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DOI
10.1016/j.erss.2025.104103

Publication date
2025

Document Version
Final published version

Published in
Energy Research & Social Science

Energy Research & Social Science 125 (2025) 104103

Contents lists available at ScienceDirect

Energy Research & Social Science

journal homepage: www.elsevier.com/locate/erss

Original research article

Just Energy Transition Partnerships: An inclusive climate finance approach?

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ARTICLE INFO

Keywords:
JETPs
Climate finance
Just energy transition
Fossil fuels
Inclusive development
Transition theory

ABSTRACT

The Just Energy Transition Partnerships (JETPs) - between G-7+ countries and South Africa (2021), Indonesia (2022), Viet Nam (2022), and Senegal (2023) - aim to expedite coal phase out, promote renewables and incentivize a just transition. Past climate finance initiatives often fell short in terms of recipient countries' autonomy and their financing terms, transparency and objectives. Against this background, we ask: how can the JETPs initiate an inclusive and effective fossil fuel phase out and accelerate the energy transition? This study is the first comparative analysis of all four partnerships from a justice perspective. Drawing on institutional analysis, key policy documents and twenty-two expert interviews, we conclude that the JETPs: receive strong host country political support; involve a significant public finance pledge ($30.8 billion); prioritize country-owned investment plans; advance just transition frameworks; and spark vital discussions about the just energy transition. Nevertheless, the JETPs are inequitable because: of the International Partners Group's financial intransparency; a lack of high-quality just transition finance (only 3-4 % grants); distorted and untransparent consultations; numerous financial conditionalities; and a privatization focus. Moreover, they exclude the Global South countries facing the biggest challenges in phasing out fossil fuels. For the JETPs to be inclusive and effective, involved governments need to disclose financial terms from the outset, improve financing terms, streamline the number of funding schemes, add localization criteria, halt new fossil fuel investments, conduct robust emission target modelling, include and inform affected communities more actively, enhance accountability and prioritize more community based small-scale projects.

1. Introduction

At the climate change negotiations in Copenhagen in 2009 (COP15), Global North countries pledged to provide $100 billion in climate finance annually by 2020. According to the OECD [1] this promise materialized in 2022. However, existing climate finance often falls short because of its loan-based structure [2], lack of transparency [3], ambiguity towards fossil fuels [4], priority of more economically attractive large-scale mitigation projects [5] and recipient countries' limited autonomy in allocating funds [6]. Previous research shows that climate finance entrenches existing injustices – e.g. by excluding more vulnerable countries [7] or poorer rural communities [8]. Without the necessary safeguards, mitigation activities sponsored by climate finance can thus reinforce current socio-economic and ecological inequities [9].

Against this background, this paper examines the just implementation of the Just Energy Transition Partnerships (JETPs) – a new

Abbreviations: CCS, Carbon Capture and Storage; CFPPs, Coal Fired Power Plants; CIPP, Comprehensive Investment and Policy Plan; COP, Conference of the Parties; CSOs, Civil Society Organization; DFIs, Development Finance Institutions; EMDEs, Emerging Markets and Developing Economies; ETM, Energy Transition Mechanism; GCF, Green Climate Fund; GEF, Global Environment Facility; GHGs, Greenhouse Gases; GoI, Government of Indonesia; GoS, Government of Senegal; GoSA, Government of South Africa; GoVN, Government of Viet Nam; IPG, International Partners Group; IPPs, Independent Power Producers; JET IP, Just Energy Transition Investment Plan; JETPs, Just Energy Transition Partnerships; LDCs, Least Developed Countries; LIDCs, Low-Income Developing Countries; NDCs, Nationally Determined Contributions; PCC, Presidential Climate Commission; PPAs, Power Purchase Agreements; RE, Renewable Energy; RMP, Resource Mobilization Plan; UNFCCC, United Nations Framework Convention on Climate Change.

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https://doi.org/10.1016/j.erss.2025.104103
Received 14 January 2025; Received in revised form 18 April 2025; Accepted 23 April 2025
Available online 9 May 2025

multilateral climate finance initiative to expedite coal phase out,[1] promote renewable energy (RE) and incentivize a just transition in four countries. Introduced between the International Partners Group[2] (IPG) and South Africa at COP26 in Glasgow in 2021, subsequent agreements with Indonesia (2022), Viet Nam (2022) and Senegal (2023) followed. Due to their high ambitions, host-led implementation and focus on equity and procedural justice, the JETPs are seen as a vanguard climate finance approach. Drawing on institutional analysis, key policy documents and twenty-two expert interviews, this paper analyzes how the novel partnerships can overcome the existing fossil fuel-based energy regime [10], initiate an inclusive and effective fossil fuel phase out and accelerate the energy transition in the four host countries.

To date, academic research on the JETPs remains sparse. Existing studies tend to analyze a single partnership – see e.g. Lenferna [11] and Murcott [12] for South Africa and Jazuli et al. [13] for Indonesia. Notable exceptions are Ordonez et al. [14], modelling the 1.5 °C compatibility of the JETPs' for all but the Senegalese partnership, and Banerjee's [15] document analysis of all four agreements building on previous (un-)successful North-South partnerships. Hence, this paper aims to contribute a comparative analysis of all four partnerships from a justice perspective.

In what follows, Section 2 summarizes the literature on mitigation finance and justice, followed by a discussion of the theory and research design in Section 3. Section 4 reviews the relevant context, and Section 5 present the results of the analysis, resulting in a discussion in Section 6. The final section concludes.

2. Literature review

Based on a scoping review [16] of the mitigation finance and justice literature, we identify four main equity issues. First, failing to define what counts as climate finance at COP15 makes each provider to independently determine what qualifies, leading to inconsistent accounting and reporting methods [3,17]. For example, the OECD [18] declared annual global climate finance to amount to $57 billion for 2013-2014, while India's Ministry of Finance [19] acknowledged a mere $1-2.2 billion as genuine global climate finance. This stark discrepancy arises from three key factors: whether only grants or also (concessional) loans qualify; the degree to which finance directly addresses climate goals; and whether the finance is truly 'new and additional' or simply converted development funds [17,20].

Second, while loan-based climate finance can boost RE deployment in some cases, it includes additional risks and is challenged from a justice perspective. Kushawaha and Jain [21] find the relationship between loan-based finance and RE deployment to be 'U-shaped', indicating that debt financing prevents RE deployment at first but, beyond a certain debt level, promotes the energy transition. Indonesia – the only JETP country included in the analysis - would thus benefit from more loan-based RE financing since it has not reached the beneficial level of debt yet. However, high debt levels can increase sovereign debt distress and foreign exchange risks, especially since interest rates for new debt have been rising over the last decade [22]. In 2022, Low-Income Developing Countries (LIDCs) spent 23 % of their tax revenues on interest payments alone [23]. Moreover, considering the Global North's historic responsibility for the climate crisis, climate finance justice scholars object to debt financing and call for grant-based finance [5,24,25].

Currently loan-based financing represents a substantial part of international climate finance [2,4,26]. Table 1 compares three major public-led climate finance initiatives - the Global Environment Facility (GEF), the Green Climate Fund (GCF) and the JETPs – which all finance a substantial part of their projects through loans. While the grant to loan ratio is more than ten times smaller in the plurilateral JETPs than in the multilateral GCF, the former includes a substantial amount of grants in absolute terms due to its large public financing pledge (see Table 4 below). Notably, the JETPs only provide finance to four countries. Overall, grants made up 42 % of climate finance directed to Least Developed Countries (LDCs) in 2022, while emerging markets and developing economies (EMDEs) received 38 % and 35 % on balance-sheet financing and market-rate debt rates respectively [27].

Table 1
Comparison of different international public-led climate finance initiatives.

	Global Environment Facility	Green Climate Fund	Just Energy Transition Partnerships
Type	Multilateral	Multilateral (accountable to COP)	Plurilateral
Purpose	Environment (e.g. biodiversity, climate change, chemicals and waste, land degradation and water)	Climate mitigation and adaptation	Climate mitigation (focus on just transition)
Country focus	Developing countries and economies in transition	Developing countries	South Africa, Indonesia, Viet Nam, Senegal
Governance	GEF Assembly and Council	GCF Board and World Bank	IPG and host country
Amount	$5.3 billion for four years (GEF-8 period: 2022-2026)	$2.1 billion (period: 2023); 64 % of portfolio in public sector	$30.8 billion in public finance (3-5 year period)
Portfolio	Primarily grants; overall grant to co-financing ratio of ~1:5 (between 1991 and 2022)	42 % grants; 40 % loans; 12 % equity	3-4 % grants; 53 % concessional loan; 26 % commercial loans; 13 % guarantees; 3 % equity

Note: The differences in disbursement period and the percentage of the portfolio in the public sector complicate the comparison for amount and portfolio. For data see GEF [28], GCF [29] and Table 4.

Babic [30] also identifies the geographical unevenness of available financial resources and climate impacts as major political issue of RE finance. Climate finance channeled through Multilateral Development Banks, for instance, does not correspond with countries' climate vulnerability and focuses on a selected number of relatively wealthy countries [7]. Despite representing 12 % of the world's population, LDCs – including 46 countries [31] – obtained just $30 billion, or 2 %, of total climate finance in 2021/2022 [27]. Similarly, EMDEs, home to over half the world's population (excluding China), secured less than 15 % of the world's clean energy investments [32]. The Global North also continues to determine climate finance rules and investment choices by defining how multilateral climate finance institutions with more egalitarian norms can use their contributions [33,34].

Third, the language employed in climate finance tends to have a depoliticizing effect foreclosing more fundamental changes. The appropriation of transformational rhetoric, for example, diminishes the agency of non-state actors and host states [6]. More radical terms, such as 'climate debt' - which originally posited that major (historical) emitters owe remuneration to Global South countries and a forerunner of today's demands on loss and damage [35] - find their way into the United Nations Framework Convention on Climate Change (UNFCCC) void of "disruptive meaning and impact" [36: 1070]. COP28, for instance, launched a fund for loss and damage after several years of negotiations. However, at COP29 Global North countries failed to agree for this fund to be included as part of the new climate finance goal [37]. Provider countries also use different obstructing tactics, such as manipulating the terminology of climate finance, to resist deeper systemic changes like loss and damage [38].

[1] Apart from Senegal.
[2] Conditional upon the respective host country, the IPG consists of Denmark, the EU, the G-7 countries, the Netherlands and Norway.

Finally, while private finance is often considered as remedy to close the large energy transition financing gap, its accompanying 'bankability' logic entails additional risks that are likely to reproduce existing inequalities. Increasingly attracting private capital through de-risking shifts investment risks to the public sector [39,40]. Private sector investments tend to carry higher interest rates, shorter pay back terms, and exacerbate debt restructuring, leading to potential debt distress [22]. In the GCF, private finance also raises concerns over country ownership, transparency and civil society participation [41], and 'large-scale techno-managerial approaches' that appeal to private investors are considered more transformative [34: 9]. At the same time, studies have shown that "climate finance flows primarily to the most bankable, lowest risk, highest return, and often the largest scale projects" [5: 1] – e.g. in Senegal [42]. These patterns reinforce social, economic and territorial inequities, excluding poorer rural communities from accessing clean and affordable energy [8,43–45]. This paper goes beyond the literature discussed above and applies the four equity issues - accountability, quality and distribution of finance, depoliticization and financing beyond bankability – to examine the inclusiveness of the JETPs and their potential in overcoming the existing fossil fuel-based energy regime.

3. Methodology

This paper draws on socio-technical transition theory, employed to analyze far-reaching technological and societal evolution processes, including the development of experimental niches at the micro level that are able to exert pressure on the meso (regime) and macro (landscape) level [46–48]. Following this theory, the JETPs constitute a niche policy innovation that could challenge the existing fossil fuel-based energy regime.

Notwithstanding their increasing technological effectiveness, non-CO_2 emitting energy alternatives keep facing resistance from prevailing fossil fuel interests [49] and the narrative of stranded assets and resources. Existing power (im)balances obstruct a regime shift away from fossil fuels, exemplified by the 'clean coal' narrative or 'promising' future advancements in technologies such as carbon capture and storage (CCS) [10]. At the same time, transition theory still needs to fully consider different energy transition contexts in the Global South [50] and "the trade-offs between inclusive development and the promotion of renewable energies" [51: 40].

This paper, therefore, brings together Inclusive Development and transition theory, moving beyond traditional conceptualizations of economic development that prioritize growth. Sustainable development balances economic, social and ecological issues, but the cost of stranded fossil resources and assets is so humongous that it outweighs social and ecological issues. This renders a just and inclusive fossil fuel phase-out impractical due to the significant financial burden and trade-offs of leaving fossil fuels untapped [52]. Emphasizing the importance of addressing past and present socio-economic inequities and the vital role of ecosystems in sustaining more vulnerable groups, Inclusive Development acknowledges that the behavior of more powerful actors often aggravates marginalization and ecological breakdown instead [53].

Applying Inclusive Development, this paper analyzes whether the JETPs serve as a driver for just access and allocation of the burdens and benefits of the energy transition and mitigation finance. Social inclusiveness refers to just access to procedural justice and compensation for communities affected by a coal phase out, new and decent jobs in the RE sector, and affordable clean energy for low-income groups as well as the just allocation of the risks of the energy transition and climate finance both internationally and domestically. Ecological inclusiveness refers to the just access to ecosystems for livelihoods, clean air and environmental rights as well as the just allocation of the remaining national emissions and natural resources for RE, environmental risks of and responsibilities for the energy transition and to safeguard the environment. Though we do not separately refer to relational inclusiveness here, it is essential to drive political transformations across the other two areas [52]. We analyze each JETP in terms of its socio-relational and ecological-relational inclusiveness and across countries based on four inclusivity criteria from the literature (see Section 2): accountability, quality and distribution of finance, politicization and financing beyond bankability (see Table 2).

Following institutional analysis, we examine the impact of the JETPs on key actors against these criteria. This method allows scrutiny of institutional effectiveness considering pre-existing context and drivers. It seeks to address questions of causality (the causal impact of institutions on key actors), performance (the evaluation of institutions against pre-defined criteria) and design (the redesign of institutions for improved outcomes) [54]. Here we evaluate how the design and early performance of the JETPs affect the IPG and recipient countries' governments in achieving a just energy transition.

The paper draws from an analysis of two primary data sources. In a first step, we conducted a content analysis of key policy documents from IPG and host country governments. These include the four political declarations and three investment plans (Senegal did not publish its investment plan yet), which implicitly present the views of policymakers. Given that government officials can express their positions in public more frequently and that their views are incorporated in the JETP policy documents, we then conducted twenty-two semi-structured expert online interviews with key stakeholders with fewer opportunities to be heard to fill the existing gaps in our analysis and include more diverse perspectives. Amplifying the voices and lived realities of those most impacted by climate finance and the JETPs is pivotal, especially as the authors are based in the Global North.

Interviews were conducted with civil society actors not or only indirectly included in the JETP process (twelve interviews), academics (five interviews) and more institutional actors directly involved in implementing or providing technical advice during the JETP process (five interviews). In the results section, we refer to civil society actors as CSA, academic actors as AA and institutional actors as IA. Aiming for a balanced representation of these groups of stakeholders with expertise on all four partnerships, the selection of interviewees was based on purposive sampling and snowballing. Interview questions were broad and open-ended (e.g. asking about the main goals of the partnerships, their strengths and weaknesses, the involvement of civil society and the role of private finance), adapted to the specific expertise of the respective interviewee and conducted online between November 2023 and March 2024. It was made clear that participation was voluntary, confidential, anonymous and not renumerated. Participants were given prior information about the research's purpose and content and provided both written and oral consent for the interview and recording. Responses

Table 2
Criteria for inclusive JETPs.

Criteria	Questions
Accountability of JETPs	Does JETP financing directly address climate mitigation goals? Are the JETP funds 'new and additional'?
High-quality and just distribution of funds	Do the JETPs include a sufficient amount of high-quality funds (i.e. grants)? Are JETP host countries autonomous in allocating the funds? Is the choice of JETP host countries reasonable from a justice perspective?
Politicization of JETPs	Do the JETPs entail a transparent debate about the involved trade-offs? Do the JETPs include the perspectives of non-institutional stakeholders? Do the JETPs present a partnership between equals?
Financing beyond bankability	Does JETP financing include a balance between different types of RE projects? Do the JETPs prioritize access to affordable and clean energy?

Note: Based on Section 2.

were transcribed and processed the same day of the interview and categorized using a mix of directed and conventional content analysis for coding and analyzing. To triangulate results, the analysis of primary data from both policy documents and interviews was cross-checked against government statements in public fora, the media and additional reports.

4. Context

The JETPs developed within a context of higher cost of capital in the Global South due to elevated risk perceptions [32] and deep-rooted power asymmetries in the global finance system [55]. In the Global South, 62 states currently face, or are at moderate to high risk of, external debt distress [56].

Fig. 1 shows that the JETPs do not include those countries that would need to transition most urgently with the least resources available. Fossil fuel-dependent low-income countries – Angola, Bolivia, Laos, Mozambique, Nigeria, North Korea, Papua New Guinea, Republic of Congo and Uzbekistan – would be equally, if not more, suitable for a JETP from a justice perspective. Yet, for the IPG, the high-level partnerships did not only offer a pathway to expedite Southern coal retirement and advance their climate finance obligations but also an opportunity to respond to China's Belt and Road Initiative [59]. This, for instance, led Japan and the US to co-chair the Indonesian partnership [60]. Moreover, despite their finance pledge, IPG countries continue to subsidize fossil fuels. Although G-7 states promised to phase out inefficient fossil fuel subsidies by 2025, these increased by 15 % from 2016 to $1.36 trillion in 2023 [61].

Table 3 provides an overview of the host countries' energy sectors, energy transition challenges and JETP trajectories. South Africa has the highest GHG emissions per capita because coal dominates the country's electricity generation, followed by Viet Nam, Indonesia and Senegal. Coal also serves as the primary energy source in Indonesia and Viet Nam, while Senegal relies on imported heavy fuel oils, leading to high electricity prices [62]. All four recipient countries recently opened their energy sectors to different degrees to the market [11,44,63,64], with Independent Power Producers (IPPs) producing over half of Senegal's electricity [65] and roughly one-fourth in Indonesia and Viet Nam [66,67].

Moreover, recipient countries encounter diverse energy transition challenges, which fed into the countries' desire to engage in a JETP. South Africa and Senegal face high sovereign debt rates, and except for Viet Nam, electricity access remains non-universal, especially in rural areas. South Africa, with an unemployment rate exceeding 30 % [82], will see around 80,000 coal workers in Mpumalanga affected by coal fired power plant (CFPP) closure alone [83], with nine CFPPs scheduled for retirement by 2035 [74]. In addition, South Africa's aging coal fleet causes frequent load shedding, straining the economy and domestic households, while Indonesia's and Viet Nam's coal fleets are relatively young. Consequently, state-owned utility companies and IPPs in these two countries still need to retrieve initial investments. In Indonesia, IPPs hold long-run, rigid Power Purchase Agreements (PPAs) with the state-owned utility company PLN, ensuring fixed-price energy procurement. However, before CFPPs reach their designated economic lifetime, PPAs are costly and complicated to exit early [75]. Indonesia's energy transition is also hampered by PLN's 50-60 % reserve margin from CFPPs mainly built by Chinese and Japanese investors [84], which make it less attractive to build new RE. High fossil fuel subsidies for end-use electricity across all four countries further distort the level playing field for RE.

Additionally, Indonesia's JETP does not restrict investments into captive CFPPs, potentially adding up to 20 GW by 2030, and Viet Nam continues to construct new CFFPs (~14 GW) until 2030 [75,85]. South Africa and Senegal build on natural gas as a transition fuel [71,86]. Moreover, all these countries will be left holding stranded resources and assets [87].

The JETPs build on the respective Nationally Determined Contributions (NDCs) and national energy transition policies. While South Africa's, Indonesia's and Viet Nam's agreement emphasize CFPP phase-outs, Senegal's JETP evolved in the aftermath of Russia's invasion of Ukraine and Europe's scramble for non-Russian gas imports [60]. Across host nations, governments take on key roles in realizing these partnerships and provide substantial political backing. South African and Indonesian officials, in particular, have voiced firm optimism regarding their respective JETPs.[3]

5. Results

We determined three key policy instruments deployed by the IPG and host countries across partnerships through institutional analysis: (i) international public funds, (ii) private sector engagement and (iii) community and civil society participation.

5.1. International public funds

International public funds amount to $30.8 billion - i.e., around 3-4 % grants, 53 % concessional loans and 41 % at commercial financing rates (see Table 4 and Fig. 2).[4] The majority of loans thus come with better conditions than on capital markets. For instance, interest rates of 3 % and 3.6 % of two €300 million loans to South Africa are 5-6 percentage points cheaper and include a five-year grace period [89]. Certain levels of debt financing are also considered to increase RE deployment [21].

Notwithstanding, all loans demand pay back with returns, which can exacerbate existing debt distress, in particular in South Africa and Senegal, as well as increase foreign debt levels as in Viet Nam [63]. Often, these loans necessitate sovereign guarantees from host governments (Interview #15: IA); Indonesia must allocate as much as $8.4 billion for such guarantees under its JETP [91]. Additionally, loans disbursed in hard currency make host states subject to foreign exchange risks, which can increase actual interest rates and aggravate repayments (#1: CSA; #5: CSA). For instance, the rand/dollar rate jumped from 14.9 in September 2021, when announcing the political declaration, to 18.2 by March 2025 [92]. The JETPs' credit-based structure also shifts financial risks to taxpayers and undermines the partnership's credibility by sidelining the principle of historical responsibility (#2: AA; #6: CSA; #7: CSA; #17: CSA).

Furthermore, (commercial) loans are not suitable for transition projects with high positive externalities but little investment returns (i.e., the compensation of workers, consultation and CFPPs' retirement). However, despite the IPG's just transition pledge, these essential projects face financial insecurity, as grants make up less than 4 % of public finance. For example, to transition the Mpumalanga region alone requires more than five times the grants pledged to South Africa [74]. Concessional finance, in particular grants, crucial for early CFPP phase out in Indonesia and Viet Nam [93], are mostly designated for other uses like technical assistance schemes [75,76]. Moreover, while the JETPs "are considered a fossil-free zone" (#20: IA), Indonesia's energy ministry and PLN intend to rely on co-firing with hydrogen and ammonia and CCS rather than retiring CFPPs [94]. As one stakeholder explains, "the main reason why it is only two power plants listed [for retirement under the Indonesian JETP] (…) is because of the limited amount of funding provided by the IPG" (#15: IA; see also [95]). These two CFPPs also form part of the pre-existing Energy Transition Mechanism (ETM), partially incorporated into Indonesia's partnership [75]. Viet Nam, similarly, considers CCS in its investment plan ([76]; #7: CSA).

[3] Authors' observations at G20 Bali Global Blended Finance Alliance Dialogue on 19th May 2024 [88].

[4] The percentages do not include Senegal since its investment plan is not yet published.

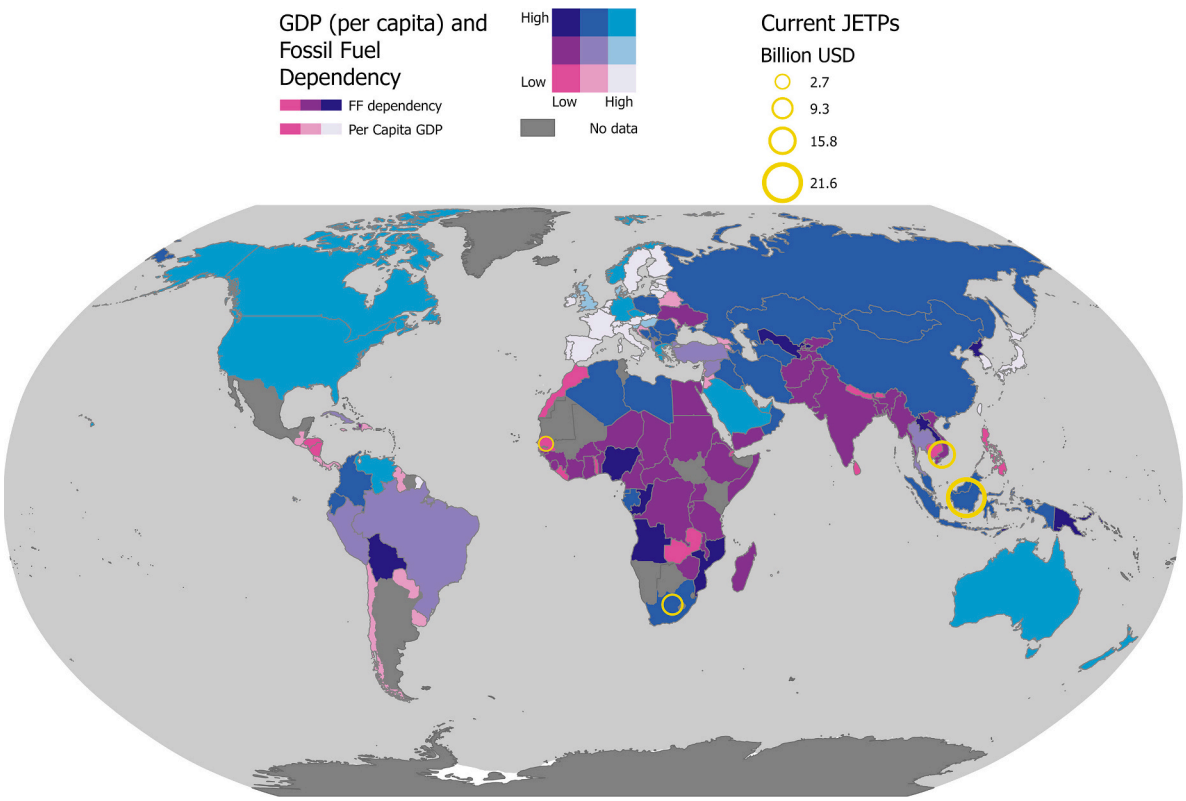

Fig. 1. Necessity of mitigation finance across countries.
Note: The small square depicts GDP per capita from left (low income) to right (high income) in relation to fossil fuel dependency from the bottom (low fossil fuel reliance) to the top (high fossil fuel reliance). Exemplifying countries colored in light blue (top right) have high GDP per capita and heavily rely on fossil fuels while countries colored in dark blue (top left) also heavily rely on fossil fuels but have low GDP per capita. For fossil fuel dependency see method [57] and data [58], for per capita GDP, data is based on the World Bank, obtained from Natural Earth.

Table 3
Overview of energy sector, energy transition challenges and JETPs in recipient countries.

		South Africa	Indonesia	Viet Nam	Senegal
Annual GHG emissions (t CO_2 eq per capita) [68]		8909	4473	4882	1688
Energy sector	Electricity generation share in 2021 [69]	86 % coal; 5 % nuclear; 3 % wind; 3 % hydropower; 3 % solar	62 % coal; 17 % natural gas; 8 % hydropower; 6 % biofuels; 5 % geothermal; 3 % oil	45 % coal; 31 % hydropower; 11 % solar; 10 % natural gas	77 % oil; 8 % solar; 6 % wind; 6 % coal
	State-owned utility company	Eskom	PLN	EVN, PVN, TKV/Vinacomin	Senelec
Energy transition challenges	Fossil fuel subsidies [70]	Coal and end-use electricity (2023): $1.32 billion	Coal and end-use electricity (2023): $6.15 billion	Coal and end-use electricity (2023): $3.37 billion	Electricity sector (2023): $458 million [71]
	Access to electricity [72]	87 % of urban population 93 % of rural population	100 % of urban population 98 % of rural population	100 % of urban population 100 % of rural population	97 % of urban population 43 % of rural population
	Government debt (% of GDP) [73]	71 % (central government)	40 %	37 % (general government)	75 % (central government)
JETP trajectory	NDC targets contingent on international climate finance	Enhanced NDC submitted September 2021; emission reduction to range of 350-420 MT CO2 by 2030 [74]	Enhanced NDC submitted September 2022, emission reduction goal: 43.2 % by 2030 [75]	Enhanced NDC submitted November 2022, emission reduction goal: 43.5 % by 2030 [76]	First NDC submitted in December 2020; emission reduction goal: 29.5 % by 2030 [77]
	JETP targets	Decarbonization of electricity system in line with enhanced NDC [78]	Peak electricity sector emissions: 290 Mt. CO2 by 2030; increase RE to 34 % of power generation by 2030 [79]	Peak electricity sector emissions: 170 Mt. CO2 by 2030; peak coal-fired generation: 30.2 GW; increase RE to 47 % of power generation by 2030 [80]	Increase RE to 40 % of electricity mix in line with PIMC [81]
	National energy transition policy	e.g. REIPPP (since 2011), NDP 2030 (2012), LEDS (2020)	e.g. RUKN (2019), RUPTL (2021), LTS-LCCR (2021), Perpres 112/2022	e.g. NCCS (2022), PDP8 (2023), NEMP (2023), NEDS (2024)	e.g. PIMC (2023), LTS (2024), LPSDE (2024)
	Announcement	At COP26 in November 2021	At G20 Summit in Bali (November 2022)	In December 2022 in Brussels	At Summit for New Global Financing Pact (June 2023)
	Investment plan	JET IP published in November 2022 for period 2023-2027	CIPP published in November 2023 for period until 2030	RMP published in November 2023 for period until 2030	To be published

Table 4
Overview of public and private finance pledged under the JETPs.

Type of funding			South Africa	Indonesia	Viet Nam	Senegal	Total
Public finance	Grants		330	300	320	163	1113[a]
	Concessional loans		5325	6950	2710	Tba	14,985[b]
	Commercial Instruments of DFIs	Loans	1500	1590	4230	Tba	7320[b]
		Guarantees	1300	2000	240	Tba	3540[b]
		Equity	N/A	380	310	Tba	690[b]
	Other / tbd		N/A	350	260	Tba	610[b]
Total public finance			8455	11,560	8080	2740	30,835[a]
Private finance (GFANZ)			N/A	10,000	7750	N/A	17,750[b]
Total JETP funding			8455	21,560	15,830	2740	48,585[a]
Total amount required			98,700 (2023-2027)	97,300 (until 2030)	134,700 (until 2030)	Tba	330,700[b]

Note: Amounts are in million USD and based on investment plans; for Senegal see [59]. The last column includes Senegal if the information is available (a) and if not (b). Commitments to South Africa have since been increased to $9300 million with an additional $383 million in grants [90]. Viet Nam's total amount is based on PDP8 (excludes costs for just aspects and includes JETP inconsistent fossil fuel investments).

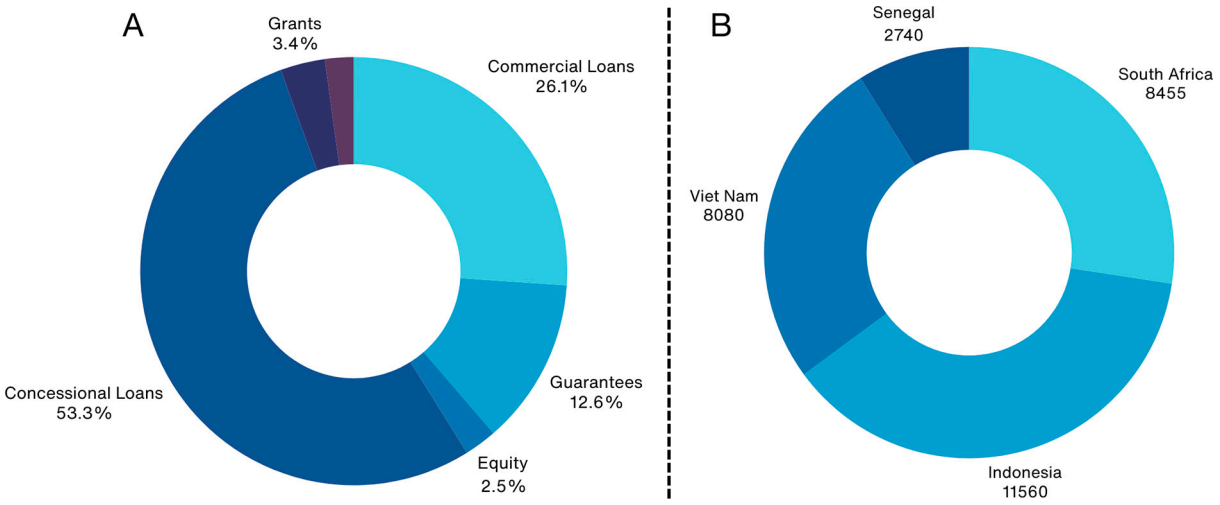

Fig. 2. Public finance pledges.
Note: Part A visualizes the total public finance pledges divided by type (excludes Senegal) and Part B public finance distribution per host country in million USD. Data is based on Table 4.

In addition, the political declarations committed the IPG to overall funding but did not specify the quality of the group's public finance pledge, while recipient countries committed to more ambitious emission reduction targets. Loan terms, comprising 94 % of the funds, were merely disclosed incrementally by the IPG following the partnerships' launch. Viet Nam, for instance, agreed to its JETP at the end of 2022 but:

> "the IPG communicated an indicative breakdown of the USD 7.75 billion by type of finance on 24 March 2023 which was updated on 2 August 2023 and in yet more detail on 27 September 2023, with some updates on 21 October 2023" [76: 94].

The Resource Mobilization Plan (RMP) also states that "details of each loan and technical assistance will be negotiated and decided for each specific project" [76: 8]. Similarly, in Indonesia, "they [the IPG] do not disclose the terms and conditions during the signing of the joint statement" (#15: IA). The partnership's grant portion remained ambiguous over six months post-partnership announcement [96]. Indonesia also found its initial goal to peak emission at 290 MT CO2 by 2030 unachievable [75,97]. According to one institutional stakeholder, the IPG and the Indonesian government:

> "agreed on the [emission reduction] target, but there was actually no credible and implementable plan yet (…) then there was the realization, it is really, really difficult to achieve the kind of targets set up in the agreement and after" (#22: IA).

For South Africa, the composition of the JETP financing was initially unclear with the Presidency expecting most finance to come in the form of grants and any loans to be offered on concessional terms [98]. It later also resisted the high commercial loans to grant ratio (#19: AA).

In addition, some pre-existing schemes were folded into the JETPs [97,99]. Viet Nam and Indonesia, for instance, could each access a maximum of $47.5 million through previously fully dispensed funding from the Canada-World Bank Clean Energy and Forests Climate Facility [75,76]. A $500 million commitment as part of the Climate Investments Fund's ACT investment program from October 2022 also counts towards the pledged finance in Indonesia's Comprehensive Investment and Policy Plan (CIPP) [75,100]. This led some civil society actors to be disappointed with the JETP (#6: CSA; #7: CSA).

International public funds also flow through conventional development finance institutions, having to meet their specific financing policy or "internal terms and conditions" ([76: 95]; #3: AA). Since the partnerships are "negotiated country to country and each pledges' mechanism has their own terms and conditions", the result is "lots of hundreds of projects and multiple schemes" (#22: IA). In sum, Indonesia's agreement involves ten IPG countries, resulting in over 50 funding schemes, while Viet Nam's partnership, backed by eleven provider states, includes more than 40 financing facilities [99]. These numerous funding schemes include a diverse number of pre-defined conditions such as government guarantees, equity investments with shareholding limits or compliance with different standards. For instance, at least $4

billion in investment pledged to Viet Nam depends on private sector-led projects that seek financing and adhere to environmental, social and financing standards [76: 107]. Similar provisions concern more than $1 billion under the South African and Indonesian JETP respectively. In addition, commercial loans of $1 billion by the United States' Development Finance Cooperation to South Africa and Indonesia each require among others a 30 % shareholding limit on equity [74,75]. Moreover, guarantees of $1 billion each pledged to Indonesia by the United States and United Kingdom to facilitate lending from the International Bank for Reconstruction and Development are only disbursed once the country has achieved its Single Borrower Limit, which it never did in the past [91].

The numerous financing packages and criteria limit host countries' autonomy in fund allocation (#22: IA) despite the JETPs' emphasis on host country-led and -owned implementation under the investment plans (#20: IA). The biggest hurdle for the JETPs therefore remains "refining a good match between the type of finance mechanism and the needs" of host states (#18: IA).

Further complicating matters, harmonization and cooperation among the IPG remains weak ([99]; #20: IA; #21: CSA), leaving the question of which IPG state is most prepared to address specific host country needs unanswered (#18: IA). Because it tends to be unclear whom to contact about particular concerns and to determine the diverse flow of funds, the financing jumble also hampers accountability (#19: AA).

5.2. Private sector engagement

Public climate finance provided by the IPG accounts for a significant but insufficient portion of the estimated energy transition costs in the investment plans (i.e., around 9 % in South Africa, 12 % in Indonesia and 6 % in Viet Nam (see Table 4)). All partnerships, hence, highlight the need for public investments to attract private finance, whether through de-risking, blended finance or creating an enabling environment for private investors.

However, both private investors and banks as well as public development finance institutions (DFIs) require some degree of economic viability and investment returns (#22: IA), necessitating host governments to constantly reassess the allocation of the restricted number of concessional loans and grants available. Interviewed stakeholders hold different views about the current distribution of concessional funds, disagreeing whether it promotes an inclusive transition pathway or primarily benefits private investors at the expense of inclusiveness. More institutional stakeholders endorse using concessional funds to catalyze private investments, aiming to close the significant funding gap. Their strategy involves improving host states' investment climate, lowering risks for private investors, and therefore reducing the overall costs of private capital (#20: IA).

In contrast, critics argue that scant public concessional funds are currently allocated to the detriment of non-profitable transition projects unviable for private investments. Accordingly, in the South African context, "there is a mismatch between where the money is going, where it should be going, and the different sources of money (…) [since] the donor governments want to put their money into the bits that do not need it, and not (…) into the bits that do" (#21: CSA). These stakeholders question financial de-risking in which concessional funds are mainly used to attract private investment instead of financing just transition initiatives that are not viable for private investors but would benefit affected communities.

In addition, issues such as land appropriation arise, where local communities have previously provided agricultural land for RE without benefiting from the produced energy (#2: AA; #4: CSA; #9: CSA; [9,64,101]). Similarly, large-scale, more attractive and profitable RE projects receive priority funding - e.g. due to a minimum ticket size in Indonesia [91] - sidelining decentralized, community-owned RE projects - e.g. receiving only 0.01 % in the Just Energy Transition Investment Plan (JET IP) [74]. This emphasis on capital- and land-intensive projects disadvantage communities lacking these resources to invest in and benefit from RE - e.g. in South Africa (#19: AA). Critics also point to 'false solutions', such as including CCS in Indonesia's and Viet Nam' investment plans [75,76].

Moreover, due to high government subsidies (see Section 4), South Africa, Indonesia and Viet Nam have low regulated energy rates, where state-owned utility companies provide electricity to more vulnerable groups [63]. The JETPs make recipient countries cede some regulation of their energy sectors to replace the public utilities operating at a loss. Yet, this can negatively affect energy access and affordability and thus comes with risks for social unity. Broad privatization efforts of the energy sector have fueled local opposition to the coal retirement plans, perceived "as effectively neo-colonial intervention in an energy system that is currently owned by the people" with the IPG failing to grasp "the political complexities of energy in these countries" (#21: CSA). In other words, (short-term) political and government interests frequently outweigh favorable energy transition policies despite the pledged mitigation finance. The consequences are evident in South Africa, where political instability, opposition from the coal lobby and resistance from the energy minister, besides other factors, have delayed JETP implementation and coal phase-out plans [102,103].

5.3. Community and civil society participation

All JETP countries, except Senegal, have drafted a just transition framework. South Africa stands out because it "had already embarked on a just transition" with the Framework for a Just Transition prior to the JETP (#5: CSA). This framework guides transition projects nationwide, focusing on distributive, restorative and procedural justice, including to inform communities to actively participate [104]. In comparison, Indonesia's framework adds economic diversification and transformation to current international good practices criteria, aiming to attenuate the energy transition's negative economic externalities. It also requires the "informed involvement and meaningful participation" of more vulnerable groups [75: 118]. Yet, the framework is "not used as part of the [project] selection criteria" (#22: IA) and "conditional upon [concessional] financing" (#6: CSA), raising questions about its implementation. Viet Nam's more narrow, labor-centered framework focuses on energy access and affordability, stakeholder engagement, business and employment opportunities and mitigating negative transition effects on workers and communities [76]. Viet Nam's JETP also requires "regular consultation (…) with media, NGOs and other stakeholders so as to ensure a broad social consensus" [80: 3]. Unlike the RMP and the CIPP, the JET IP also specifies the amounts of funding needed to deliver the just part [74].

Across partnership countries, consultations (until December 2023) faced more or less severe shortcomings. South African civil society and unions were consulted and could express concern at different stages of the process. Yet, "the first official stakeholder consultation took place nine months after the partnership was announced" [105]. These sessions exhibited flaws, such as the use of expert language, a lack of background documents, and short time frames for feedback - e.g. releasing the investment plan only days prior to COP27 (#1: CSA). Shortcomings made the participation of affected population groups, "the poorest strata of society [and] the young people" impossible (#3: AA). Moreover, labor unions were sidelined during the JET IP process, participating in what they describe as "tick-box exercise after the plan was formulated" [106]. Despite the mismatch between the Framework for a Just Transition and actual participation, the country's vocal and proactive civil society – the strongest across JETP countries - "elevated the discussion about the just transition [and] exposed it (…) and the conduct of the IPG to greater scrutiny" (#13: AA).

Two formal Civil Society Organization (CSO) dialogues took place as part of Indonesia's JETP in June and November 2023 besides the informal engagement of representatives in working groups (#14: IA).

However, representatives mostly included high-level CSOs, with limited involvement from groups working directly with local communities (#16: CSA). Stakeholders also raised concerns about the timing of the CSO dialogue in mid-November shortly before the CIPP's launch on November 21, for the brief preparation time due to the limited information available before the November consultations and the fact that the 300-page draft investment plan was first published in English (#14: IA). This made it difficult for communities to understand the draft CIPP (#14: IA) and for CSOs to thoroughly analyze it and provide feedback (#14: IA; #16: CSA), raising doubts about the legitimacy of consultations (#14: IA). Furthermore, besides affected communities, local governments did not play an active role in the JETP process (#7: CSA; #14: IA) in spite of facing significant regional socio-economic and financial challenges from the energy transition [107]. In regions with planned CFPP retirements, many local government officials did "not even know what the JETP [or] the ETM is" (#7: CSA). A study by Celios [108] revealed that more than three quarters of respondents, particularly in rural areas, were unaware of the JETP's existence (#7: CSA). Notwithstanding these challenges, the present consultations "drive attention of the people to the energy transition in the country more than ever before" (#6: CSA).

In contrast, independent CSO participation is limited in Viet Nam (#2: AA), with their autonomy further diminishing more recently [109]. In the context of the JETP, "key [energy transition] advocacy figures of civil society have been *arrested*" (#2: AA; emphasis added) and harshly convicted on presumptively constructed tax evasion charges, permitting the Vietnamese government to implement the energy transition with less checks and balances [110]. The arrests did not only include civil society but also "lawyers and modelers (…), who actually did a lot of the work with the government (…) to land the JETP in the first place" (#21: CSA). Yet, this lack of civil society support and diminished access to reliable data and modelling undermines the partnership's ability to succeed (#21: CSA).

In Senegal, nearly half a year after agreeing to the JETP, civil society remains excluded from the JETP process, jeopardizing an equitable energy transition (#4: CSA; #12: CSA). Compared to South Africa, Senegalese CSOs lack sufficient resources to claim transparency and accountability, leading several stakeholders to call on the IPG to assure genuine consultations (#11: CSA; #19: AA). However, for the IPG to ensure transparent and accountable consultations across host countries is a delicate issue. It comes with the risk of being considered too interventionist in host countries' domestic internal affairs (#20: IA).

Consultation processes across recipient countries have faced additional barriers due to a lack of transparency and accountability. In all recipient countries, pre-JETP negotiations were not accessible for non-institutional stakeholders, including in Senegal, where "civil society organizations could not access information about [the] JETP until [it] was signed" (#4: CSA). In South Africa, actors participating in the formal JETP process signed non-disclosure agreements [11]. In addition, the Presidential Climate Commission's (PCC) executive director openly complained about the "government secrecy about the deal" [111], and CSOs threatened to abandon the consultation process due to missing information on the draft investment plant [112]. Similarly, in Indonesia, before and after the partnership announcement and when formulating the investment plan (before November 2023), access to information was restricted (#6: CSA; #14: IA), with many "people on the ground (…) not know[ing] what the JETP is" (#6: CSA; [108]). Moreover, transparency concerns surfaced regarding the CFPP selection process for retirement in Indonesia (#7: CSA; #16: IA).

These shortcomings endanger the overall energy transition in recipient countries. In South Africa and Indonesia, workers and labor unions have started opposing the idea of the JETP, undermining its already difficult political reputation. Only 0.01 % of JET IP investments are reserved for manufacturing and the clean energy value chain – the key area for job creation in the renewable sector [11,74]. Hence, coal workers in South Africa "are worried of losing their employment without really having an alternative" (#5: CSA). This dynamic risks "destroying the political consensus that will make sure that [the energy transition] actually happens over the next 5, 10, 15, 20, 50 years" (#21: CSA) and harms the public perception of the transition (#19: AA). In Indonesia, although coal retirement plans are less advanced, some workers and communities have also begun to question their imperative, raising "debate or doubt about the future of the energy transition" (#7: CSA).

6. Discussion

Following institutional analysis, this section evaluates the implementation of the four different JETPs by IPG and host countries' governments against the inclusivity criteria in Table 2 and provides ten policy recommendations.

6.1. Country-specific JETP transition pathways

Socially exclusive JETP pathway: **South Africa's JETP** promotes a socially exclusive energy transition that is, in theory only, ecologically inclusive. Eskom plans to shut down nine CFPPs by 2035, but political obstacles, such as conflicts of interest within the government that the JETP fails to address, delay retirement efforts. However, replacing the country's old CFPPs with RE remains paramount due to their heavy burden on the economy and taxpayers. In terms of social inclusion, the JET IP does not sufficiently address the replacement of coal-based jobs with positions in the RE sector, allocating just 0.1 % of its investment to renewable manufacturing. The JETP provides insufficient just transition funding, excludes affected communities from decision-making despite extensive consultations and leans towards privatization. The latter may benefit wealthy groups while disadvantaging poorer households if more affordable, subsidized coal-based energy is replaced by costlier privatized renewables. Yet, fossil fuel subsidies may decrease if RE deployment is successful. Finally, loan-based funding risks worsening existing debt distress.

Socially and ecologically exclusive JETP pathway: **Indonesia's and Viet Nam's JETP** outline an energy transition that remains ecologically and socially exclusive. Indonesia's investment plan does not increase CFPP retirement ambitions besides the ETM and to halt the ongoing and future construction of captive CFPPs despite the loss in operating CFPPs and the already existing reserve margins from CFPPs of 50-60 %. Likewise, Viet Nam intends building new CFPPs until 2030. The expansion of CFPPs increases the likelihood of stranded assets and commits taxpayers to continue paying for high fossil fuel subsidies in both countries. Their investment plans lean towards privatization, jeopardizing recent gains in energy access and affordability while shifting investment risks to the public sector. Rural Indonesian communities may remain without affordable clean energy, as unprofitable remote areas attract little investment, echoing previous financialized RE electrification efforts [44]. In addition, prioritizing large-scale RE - e.g. through a minimum ticket size – likely reinforces socio-ecological disparities. While Viet Nam oppresses procedural rights, rendering the inclusion of civil society and affected communities nearly impossible, Indonesia partly implemented procedural rights.

Ecologically exclusive JETP pathway: **Senegal's JETP** demands cautious analysis, as its investment plans remains unpublished. Current details indicate an ecologically exclusive transition pathway drawing on natural gas besides RE - a decisive reason for France and Germany instigating the agreement. In terms of social inclusiveness, developing both natural gas and renewables could improve energy access and lower high electricity rates, currently driven by imported heavy oils that require high government subsidies [71]. However, restricted consultations heretofore, along with a focus on privatization instead of energy access and affordability, is reminiscent of previous large-scale RE plant projects with little socio-economic impact on the ground [42] and risks deepening present inequalities. Finally, with just 6 % of IPG funding in grants, the JETP may worsen Senegal's already existent debt distress.

6.2. Strengths and weaknesses of the JETPs across countries

First, in terms of accountability, the JETPs directly address climate change mitigation goals by excluding fossil fuels from their investment portfolio. Yet, all host countries continue to invest into fossil fuels and Senegal's JETP evolved in the context of Europe's scramble for non-Russian gas imports. The limited amount of high-quality finance also risks boosting renewables in addition to fossil fuels instead of replacing the latter. In addition, while a substantial part of the public finance is 'new and additional', the JETPs, in particular with Indonesia, include some financing pledges that were in planning or existed prior to the partnership's announcement [113].

Second, while the JETPs include an unparalleled public climate finance commitment ($30.8 billion), the low grant to loan ratio (less than 4 % grants) raises serious concerns about debt distress. The IPG pledged to provide funds for a just transition and to expedite coal retirement but the quantity of high-quality funding remains inadequate for the just part and to phase out CFPPs in Indonesia and Viet Nam. While private finance remains critical, it cannot replace the required rise in public finance. Blended concessional finance, dependent on investment returns [40], also risks depleting essential concessional funds for non-profitable coal phase out and just transition endeavors. Moreover, the JETPs enjoy high level political backing from host countries' governments. Yet, despite host country-owned implementation through the respective investment plans, the multiplicity of financing institutions and conditionalities seriously limit their control over fund distribution and overall accountability, resembling existing power dynamics in traditional DFIs [6].

Third, the development of just transition frameworks signals a shift beyond economic factors, considering workers' rights and affected communities. The JETPs also intensify the discussion about the just energy transitions and its trade-offs - in particular the extensive consultations in South Africa and Indonesia. However, the lack of transparency and flawed consultations clash with host countries' JETP-specific procedural justice principles, likely undermining the political consensus necessary for partnership implementation. It also risks attenuating bottom-up conceptualizations of the just transition and climate (finance) justice. Moreover, both the CIPP and RMP do not outline specific figures for the just parts with the risk of diminishing it to mere performative rhetoric, echoing past trends in climate finance [36]. Host countries also signed political declarations with more ambitious emission reduction targets without full disclosure of the exact financial conditions from the IPG, highlighting an imbalanced partnership. Indonesia's case, where agreed emission reduction targets proved too difficult to reach, underscores this disequilibrium.

Finally, the JETPs' focus on privatization disregards recipient countries' domestic political realities, probably prolonging coal use and reproducing existing socio-ecological injustices with the public sector increasingly assuming investment risks. The partnership's focus on large-scale, profitable RE projects reflects tendencies of neoliberal environmental governance [114] and is unlikely to increase affordable and clean energy access.

6.3. Policy recommendations

For the JETPs to be more inclusive and effective in phasing out fossil fuels, the IPG must disclose financial terms and conditions to recipient countries from the outset (#1), increase the amount of grant-based finance for the just part and CFPP retirement in Indonesia and Viet Nam (#2), improve the terms of non-concessional loans (e.g. higher concessionality, better debt repayment structures and providing finance in local currencies) (#3) and streamline the number of funding conditions and institutions (#4); while host countries should define additional localization criteria for de-risking (#5), halt all new fossil fuel investments in exchange for high-quality climate finance (#6) and conduct robust modelling prior to defining emission targets (#7). Both IPG and host countries need to more actively include and inform affected communities (including in local languages) (#8), enhance accountability by disclosing project-specific finance flows within a set time frame (#9) and prioritize more community based small-scale RE projects (#10).

7. Conclusion

This paper has shown that the JETPs constitute a significant evolution of the global climate finance architecture. First, compared to other climate finance initiatives, Global North countries provided an unprecedented $30.8 billion in public finance to just four countries. This sheer financing volume could initiate a regime change from fossil fuels, in particular coal, towards RE. Second, the JETPs enjoy strong support from host country governments with the autonomy to shape their country's energy transition pathway through the country-owned design of comprehensive investment plans. Third, shifting the focus of the energy transition beyond economic factors, the partnerships' inclusion of civil society intensify the discussion about the just transition. In particular, South Africa's and Indonesia's JETP begin challenging the entrenched behavior, culture and beliefs of the existing fossil fuel-based energy regime.

Nevertheless, while the JETPs are likely to add some RE, they are unable to overcome the existing fossil fuel-based energy regime in an inclusive way and reproduce existing injustices and power asymmetries of conventional climate finance. First, providing only 3-4 % of public finance in grants is insufficient to finance the just parts of the agreements as well as the coal phase out in Indonesia and Viet Nam. Host countries also committed to more ambitious emission reduction targets in the political declarations, while the IPG fully disclosed the quality of financing terms only in the months post-partnership announcement. Second, the numerous financial conditionalities and institutions disbursing JETP funds limit the autonomy of host countries in distributing the funds and implementing the investments plans. Third, the distorted and untransparent consultation processes with civil society and affected communities (until December 2023) jeopardize the just transition pledge of the partnerships. Public transparency and accountability are also necessary to prevent corruption. The JETPs' focus on privatization and large-scale, profitable RE projects are likely to further exacerbate existing socio-economic inequalities in terms of energy access and affordability.

Yet, considering the narrowing political space for global cooperation in Global North countries, the JETPs present a serious climate change mitigation commitment to the four host countries. Given the tremendous sums required for the global energy transition, the partnership's focus on de-risking and privatization are comprehensible but also point to the structural shortcomings of the current international financial architecture in providing sufficient mitigation finance. Moreover, the pace of creating the JETPs can partially explain the poor coordination between IPG countries and the scattered public financing pledge. While the IPG failed to provide sufficient high-quality finance for the just part of the transition, host countries excluded parts of their own population in the consultation processes. Furthermore, although host countries committed to more ambitious emission reduction targets, they continue to invest in questionable fossil fuel projects, heightening the risks of stranded asset, resources and environmental harm, undermining progress towards NDC targets and deepening their reliance on fossil fuel-driven development.

From the perspective of the host countries, however, the loan-based nature and the many different bits and pieces of the financing pledge raise questions about the IPG's commitment. Given the historical responsibility and financial capacities of IPG countries, the inconsistency of the IPG to phase out their own fossil fuel subsidies further subverts the JETPs' legitimacy [115]. Besides, the JETPs do not include those countries that would need to transition most urgently with the least resources available, raising serious concerns about the fair and effective

allocation of climate finance across the Global South. While South Africa, Indonesia and Viet Nam are major coal combustors, recipient countries are also geopolitically attractive partners, which liberalized their energy sectors to different degrees in the years prior to the JETPs.

Future research should therefore examine whether geopolitically strategic, more market-open economies disproportionately benefit from climate finance outside the multilateral framework. In addition, the paper's focus on JETP design and early implementation did not allow to evaluate whether the partnerships have led to an increase in RE deployment or helped countries to decrease coal use in comparison to a non-JETP scenario. This points to the need to examine the partnership's more long-term effects (e.g. how the JETPs impact RE growth over time) in comparison to their short-term political goals. Further research could also explore each partnership in its domestic political context in more detail and the effect of different financing modalities – i.e. concessional vs. commercial or public vs. private finance - on phasing out coal, deploying RE and the just transition.

CRediT authorship contribution statement

Aljoscha Karg: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation, Formal analysis, Conceptualization. **Joyeeta Gupta:** Writing – review & editing, Supervision, Project administration, Methodology, Funding acquisition, Conceptualization. **Yang Chen:** Writing – review & editing, Visualization, Validation, Supervision, Methodology, Conceptualization.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used "ChatGPT" in order to improve readability and language in editing parts of the text. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements and funding

The authors are grateful to two anonymous reviewers for valuable comments on previous versions of this paper. This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 101020082).

Data availability

The data that has been used is confidential.

References

[1] OECD, Developed countries materially surpassed their USD 100 billion climate finance commitment in 2022, 2024. May 29, https://www.oecd.org/en/about/news/press-releases/2024/05/developed-countries-materially-surpassed-their-usd-100-billion-climate-finance-commitment-in-2022-oecd.html.
[2] S. Bracking, B. Leffel, Climate finance governance: fit for purpose? WIREs Climate Change 12 (4) (2021) e709 https://doi.org/10.1002/wcc.709.
[3] R. Weikmans, J.T. Roberts, The international climate finance accounting muddle: is there hope on the horizon? Clim. Dev. 11 (2) (2019) 97–111, https://doi.org/10.1080/17565529.2017.1410087.
[4] A. Chowdhury, J.K. Sundaram, The Climate Finance Conundrum. Development 65 (1) (2022) 29–41, https://doi.org/10.1057/s41301-022-00329-0.
[5] K. Anantharajah, A.B. Setyowati, Beyond promises: realities of climate finance justice and energy transitions in Asia and the Pacific, Energy Res. Soc. Sci. 89 (2022) 102550, https://doi.org/10.1016/j.erss.2022.102550.
[6] D. Ciplet, D. Falzon, I. Uri, S. Robinson, R. Weikmans, J.T. Roberts, The unequal geographies of climate finance: climate injustice and dependency in the world system, Polit. Geogr. 99 (2022) 102769, https://doi.org/10.1016/j.polgeo.2022.102769.
[7] L. Xie, B. Scholtens, S. Homroy, Rebalancing climate finance: Analysing multilateral development banks' allocation practices, Energy Res. Soc. Sci. 101 (2023) 103127, https://doi.org/10.1016/j.erss.2023.103127.
[8] K. Anantharajah, S.V. Naisilisili, Toward cognitive justice: reconstructions of climate finance governance in Fiji, Contemp. Pac. 35 (1–2) (2023) 1–30, https://doi.org/10.1353/cp.2023.a924450.
[9] B.K. Sovacool, L. Baker, M. Martiskainen, A. Hook, Processes of elite power and low-carbon pathways: experimentation, financialisation, and dispossession, Glob. Environ. Chang. 59 (2019) 101985, https://doi.org/10.1016/j.gloenvcha.2019.101985.
[10] F.W. Geels, Regime resistance against low-carbon transitions: introducing politics and power into the multi-level perspective, Theory, Culture & Society 31 (5) (2014) 21–40, https://doi.org/10.1177/0263276414531627.
[11] A. Lenferna, South Africa's unjust climate reparations: a critique of the just energy transition partnership, Rev. Afr. Polit. Econ. 50 (177–178) (2023), https://doi.org/10.1080/03056244.2023.2278953.
[12] M.J. Murcott, A just COP26 outcome for South Africa? Transnatl. Leg. Theory 13 (2–3) (2022) 352–365, https://doi.org/10.1080/20414005.2022.2160123.
[13] M.R. Jazuli, K. Roll, Y. Mulugetta, A review of Indonesia's JETP through the dynamics of its policy regime, Global Pol. 1758-5899 (2024), https://doi.org/10.1111/1758-5899.13452.
[14] J.A. Ordonez, T. Vandyck, K. Keramidas, R. Garaffa, M. Weitzel, Just energy transition partnerships and the future of coal, Nat. Clim. Chang. 14 (10) (2024) 1026–1029, https://doi.org/10.1038/s41558-024-02086-z.
[15] A. Banerjee, Transforming the rhetoric of just energy transition partnerships into reality: the devil lies in the details, PLOS Sustainability and Transformation 3 (8) (2024) e0000121, https://doi.org/10.1371/journal.pstr.0000121.
[16] Z. Munn, M.D.J. Peters, C. Stern, C. Tufanaru, A. McArthur, E. Aromataris, Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach, BMC Med. Res. Methodol. 18 (1) (2018) 143, https://doi.org/10.1186/s12874-018-0611-x.
[17] J.T. Roberts, R. Weikmans, S. Robinson, D. Ciplet, M. Khan, D. Falzon, Rebooting a failed promise of climate finance, Nat. Clim. Chang. 11 (3) (2021) 180–182, https://doi.org/10.1038/s41558-021-00990-2.
[18] OECD, Climate finance provided and mobilised by developed countries in 2013-2021: aggregate trends and opportunities for scaling up adaptation and mobilised private finance, 2023, https://doi.org/10.1787/e20d2bc7-en.
[19] Indian Ministry of Finance, Climate Change Finance, Analysis of a Recent OECD Report: Some Credible Facts Needed, 2015. https://dea.gov.in/sites/default/files/ClimateChangeOEFDReport_0.pdf.
[20] I. Shishlov, P. Censkowsky, Definitions and accounting of climate finance: between divergence and constructive ambiguity, Clim. Pol. 22 (6) (2022) 798–816, https://doi.org/10.1080/14693062.2022.2080634.
[21] D. Kushawaha, M. Jain, Debt as catalyst: empowering renewable energy in developing countries, Energy Policy 194 (2024) 114336, https://doi.org/10.1016/j.enpol.2024.114336.
[22] C. Albinet, M. Kessler, The coming debt crisis monitoring Liquitdity and solvency, FDL (2022). https://findevlab.org/wp-content/uploads/2022/12/FDL_CAMK_DebtService.pdf.
[23] IMF, Global Debt Monitor, 2023 https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.imf.org/-/media/Files/Conferences/2023/2023-09-2023-global-debt-monitor.ashx&ved=2ahUKEwjGvJSpyceGAxWDxQIHHfZtBREQFnoECA4QAw&usg=AOvVaw2to7jftucq-TZUA6n3Y0rL.
[24] L.A. Sauls, Becoming fundable? Converting climate justice claims into climate finance in Mesoamerica's forests, Clim. Chang. 161 (2) (2020) 307–325, https://doi.org/10.1007/s10584-019-02624-1.
[25] L. Gifford, C. Knudson, Climate finance justice: international perspectives on climate policy, social justice, and capital, Clim. Chang. 161 (2) (2020) 243–249, https://doi.org/10.1007/s10584-020-02790-7.
[26] T. Carty, J. Kowalzig, B. Zagema, Climate finance shadow report 2020: assessing progress towards the $100 billion commitment, 2020 https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621066/bp-climate-finance-shadow-report-2020-201020-en.pdf.
[27] CPI, Global Landscape of Climate Finance (2023) 2023. https://www.climatepolicyinitiative.org/wp-content/uploads/2023/11/Global-Landscape-of-Climate-Finance-2023.pdf.
[28] GEF, Countries Pledge Record Support to the Global Environment Facility vol. April 8, 2022. https://www.thegef.org/newsroom/press-releases/countries-pledge-record-support-global-environment-facility.
[29] GCF, Thirteenth Report of the Green Climate Fund to the Conference of the Parties to the United Nations Framework Convention on Climate Change, 2024 https://www.greenclimate.fund/document/gcf-b39-14.
[30] M. Babic, Green finance in the global energy transition: actors, instruments, and politics, Energy Res. Soc. Sci. 111 (2024) 103482, https://doi.org/10.1016/j.erss.2024.103482.
[31] United Nations, Least Developed Countries, n.d. https://www.un.org/en/conferences/least-developed-countries.
[32] IEA, Reducing the Cost of Capital, 2024 https://iea.blob.core.windows.net/assets/227da10f-c527-406d-b94f-dbaa38ae9abb/ReducingtheCostofCapital.pdf.
[33] E.R. Graham, A. Serdaru, Power, control, and the logic of substitution in institutional design: the case of international climate finance, Int. Organ. 74 (4) (2020) 671–706, https://doi.org/10.1017/S0020818320000181.

[34] L. Kuhl, J.E. Shinn, J. Arango-Quiroga, I. Ahmed, M.F. Rahman, The liberal limits to transformation in the green climate fund, Clim. Dev. 1–12 (2023), https://doi.org/10.1080/17565529.2023.2235318.

[35] J. Gupta, The history of global climate governance, Cambridge University Press. (2014), https://doi.org/10.1017/CBO9781139629072.

[36] D. Ciplet, Subverting the status quo? Climate debt, vulnerability and counter-hegemonic frame integration in United Nations climate politics – a framework for analysis, Rev. Int. Polit. Econ. 24 (6) (2017) 1052–1075, https://doi.org/10.1080/09692290.2017.1392336.

[37] UNFCCC, New Collective Quantified Goal on Climate Finance, 2024 https://unfccc.int/sites/default/files/resource/cma2024_L22_adv.pdf.

[38] D. Falzon, F. Shaia, J.T. Roberts, Md.F. Hossain, S. Robinson, M.R. Khan, D. Ciplet, Tactical opposition: obstructing loss and damage finance in the United Nations climate negotiations, Global Environmental Politics 23 (3) (2023) 95–119, https://doi.org/10.1162/glep_a_00722.

[39] S. Bracking, 20. Climate finance and the promise of fake solutions to climate change, in: S. Böhm, S. Sullivan (Eds.), Negotiating Climate Change in Crisis, 1st ed, Open Book Publishers, 2021, pp. 255–276, https://doi.org/10.11647/OBP.0265.20.

[40] S. Attridge, L. Engen, Blended finance in the poorest countries: the need for a better approach, ODI (2019). https://www.econstor.eu/bitstream/10419/206745/1/12666.pdf.

[41] T. Kalinowski, The green climate fund and private sector climate finance in the global south, Clim. Pol. 24 (3) (2024) 281–296, https://doi.org/10.1080/14693062.2023.2276857.

[42] S. Haag, D. Apfel, C. Herbes, Do development finance projects facilitate domestic renewable energy transitions? The role of small economic actors in Senegal, Energy Res. Soc. Sci. 115 (2024) 103598, https://doi.org/10.1016/j.erss.2024.103598.

[43] K. Anantharajah, "But our lights were still on": decolonizing energy futures emerging from climate finance regulation in Fiji, Energy Res. Soc. Sci. 72 (2021) 101847, https://doi.org/10.1016/j.erss.2020.101847.

[44] A.B. Setyowati, Mitigating inequality with emissions? Exploring energy justice and financing transitions to low carbon energy in Indonesia, Energy Res. Soc. Sci. 71 (2021) 101817, https://doi.org/10.1016/j.erss.2020.101817.

[45] T. Cholibois, Electrifying the 'eighth continent': exploring the role of climate finance and its impact on energy justice and equality in Madagascar's planned energy transition, Clim. Chang. 161 (2) (2020) 345–364, https://doi.org/10.1007/s10584-019-02644-x.

[46] F.W. Geels, Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study, Res. Policy 31 (8–9) (2002) 1257–1274, https://doi.org/10.1016/S0048-7333(02)00062-8.

[47] J. Rotmans, R. Kemp, M. Van Asselt, More evolution than revolution: transition management in public policy, Foresight 3 (1) (2001) 15–31, https://doi.org/10.1108/14636680110803003.

[48] F.W. Geels, F. Berkhout, D.P. Van Vuuren, Bridging analytical approaches for low-carbon transitions, Nat. Clim. Chang. 6 (6) (2016) 576–583, https://doi.org/10.1038/nclimate2980.

[49] G. Gentile, J. Gupta, Orchestrating the narrative: the role of fossil fuel companies in delaying the energy transition, Renew. Sust. Energ. Rev. 212 (2025) 115359, https://doi.org/10.1016/j.rser.2025.115359.

[50] L. Baker, P. Newell, J. Phillips, The political economy of energy transitions: the case of South Africa, New Political Economy 19 (6) (2014) 791–818, https://doi.org/10.1080/13563467.2013.849674.

[51] P. Newell, J. Phillips, Neoliberal energy transitions in the south: Kenyan experiences, Geoforum 74 (2016) 39–48, https://doi.org/10.1016/j.geoforum.2016.05.009.

[52] J. Gupta, B. Hogenboom, A. Rempel, M. Olofsson, Leaving Fossil Fuels Underground Actors, Arguments and Approaches in the Global South and Global North, Amsterdam University Press, 2024. https://www.aup.nl/en/book/9789048560370/leaving-fossil-fuels-underground.

[53] J. Gupta, C. Vegelin, Sustainable development goals and inclusive development, Int. Environ. Agreem.: Politics Law Econ. 16 (3) (2016) 433–448, https://doi.org/10.1007/s10784-016-9323-z.

[54] O.R. Young, Institutions and environmental change: The scientific legacy of a decade of IDGEC research, in: O.R. Young, L.A. King, H. Schroeder (Eds.), Institutions and Environmental Change: Principal Findings, Applications, and Research Frontiers, The MIT Press., 2008, https://doi.org/10.7551/mitpress/9780262240574.003.0001.

[55] I. Alami, C. Alves, B. Bonizzi, A. Kaltenbrunner, K. Koddenbrock, I. Kvangraven, J. Powell, International financial subordination: a critical research agenda, Rev. Int. Polit. Econ. 30 (4) (2023) 1360–1386, https://doi.org/10.1080/09692290.2022.2098359.

[56] IMF, List of LIC DSAs for PRGT-Eligible Countries, 2024 https://www.imf.org/external/Pubs/ft/dsa/DSAlist.pdf.

[57] I. Overland, M. Bazilian, T. Ilimbek Uulu, R. Vakulchuk, K. Westphal, The GeGaLo index: geopolitical gains and losses after energy transition, Energ. Strat. Rev. 26 (2019) 100406, https://doi.org/10.1016/j.esr.2019.100406.

[58] I. Overland, Data for: The GeGaLo Index - Geopolitical Gains and Losses after Energy Transition, 2019, https://doi.org/10.17632/xx4k24y6jb.1.

[59] N.P. Simpson, M. Jacobs, A. Gilmour, Taking stock of just energy transition partnerships, ODI Policy Brief (2023). http://www.odi.org/en/publications/taking-stock-of-just-energy-transition-partnerships.

[60] T. Kelsall, S. Colenbrander, N. Simpson, One size won't fit all: Designing country platforms for different political contexts, in: ODI Working Paper, 2024. https://odi.org/en/about/our-work/country-platforms.

[61] S. Fiedler, S. Greifoner, F. Zerzawy, Leere Versprechungen Wo Deutschland und G7 beim Subventionsabbau stehen, Greenpeace and Forum Ökologisch-Soziale Marktwirtschaft (2025). https://www.greenpeace.de/publikationen/g7-klimaschaedliche-subventionen?check_logged_in=1&utm_campaign=fossil-fuels&utm_source=www.greenpeace.de&utm_medium=referral&utm_content=press-release.

[62] J. Lo, Rich nations pledge $2.7 billion for Senegal's renewable rollout, Climate Home News. (2023). June 22, https://www.climatechangenews.com/2023/06/22/senegal-jetp-energy-transition-2-billion-renewables/.

[63] M. Ha-Duong, Vietnam's just energy transition partnership: a background report, CIRED Working Paper 90 (2023). https://enpc.hal.science/hal-04094268v2.

[64] S. Haag, Old colonial power in new green financing instruments. Approaching financial subordination from the perspective of racial capitalism in renewable energy finance in Senegal, Geoforum 145 (2023) 103641, https://doi.org/10.1016/j.geoforum.2022.09.018.

[65] A.S. Ba, The energy policy of the Republic of Senegal, HAL Open Science (2018). https://hal.science/hal-01956187/document.

[66] ITA, Indonesia Country Commercial Guide—Energy, 2024, January 9 https://www.trade.gov/country-commercial-guides/indonesia-energy.

[67] ITA, Vietnam Country Commercial Guide—Power Generation, Transmission, and Distribution, 2024, January 30 https://www.trade.gov/country-commercial-guides/vietnam-power-generation-transmission-and-distribution.

[68] M. Crippa, D. Guizzardi, F. Pagani, M. Banja, M. Muntean, E. Schaaf, W. Becker, F. Monforti-Ferrario, R. Quadrelli, A. Risquez Martin, P. Taghavi-Moharamli, J. Köykkä, G. Grassi, S. Rossi, J. Brandao De Melo, D. Oom, A. Branco, J. San-Miguel, E. Vignati, GHG Emissions of all World Countries, Publications Office of the European Union, 2023. https://edgar.jrc.ec.europa.eu/booklet/GHG_emissions_of_all_world_countries_booklet_2023report.pdf.

[69] IEA, Countries & Regions, n.d. https://www.iea.org/countries.

[70] IISD and OECD, Country data, Fossil Fuel Subsidy Tracker (2024). https://fossilfuelsubsidytracker.org/country/.

[71] IEA, Senegal 2023 Energy Policy Review, 2024 https://iea.blob.core.windows.net/assets/b80ed5fc-7483-4b65-ae73-d39d5b2de40d/Senegal2023.pdf.

[72] World Bank, World Development Indicators | DataBank, 2024 https://databank.worldbank.org/source/world-development-indicators.

[73] IMF, Global Debt Database, 2024 https://www.imf.org/external/datamapper/datasets/GDD.

[74] GoSA, Just Energy Transition Investment Plan, 2022 https://pccommissionflo.imgix.net/uploads/images/South-Africas-Just-Energy-Transition-Investment-Plan-JET-IP-2023-2027-FINAL.pdf.

[75] GoI, Comprehensive Investment and Policy Plan, 2023. https://jetp-id.org/storage/official-jetp-cipp-2023-vshare_f_en-1700532655.pdf.

[76] GoVN, Resource Mobilization Plan, 2023 https://climate.ec.europa.eu/system/files/2023-12/RMP_Viet%20Nam_Eng_%28Final%20to%20publication%29.pdf.

[77] GoS, Contribution déterminée au niveau national du senegal, 2020 https://unfccc.int/sites/default/files/NDC/2022-06/CDNSenegal%20approuv%C3%A9e-pdf-.pdf.

[78] GoSA & IPG, Political Declaration on the Just Energy Transition in South Africa, 2021 https://www.bundesregierung.de/resource/blob/974430/1974538/b2264555c87d8cbdd97bd1eb8b16387a/political-declaration-on-the-just-energy-transition-in-south-africa-data.pdf?download=1.

[79] GoI & IPG, Joint Statement by the GoI and the IPG, 2022 https://www.whitehouse.gov/wp-content/uploads/2022/11/Joint-Statement.pdf.

[80] GoVN & IPG, Political Declaration on Establishing the Just Energy Transition Partnership with Viet Nam, 2022 https://ec.europa.eu/commission/presscorner/detail/en/statement_22_7724.

[81] GoS & IPG, Just Energy Transition Partnership with Senegal, 2023 https://international-partnerships.ec.europa.eu/system/files/2023-06/political-declaration-for-a-jetp-with-senegal_en.pdf.

[82] GoSA, SA Unemployment Rate Increases vol. May 14, SAnews, 2024. https://www.sanews.gov.za/south-africa/sa-unemployment-rate-increases.

[83] N. Makgelta, M. Patel, The coal value chain in South Africa, Trade & Industrial Policy Strategies (2021), https://doi.org/10.13140/RG.2.2.13833.36964.

[84] E. Hamdi, Indonesia wants to go greener, but PLN is stuck with excess capacity from coal-fired power plants, Institute for Energy Economics and Financial Analysis (2021). https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://ieefa.org/wp-content/uploads/2021/11/Indonesia-Wants-to-Go-Greener-but-PLN-Is-Stuck-With-Excess-Capacity_November-2021.pdf&ved=2ahUKEwj2-5TTgdCLAxVHgf0HHe9NPcQQFnoECBkQAQ&usg=AOvVaw0ijwj-rrNOnsujP28IrySR.

[85] H. Thuy, Newest draft of power development plan VIII comes with several highlights, Vietnam Investment Review November 16 (2022). https://vir.com.vn/newest-draft-of-power-development-plan-viii-comes-with-several-highlights-97898.html.

[86] Eskom, Just Energy Transition Fact Sheet #001, 2021 https://www.eskom.co.za/wp-content/uploads/2021/10/JET_Factsheet13Oct2021.pdf.

[87] Y. Chen, J. Gupta, Interactive Atlas (IA) for Climate Change and Fossil Fuels (CLIFF) v1.0, 2024 https://storymaps.arcgis.com/stories/3d4e1612f05d40faa5eaaa91110a204a.

[88] U.I.D. Indonesia, Tri Hita Karana forum - world economic forum: G20 Bali global blended finance Alliance dialogue [video recording], 2024 https://www.youtube.com/watch?v=a-WY2bn7DgU.

[89] Businesstech, South Africa Gets R10 Billion from France and Germany for the Move Away from Coal – Terms and Conditions Apply vol. November 11, 2022. https://businesstech.co.za/news/energy/642427/south-africa-gets-r10-billion-

from-france-and-germany-for-the-move-away-from-coal-terms-and-conditions-apply/.
[90] EEAS, South Africa's Just Energy Transition Is Progressing, Says International Partners Group Ahead of cop28, 2023 https://www.eeas.europa.eu/delegations/south-africa/south-africa%E2%80%99s-just-energy-transition-progressing-says-international-partners-group-ahead-cop28_en?s=120.
[91] L.K. Larasati, T. Mafira, Highlights from Indonesia's JETP comprehensive investment and policy plan, CPI (2023). https://www.climatepolicyinitiative.org/highlights-from-indonesias-jetp-comprehensive-investment-and-policy-plan/.
[92] Trading Economics, South African Rand, n.d. https://tradingeconomics.com/south-africa/currency.
[93] N. Manych, R.R. Bhandary, K.P. Gallagher, T. Musasike, G. Shrimali, F. Tumiwa, Early Phase-Down of Coal Plants the Role of Development Finance Institutions, Boston University Global Development Policy Center, 2024. https://www.bu.edu/gdp/files/2024/03/Coal-Phase-Down-Report-FIN.pdf.
[94] D. Karyza, RI Opts for less Ambitious Option than Early Coal Retirement vol. November 20, The Jakarta Post, 2023. https://www.thejakartapost.com/business/2023/11/20/ri-opts-for-less-ambitious-option-than-early-coal-retirement.html.
[95] D. Karyza, Coal Phase-out Scheme Draws Minimal JETP Funding—Regulations vol. November 13, The Jakarta Post, 2023. https://www.thejakartapost.com/business/2023/11/13/early-coal-retirement-anyone-program-draws-minimal-jetp-funding.html.
[96] J.N. Shofa, Grant Portion in $20b JETP Green Pact Still under Negotiation: Secretariat vol. July 5, Jakarta Globe, 2023. https://jakartaglobe.id/news/grant-portion-in-20b-jetp-green-pact-still-under-negotiation-secretariat.
[97] J. Rachman, Indonesia Asks where the Money Is for Green Transition vol. September 26, Foreign Policy, 2023. https://foreignpolicy.com/2023/09/26/indonesia-green-transition-investment-jetp-coal-united-states/.
[98] Reuters, South Africa Will Only Accept $8.5 Bln Green Energy Deal on Good Terms vol. November 25, President Says, 2021. https://www.reuters.com/business/cop/safrica-will-only-accept-85-bln-green-energy-deal-good-terms-president-says-2021-11-25/.
[99] G. Hauber, Financing the JETP: making sense of the packages, IEEFA (2023). https://ieefa.org/resources/financing-jetp-making-sense-packages.
[100] S. Jessop, CIF Earmarks $1 Bln for Clean Power Move in SAfrica, Indonesia vol. October 27, Reuters, 2022. https://www.reuters.com/business/sustainable-business/cif-earmarks-1-bln-clean-power-move-safrica-indonesia-2022-10-27/.
[101] L. Temper, From boomerangs to minefields and catapults: dynamics of trans-local resistance to land-grabs, J. Peasant Stud. 46 (1) (2019) 188–216, https://doi.org/10.1080/03066150.2017.1398144.
[102] A. Sguazzin, P. Burkhardt, How 60 million south Africans are being failed by the west's green ambitions, Jpn. Times April 28 (2023). https://www.japantimes.co.jp/news/2023/04/28/world/west-green-ambitions-fail-south-africa/.
[103] A. Sguazzin, New Timetable to Shut Down Eskom Power Stations vol. May 9, TechCentral, 2024. https://techcentral.co.za/new-timetable-shut-eskom-power-stations/244342/.
[104] PCC, A Framework for a Just Transition in South Africa, 2022 https://pccommissionflo.imgix.net/uploads/images/22_PAPER_Framework-for-a-Just-Transition_revised_242.pdf.
[105] R. Halsey, Just Transition Finance Proposal Needs Better Transparency vol. September 7, BusinessDay, 2022. https://www.businesslive.co.za/bd/opinion/2022-09-07-richard-halsey-just-transition-finance-proposal-needs-better-transparency/.
[106] D. Erasmus, Unions Unhappy about 'Consultation' Process for Energy Transition Plan vol. February 14, BusinessDay, 2023, in: https://www.businesslive.co.za/bd/national/2023-02-14-unions-unhappy-about-consultation-process-for-energy-transition-plan/.
[107] Celios, Accelerating the Equitable Energy Transition: Challenges and Opportunities for Regions, 2023 https://celios.co.id/wp-content/uploads/2023/10/CELIOS-Accelerating-the-Just-Energy-Transition-Challenges-and-Opportunities-for-Regions.pdf.
[108] Celios, National Public Survey on Just Energy Transition Partnership (JETP), 2023 https://celios.co.id/wp-content/uploads/2023/07/EN-CELIOS-JETP-Public-Opinion-Survey.pdf.
[109] N.K. Giang, D.N.A. Luong, What drives Vietnam's tightened public sphere? ISEAS Perspectives 47 (2023). https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2023-47-what-drives-vietnams-tightened-public-sphere-by-nguyen-khac-giang-and-dien-nguyen-an-luong/.
[110] S.-L. Wee, Vietnam Relied on Environmentalists to Secure Billions. Then it Jailed Them vol. November 28, The New York Times, 2023. https://www.nytimes.com/2023/11/28/world/asia/vietnam-cop28-environment.html.
[111] Olver Crispian [@CrispianOlver]. (2022, October 23). Leaked #JETP investment plan shows the futility of continuing government secrecy about the deal. Put it out there for public comments and let everyone engage with the adequacy of its terms https://climatechangenews.com/2022/10/22/breakdown-who-is-contributing-what-to-south-africas-clean-energy-shift/ via @ClimateHome [Tweet]. Twitter. https://x.com/CrispianOlver/status/1584097713347387392.
[112] F.F.S.A. LAC, South Africa's Participation in the Just Energy Transition Partnership (JETP): Civil Society Participation and Input, 2022 https://lifeaftercoal.org.za/wp-content/uploads/2022/09/LAC-and-FFCSA-Climate-Finance-Letter-2-September-2022.pdf.
[113] T.T. Zan, I. Dokk Smith, I. Øverland, The political economy of climate finance: stakeholder relationship dynamics in the Indonesian just energy transition partnership, Cambridge Journal of Climate Research 1 (2) (2024) 47–56, https://doi.org/10.60866/CAM.123.
[114] D. Ciplet, J.T. Roberts, Climate change and the transition to neoliberal environmental governance, Glob. Environ. Chang. 46 (2017) 148–156, https://doi.org/10.1016/j.gloenvcha.2017.09.003.
[115] H.V. Lüpke, C. Aebischer, M. Bolanos, International partnerships for a just energy transition: findings from South Africa, DIW Weekly Report 5 (2023), https://doi.org/10.18723/DIW_DWR:2023-5-1.