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The politics of the green economy in provincial Indonesia

Insights from coal and oil palm sector reforms in East Kalimantan

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Key messages

- **East Kalimantan province (Kaltim) has adopted and developed a long-term phased 'green' economic reform strategy that includes goals to limit coal production and increase agricultural productivity, particularly in the oil palm sector.**
- **One notable achievement of East Kalimantan's green economic reform is the issuance of various regulations supporting low-carbon development that indicate a "politics of possibility" and an appetite for change from key actors across the political spectrum. The challenge ahead is how to mobilize key actors to implement these regulations as quickly as possible.**
- **We find that the enactment of regulations on post-mining landscape reclamation and rehabilitation was associated with well-organized public mobilizations, but coal remains central to East Kalimantan's economy. For oil palm, the government is simultaneously promoting further oil palm development along with high conservation value forest protection – now a policy prescription with widespread support from members of the house of representatives and development partners.**
- **However, the East Kalimantan Provincial Government also seeks to maintain economic growth – meaning the province is unlikely to completely phase out coal mining and/or halt oil palm expansion in the near term.**
- **Clear and consistent policy directions from the national government, in combination with significant new global market signals, are required for more substantial provincial green economy reforms to proceed.**

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Oil palm plantation in East Kalimantan, with more forested land is being cleared for more expansion, 2017
Photo by Mokhamad Edliadi/CIFOR

Introduction

A 'green economy' was conceived as a development pathway that could result in "improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (UNEP 2011). The green economy concept has been seen as a pathway for 'sustainable development' where trade-offs between the economy and environment (e.g., economic growth or conservation) are not seen as constraints but as opportunities for new sources of income and employment (Pearce et al. 1989). A green economy reform is typically orchestrated by national government agencies, has multiple objectives (e.g., poverty reduction, building climatic resilience, improving the economy), and employs a mixture of command-and-control and market-based instruments. Indonesia's Low Carbon Development strategy (LCDI) is one example (Bappenas 2019).

Given the severity of unfolding global environmental crises, a serious transition to a 'green' and low-carbon economy is necessary. However, transition to a green economy is far from easy, as various trade-offs ultimately need to be made, and key stakeholders and constituents satisfied. Götz and Schäffler (2015) observed some policy dilemmas in a 2011 green economy reform in Gauteng province of South Africa: increasing the environmental cost of natural resource extraction versus risking lower government revenues from mineral-based industries. Perhaps unsurprisingly, in Gauteng, political and business leaders were opposed to green economy efforts and continued to promote mineral and industrial assets that were deemed to be a "competitive advantage that must be capitalised on" (ibid 83). Other scholars have argued that green economy measures can become a policy fig leaf – promoting business as usual under the cover of a 'greened' plantation industry at the expense of natural environment and politically marginalized communities (McAfee 2016; Montefrio and Dressler 2016). Fünfgeld (2016) and Urano (2019) identify that such outcomes are especially likely if accompanied by limited transparency in the environmental impact assessment process. As with a number of policies from other jurisdictions, Indonesia's LCDI has also been criticized as inadequate in aspects relating to equity or social justice in the green economy (Elliott and Setyowati 2020).

This brief focuses on emerging approaches to the green economy using the Indonesian province of East Kalimantan (Kaltim) as a case study. East Kalimantan is a resource-rich economy which has undergone significant expansions in oil palm and coal mining development since the beginning of decentralization in 1998 (Fünfgeld 2016; Urano 2019). To counter this unsustainable trend, in 2010 the provincial government pledged to make East Kalimantan a 'green' province through the declaration of a provincial policy known as *'Kaltim Green'* (Green East Kalimantan). This was followed by a new development vision named *'Kaltim Berdaulat'* (Sovereign East Kalimantan) under the new governorship in 2018, in which the provincial government reaffirmed its commitment to "sustainable green development" (*pembangunan hijau berkelanjutan*). We explore how this government-led green economy reform is being implemented through the viewpoints of stakeholders at the provincial level who are involved in the reform process. More specifically, we examine how the dynamics between actors at the provincial level, including changes in political leadership, have shaped the direction and implementation of the green economic reform.

We used a political economy framework to explore the conditions and interactions between political actors and institutions, which may advance or hinder a reform agenda (Corduneanu-Huci et al. 2013). This framework was applied to analyse the various interests involved in the green economic reforms to: (i) limit coal production and revitalize post-coal mine landscapes; and (ii) prevent additional land-use change in the context of the oil palm sector. The study utilized multiple qualitative methods for data collection — targeted semi-structured interviews, participant observation, and desk review of strategic plans (2013–2018 and 2018–2023) of two provincial government agencies (Energy and Mineral Resources Agency and Plantation Agency). Fieldwork was conducted by the first author between June–July 2019 in Samarinda, East Kalimantan and Bogor, West Java. A total of 47 key stakeholders were interviewed (see Appendix) and two provincial policy meetings were attended in East Kalimantan.[1]

Although the green transformation commitment was introduced in 2010, we find that East Kalimantan has been unable to break its coal dependency. The province's stated intent to develop 'agriculture in a broad sense' remains largely focused on continued oil palm expansion, which continues with associated socioecological problems (Susanti and Maryudi 2017; Santika et al. 2019; Dharmawan et al. 2020). Oil palm development in the province is happening alongside the ongoing jurisdictional REDD+ initiative (Reducing Emissions from Deforestation and Forest Degradation) under the World Bank-backed Forest Carbon Partnership Facility (FCPF) Carbon Fund scheme aiming to protect East Kalimantan's tropical forests.[2] Overall, the analysis presented hereafter shows that transitioning to a just and low-carbon economy remains a difficult task if done in isolation – subnational governments would benefit from a national and global context that favours structural green economic changes.

Coal mining sites reclaimed using fast growing tree species (*Paraserianthes falcataria* L. Nielsen, locally known as Sengon), East Kutai District, 2018

Photo by Rina Kristanti/KLHK

A protester reads a poem in a weekly rally known as *Aksi Kamisan*, mobilized by students and activists from several local NGOs. The protest is held every Thursday in front of East Kalimantan Governor office, June 2019

Photo by Sandy Nofyanza/CIFOR

1 The first meeting (3 July 2019) was facilitated by Kawal Borneo Community Foundation (KBCF) and conducted with members of several local NGOs focusing on evaluating the draft provincial regulation (*Perda*) on spatial planning for coastal areas and small islands. The second meeting (17 July 2019) was between several coal mining company representatives, officials from the Ministry of Environment and Forestry (KLHK), Ministry of Energy and Mineral Resources (KESDM), and officials from provincial and district Environmental Agency (DLH) and Energy and Mineral Resources Agency (Dinas ESDM). The meeting focused on post-mining land reclamation, revegetation and utilization. These meetings provided useful insights on how stakeholders in East Kalimantan interact to promote their agendas. The first author was invited by the East Kalimantan Energy and Mineral Resources Agency to attend the meetings.

2 East Kalimantan is a pilot province for the FCPF Carbon Fund scheme, a result-based payment phase of REDD+ to be implemented in the province from 2020 to 2025. Through this scheme, East Kalimantan will receive USD 5 per ton CO2e emissions reduced from deforestation and forest degradation.

Green economic development in East Kalimantan throughout the years

The *Kaltim Green* initiative was launched in 2010 by the then Governor, Awang Faroek Ishak, at the first "Kaltim Summit", a multistakeholder forum on provincial development planning. In its original declaration, *Kaltim Green* aimed to create a set of development policies and programmes with four objectives: (i) improve the quality of life of East Kalimantan's people; (ii) reduce the threat of climate disasters; (iii) reduce pollution and improve the quality of land, water and air management; and (iv) raise the awareness of East Kalimantan's people in utilizing renewable resources (Ishak et al. 2013).

In 2011, *Kaltim Green* was formalized through a Gubernatorial Regulation (*Pergub* No. 22/2011, hereinafter the *Kaltim Green* Regulation – see Table 1), effectively setting *Kaltim Green* as a comprehensive and multisectoral green economic transition programme, which all provincial and district government institutions would adopt. In the same year, the provincial government established an ad hoc multistakeholder organization named the Regional Climate Change Council or Dewan Daerah Perubahan Iklim (DDPI) to coordinate the implementation of climate change-related policies in the province, including *Kaltim Green*-related policies. The Governor of East Kalimantan (*ex-officio*) sits as the head of DDPI, while the daily activities are the responsibility of a managing director. There are at least two factors that contribute to DDPI's significance. First, by design, its organizational structure grants DDPI strong power and authority to report directly to the governor, as well as coordinating several line agencies under the provincial government *and* international and local NGOs (often referred to as *mitra pembangunan* or development partners) that are formally chosen as members of DDPI. Secondly, since its establishment in 2011, DDPI leadership positions have been filled by respected academics with extensive policy advisory experience in the province (see also CIFOR 2019; Tamara et al. 2021). These factors, combined with solid coordination and collective action capacities, have helped the province in the FCPF Carbon Fund process over the last five years (the Emission Reduction Payment Agreement was recently signed on 27 November 2020). The East Kalimantan experience serves as an example that, even though the payments promised by this REDD+ scheme have yet to materialize, solid internal networks and long-term donor engagement can lead to some real changes on the ground (Seymour et al. 2020).

During the second Kaltim Summit in 2013, *Kaltim Green* was further defined as a long-term 'economic transformation'. This formulation was detailed in the *Kaltim Vision 2030: Kaltim Equitable and Sustainable Green Growth — A Policy Idea for the Post-Oil, Gas and Coal Economic Transformation*,[3] a publication by Governor Ishak and other high-level provincial government officials (Ishak et al. 2013). This report lays out seven economic transformation strategies, and a transition timeline toward industrializing East Kalimantan's resource economy (see Box 1), but does not constitute a legal obligation. Further, not all seven strategies outlined in *Kaltim Vision 2030*, nor the transition timeline, are included in official development planning documents such as the Provincial Medium-Term Regional Development Plan (RPJMD) or in the *Kaltim Green* Regulation. Notably, the *Kaltim Green*

Box 1. *Kaltim Vision 2030*

The *"Kaltim Vision 2030"* report by Ishak et al. (2013) envisions economic transformation to be gradual and long-term (from 2009 to 2050) with implementation proposed to be divided into the following five phases:

- 2009-2013: Initiation phase
- 2013-2015: Local capacity building and planning preparation for secondary industries development (for oil, gas and coal) and encouraging the development of broader agriculture sectors
- 2015-2020: Limiting the production of coal, developing palm oil-based secondary industries
- 2020-2030: Development of environmentally friendly industry (e.g., increasing the use of renewables)
- 2030-2050: Innovation phase

The seven economic transformation strategies are as follows:

1. Limiting the production of oil, gas and coal;
2. Developing secondary industries based on oil, gas and coal produced in the province;
3. Developing environmentally friendly industries;
4. Increasing the productivity of broader agriculture sectors;
5. Developing secondary industries based on agricultural products;
6. Developing new and renewable energy sources, as well as developing service, trade and financial sectors; and
7. Developing infrastructure to support industrial needs.

3 Visi Kaltim 2030: Pertumbuhan Kaltim Hijau yang Berkeadilan dan Berkelanjutan—Sebuah Pemikiran Kebijakan Transformasi Ekonomi Pasca Migas dan Batubara.

Coal mining pit in Berau District, March 2018
Photo by Rina Kristanti/KLHK

Regulation was established ahead of *Kaltim Vision 2030* publication, which may also explain the absence of limits on provincial coal production in the regulation (see Table 1). The RPJMD plan for 2013–2018 envisioned a new development pathway based on agriculture and agroindustry, but it did not include plans to limit fossil fuel extraction.[4] With the lack of binding regulations, *Kaltim Green* is therefore best understood as an aspirational set of goals and planning priorities that was introduced by former Governor Ishak.

In October 2018, East Kutai District Head, Isran Noor, was elected governor, replacing Ishak after completion of his maximum two-term gubernatorial limit. Governor Noor has since formulated a new development vision, 'Sovereign Kaltim,' emphasizing and re-asserting the province's rights to manage and develop its natural resources sustainably and its claim to resource revenues. Nevertheless, the provincial government has reiterated its commitment towards 'green and sustainable development' by continuing the legacy of *Kaltim Green*, notably by extending DDPI's mandate and continuing FCPF Carbon Fund implementation. A consistent use of 'green' development rhetoric is also found in the current 2019–2023 RPJMD (Government of East Kalimantan 2019).

Coal transition and post-mining reclamation: A gradual progress

Despite professed support for a green transition at the highest level of provincial government, *Kaltim Green* has done little with regard to a transition from coal as it remains integral to the province's economy (see Figure 1). In 2017, coal was the largest contributor (35%) to the province's gross regional domestic product (GRDP) (IESR 2019). East Kalimantan Statistics Agency data further shows that coal production has continued its rapid expansion, from 146 Mt in 2009 to 257 Mt in 2018 (BPS Kaltim 2020).[5] From a political economy standpoint, coal money (e.g., in the form of government revenue, job creation, development) is a driving force behind continued coal extraction. While we acknowledge that there are multiple interconnected dynamics at play that perpetuate coal extraction at both national and local levels, we focus on the predominant political support for coal extraction from local elites. Moreover, we also highlight that the limited improvements in the legally-mandated post-mining landscape reclamation and rehabilitation in the province has been driven by strong and well-organized pressure groups (comprising

4 See *Perda* No. 7/2014 on East Kalimantan RPJMD 2013–2018 and its revision in Gubernatorial Regulation (*Pergub*) No. 50/2016.

5 Indonesia's total coal production in 2018 was 557 Mt, meaning that East Kalimantan accounted for approximately 46% of national coal output at the time.

mainly of local NGOs; Toumbourou et al. 2020), and national-level interventions, such as one from the Corruption Eradication Commission (KPK; Kristanti et al. 2020).[6] However, we found that issues pertaining to low compliance in fulfilling reclamation obligations persist (see also ibid) and a previous study has also shown the presence of contested interpretations of reclamation regulations, further rendering the implementation ineffective (Toumbourou et al. 2020).

Coal phase-out

Interviewees highlighted the continued centrality of coal to East Kalimantan's economy, referring to recent endorsements from powerful provincial bureaucrats and political figures. Similar political support for coal has been documented at the national level (Fünfgeld 2016; Toumbourou et al. 2020). From an Energy and Mineral Resources Agency (hereinafter Dinas ESDM) official's perspective, the focus of *Kaltim Green* in the coal mining sector is on law enforcement and improving corporate compliance with existing regulations. It is important to note that national regulations mandating mining reclamation and post-mining activity plans were only introduced in 2010,[7] but none to date specifically mandate refilling of mining pits (Toumbourou et al. 2020). Another high-ranking Dinas ESDM official placed the emphasis of *Kaltim Green* on maximizing economic gains while minimizing the degradation caused by mining activities. Both views were endorsed by the interviewed members of the East Kalimantan Provincial House of Representatives (DPRD), emphasizing that coal remains a "supporting source" for the provincial economy. Moreover, our respondents from development organizations and local NGOs noted the influence of coal mining companies on policymaking in the province, including in the governor's advisory team (i.e., the Governor's Team for Development Acceleration and Oversight or TGUP3). Further, none of the interviewees representing the coal industry mentioned 'coal phase-outs', 'production limitations', or plans to offset the emissions from coal extraction, as mandated in the 2011 *Kaltim Green* Regulation (Table 1). The industry's lack of enthusiasm for *Kaltim Green* is indeed unsurprising, since a serious green economic transition would necessitate a drawdown and an eventual phasing out of coal.

Recently, under the ***Sovereign Kaltim*** vision, the Energy and Mineral Resources Agency is recommending the phasing out coal production by 5% each year and reaching a complete production shut down by 2033 (Dinas ESDM Kaltim 2021). Under this recommendation, East Kalimantan also expects to gradually rehabilitate post-mine landscapes and shift the labour force to other productive sectors – although a detailed coal transition plan is not available as yet. Regardless of the pace and magnitude of this phase-out target, this recommendation is an improvement on Dinas ESDM's 2013–2018 strategic plan under the *Kaltim Green* regime, in which coal production was targeted to increase each year (Dinas ESDM Kaltim 2014) – to address the growing demand for electricity generation from domestic and international markets (FCPF 2019).

Reducing coal production is not an easy task for a provincial government since, according to Mining Law No. 4/2009 (and the recently amended version Law No. 3/2020), the national government has the authority to set nationwide and provincial coal production targets every year. The recent coal phase-out plan in East Kalimantan may be influenced by the national government's intention to start a moratorium on new coal-fired power plants from 2025 and phase out the use of coal-fired power plants by 2055 (Irfani 2021).[8] Similarly, the idea of increasing the value of coal by downstreaming mineral processing industries (see Box 1) is mandated by the Mining Law in light of the global mining boom in the 2000s. This 'value adding' idea has gained widespread support from politicians and policymakers alike, who argue that state intervention is necessary during commodity boom periods to avoid selling exhaustible resources too cheaply and too rapidly (Warburton 2018) and to reduce Indonesia's volatile export dependency (IESR 2019). Though fossil fuel downstreaming in itself hardly constitutes as a 'green' policy, one reason for its enactment was to slow the pace of extraction. To this end, a successful and just coal transition would require a national plan and commitment, as well as significant global market signalling towards clean energy sources (Swainson and Mahanty 2018) – certainly bigger than one province's green economic pursuits.

6 From coal mining permit reviews under the 2015 National Movement to Save Indonesia's Natural Resources by KPK, involving the Ministry of Energy and Mineral Resources and Dinas ESDM Kaltim, it was found that only 386 mining concessions in the province (out of 1,404) are certified 'clear-and-clean' (based on March 2019 reconciliation data between the three institutions). Of relevance to East Kalimantan's green economic transition is that a clear-and-clean mining concession means that its area does not overlap with state forest estate or other land-based business permits.

7 Government Regulation (PP) No. 78/2010 on Reclamation and Post-mining, followed by Minister of Energy and Mineral Resources Regulation (*Permen* ESDM) No. 7/2014 on Reclamation and Post-mining in Mineral and Coal Mining Businesses and *Permen* ESDM No. 26/2018 on the Implementation of Good Mining Practices and Mineral and Coal Mining Activity Oversight.

8 However, in the long run (2021–2030) coal-based energy use is still projected to increase as the national stimulus policy will ease businesses' burden from the Covid-19 pandemic (Hartono et al. in press). Indication of prolonged use of coal is also found in the recent Updated Nationally Determined Contribution (NDC), in which Indonesia's mixed energy policy includes a minimum of 30% and 25% primary energy supply from coal in 2025 and 2050, respectively (Government of Indonesia 2021).

Barge transporting coal on the Mahakam River in Samarinda, July 2019
Photo by Sandy Nofyanza/CIFOR

Mining pit reclamation and rehabilitation

The enactment of regulations concerning mining pit reclamation and rehabilitation in the province was largely driven by persistent and well-organised civil society organisations (CSOs), led by several local NGOs, such as JATAM, Walhi and POKJA 30, through a series of protests, lobbying and litigations (Toumbourou et al. 2020). These CSOs filed at least four lawsuits against the government between 2010 and 2019, particularly the 2012 Samarinda Civil Lawsuit Movement or *Gerakan Samarinda Menggugat* (GSM), which was important in instigating a judicial review of the 2016 Provincial Spatial Plan (*Perda* No. 1/2016). According to Toumbourou et al. (2020), these efforts have ultimately led to two main policy measures: (i) the establishment of regulations on post-mining reclamation (*Perda* No. 8/2013); and (ii) the multistakeholder supervisory commission for post-mining reclamation oversight (*Pergub* No. 53/2015). Other than these regulations, most interviewees believed the remaining *Kaltim Green* mining sector objectives have yet to be realized (see Table 1). For example, regarding the renewable energy target, in 2015, diesel-powered heavy mining equipment accounted for 91% of total diesel fuel usage in the whole province, making it a prime source of energy sector GHG emissions (Bappeda Kaltim 2018).

In 2017, there were 537 untreated mining voids scattered throughout the province (Dinas ESDM Kaltim 2019). By 2018, at least 41.35% or 15,582.36 ha (out of 37,679 ha) of disturbed areas located inside forest estate areas (under Forest Estate Leasehold Licenses or IPPKH) had been reclaimed (Kristanti et al. 2019). This slow progress with reclamation is caused, among other reasons, by ambiguous and contested interpretations of reclamation regulations. To illustrate, some government officials strictly believe that mining voids must be backfilled (Toumbourou et al. 2020), while others (national and provincial) and coal mining companies are jointly promoting a measure called 'reclamation in other forms', by rehabilitating mining voids located in other land use areas or *areal penggunaan lain* (APL) as artificial lakes for ecotourism purposes and water reservoirs for local people. While this is not necessarily a bad proposal, some local NGOs interviewed strongly opposed the idea, arguing that all post-mining areas must be fully rehabilitated (in accordance with Forestry Law No. 41/1999 and Mining Law No. 4/2009), and only 10% of a total mining concession area is allowed to be left untreated (in accordance with *Perda* No. 8/2013 on Post-mining Reclamation).

Table 1. *Kaltim Green* objectives for agriculture (including plantations) and mining sector (selected)

Agriculture	Mining
• Preparation of a policy to support land clearing with zero-burning • Protection of high conservation value (HCV) areas within plantation concessions • Cultivation of locally competitive plant commodities • Increasing land productivity through agroforestry and land rehabilitation	• Formulation of policy on mining area reclamation • Increase the efficiency of fossil fuel use in mining activities • Formulation of policy on renewable energy • Development of environmental policy in the mining sector

Source: *Kaltim Green* Regulation (*Pergub* No. 22/2011 on *Kaltim Green* Implementation Guidelines, page 9).

East Kalimantan landscape featuring both coal mining and oil palm cultivation, 2017
Photo by Mokhamad Edliadi/CIFOR

Oil palm: Balancing expansion and conservation

The extent of oil palm in East Kalimantan can be observed through its spatial footprint and continued support from top provincial actors. Through a detailed review of planning documents and interviews with Plantation Agency (Disbun) officials and development partner representatives, we found that ongoing expansion is justified through the 2016 Provincial Spatial Plan, which allocated up to 3.26 million ha of provincial land for plantation purposes. Of that number, 2.59 million ha has been established as plantation concessions, and a clear majority (73%; 1.9 million ha) for oil palm (Disbun Kaltim 2019). In comparison, in 2017, the total area of rubber plantations (the second largest plantation crop in the province) was only 115,160 ha or about 10% of the total oil palm area allotted in the 2016 spatial plan (ibid, ii-28). Thus, we find that in the oil palm sector there are two competing development trajectories. On one hand, the government is keen to fulfil the spatial plan mandate by expanding the area of land under agricultural and plantation concession. On the other hand, active participation in climate change mitigation is visible particularly through East Kalimantan's participation in the FCPF Carbon Fund. Furthermore, similar to the coal mining industry, prominent political figures in the province have expressed continued support for oil palm. They emphasize the future need for East Kalimantan to maximize its vast lands for oil palm development as a substitute for coal, despite the negative socioeconomic and environmental impacts associated with oil palm development (Susanti and Maryudi 2017; Dharmawan et al. 2020) and the uneven distribution of oil palm economic benefits (Santika et al. 2019).

Disbun operationalizes the East Kalimantan Provincial Government's ambition to develop agriculture broadly as consistent with developing oil palm in accordance with sustainable development principles (*kaidah-kaidah pembangunan berkelanjutan*) (Disbun Kaltim 2019). These principles are considered important to counter the negative coverage of oil palm, and seen as a response to the growing pressure to curb one of the causes of climate change (ibid).

With the support of several development organizations, in September 2017 the provincial government successfully pushed seven district governments to jointly declare their pursuit of 'sustainable plantations'. One of the objectives under this declaration is to promote 'environmentally responsible' economic growth by protecting High Conservation Value Forests (HCVF) within licensed oil palm concessions.[9] This activity, now part of East Kalimantan's FCPF Carbon Fund strategy, aims to preserve 640,000 ha of natural forests and 50,000 ha of peatlands by 2030 (FCPF 2019). A year later, a collaboration between the executive branch and the House of Representatives (DPRD) demonstrated their ongoing commitment to making oil palm more sustainable through the establishment of *Perda* No. 7/2018 on Sustainable Plantations. Recently, the provincial government has established an HCVF criteria guideline through *Pergub* No. 12/2021 to help district governments identify HCVF areas, and another regulation is being developed regarding HCVF management. These policies were widely welcomed by low-carbon development proponents, such as the interviewees involved in the FCPF Carbon Fund preparation.

While these developments are promising, there are also limitations. The *Perda* on sustainable plantations fails to specify the amount or locations of land to be protected (i.e., 640,000 ha of natural forests and 50,000 ha of peatlands). The 640,000-hectare figure was initially based on 2016 forest cover data from KLHK. Consequently, some of the development organization representatives interviewed stressed that the size of protected HCVF may actually be lower. As of May 2021, the target area for HCVF was lowered to 417,505 ha of natural forest, based on a joint location analysis by the provincial government with support of several development partners. Moreover, this new target can still be lowered further, as now all district governments are working to prepare and formalize their own indicative maps of HCVF.[10] Additionally, HCVF protection policy has also received some opposition from businesses. From the private sector perspective, leaving land 'pristine' is equivalent to inviting illegal encroachment by nearby communities or their backers (i.e., community-level actors can be linked to other powerful actor groups). An interviewed corporate informant argued that companies risk losing their *Hak Guna Usaha* (HGU) concession rights for allocated parcels of land that become occupied by local actors.

Similar contestations between oil palm development (for more tangible and immediate benefits) and implementing REDD+ schemes (for future benefits) can also be found at the district level (Anderson 2019). As with the coal mining sector, the central government has the power and authority to bridge these trade-offs. The mandatory Indonesian Sustainable Palm Oil (ISPO) standard, for instance, requires the protection of peat, primary forests and riparian areas (Luttrell et al. 2018) – although non-compliance remains a problem due to various unresolved issues, such as contested land rights and capacity gaps (Dharmawan et al. 2020). Additionally, emerging jurisdictional approaches to REDD+ (characterized as government-led and involving various non-state actors) also open up new opportunities for public-private partnerships for sustainability (e.g., jurisdiction-wide certification), as well as for companies to showcase their sustainability commitments (e.g., zero-deforestation pledges) (Pacheco et al. 2018a). Yet, policy harmonization across public and private spheres is challenged by strong vested interests of those benefitting from business-as-usual deforestation (Pirard et al. 2015; Pacheco et al. 2018b). If done right, advancing jurisdictional-level sustainability could help orient clean investments, stimulate further multistakeholder collaborations, and help address the persistent socioecological issues associated with oil palm development (Pacheco et al. 2018b). Recently an overarching concept note for sustainable agricultural commodities at jurisdictional levels led by the National Development Planning Agency (Bappenas) and the Sustainable Districts Association or Lingkar Temu Kabupaten Lestari (LTKL) has been mainstreamed into the National Medium-Term Development Plan (RPJMN) for 2020–2024 (Seymour et al. 2020).

The primary focus of NGOs in oil palm governance is either on advocacy to prevent oil palm-related conflicts or assisting communities in conflict with corporations. However, based on our interviews, we found a growing shift within government and business circles towards labelling vocal critics (i.e., some local NGOs) as "preventers of development" or even as "foreign accomplices" tasked to undermine Indonesia's resource industries. In East Kalimantan, Anderson et al. (2016) found that certain private and government actors considered 'green' economic reform a constraining factor to national sovereignty and economic growth. Regardless of the true interests of the NGOs, these labels are misleading and are capable of steering the province away from the focus of reforming the oil palm sector. In all, land-use sector governance will benefit from inputs, commitments, and collaboration from diverse stakeholders, and should remain sensitive toward power inequalities between stakeholders to ensure effective participatory policymaking (Sarmiento Barletti et al. 2021; Peteru et al. 2021; Sarmiento Barletti et al. 2020).

9 Other than HCVF protection, this declaration aims to help fulfil the spatial plan mandate by: (1) prioritizing smaller-scale community plantation development in 'idle' lands; (2) evaluating the existing plantation licenses to maximize land-use efficiency; (3) ensuring companies and smallholders adhere to sustainability principles; and (4) promoting palm oil intensification. This declaration also reasserts provincial and districts' commitments in pursuing *Kaltim Green* agricultural sector objectives (Table 1).

10 Berau is ahead of the other six districts in East Kalimantan, having formally set an HCVF target of 83,000 ha (through District Head Decree [*SK Bupati*] No. 287/2020).

The future of green economic transition in East Kalimantan

We find that coal production phase-out, mining void rehabilitation, and prevention of additional oil palm expansion in East Kalimantan remain challenging, especially considering: (i) the large share of mining sector contributions combined with decreasing contributions from manufacturing sectors to provincial GDP (see Figure 1); (ii) the status of oil palm as one of the most profitable tree crops; and (iii) the need for some significant global market signals. More importantly, while the government has demonstrated its intent to shift towards a cleaner economy, at the same time there is a clear prioritization of resource-led economic growth, especially amid the ongoing Covid-19 pandemic. With regard to coal, despite lower emissions from lower energy consumption due to the pandemic, any environmental gains would not last if returning to pre-pandemic coal production and usage (Hartono et al. in press). For oil palm, global price decline in recent years combined with pandemic-induced drop in demand has been associated with slower plantation expansion in the country (Gaveau et al. 2018; Kaimowitz and Wunder 2021). Hence, this crisis provides government an opportunity to focus on the details of sustainable oil palm transition to safeguard forests and the environment (Gaveau et al. 2021), particularly since future demand for oil palm is expected to increase (Shigetomi et al. 2020).[11] The expansion of low-carbon activities in the province (such as the FCPF Carbon Fund) and interventions from the national level may help the province in drawing down coal production, rehabilitating post-coal mining landscapes, minimizing further land conversion for oil palm, and improving existing oil palm plantation practices and productivity.

Local NGOs also play important roles in advocating and representing the interests of the environment and politically marginalized communities – and through their persistence they can also deliver some changes (as demonstrated in the coal mining sector), although the work is considered far from over. Also, many key stakeholders interviewed supported the idea that both REDD+ (through the protection of HCVF) and sustainable oil palm development, with their associated strengths and shortcomings, are two prominent tools for a successful green economic transition in the province.

A particular target for reform in the eyes of local NGOs is the 2016 Provincial Spatial Plan. The plan allocated up to 5.22 million ha of provincial land (41.1%) for coal and mineral mining and 3.68 million ha (28.9%) for agriculture (including plantation) purposes. According to several local NGO representatives interviewed, the combination of this spatial plan, limited progress on coal pit rehabilitation, and continuous oil palm development have invited some serious opposition from those who believe that a green economy should first and foremost respect the resource rights of rural citizens and indigenous communities, as well as promote environmental sustainability and disaster reductions over profit. The largest protest in relation to *Kaltim Green* was staged by a coalition of around fifteen local NGOs in Balikpapan city during the Governors' Climate and Forests Task Force annual meeting in September 2017, stating that *Kaltim Green* was a 'hoax' (according to interviews with several local NGOs). The substance of the protest focused on slow and non-transparent mining pit rehabilitation processes, and everlasting conflicts surrounding oil palm development.

Perhaps aside from becoming a pilot province for the FCPF Carbon Fund, another achievement of East Kalimantan's green economic reform has been the issuance of regulations supportive towards low-emission development (e.g., *Perda* No. 7/2018 on Sustainable Plantations and No. 7/2019 on Climate Adaptation and Mitigation). While we acknowledge that despite the issuance of these regulations, large-scale coal mining continues, many mining pits remain unattended and deforestation continues (e.g. Wijaya et al. 2019), these regulations are not merely cosmetic. These regulations can be viewed as an indicator of the 'politics of possibility' (Toumbourou et al. 2020), which can help mobilize and maintain momentum behind the green economic reforms. These regulations also serve as proof that there is some appetite for change from key actors across the political spectrum. The challenge now is how to mobilize key actors to implement the regulations and bring about meaningful changes at a fast enough pace to stem the environmental catastrophe facing Indonesia and the world.

Elsewhere, green economy reforms similar to *Kaltim Green* have been enacted, but with undesirable outcomes. In the Philippines, for example, green economic development is used to legitimize large monoculture plantations (e.g., rubber and oil palm) in supposedly 'idle' lands – further marginalizing upland indigenous communities whose livelihoods depend on swidden agriculture (Montefrio and Dressler 2016). Similarly in Tanzania, a national agribusiness initiative gained popularity among investors due to its supposedly 'green' and 'inclusive' narratives, but the implementation on the ground is considered a new form of land-grabbing and is hardly inclusive (Buseth 2017). Some sceptical respondents from development organizations and local NGOs in East Kalimantan have expressed concerns over *Kaltim Green* implementation, desiring a firmer commitment from the provincial government toward environmental sustainability to avoid issues plaguing green economic transitions elsewhere. Some firmly positioned themselves outside government circles and stressed that a green economy requires grassroots-level participation and attention to the needs of local communities and the environment, which is actually stressed in the FCPF Carbon Fund implementation plan (FCPF 2019). Nevertheless, if

11 With European Union's (EU) Green Deal policies expected to be released within this year and the EU Renewable Energy Directive (REDII) being revised, the demand and expectations for sustainable palm oil (including for biofuel) will change (see McGrath 2021).

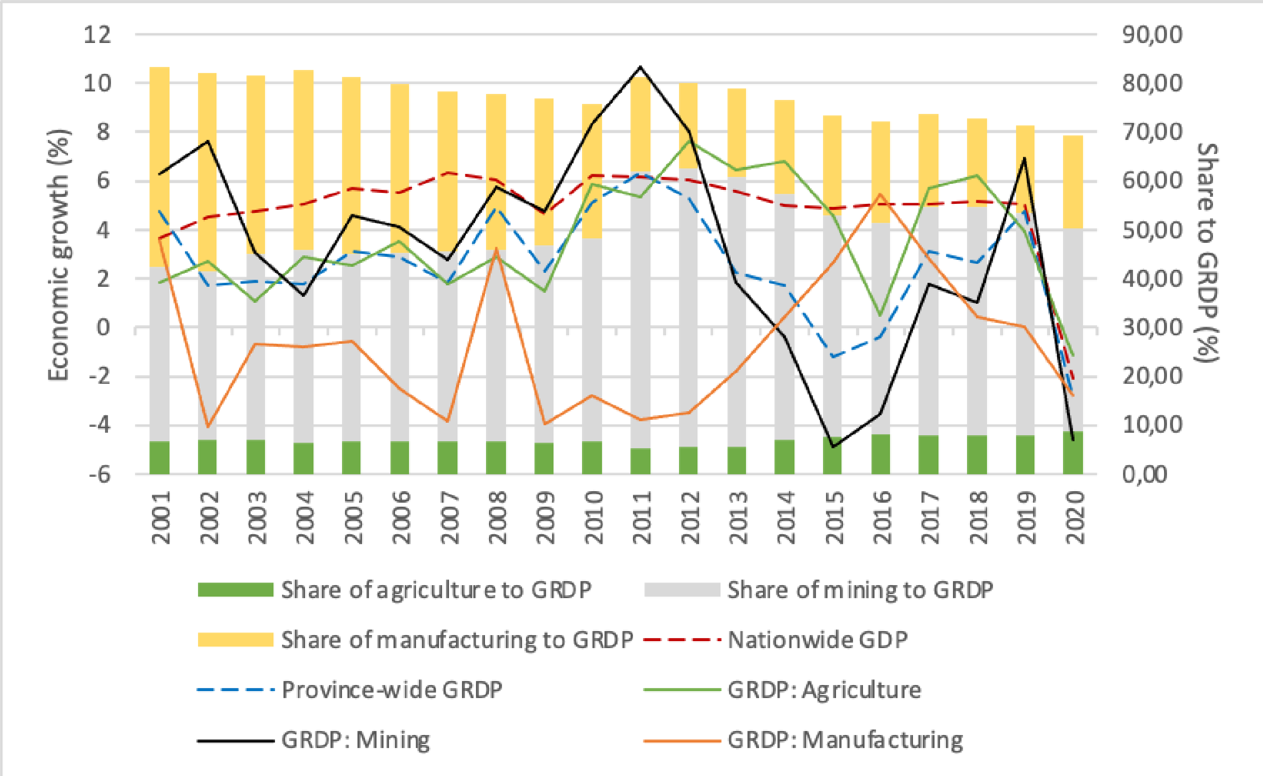

Figure 1. Economic growth (GRDP) of East Kalimantan province and share of agriculture (including forestry), mining and extraction, and manufacturing sectors to GRDP. GRDP growth data from 2001–2010 use 2000 constant price, while 2011–2020 use 2010 constant price; shares of the three sectors to GRDP use current prices. The significant drop in GRDP growth from the mining sector (2010–2015) was influenced by a global decline in market coal prices following the end of the commodity export boom in 2012, whereas the drop in 2020 reflects the economy under the Covid-19 pandemic

Source: BPS

the East Kalimantan Provincial Government continues with the current form of green economic transition, strong opposition from key NGOs and sections of civil society is likely to remain. And at least in the short run, economic interests are likely to outweigh the interests of marginalized communities and the environment. To this end, in addition to putting the environment at the heart of a green economy, future green economic reform or low-carbon development strategies must also break the perpetuity of injustices facing those who are economically and politically marginalized (Elliott and Setyowati 2020).

One critical similarity between a 'green' and a fossil fuel extractive (or 'brown') economy is the growth imperative (Wilkinson 2014). Critics argue that green economic policies will not ameliorate existing environmental problems as these do not address foundational problems of over-extraction and over-consumption (Death 2015; Lohmann 2016). Undoubtedly linking sustainability with continued growth makes the green economy a popular approach among many policymakers and development actors. The majority of our respondents in East Kalimantan emphasized the theoretical strengths of a 'green economy' to deliver environmental sustainability and economic growth, indicating that the global green economy concept is broadly understood in the province. Many also agreed that GDP growth should remain a central priority in national and provincial development discourse. The main difference relates to the extent of the trade-offs between economic growth and environmental protection that are considered acceptable. Contrary to the popular green economy rhetoric (i.e., a win-win for environment, society, and the economy), this research bolsters the view that competing interests are difficult to satisfy simultaneously.

Conclusions and lessons learned

This brief provides a critical reflection for policymakers and researchers on the challenges of delivering 'triple-wins' for the planet, people, and the economy. Outcomes of a transition to a green economy are ultimately shaped by strategic interests of powerful actors, and the critical responses from opposing stakeholders. Ultimately, a green economic transition must also be sensitive towards the needs and aspirations of local communities to bring about environmentally sustainable and socially equitable outcomes.

Signing of the Green Growth Compact, a multistakeholders initiative to support green economic development and forest conservation in the province, by Former East Kalimantan Governor Awang Faroek Ishak (center and seated) and representatives from KLHK, district governments, private sector, universities, local communities and development partners at the 2017 Governors' Climate and Forest (CGF) Task Force annual meeting in Balikpapan

Photo by Aris Sanjaya/CIFOR

Workshop on HCVF management within oil palm plantation concessions, involving local stakeholders such as East Kalimantan and districts' Plantation Agencies, DDPI, development partners and private sector representatives, April 2019

Photo by DDPI East Kalimantan

Breaking societal dependence on natural resource extraction is difficult, as demonstrated in East Kalimantan and in other resource-rich economies where progress remains gradual and incremental. Nevertheless, East Kalimantan serves as a rich case study, where provincial-level stakeholders can deliver progress by various means, from mass mobilizations and multistakeholder collaborations, to deliberations in the chamber of the house of representatives. Ultimately, provincial green economic reform cannot be done in isolation outside of national and global circumstances and influences – it needs national-level support, effective global market signals, and incentives for structural economic change that can tilt the balance of interests away from damaging coal extraction and unconstrained oil palm expansion in Indonesia. In all, the pursuit of unlimited economic growth based on material resource inputs is not possible and will surely be meaningless in the face of growing inequality and planetary limits.

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Appendix

List of stakeholders interviewed

Stakeholder [# of interviews]	Notes
Provincial government leaders [2]	Interviews with past and present highest-ranking provincial government leaders
Provincial House of Representatives (DPRD) [2]	DPRD members interviewed were responsible for the oversight of finance and the economic affairs, and mining and the natural environment affairs
Executive branches of the provincial government	
Marine Affairs and Fisheries Agency [1]	Interview with the agency head who is also the province's official delegate to the GCF Task Force
Plantation Agency [1]	Interview with agency head
Environmental Agency [1]	Group interview
Forestry Agency [1]	Group interview involving agency leadership
Energy and Mineral Resources Agency [2]	Interviews with the agency head and mineral and coal division representative
Development Planning Agency (Bappeda) [2]	Interviews with agency head and head of economics division
Provincial multistakeholder forum (ad hoc agency)	
Regional Climate Change Council (DDPI) [2]	Interviews with high-ranking DDPI leaders and Green Growth Working Group
National-level stakeholders	
Centre for Research and Development of Socioeconomic Policy and Climate Change (P3SEKPI) [1]	A research institution under the Ministry of Environment and Forestry (KLHK)
Governors' Climate and Forest (GCF) Task Force, Indonesia [1]	Respondent is actively involved in the development of East Kalimantan's FCPF Carbon Fund
Local NGOs	
Walhi (Indonesian Forum for the Environment), East Kalimantan chapter [1]	Indonesian-affiliate of Friends of the Earth; group interview
POKJA 30 (Working Group 30) [1]	An NGO focused on promoting good governance and community empowerment; group interview
JATAM (Mining Advocacy Network), East Kalimantan chapter [1]	An NGO devoted to mobilizing against mining operations and promoting community and environmental interests
Jaringan Advokat Lingkungan Hidup/JAL (Environmental Advocate Network) [1]	Provides legal aid to poor and marginalized communities on environmental issues
Yayasan Konservasi RASI [1]	A conservation foundation for rare aquatic species in East Kalimantan
Perkumpulan Nurani Perempuan [1]	NGO for women's empowerment in Dayak communities
Yayasan Ulin [1]	A biodiversity conservation NGO, also advising oil palm companies on HCV and community engagement
Yayasan Konservasi Khatulistiwa Indonesia [1]	A biodiversity conservation NGO with aims similar to Yayasan Ulin
Kawal Borneo Community Foundation (KBCF) [1]	NGO for community empowerment and policy advocacy on natural resources-related issues in Kalimantan
Development partners (members of DDPI as per Gubernatorial Decree [SK Gubernur] No. 500/K.125/2017)	
Global Green Growth Institute (GGGI) [1]	GGGI works in East Kalimantan and other regions to support 'green' policy implementation and mainstreaming
Yayasan Konservasi Alam Nusantara (YKAN) [3]	Interview with Green Growth Compact project representatives with knowledge of DDPI, East Kalimantan's governorship, and FCPF Carbon Fund
GIZ [2]	Interview with officials from FORCLIME (Forest and Climate Change Programme) and LEOPALD (Low-Emissions Oil Palm Development) projects
WWF [1]	WWF is working in East Kalimantan and other regions to support sustainable palm oil development
Kalfor (Kalimantan Forest) UNDP [1]	A UNDP-backed KLHK project aimed at preserving remaining forest in other land use (APL) areas outside the state forest estate

Stakeholder [# of interviews]	Notes
Yayasan BIOMA [1]	A local NGO providing research-based policy advocacy and community assistance
Indigenous People's Alliance (AMAN), East Kalimantan chapter [1]	An NGO advocating for the economic, social, and political interests of indigenous communities in East Kalimantan
Prakarsa Borneo [1]	A local research and policy advocacy NGO focusing on environmental law and governance issues
Planète Urgence [1]	A French NGO providing various forms of assistance (e.g., volunteers, funding) for local NGOs
Yayasan BUMI [1]	A local environmental and policy research NGO, working to promote progressive regulations in the province (e.g., ecological fiscal transfers from the province to villages)
Academia	
Faculty of Agriculture, Universitas Mulawarman [1]	The respondent is also a member of the Governor's Team for Development Acceleration (TGUP3)
Faculty of Forestry, Universitas Mulawarman [1]	The faculty is actively involved in community engagement and the implementation of various green initiatives in the province
Center for Climate Change Studies, Universitas Mulawarman [1]	The respondent is a respected senior academic working actively in tropical forest and climate change issues
Polytechnic of Agriculture (Politani) Samarinda [1]	The respondent is personally involved in various green initiatives in the province, often not under Politani
Research Centre for Tropical Ecosystem and Sustainable Development (TESD), Universitas Mulawarman [1]	TESD assists the government in various environmental initiatives, notably in the formulation of Emissions Reduction Programme Documents for the FCPF Carbon Fund
Private sector	
Indonesian Palm Oil Association (GAPKI) East Kalimantan [1]	Group interview with several GAPKI leaders
Indonesian Forest Entrepreneurs Association (APHI) East Kalimantan [1]	Group interview with several APHI leaders
Coal mining company 1 [1]	Interview with the Health and Safety, Environment and Security (HSES) Manager
Coal mining company 2 [1]	Interview with the Head of Mining Engineering

Caption and Photo Credit

Front Cover:

'Bold for Sovereign East Kalimantan', a new banner in front of *Lamin Etam* (the official residence of East Kalimantan Governor) signifies the new development vision under the new governorship, July 2019 (Photo by Sandy Nofyanza/CIFOR)

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