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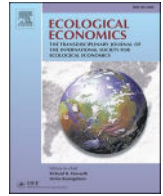
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# Ratcheting up private standards by exploiting coopetition: The curious case of RSPO's adoption of zero-deforestation criteria

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## ABSTRACT

At its November 2018 annual meeting, the Roundtable on Sustainable Palm Oil (RSPO) approved a new version of its foundational rules that advocates argued made it a zero-deforestation standard. Using a combination of over 160 key informant interviews and archival analysis, we argue that actors in the RSPO orbit made the High Carbon Stock Approach - a new method for defining forest boundaries that features heavy use of satellite data - attractive by blending cooperative and competitive strategies in a pattern known as *coopetition*. Critical stakeholders pushed leading companies into a *competition for legitimacy* that spurred innovations outside of the Roundtable setting. In turn, however, these firms also used relationships established through the RSPO Roundtable - *cooperating* - to elaborate guidelines and tools for defining forest areas, pursuing supply chain traceability and engaging in supplier transformation. This cooperation helped zero-deforestation strategies to emerge outside the organization. In response, stakeholders with sunk investments in RSPO membership re-incorporated those external tools into the standard by framing them as consistent with the institution's fundamental logics. This case provides a compelling example of how coopetition can lead to norm emergence in a contentious governance arena, allowing a combination of internal and external actors to steer institutional development. We argue that this strategy could be employed to stimulate increased rigor in environmental standards.

## 1. Introduction

Private standards like those maintained by the Forest Stewardship Council, Marine Stewardship Council, and Rainforest Alliance are regular components of value-chain sustainability governance (Green, 2013b; Pacheco et al., 2020; van der Ven, 2019), but their efficacy depends on their stringency and how widely they are adopted (Dietz et al., 2019; Dietz et al., 2021). To improve environmental outcomes, standards must increase their stringency over time - a process some call “ratcheting up” (Cashore et al., 2007; Dentoni et al., 2018; Green, 2013a; Cashore and Stone, 2014; Overdevest and Zeitlin, 2014; Gallemore et al., 2018; Vandenberg and Gilligan, 2017).

Because individual sectors are rarely dominated by a single private standard, competition between standards is can affect whether and how they evolve (Heyes and Martin, 2017; Judge-Lord et al., 2020; van der Ven, 2019). Facing competition, private standards must balance strict requirements that can boost their impacts and external legitimacy, on

the one hand, with the risk that stricter requirements might limit their membership, on the other (Auld and Renckens, 2017a, 2017b; Cashore et al., 2007; Cashore and Stone, 2014; Dietz et al., 2021; Haack and Rasche, 2021; Gallemore et al., 2018; Judge-Lord et al., 2020; Overdevest, 2010; Overdevest and Zeitlin, 2014; van der Ven, 2019).

Studies associate competition between private standards with diverse outcomes. Sometimes, competing standards drive each other to improve (Cashore et al., 2007; Green, 2013a; Gulbrandsen, 2005; Overdevest, 2010; Schlyter et al., 2009; Smith and Fischlein, 2010). Sometimes, private standards in the same sector will specialize in individual niches to escape competition (Fransen, 2011; Judge-Lord et al., 2020; Manning and Reinecke, 2016; van der Ven, 2019). Because standards must take care lest their members jump ship to alternative schemes, competition can stifle improvements (Auld, 2014; Bacon, 2010; Grabs, 2020; Miller and Bush, 2015), or, worse, spark races to the bottom (Bitzer et al., 2008). Competing standards, finally, may “meet in the middle” as stringent ones relax their requirements, while laggards

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catch up (Poret, 2019).

In short, there is evidence in the literature for most of the logically possible ways competition between standards could affect their stringency, suggesting the effects of competition between private standards are contingent. This article, therefore, asks, “How can stakeholders leverage competition between private standards to increase their stringency?” We study this question using an in-depth process-tracing case study of the Roundtable on Sustainable Palm Oil (RSPO)’s 2018 standard review process, during which the organization strengthened its land-use change restrictions by adopting rules on zero deforestation and no planting on peatland.

Drawing on our case study, we argue that competition can lead to more stringent private standards is when, first, limitations of an existing standard create opportunities for interfirm competition among its members, potentially generating competing standards, and, second, the costs involved in institution building generate interactions between competitive and cooperative strategies between both firms and private standards organizations in a process called “coopetition.” We ground our argument in both institutional field theory and coopetition theory.

Work on private standards and competition generally examines *competition between standards* active in a single sector. As private standards are often studied as a type of precompetitive collaboration on joint problems between like-minded organizations (Brodie Rudolph et al., 2020; de Bakker et al., 2019), the literature has paid less attention to the simultaneous *competition between the firms* in the field the standards hope to govern, not to mention interactions between these two levels of competition. In particular, *competition between firm members of a single private standard* tends to be understudied. We examine the interplay between firm-level and private standard-level competition, arguing that disruptions to a standard’s collective reputational benefits can lead to reputational competition between private standard members, causing a breakdown of agreed-upon norms and a subsequent period of experimentation with new standards that subject the standard itself to reputational competition.

In a second step, *competition can be balanced with strategic cooperation*, facilitating a change in the status quo. The growing literature on coopetition, “a strategy whereby competing organizations simultaneously cooperate with each other to secure mutual advantages” (Christ et al., 2017, p. 1030), observes that actors regularly partner with those with whom they nonetheless compete (Christ et al., 2017; Stadler, 2018; Manzhynski and Figge, 2020). Taking advantage of these practices, external stakeholders may strategically incite reputational competition between otherwise cooperating firms to increase their ambition (Stadler, 2018).

Applying these ideas to private standards, we suggest that when facing field-level legitimacy challenges, actors can pressure standards to ratchet up by creating small “coalitions of the willing” that create private standard competitors with more stringent rules, while remaining open to collaborate and reintegrate those rules into the main standard. Civil society actors wishing to improve private standards can strategically encourage such coopetition processes.

In the following section, we provide some background on the RSPO before further elaborating on our theoretical framework in the subsequent section. We then outline the data collection methods we employed to develop our case analysis. After presenting and discussing the case, we conclude by outlining how our analysis might extend to other sectors and illustrate a possible strategy for civil society and other stakeholders hoping to encourage standards to ratchet up.

## 2. Background on the RSPO and the empirical puzzle

While beneficial for many firms’ bottom lines, oil palm plantations have had severe environmental costs, displacing tropical forests (Abood et al., 2015; Vijay et al., 2016), threatening biodiversity and ecosystem services (Clough et al., 2016; Vijay et al., 2016), and starting wildfires that generate tremendous greenhouse gas emissions and regional air

pollution (Abood et al., 2015; Carlson et al., 2012, 2013; Dislich et al., 2017; Marlier et al., 2015). The RSPO originated in the mid-2000s amid growing concern about these issues, largely due to the efforts of the World Wide Fund for Nature (WWF). It became one of several sustainability roundtables bringing together civil society and the private sector (Ponte, 2014). Operating for two decades, the RSPO remains the primary global consumer-facing sustainability certification organization for palm oil and has experienced several reform attempts since its founding (Dentoni et al., 2018). As general overviews of the RSPO are available elsewhere (Dauvergne, 2018; Lyons-White and Knight, 2018), we focus on the aspects of the organization and its standard most relevant to our analysis.

Most RSPO members are firms in the palm oil value chain - usually producers, refiners, traders, manufacturers, or retailers - who use certification to ward off NGO criticisms, consumer backlash, or regulatory action (Auld, 2018; Bullock and van der Ven, 2018; Lyons-White and Knight, 2018). To act as a shield, however, private standards require credibility, and the RSPO’s founding ethos reflected what Auld et al. (2015) refer to as a “logic of control,” relying on rule enforcement to protect members’ reputations.

The RSPO’s Principles and Criteria lay out the standard’s environmental and social requirements for certified production. Questioning the Principles’ and Criteria’s credibility, critics often argue they are too weak, poorly enforced, and biased toward industrial interests (Gallimore et al., 2018; Laurance et al., 2010; Schouten and Glasbergen, 2011). Supporting these concerns, studies have found RSPO certification to have negligible or modest impacts on orangutan abundance (Morgans et al., 2018), wildfire incidence (Cattau et al., 2016; Morgans et al., 2018) and forest loss (Carlson et al., 2018; Heilmayr et al., 2020).

Following guidelines from the ISEAL Alliance (2014), the RSPO conducts a comprehensive review of the standard every 5 years. The process starts with the RSPO Secretariat, alongside working groups and task forces composed of a mixture of RSPO staff and members, soliciting feedback. Next, working groups and task forces propose changes that are again submitted for public stakeholder feedback and revised before a final vote of the membership during the RSPO’s annual General Assembly.

Our case study covers the decade between 2008 and 2018, when the RSPO was confronted with major disputes over oil palm’s expansion into forests and peatlands, damaging habitats and generating greenhouse gas emissions (Dentoni et al., 2018), which were especially high for peatland production (Ruysschaert and Salles, 2018). When, at the 2009 General Assembly, an RSPO working group first proposed requiring emission reduction plans that would constrain further forest or peatland conversion, it “almost led to a walkout” by growers (Damodaran, 2012; New Straits Times, 2009; Roundtable on Sustainable Palm Oil [RSPO], 2009), who saw the requirements as inconsistent with the RSPO’s founding objectives (Damodaran, 2012; New Straits Times, 2012; Ooi, Tee Ching, 2012). It took four years until an extraordinary meeting of the General Assembly adopted modest greenhouse gas rules (Dentoni et al., 2018) and soft requirements to plan to lower emissions, avoid high conservation value areas, and limit planting on peatlands (Roundtable on Sustainable Palm Oil [RSPO], 2013a,b), leaving peat and forestland conversion at best partially addressed.

In sharp contrast, the 2018 review period saw RSPO members relatively smoothly disallow new planting on peatland, regardless of depth and adopt the High Carbon Stock Approach to forest conservation, effectively making the organization a zero-deforestation standard. To be clear, these exact issues nearly broke the organization only a decade prior. We argue that the concept of coopetition helps explain how this stark reorientation came about.

### 3. Theoretical framework

#### 3.1. Substantial change in institutional fields

It is generally agreed that, as argued in the club theory account, private standards' primary role is to provide reputational, risk-reduction, or market-access benefits to their members (Potoski and Prakash, 2009). These benefits, in turn, rely on the standard's legitimacy from the perspective of both external audiences and potential or current members (Baumann-Pauly et al., 2017; Haack and Rasche, 2021; Mena and Palazzo, 2012).

When standards in the same sector compete for members, in other words, they compete for international and external legitimacy. Situations like these are widely studied in the institutional field theory literature, as set out by DiMaggio and Powell (1983, 1991) and Scott (1994). While this literature argues that as sectors mature, their participants tend to develop stable practices and relationships (Greenwood et al., 2002), they also may experience “jolts” - that is, exogenous or highly unexpected events that destabilize business as usual (see Meyer et al., 1990), resulting in de-institutionalization (Greenwood et al., 2002). With established practices unsettled, actors have more freedom to experiment with new ideas and norms (Purdy and Gray, 2009; Becker, 1963; Oliver, 1992).

For private standards, jolts generally come in the form of internal or external criticisms that call established standards' legitimacy into question and encourage change (Auld and Renckens, 2017a, 2017b; Dentoni et al., 2018; Fougère and Solitander, 2019; Gallemore et al., 2018; Glasbergen, 2013; Overdevest, 2010; Quack, 2010; van der Ven, 2019). Greenwood et al. (2002) propose a six-phase model of how jolts generate opportunities for meaningful institutional change (see Fig. 1): 1) the sector encounters a *precipitating jolt* from external processes; 2) *deinstitutionalization*: the status quo consensus breaks down; 3) *pre-institutionalization*: actors undertake independent innovations in response to the jolt; 4) *theorization*: actors begin to articulate theories of change supporting some experimental responses to the jolt; 5) *diffusion*: some experiments gain new adherents and start to spread; and, finally, 6) *reinstitutionalization*: some new practices and ideas become taken-for-granted (Greenwood et al., 2002; Suchman, 1995).

To be clear, while the framework here is sequenced, it is not intended to be deterministic. Although the sequencing presents logical preconditions for the next step of the process to take place, there is no guarantee that any of these steps will in fact occur, in which case the field in question would become fragmented. Indeed, as work in this area has developed, it has emphasized the interplay between pressures at multiple levels, with sectoral change intertwining with actors' own strategic interests and independent agency, shaping private standards' evolution (Edwards and Berry, 2010). So instead of giving us a deterministic theory of field reconstitution, the framework in Fig. 1 can be better understood as a vocabulary that helps us identify and discuss important periods in the process we study. Furthermore, while the stylized process described in Fig. 1 helps identify moments during competitions over private standards' legitimacy, it accommodates various causal mechanisms that could plausibly move a sector from one phase to another. To specify the causal mechanisms in the current case, we turn to the literature on coopetition.

#### 3.2. Coopetition inside, outside, and among multi-stakeholder initiatives

Coopetition is the “simultaneous use of competitive and cooperative business strategies” (Christ et al., 2017, p. 1030) to reach firms' aims. It takes place when cooperation could create beneficial shared resources, though companies are still competing for industry leadership. The concept has been applied extensively when studying firm behavior in the fields of innovation and corporate sustainability, where authors have outlined both promises (e.g. efficiency gains, innovative potential), and trade-offs associated with using competitive and cooperative tactics

simultaneously (Bengtsson and Kock, 2014; Munten et al., 2021; Manzhynski and Figge, 2020; Christ et al., 2017; Stadler and Van Wassenhove, 2016; Stadler, 2018).

The coopetition approach is in contrast to both approaches that study private standards as a mechanism of norm diffusion (Petez-Batres et al., 2011; Zeyen et al., 2016), or as a form of precompetitive cooperation through which firms collectively provide club goods in the form of reputation or market advantages (Potoski and Prakash, 2009; Potoski and Prakash, 2009). In the first instance, the coopetition perspective suggests that norm adoption is often the result of a confluence of strategic considerations. In the second, it emphasizes the simultaneous interplay of competition and cooperation - rather than precompetitive alignment alone - in generating normative change, as stakeholders can use competitive dynamics to promote cooperative commitments (Stadler, 2018).

In principle, both private standards and their members can engage in coopetition. Firms are in continuous competition over their market position and their business practices' legitimacy (Hahn and Pinkse, 2014). Private standards active in a single sector may also engage in coopetition. Rival standards sometimes collaborate to set meta-standards that set general ground rules, while simultaneously seeking strategic differentiation (Reinecke et al., 2012; Grabs, 2020). In an important distinction with a precompetitive conception of private standards, a coopetition approach would emphasize that coopetition between firms in private standard and between standards in a sector can interact. If “competitive forces at the firm level are aligned with the collective benefits of partnerships”, such competition within collaborative endeavors may have overall benefits for environmental problem-solving (Hahn and Pinkse, 2014, p. 140). Should some of a private standard's member firms find it in their interest to build their own standards outside the organization, for example, this may spark competition between the extant and the emerging standard, spurring coopetition within the former in order to compete with the latter. To explain how coopetition at the firm level might also affect private standards' propensity to ratchet up, therefore, it is important to understand both when their members are likely to compete as well as when they are likely to collaborate (Stadler and Van Wassenhove, 2016).

### 4. Data and methods

Our empirical objective is to trace the process leading to the RSPO's integration of zero deforestation and no peatland conversion criteria during the 2018 Principle and Criteria review. Relevant data sources come from materials collected by the co-authors between 2016 and 2020. These include 104 short interviews at the European Meetings of the RSPO in 2016 and 2017, 14 longer semi-structured interviews with individuals closely involved in the High Carbon Stock Approach process, 62 semi-structured interviews with key informants (supply chain members and stakeholders) on zero-deforestation commitment implementation, participant observation at several RSPO meetings between 2016 and 2019, participant observation at 12 workshops and webinars focused on zero deforestation palm between 2019 and 2020, qualitative coding of RSPO documents, content analysis of approximately 4200 Annual Communication of Progress (ACOP) reports submitted up to 2017, supplemented with fixed-response items from reports submitted in 2018 and 2019, and an analysis of records of comments received by the organization contracted to manage consultations on the RSPO's 2018 Principles and Criteria revisions. We cite the short interviews from the European Roundtables as EURT 2016 or 2017, while the longer interviews are cited by the respondent's sector, as outlined in Appendix 1, which gives a more detailed overview of the data collection process.

Following Beach and Pedersen (2019) approach to process tracing, we constructed expectations derived from sequenced observations that draw on our theoretical framework, and used these as a basis for a coding guide that we subsequently applied to analyze our data. First, we created a structured timeline of key events, organized according to the

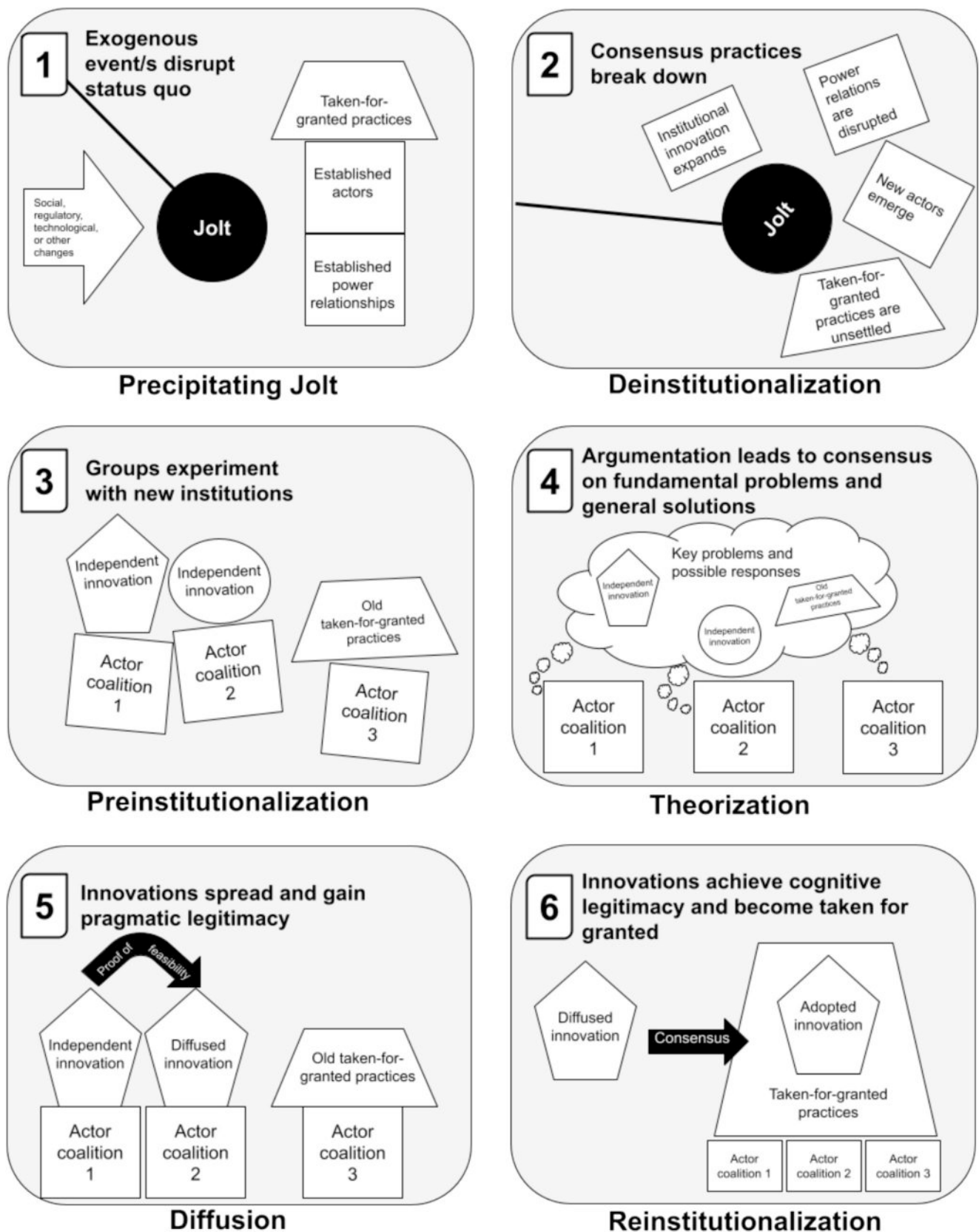


Fig. 1. Sequential phases of institutional disruption and reconstruction, proposed by Greenwood et al. (2002).

phases in Greenwood et al. (2002)'s model of institutional change presented in Fig. 1. In a second step, we coded our data with a focus on firm-level or standard-level interactions, as well as competitive or cooperative interactions, and identified themes for each that highlighted the presence of cooptation (both competition and cooperation in the same spaces). The final coding guide and exemplary coded materials can be found in Appendix 2.

## 5. Results

### 5.1. Timeline and stages of institutional change in the palm oil sector

Fig. 2 shows an overview of the timeline of institutional change around No Deforestation and No Peat Conversion requirements in the international palm oil sector during our period of interest.

The zero deforestation movement played out at multiple levels and in diverse venues. To mitigate their reputational damage, some large companies started issuing company-internal “No Deforestation, No Peat, and No Exploitation” policies as early as 2010.<sup>1</sup> To define and align these policies and their implementation further, firms met in groups outside the RSPO established for the purpose, such as the High Carbon Stock Approach, the Palm Oil Innovation Group, the Palm Oil Traceability Working Group, and the Indonesian Palm Oil Pledge. Work in these fora led to broad-scale agreement on identifying forests (via the High Carbon Stock Approach) for protection and best practices to trace supply chains, report on progress, and initiate supplier transformation. This cooperation outside of the RSPO - and the growing strength of the competing standards it generated - finally created sufficient support for No Deforestation and No Peatland Conversion policies to be absorbed into the RSPO standard in November 2018.

In Fig. 3, we translate this timeline into the stages of institutional change. Framed this way, it becomes clear that important developments in the process leading to the adoption of a no deforestation and no peatland conversion approach took place across three interacting levels: individual firms, private standards (RSPO and others), and the sector as a whole. Generally, we find that cooptation at the firm level was critical during the phases of deinstitutionalization, pre-institutionalization, and theorization, as actors experimented with different options following an initial jolt that called the RSPO's legitimacy into question. This was followed by cooptation at the standard level during the stages of theorization, diffusion, and reinstitutionalization, as the new approach was progressively formalized and, ultimately, reabsorbed into the RSPO. We outline these phases in detail below.

### 5.2. Precipitating jolts and deinstitutionalization (2007–2013)

Deforestation has always been a core RSPO concern (TECH-02), a point made clear in Fig. 4, which shows forests to be a consistent agenda topic in the meetings of the organization's highest-level executive management body, coming up much more frequently than other key issues, such as greenhouse gas emissions, which we show for comparison.

The RSPO's original Principles and Criteria, approved in 2005, required growers to use the High Conservation Value methodology to identify areas for protection. As High Conservation Value was first developed by the Forest Stewardship Council for timber, rather than agriculture, RSPO stakeholders frequently had to adjust the framework. In the face of growing civil society consensus in the late 2000s that,

<sup>1</sup> While these commitments notably also included a focus on “no exploitation” that related to community relations and working conditions on plantations, companies focused predominantly on operationalizing and implementing the deforestation and no peatland portions of their policies. Our article focuses on these elements as well and leaves the analysis of the lack of progress on exploitation to future work.

“when we say sustainable we mean deforestation-free” (NGO-1), some NGOs began to regard the RSPO as “very slow, very lethargic, and very difficult to change” (GRO-3) and adopted a new strategy: pushing major member firms to move beyond the standard through new, parallel initiatives. Starting in 2007, Greenpeace initiated the “kickoff of the [...] zero deforestation movements” (TECH-2), connecting RSPO members to forest clearance, calling out major palm oil users like Unilever and Nestlé and challenging the standard's credibility.

The approach was effective. One big splash came in 2010 with a viral YouTube video showing a man opening a Kit-Kat to find severed orangutan fingers. Another came when a Greenpeace campaigner called out the palm oil producer and trader Wilmar as partially culpable for the 2013 Southeast Asian haze crisis (Johnson, 2015). This strategy “sent the shockwave back to the commodity producing companies”, one interviewee explained, because Wilmar is “like the Walmart for palm oil, [so] every single supplier and buyer goes to them at some point” (CON-3). Targeting large traders took advantage of the fact that a small number of those firms account for most global palm oil shipments (NGO-1), allowing NGOs to implicate numerous manufacturers and retailers simultaneously, pressuring them to push for improvements (GRO-3).

In response to the mounting civil society pressure, large retailers and manufacturers indeed began making company-internal traceability and zero-deforestation commitments starting in the mid-2010s (Jespersen and Gallemore, 2018; Umunay et al., 2018; Grabs and Garrett, 2023). Soon, as one interviewee put it, “Everyone was talking about no deforestation, no deforestation, no deforestation” (TECH-3). Prominent RSPO members frequently raised the issue in their annual reports to the organization. In 2015, for example, the consumer goods giant Unilever (2015) noted continued “consumer pressure,” lamenting, “A significant challenge continues to be the negative consumer perception of palm oil, which has a strong link to deforestation.”

For firms that continued to be targeted by NGO campaigns over deforestation issues, there was growing frustration that the RSPO was too slow to respond (TECH-3). Amid growing reputational risks, the lack of progress on peat and greenhouse gases (and, by extension, deforestation) led some firms to join experiments outside the RSPO (TECH-4).

As debate mounted, more firms saw the RSPO's High Conservation Value approach to forest protection, whose adaptability raised concerns about consistency, reliability, and conflicts of interest, as a poor shield for their reputations (TECH-3, GRO-1, LISC-6). In short, as one interviewee put it, following revelations by Greenpeace and others, it was clear that “a lot of forest [...] was being converted by RSPO-certified companies, and that was obviously not compatible with what the market was saying [i.e. demanding]” (TECH-1).

The zero-deforestation movement threatened to make the RSPO less “relevant” in the market (TECH-1). In 2016, for example, one annual report submission noted “[l]ittle demand for CSPO [certified sustainable palm oil]” and that “customers want to have palm oil [sic] substituted.” Growers, who could find themselves excluded from zero-deforestation value chains despite being RSPO certified, felt particularly squeezed. “They shunned all our oil from entering into the refinery, stopped even negotiating with us, because the media highlighted that we are [destroying] forest,” one interviewee lamented (GRO-2).

### 5.3. Pre-institutionalization and firm-level cooptation on no deforestation, no peatland conversion, no exploitation criteria (2013–2016)

While they pressured firms to adhere to more stringent standards, environmental groups also offered possible solutions. Alongside the Forest Trust and Golden Agri Resources (GAR), Greenpeace started piloting a new forest assessment methodology in 2011, which eventually evolved into the High Carbon Stock Approach (TECH-1; HCS Approach Steering Group, 2016b). In contrast to High Conservation Value, the High Carbon Stock Approach focused on quantifiable means of distinguishing forest from non-forest that could more clearly delineate

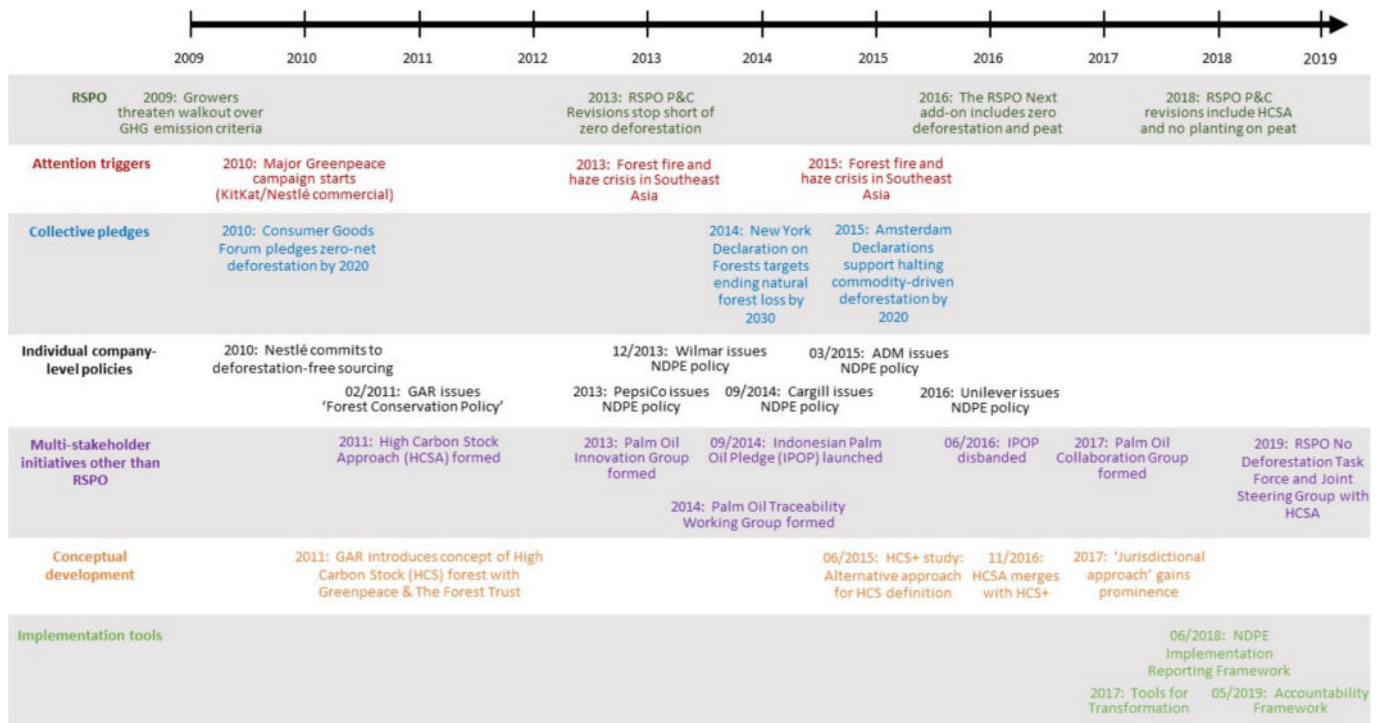


Fig. 2. Timeline of institutional change around Zero Deforestation and No Peatland Conversion in the international palm oil sector. The most important of these events are discussed in the main text. Adapted from Grabs and Garrett (2023).

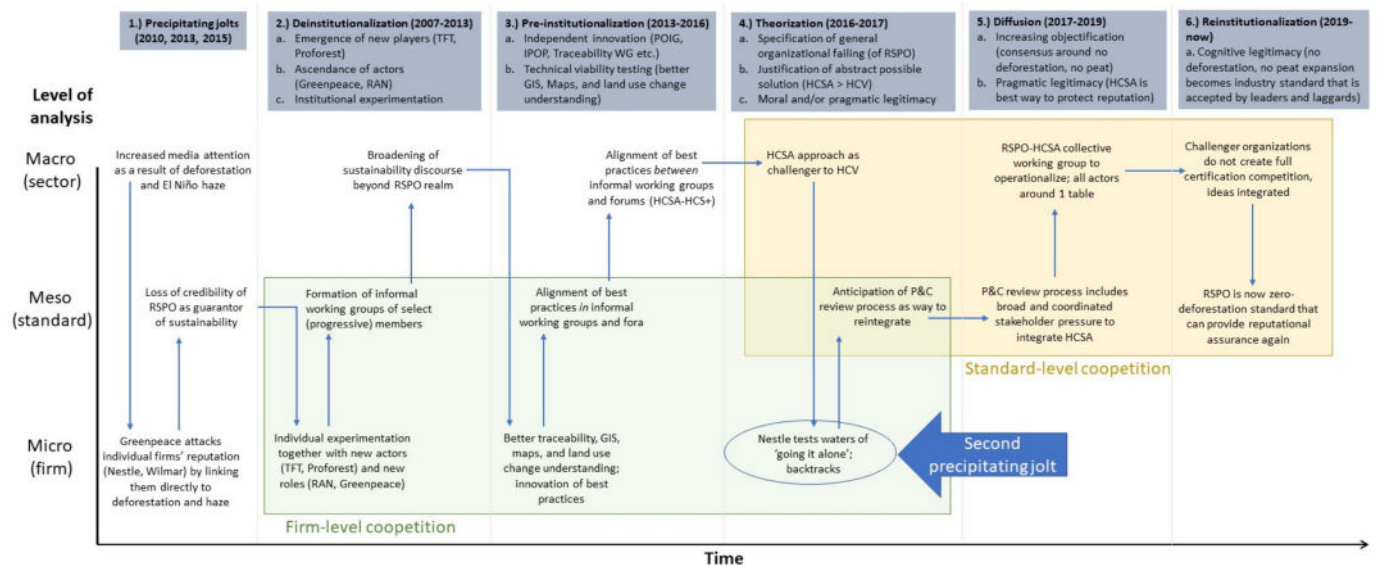


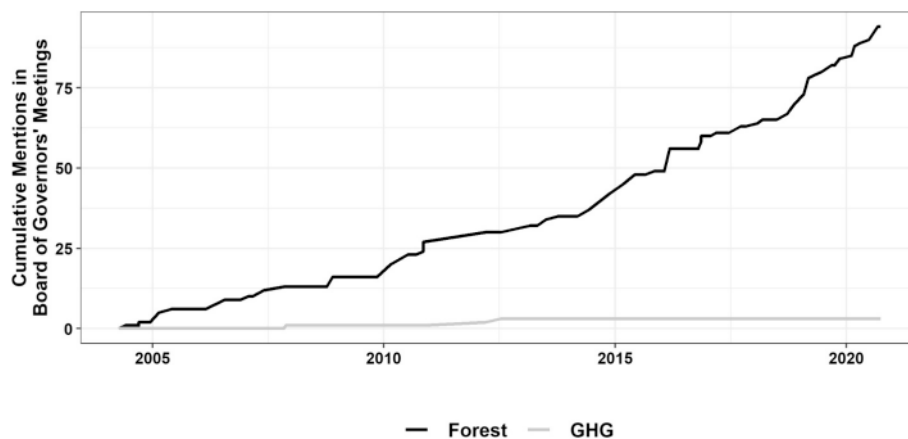
Fig. 3. The stages of institutional change toward RSPO reform in the palm oil sector. Arrows show the temporal sequence of events, while spatial position shows the relevant level of analysis at which the event took place.

conservation areas. As one person involved characterized it, "The [High Carbon Stock] Approach was developed as a much stricter way of saying, this is how you identify forest [...] to try and help companies implement their no deforestation commitments" (TECH-4).

Other firms joined the High Carbon Stock Approach in 2013, ultimately forming the High Carbon Stock Approach Steering Group to develop the new methodology. In 2014, a few prominent RSPO firm and NGO members, disappointed by the lack of progress on deforestation, formed the Palm Oil Innovation Group, with the purpose, as one member noted, of "spur[ring] RSPO to raise its game after the [Principles & Criteria] review in 2013, where it didn't meet stakeholder expectations"

(LISC-6). The Palm Oil Innovation Group made the High Carbon Stock Approach a central pillar of their initiative.

Another significant jolt came in 2015. It was an El Niño year, which tends to exacerbate fire seasons in Indonesia's peatlands. That year was particularly bad, and the fires made worldwide news, providing an opportunity for advocacy organizations to push firms hard to go beyond the RSPO's existing standards to achieve zero deforestation and zero planting on peatlands (GRO-03). With hundreds of zero-deforestation commitments from firms that "had no way of actually putting [them] in place on the ground" (TECH-1) and Palm Oil Innovation Group members out in front on zero deforestation, the field was primed for



**Fig. 4.** Cumulative mentions of “forest”, not including names of the organizations “Forest Peoples Program” or “Proforest” and “greenhouse” or “GHG” in RSPO Board of Governors minutes. The Board of Governors is the RSPO’s top executive committee, elected by the member organizations.

competition between the two standards, as well as between firms attempting to build zero-deforestation mechanisms of their own. As one interviewee opined, key firms “have to be part of any big movement. [...] They need to stay on the radar” (TSO-9). Horizontal competition was particularly important for palm oil processors and traders, located in the middle of the value chain, some of which wanted to be “the better [partner] of a not so great industry” (LISC-05), though large manufacturers were also clearly competing with one another to develop ever more impressive traceability mechanisms (Gallemore et al., 2022). An interviewee from one trading firm characterized the whole situation as “a little bit [of] a race to the moon [...] because we are competing for the same target [...] and inventing the tools on the way” (LISC-4).

Competitive pressures notwithstanding, even the pioneering firms had clear incentives to cooperate. The firms racing to the moon were using different spacecraft, making for a complex situation for buyers (LISC-4; TECH-5), and raising the risk that amid a proliferation of standards customers might start regarding them all as noise (TSO-3), threatening the sector as a whole. So, new coordination efforts emerged alongside the experiments. One trader interviewed in 2020 reported having “seen unprecedented collaboration across the industry” over the previous six years, during which “competitors, peers, suppliers, customers [were] working together [in a way] that would have never happened beforehand” (TRA-1). Examples included the formation of yet another semi-formal organization, the Palm Oil Collaboration Group. Led by PepsiCo, Cargill, and Proforest, it developed “a harmonized way of reporting” (CGM-4) on zero-deforestation efforts, a significant sector-wide investment.

In partial response to these experiments, some stakeholders began piloting a novel initiative within the RSPO itself. Approved by the Board of Governors in November 2015 and formally launched in 2016, RSPO NEXT was designed as a voluntary “addendum” allowing members to certify sustainable practices going beyond the standards’ basic requirements (Roundtable on Sustainable Palm Oil [RSPO], 2020). Growers certifying under RSPO NEXT were to have zero deforestation, no planting on peatland, and fire management and suppression plans (Roundtable on Sustainable Palm Oil [RSPO], 2016).

Some attendees at the conference where RSPO NEXT was officially launched hoped it might be a way to “bring everybody on the same page” (EURT, 2016) and help with “filling those gaps” in the RSPO as it stood (EURT 2016). Indeed, RSPO NEXT was explicitly positioned as a response to the Palm Oil Innovation Group. As one NGO interviewee characterized it, RSPO NEXT’s attempt to allow for market differentiation “was a little bit redundant to [the Palm Oil Innovation Group], but at least kept it in their own home so to speak” (NGO-13).

Nevertheless, the initiative suffered from some important drawbacks. First, RSPO NEXT’s definition of zero deforestation did not

include the High Carbon Stock Approach and permitted deforestating areas whose carbon stocks were less than or equal to plantation carbon stock (Roundtable on Sustainable Palm Oil [RSPO], 2015). Greenpeace criticized this approach as opening “loopholes” for continued deforestation, arguing that the RSPO had opted to create a weaker voluntary requirement rather than just adopting the Palm Oil Innovation Group method entirely (Cooper, 2016). Furthermore, the decision effectively left the system open to many of the criticisms already leveled at High Conservation Value. A second major problem was that RSPO NEXT would not result in a separate tier of traceable certified supply. Rather, buyers wishing to claim they supported RSPO NEXT would have to buy credits generated by RSPO NEXT-certified entities (RSPO, nd), failing to meet downstream firms toward traceability. Ultimately, market response to RSPO NEXT was severely limited (TSO-09). By the time the program was retired in 2020, only six growers had become certified (Roundtable on Sustainable Palm Oil [RSPO], 2020), though its key provisions were reflected in the new version of the RSPO standard.

#### 5.4. Separate or integrate? Standard-level competition regarding no deforestation and no peat criteria (2017–2018)

Bringing the High Carbon Stock Approach into the RSPO offered a way to address the interests of both firms seeking simpler zero deforestation and no peatland conversion compliance and stakeholders hoping to bolster the RSPO’s relevance. If successful, incorporation would amount to a “race to the top” while simultaneously giving the RSPO justification to push reluctant grower members on deforestation (TSO-9). Additionally, as one interviewee observed, firms that had committed to avoid deforestation and peatland conversion “had a much larger interest in also getting RSPO to subscribe to the approach, [be]cause when they undertake these much more onerous requirements [...] they have an interest in [...] it being applied more world-wide” (NGO-2). By the time of the comprehensive review in 2017 and 2018, however, several prominent RSPO members were still “trying to figure out what [zero deforestation] mean[t]” during the 2018 Principles and Criteria review (CGM-4).

Making the High Carbon Stock Approach a central response to zero deforestation demands had several attractions. First, the [HCS Approach Steering Group \(2016a\)](#) argued, the method required its adherents to “demonstrate a commitment to [...] achieve no deforestation.” Second, some stakeholders argued incorporating the High Carbon Stock Approach into the RSPO would make both more credible. Third, the RSPO could adopt the High Carbon Stock Approach wholesale, avoiding piecemeal negotiations (NGO-5) and simplifying firms’ sourcing decisions (CGM-5). Fourth, the Palm Oil Innovation Group’s experience provided a proof of concept (TRA-4). Finally, the High Carbon Stock

Approach could use satellite data and algorithms to identify forest areas, making it less subject to auditors' interpretations than High Conservation Value.

The overlapping membership of the High Carbon Stock Approach groups and RSPO's internal taskforces also encouraged reconciliation. One interviewee involved in both the High Carbon Stock Approach and RSPO working groups said they had "kept both sides informed about developments and tried to bring them together [...] and sort of push for both sides to continue to collaborate" (LISC-7). From their perspective, "We essentially want[ed] to implement these two initiatives, and if the two initiatives don't get along, we are going to be like an ant to two fighting elephants, and we don't want that" (LISC-7). Another reported a similar strategy, "very actively participating in the 2018 [Principles and Criteria] review as one of the task force members," while "also working with a lot of partners including the [High Carbon Stock Approach]" (LISC-2).

All this positioned the High Carbon Stock Approach as the consensus alternative to High Conservation Value. During the 2018 standard review, numerous online comments expressed sentiments like the following: "the [High Carbon Stock Approach] is the agreed-upon methodology for defining High Carbon Stock forests. Using anything else would cause confusion." All told, 54% of the comments submitted under the deforestation topic in the RSPO's 2017 online consultation explicitly advocated the High Carbon Stock Approach. Two of these were submissions from coalitions of dozens of major retail and restaurant firms. External actors also chimed in. In an open letter released on 1 August 2018, for example, a group of investors collectively managing almost \$7 trillion lamented the disconnect between their portfolio firms' deforestation commitments and the RSPO standard, advocating the High Carbon Stock Approach as a solution.

Of course, other members were reluctant about the High Carbon Stock Approach, for some good reasons. First, it could put plantations in highly forested countries, particularly in West Africa and parts of Latin America, off limits (TECH-1; TECH-2), which "would essentially make RSPO uninteresting and redundant in some countries where there is a palm oil frontier" (ACAD-1). Second, it requires more conservation, management, and monitoring and is deliberately less flexible than High Conservation Value, making things challenging for smallholders (TECH-1; NGO-6; TRA-5 (Howard, 2016)). Third, it essentially embeds a High Conservation Value requirement (TECH-3), maintaining existing costs from that system. Some RSPO members - particularly growers - argued the High Carbon Stock Approach risked splitting the palm oil market, permitting only a small percentage of palm oil production to be certified (CGM-6, TRA-4). Such worries, however, were ultimately a minority position, particularly when an agreement was reached to exempt countries with more than 80% forest cover, though exactly what to do with high forest-cover landscapes remains a stringent debate (ACAD-1).

The initiative might also have failed had pioneer firms decided that implementing the High Carbon Stock Approach within their own supply chains would obviate their need for the RSPO and give them a horizontal competitive advantage against rivals. Indeed, for pioneer firms seeking to distinguish themselves, it would seem as if this would be the optimal outcome. One notable incident, however, indicated going it alone might not be an option. In late June 2018, Nestlé's RSPO membership was suspended due to its failure to submit an annual report. Nestlé's head of responsible sourcing quickly issued a press release asserting "there are fundamental differences in the theory of change that Nestlé and RSPO are employing," elevating supply chain traceability over certification as a method for improving sustainability (Ware, 2018). This move might, as one Greenpeace campaigner suggested, have led to an exodus of key players focused on zero deforestation and no peatland conversion commitments from the RSPO (Pye, 2018). However, several zoos, which make up a large share of the RSPO's environmental civil society membership, rejected actions that might undermine the RSPO (Canadian Accredited Zoos and Aquariums, 2018), shaming Nestlé by removing their products from zoo shops (Davey, 2018; Zoological Society of

London, 2018). Facing this backlash, Nestlé achieved reinstatement in a little over two weeks.

In early November 2018, the RSPO's General Assembly approved, by an overwhelming margin, a revised version of the standard that required members to identify forests for conservation using the High Carbon Stock Approach. Darrel Webber, then the RSPO's CEO, cheekily addressed the General Assembly under the slogan "long live the incremental revolution," defending the merits of slow but consistent improvement. At that point, the RSPO could claim - and it seems the claim was generally accepted by firms - that it was a zero-deforestation standard (TSO-3; CGM-1). The result was that the field "moved from being a three track [...] - uncertified; certified, but not [No Deforestation, No Peatland Conversion, and No Exploitation]; and certified [No Deforestation, No Peatland Conversion, and No Exploitation] to [...] just certified or not certified again" (CGM-1).

## 6. Discussion

Combining the institutional change model presented by Greenwood et al. (2002) with the coopetition literature allows us to highlight some key factors that might act as enabling conditions for those hoping to use coopetition to pressure standards to increase their stringency: 1) supportive enabling conditions; 2) a combination of both cooperative and more confrontational NGOs active in the field; and 3) a perception that the club good's reputational benefits generally outweigh the benefits of going it alone.

First, specific geophysical characteristics of the palm oil industry supported NGOs' efforts to capture international attention. Rapidly developing and increasingly accessible technologies made it easier to rigorously attribute deforestation and wildfire events to particular operations (Gallemore et al., 2022). Furthermore, the spectacle of wildfire haze obscuring most of Southeast Asia helped attract media attention, particularly in El Niño years (see Appendix 3).

Second, consistent with Stadler (2018) evidence that government and NGO partnership managers may deliberately leverage firm-level competition to induce sustained commitments and outcomes, we also find that NGOs strategically framed firm engagement in terms of competitive advantages. These efforts were particularly clear in the case of the NGOs engaged in the Palm Oil Innovation Group, which, as noted above, they saw as a means of spurring the RSPO onward. In another example, an activist recalls pushing the palm oil trader Wilmar to make a public commitment in part by arguing it was "an opportunity" for the firm to "distinguish" itself (qtd. in Johnson, 2015). This strategy, however, would not have been possible were it not for other NGOs adopting even more confrontational tactics than Greenpeace. Pressure from these groups seems to have created a "radical flank" effect (Freeman, 1975, p. 236), in which more radical tactics increase the bargaining power of actors pursuing similar objectives with more conventional means (Baron et al., 2016; Simpson et al., 2022). Were it not for these actors, there might have been insufficient demand for institutional experiments to diffuse. If this pattern does show up in other sectors, coopetition might turn out to be another useful tool for activist campaigns. As Pacheco et al. (2020) observe, international financial institutions' environment, social, and governance (ESG) policies could be another leverage point for actors to demand rigorous sustainability certification.

Third, the case could have ended (and might yet still end) in fragmentation, with different initiatives filling different governance niches. That this has not yet taken place relates to the risks fragmentation poses, a point that distinguishes a coopetition account from an account based primarily on pioneer advantages. In the RSPO case, pioneers faced an important problem: even if they secure their own supply chains, as Nestlé hoped to do, they could still be at the mercy of attitudes toward palm oil as a whole, a point that, as we noted above, was raised by several RSPO members in their annual reports to the organization. To the extent that this remained a problem, a fragmentation of sustainability standards in the field could risk undermining leading firms'

ability to differentiate themselves from the rest of the industry, incentivizing pioneers to give up on some of their differentiation objectives and cooperate.

Under conducive conditions like these, it appears well-positioned actors can exert considerable influence on a standard's evolution. In the foregoing analysis, a relatively small number of organizations came up repeatedly. Even more striking, the most important NGO actors - Greenpeace and Rainforest Action Network - were not RSPO member organizations, though Greenpeace is a former member and has been active in RSPO circles for some time. Representatives of these organizations, as noted above, were active both in external fora and on RSPO committees, and as consensus formed between this relatively small number of actors, they were able to pull the rest of the membership along.

This analysis contributes to the literature on private standards by illustrating how external actors, like civil society organizations, can use reputational strategies to foster coopetition dynamics at both the firm and private standard levels. Finally, while there have been some applications of the coopetition concept to relationships between standards in a single sector (Reinecke et al., 2012; Grabs, 2020), these studies have only addressed the coffee sector - our case expands the analysis to a new value chain with a distinct structure. While the conditions that facilitated the outcome in this case are unique to the palm oil value chain, the basic dynamics could in principle apply in any sector where a dominant standard that has stagnated, so long as there is an effective way for more radical actors to effectively highlight its shortcomings.

The meso-level evidence we have presented here could be strengthened by further comparison - examining other standards not at the level of the organization as a whole but, rather, at the level of individual reform events. This kind of research could help establish whether or not the mechanisms we propose are generalizable. To extend this type of analysis to other sectors, however, it will be important to take a long-term perspective. Understanding the adoption of the High Carbon Stock Approach in light of the largely failed efforts on greenhouse gas emissions, which, in practice, amount to relatively similar restrictions on on-the-ground activities, changes this from a story of exogenous institutional innovation to one of complex, long-run coopetition. In other words, meaningful change and coopetition take time and may unfold over multiple cycles of adjustment and revision.

An additional limitation of our approach is that in order to develop a high-resolution account of the process we study, we have focused quite narrowly on the internal dynamics of the process itself in our data collection. This means we have for the moment bracketed potentially interesting and important questions about how the RSPO and similar private standards are situated in relation to individual firms' broader sustainability policies and strategies. This could be an interesting avenue of future research.

## 7. Conclusion

This article considers the conditions under which stakeholders in private standards organizations might be more likely to countenance costly, if perhaps incremental, increases in stringency. The process by which the RSPO adopted the High Carbon Stock Approach, we argue, suggests that in moments of substantial disruption, civil society actors and firms can leverage coopetition as a strategy to generate and disseminate experiments that can be reinstitutionalized into private standards. While the palm oil sector might have been uniquely susceptible to efforts to direct public attention and jolt the field in the first place, we suspect that dominant and stagnating standards in other sectors may be susceptible to such dynamics. Further research on this pattern could provide insights for activist campaign strategies aimed at strengthening private sustainability standards.

Understanding the process that led to the High Carbon Stock

Approach's adoption requires understanding events unfolding on multiple levels. First, across the sector, NGOs like Greenpeace and Rainforest Action Network successfully linked palm oil firms - including RSPO members - to peatland deforestation and the wildfires spewing haze across Southeast Asia during the dry season. In response to these pressures, leading firms started to demand No Deforestation, No Peatland Conversion, and No Exploitation supply chains, but the extant RSPO standard was not sufficient for this purpose.

With the existing institutions unable to absorb the precipitating jolt, action shifted to firm-level coopetition. First, companies and some NGOs initiated their own experiments, competing in a "race to the moon" to exempt themselves from the charges leveled against the industry as a whole. As a result, the norms for sustainable palm oil production began to fragment. Fragmentation, however, could mean forgoing economies of scale in institutionalization and risked undermining the whole enterprise by confusing customers. Firm and civil society actors for whom certification was important to their advocacy or business strategies faced a choice: they could stick with the current RSPO standard, revise it to meet changing needs, or abandon it altogether in favor of an emerging alternative. This risk of exit, in turn, placed pressure on the RSPO membership to adopt institutional innovations to keep the standard relevant, setting off coopetition with its emerging rivals that ultimately led to a near wholesale incorporation of their approaches into its own standard.

All this said, 2023 saw a further jolt to the palm oil sector - one arguably even more substantial than those that sparked the first wave of zero-deforestation commitments. European Union Regulation 2023/1115, adopted on May 31, bans imports of several deforestation-driving commodities, including palm oil, if the product originates from plots of land that have experienced deforestation after December 31, 2020. Firms will be expected to have due diligence reports for shipments of palm oil or goods produced with it starting at the end of 2024 (European Commission, 2024). With firms operating in those importing countries accounting for the bulk of demand for certified sustainable palm oil now required to undertake their own legally mandated zero-deforestation initiatives, the RSPO's continued relevance remains an open question. The degree to which lessons learned from coopetition in sustainable palm oil can be converted into compliance efforts on the part of firms covered by the new European regulation seems likely to be an interesting avenue of research in the future.

## CRedit authorship contribution statement

**Kristjan Jespersen:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing. **Janina Grabs:** Conceptualization, Data curation, Formal analysis, Investigation, Writing – original draft, Writing – review & editing. **Caleb Gallemore:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing.

## Declaration of competing interest

The research was funded partially as part of the Nudging Sustainable Palm Oil project, supported by the Roundtable on Sustainable Palm Oil. The funding provided covered some of the author's salaries and research travel expenses. The secretariat staff had no role in the data analysis or the conclusions drawn in this study. Any claims, errors, or misinterpretations are solely the responsibility of the authors.

## Data availability

The data that has been used is confidential.

## Appendix A. Data

Our first data source comes from short interviews of participants in the RSPO's European Roundtable meetings in Milan in 2016 (60 individuals) and London in 2017 (44 individuals). These short interviews were designed primarily to identify key debates and logics active in the organization, as well as which actors were understood to hold power. We triangulated findings from these interviews using the RSPO's Annual Communications of Progress (ACOPs; [Roundtable on Sustainable Palm Oil \[RSPO\], 2018a](#)), surveys that report activities related to sustainably certified palm oil, which RSPO members submit annually.

To generate our ACOP dataset, we first started with data reported by [Gallemore et al. \(2018\)](#), adding the 2016–2017 ACOP reports, posted to the RSPO website in 2018 ([Roundtable on Sustainable Palm Oil \[RSPO\], 2018b](#)). We coded those additional reports following [Gallemore et al. \(2018\)](#) scheme. As the ACOP format changed in 2018, we were able to use descriptive statistics to evaluate changes in perceived challenges between the 2017–2018 reporting period, prior to the reforms under study, and the 2018–2019 reporting period, immediately following.

We then combined two sets of semi-structured interviews with key informants to understand the development of zero-deforestation standards such as the High Carbon Stock Approach as well as their integration into the RSPO. The second author conducted 62 interviews with members of the palm oil supply chain and relevant stakeholders to understand zero-deforestation commitment implementation, of which 16 were informational and 46 were transcribed and coded. These are referred to by the codes shown in Table 1.

**Table A1.1**  
Overview of coded interviews.

| # of interviewees                             | Code | Type                                  |
|-----------------------------------------------|------|---------------------------------------|
| Supply chain members                          |      |                                       |
| 5                                             | GRO  | Grower                                |
| 2                                             | SHO  | Smallholder organizations             |
| 4 companies, 6 interviews                     | LISC | Large integrated supply chain company |
| 4                                             | TRA  | Trader/processor                      |
| 5                                             | CGM  | Consumer goods manufacturer           |
| Stakeholders                                  |      |                                       |
| 8                                             | NGO  | Environmental and/or social NGO       |
| Supporting organizations and industry experts |      |                                       |
| 7 organizations, 9 interviews                 | TSO  | Technical support organization        |
| 2                                             | DEV  | Development organization              |
| 5                                             | CON  | Consultant                            |
| 46                                            |      | Total                                 |

The first author conducted fourteen longer semi-structured interviews with people closely involved in the 2018 Principles and Criteria review process. These include mainly consultants (coded as TECH in the main text), but also some companies (LISC), academics (ACAD) and technical support organizations (TSO). We also used archival data from journal articles, websites, public reports, meeting minutes, and news media. Material available from the RSPO website, amounting to about 1000 pages of meeting minutes, reports, and similar materials, was especially important. A research assistant qualitatively coded these materials to identify which stakeholders were undertaking which kinds of activities with respect to the Principles and Criteria review. We also were fortunate to obtain records of comments submitted as part of the open consultation process on the 2018 Principles and Criteria review, conducted by Proforest, from the RSPO Secretariat. We were able to use these comments to triangulate stakeholder positions during the High Carbon Stock Approach debate.

## Appendix B. Coding scheme of firm- and standard-level cooperation

**Table A2.1**  
Overview of coding scheme, with examples of text coded into identified themes.

| Level of interaction   | Type of interaction | Theme                                                                  | Exemplary coded material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------|---------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firm-level interaction | Competition         | Civil society pressure provides motivation for firms to go beyond RSPO | <p>“It became an easy mark for Greenpeace to attack high end brands, so, you know, when I look at, you know, the environmental service markets, you know, especially in markets that are looking to buy, you know, environmental services from conservation projects, the big shift occurred once Greenpeace started attacking the brands and then the brands were what, you know, sent the shockwave back to the commodity producing companies. So, you know, the first movers were the brands, they started dictating, we're not going to buy from you. [...] Ultimately, that's, you know, they went after one big player, and that was Wilmar. And you know, it is essentially like the Walmart for palm oil, like every single supplier and buyer goes to them at some point. So once they started setting rules, then the market started responding.” (CON-3)</p> <p>“I guess the challenge that HCV ran into was I think from the beginning some ENGOs thought that HCV wasn't strong enough as an approach. It wasn't protecting enough forest and it was allowing for these compromises between production and conservation that some NGOs weren't happy about. People were saying that the RSPO system wasn't doing enough to stop deforestation. People have been saying that from the beginning, every since the RSPO first adopted it.” (Tech-1)</p> |

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Table A2.1 (continued)

| Level of interaction | Type of interaction | Theme                                                                                              | Exemplary coded material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------|---------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      |                     | Inter-firm competition for legitimacy (especially between RSPO members)                            | <p>“It comes back to the pressure they were getting from NGOs to go further and a frustration over some of the standards, like the RSPO, wasn't moving fast enough. It is easy enough especially for downstream companies to make commitments without in many cases bearing the responsibility for implementing them on the ground, cause they are far removed so they don't necessarily bear the costs of doing that - they just get the reputational gain for doing it. It is only when it is pushed down to their suppliers that the suppliers realize that it is not as easy and they have to bear the costs for that.” (Tech-2)</p> <p>“That's why I say that, why is this commitment coming from companies? They have to - they have to be part of any big movement? If not, they are left behind. They need to stay on the radar. [...] They're trying, they are trying because that's the nature of business to respond to the public, they respond to their consumers. They respond, because they simply will be left behind if they're not responding to such things.” (TSO-9)</p> <p>“They are not developing other standards, but they are thinking about different verifications or they may think about whatever the NGOs want. So I don't think the companies themselves are developing a standard, but they are more on developing some kind of monitoring or tools where they themselves can report to the criticisms or complaints every coming from the stakeholders.” (TSO-10)</p> <p>“In one of the discussions among CSOs, one CSO said that RSPO doesn't work, just look at the number of companies that have committed to RSPO and are buying RSPO but they are still being called out by Greenpeace and Mighty Earth and the likes” (NGO-03).</p> <p>“But certification - what do they mean? RSPO certified entities still have to deal with grievances - what does the certification mean then?” (GRO-01)</p> <p>“So I brought up this question many times in the taskforce. Why do you isolate an RSPO member following RSPO guidelines just because a refinery follows NDPE. They couldn't answer that.” (GRO-02)</p> <p>“The problem now is because of the market, so I think create the competition, really unhealthy competition. And NGOs always come with the very, very creative ways in formulating the issue in the past that you should not deforestation, labor.” (GRO-03)</p> <p>“There are a lot of, some of the companies, there are a lot of different initiatives, a lot of NGOs asking for different things. I am not surprised. There are companies that are making different ways and approaches, making their own sustainability policies. They could be very similar to what we do, but the verification part would be different or the monitoring and reporting part would be different. But all are on to the same objectives.” (TSO-10)</p>                                                                                                                                                                                                                      |
|                      |                     | Inter-firm competition for strategic position in the marketplace (especially between RSPO members) | <p>“To be honest, I think most companies try to position themselves as being, you know, ahead of the curve. Being, you know, being the better one of a not so great industry, and being then the reliable partner where the buyer can safely come to and get the volumes.” (LISC-5)</p> <p>“You've got another issue, which is, we are competing, and there is no real stand on how you demonstrate NDP compliance or the virtue of your supply base. So the way I usually describe it is - It's a race to the moon if you want, except it's a race to, it is a little bit a race to the moon, I'll tell you why I say that, because we are competing for the same target, which is an objective, which is at the same time very clear, to demonstrate no deforestation in your supply chain, and at the same time very fuzzy. And you have some tools which do not exist. So we are inventing the tools that will take us to the moon and back.” (LISC-4)</p> <p>““But then again, this is company's initiative. You know, we have to do whatever that we have to do for in terms of our suppliers. We understand also that there are other players who are also doing almost the same thing. But I do not see that there's a collaboration in terms of engagements of the suppliers. Because basically, at the end of the day, we are different entities, we have our own business, and we have our own target to achieve and we have our own framework.” (TRA-2)</p> <p>“And then more importantly, collaborating to scale efforts that do work. So over the past six years, we've seen unprecedented collaboration across the industry. Competitors, peers, suppliers, customers working together that would have never happened beforehand. And with that has also come a new level of transparency. So meaning, anything from having, who your direct suppliers are, and the mills in your supply chain.” (TRA-01)</p> <p>“To me that the value of RADD is not in the tool. They can say, yeah, we go we've got these radar things that go through the cloud. Yeah, yeah, yeah. Very well, next year, somebody would have a shinier tool. But the verification of the alerts through collaborative field verification, that to me, that's the value of something like that, because it brings that collaboration from industry. And we had to work, I joined [LISC-02] just when RADD was also starting. And we had these really interesting discussions at RADD on how do we share information without sharing information? So we cannot share maps between us? Not even to the WRI. So how do we then still say, I'm interested in this piece of the landscape and that piece of the landscape, so we made grid blocks, so everybody has grid blocks. So we try to anonymize the information. And so we can share it.” (LISC-2)</p> <p>“here are lots of working groups, there are RSPO working groups, there are informal ones that have been set up. [...] The successes that you see, it's when there's been collective action by all buyers. [...] Some of these some of these like, consumer goods</p> |
|                      | Cooperation         | Strategic cooperation for knowledge generation and standardization                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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Table A2.1 (continued)

| Level of interaction       | Type of interaction | Theme                                                                                                | Exemplary coded material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Standard-level interaction | Competition         | Clashes between approaches and structures                                                            | <p>forum, is a useful mechanism to use because it gets all its members together. They had a discussion, released in September, he called them roadmap about how they can deal with the fact that they didn't meet their targets. You know, that's, that's really useful, because you know, you're just talking, you haven't got to go to everyone individually, because it's like a union, it's easier to discuss with them, so I think they are really important and working groups are really important. And the changes in the industry wouldn't have happened if the companies didn't work together." (NGO-8)</p> <p>"And then trying to really engage, so many of the issues in palm are not supply chain issues, but systemic issues. And so you can only really address them at the industry level. And in many cases, not even that, eventually it needs others like government and such like to get involved. And so that's where we have to play our part as sort of shared responsibility approach that we need to be able to lead the way if we say that this is, this needs industry change, and we ought to be there in the industry trying to encourage that change. And that's why we're involved in a lot of these groups or are convening a lot of these kind of initiatives." (CGM-1)</p> <p>"Basically, the only thing that's publicly available is RSPO, certification, everything else that trainings and workshops and stuff that's usually led by private companies, they tend not to share that information with other companies for, because there is sort of, you know, a unwillingness to cooperate along that because, you know, you can basically get companies further downstream benefiting from saying, these mills have received training. Actually, they invested nothing in making sure that that training happened. So for many years there was an unwillingness to share that information, but actually through the collaboration that's come about through the IRF, and the kind of palm oil collaboration group, which sort of emerged around the IRF, there's a lot more willingness to do that. [...] That level of shared reporting and sort of knowing who did what is sort of more going through the collaborative group." (TSO-7)</p> <p>"I think it is the fact that the HCSA and No Deforestation commitments are so absolute and so top-down and they kind of clash with a lot of what RSPO has set itself out to be, as an inclusive, bottom-up, well relatively bottom-up approach, it is definitely not really bottom-up, but it is more so than the HCSA. So that has been a big clash in some ways. You got ENGOs thinking about things at a global level and pushing on that, without allowing for the local issues to come through and that is an issue with smallholders and high forest cover. When you are talking about deforestation there is clearly a difference of opinion there." (Tech-1)</p> <p>"I think RSPO on the deforestation side, they've been playing a little bit catch up, so now they have adopted HCS, which is good. I think where they're structurally not suited for is basically the supply chain, a third party mill, because the assumption of the audit is that you have control over the unit. And then the supply chain you don't have control over your suppliers, so doesn't fit the smallholder model. And then that's why of course the NDPE was developed, to address that issue, that gap basically. Then on the NDPE side, you know, if you look at the trends of deforestation, where more deforestation is happening outside than inside the concession. You know, even the NDPE will reach the limit. Yeah. And then you need to move more toward like, jurisdictional landscape approaches. [...] So then you have a landscape sustainability, you know, responsibility, quote, unquote, right? So we're - RSPO is hitting it limits, but it will always set a higher bar or NDPE will have its limits and it will set a higher bar. But in my policy work I try to point out to internal stakeholders, external stakeholders that we need to put more effort into smallholders and communities." (LISC-3)</p> <p>"I think that it seems like there is a very heavy pressure on RSPO through some of the NGOs that are not members. In particular Greenpeace and RAN, because they have a high brand value in the public - they have credibility that many of the companies certainly lack. They can influence the public through transparency and by that influence businesses in a way. They exert a direct pressure behind the scenes and I think they also work through the companies, cause they involve companies that subscribe to the No Deforestation approach and these companies I think, whether they really like it or not, I think there is a variety from companies feeling pressured into that position, to some of them really willingly being part of" (NGO-9)</p> <p>"Outside the RSPO circle, the powerful ones are from the NGOs - Greenpeace, TFT - actually the whole committee of the HCSA or the NGOs has been pushing this to draw a very clear line in terms of what is no deforestation." (TSO-10)</p> <p>"I was involved with Greenpeace in setting up POIG, the palm oil Innovation Group, which was, from my point of view, set to spur RSPO to raise its game after the review in 2013, where it didn't meet stakeholder expectations" (LISC-6)</p> <p>"The RSPO became a bit irrelevant for a long time. You never really even spoke about the RSPO in meetings, that will probably - well, it may have changed already. With the new principles and criteria, it's difficult to assess because the meetings are not taking place so much with corona, right. I think the individual policies of the companies are more important than the RSPO. Because they went, they had that period where the companies adopted NDPE policies and went so much further than the RSPO. The RSPO lost a lot of its significance. And that is hard for it to get back. And whenever you're in discussions with companies, it is always about their own policies, and the industry NDPE policies rather than the RSPO. I only really use the RSPO if you're talking about new planting procedures or their complaints system. [...] But I just know in my own discussions with companies, it's never about RSPO. And growers will</p> |
|                            |                     | Pressure on RSPO from non-member NGOs that set up competitors                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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|                            |                     | Competition between RSPO standard and companies' own initiatives leads to loss of relevance for RSPO |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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Table A2.1 (continued)

| Level of interaction | Type of interaction | Theme                                                           | Exemplary coded material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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|                      | Cooperation         | Motivation to reintroduce NDPE protocols into RSPO standard     | <p>talk about MSPO and ISPO. They have to do it. So I don't know I think the RSPO has a real problem that it just lost itself for a few years, and I think it will struggle." (NGO-8)</p> <p>"And when we say sustainable we mean deforestation-free. And this is kind of the approach that traders have been taking outside of the RSPO, because the RSPO is not doing it internally. And this is why we are seeing this divergence, or - I don't want to say divergence actually I think it should be more of an expansion because we still see RSPO as the core; if you can get certified against the RSPO standard that is great. But acknowledging some of the weaknesses and the challenges, taking this approach by looking at third-party supply through traders, what are the approaches we can take? So yes the RSPO is introducing things like the smallholder standard and the independent smallholder standard, but for traders this is where traceability has really been coming in, and this idea of transparency around who you are buying from and where is it coming from." (NGO-1)</p> <p>"So our stakeholders require that it. Is not us who made the standard, it is our members. So our members agree to put more on that to strengthen our standard, okay, actually to also respond to this, you know, everywhere is NDPE commitment. Well, you commit, we verify. Not just commit. So we provide that actually we provide a verification system of those commitments. [...] So I think the, the push is coming from stakeholders themselves on how RSPO can improve the bar in terms of the standard. NDPE is there already in the discussion, in the commitment. So they are bringing that in to the taskforce, discuss it and then translate those discussion points into a more structured product which is the standard, P&amp;C. So by having those indicators within the P&amp;C, who are basically trying to address NDPE, it means that it become a mandatory, an obligation to members to comply with that standard. Because if it is on like, what happened before NDPE is still has already become a huge discussion outside of the standard, but it is not part of the compliance, it's a bit challenging to push a member to go beyond commitment to transform the operation." (TSO-9)</p> <p>"I think a lot of it comes from the pressure from ENGOS in particular has put on the RSPO. A demand for RSPO to become a No Deforestation standard. They are the ones who are shouting loudest. That is probably the main factor. A lot of the RSPO consumers downstream has also gone and made their commitments to No Deforestation and are looking for some tool to say that they are implementing it in practice. And if they can use the RSPO that would potentially simplify their sourcing efforts. I don't think, as with a lot of these things, you make your commitment in the beginning and then they try to implement in practice afterwards and I think that often the two don't go hand in hand in a considered way." (Tech-1)</p> <p>"I think the problem there was because there was maybe some, I don't know, there's always been some disappointment with RSPO or realizing that RSPO was not sufficient to stop and address the urgent need to slow down or get completely rid of deforestation driven by the expansion of oil palm. So they said 'we need more', and the pressure on some of the big companies saying you have to do more with respect to the declaration of commitment to NDPE, but then sort of get another scheme. So had the consumers become completely confused now, what should I buy or what should I not buy, which may result in 'well I will buy just anything because seemed all the same'. So trying to align that and get that then absorbed into RSPO, which then resulted in the revision of the RSPO standards and adopted in 2018. So yeah, that is where it converges again. So it makes it better recognizable, and hopefully better implementable. [...] But I think as you say so the general tendency seems to be, okay, RSPO now is the next level. And it's that sort of sufficient to align with our commitment." (TSO-3)</p> <p>"I think, generally, it's accepted that the RSPO is now sufficient to be considered NDPE. But what you still don't have is a method of getting those non-RSPO certified actors? I mean, what do they then do. I think that's where you are facing the difference now. [...] So yeah, I guess it's become a kind of, it's moved from being a three track which is kind of uncertified, certified, but not NDPE and certified NDPE to now being just certified or not certified again." (CGM-1)</p> <p>"In fact we are part of the HCS Executive Committee and we are part of the RSPO's various working groups. So we have kept both sides informed about developments and tried to bring them together, because we essentially want to implement these two initiatives, and if the two initiatives don't get along, we are going to be like an ant to two fighting elephants, and we don't want that. So we help facilitate the exchange of information and sort of push for both sides to continue to collaborate." (LISC-7)</p> <p>"we are very actively participating in the 2018 PNC review as one of the task force members so we agreed to the adoption of HCS and we also working with a lot of partners including the HCSA on defining appropriate method for high forest cover countries" (LISC-2).</p> <p>"So, that's what happened since the beginning, when NDPE then come into the picture, I think if we look at on a bigger picture it is kind of in line with the idea and the vision that RSPO has initiated earlier, but then you know, that as this become a bigger discussion, the public, the consumer, are talking more about it. So now we have different, different sets of options. Yeah, we adjust, it is all is the process of learning. And well, it's a journey. So we see when it fits on the purpose and the long term to improve the industry itself and also to capacitate the stakeholders, then we are at the same agenda." (TSO-9)</p> |
|                      |                     | Collaboration via 'bridge members' involved in both initiatives |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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|                      |                     | (Re)framing of new ideas of being in line with original mandate |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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Table A2.1 (continued)

| Level of interaction | Type of interaction | Theme                                                                        | Exemplary coded material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                      |                     | Continued conflicts over collaboration (combining of approaches) in practice | “What is interestingly enough is that what the RSPO seems to have done is to reserve the right to find sort of their own solution to minimize deforestation in these high forest cover landscapes and it seems like the RSPO taskforce weren't really prepared to accept an absolute ban on conversion and no deforestation in places where much forest is around, because that would essentially make RSPO uninteresting and redundant in some countries where there is a palm oil frontier as opposed to being able to influence that in a more responsible direction. So that is sort of in opposition to the HCSA because they want to have the approach implemented in a consistent and in the same way, using the same toolkit and decision-making and wherever it is. It seems like there is not really an acceptance in the HCSA. It is also even in high forest cover, which I was part of, which was actually looking into if the concept should be adapted. It is going to be interesting to see how this plays out. There is a clear conflict particularly around what to do with this high forest cover landscapes.” (ACAD-1) |

Appendix C. Empirical evidence of increased attention to oil palm in El Niño Years

Fig. A3.1 shows worldwide Google searches on palm oil topics, which we can take as a rough indicator of public attention. Searches for palm oil, which have tended to increase steadily over time, increased more rapidly than we would have expected based on the mean rate of change during periods of intense El Niño activity in 2015 and a lesser El Niño event in 2019, before dropping below the level of attention we would expect based on the overall rate of change during period non-El Niño years. This association suggests that NGOs wishing to attract attention to the palm oil issue may benefit from headwinds during these periods.

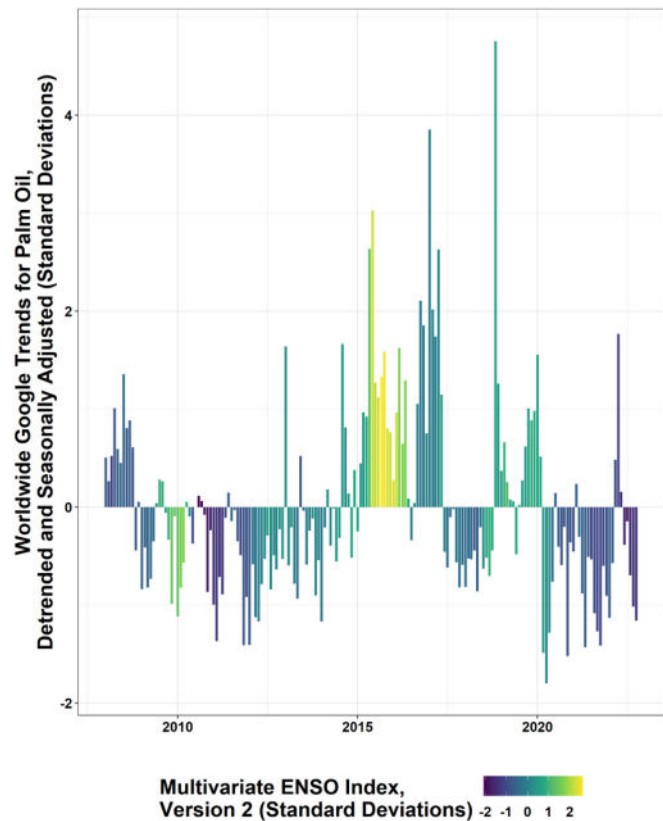


Fig. A3.1. Worldwide Google Trends Searches on the topic “Palm Oil” from January 2008 to October 2022, detrended and seasonally adjusted using ordinary least squares regression model with fixed effects by month and a linear effect by year since 2008 (Google Trends, 2022).  $N = 178$  months. Estimated in R 4.2.1 (R Core Team, 2022). Bar colors are determined by the US National Oceanic and Atmospheric Administration's (2022) Multivariate ENSO Index, Version 2, where higher values correspond to more intense El Niño periods. Plotted with ggplot2 (Wickham, 2016). Based on a regression model estimated with the fixed and linear effects, a one-standard deviation increase in the ENSO Index was associated with between a 0.1 and 0.35 standard deviation increase in worldwide Google Trends searches with 99% confidence.

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