



# JETP experience in South Africa and Indonesia, and lessons learnt for Vietnam

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## ***Disclaimer***

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## List of abbreviations

ADB	Asian Development Bank
CEO	Chief Executive Officer
CFPP	Coal-Fired Power Plant
CIF	Climate Investment Funds
CIF-ACT	Accelerating Coal Transition
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> -eq	Carbon dioxide equivalent
COP	United Nations Climate Change Conference of the Parties
CRF	Carbon Reduction Facility
DCC	Department of Climate Change
ESG	Environmental, Social, and Governance
ETM	Energy Transition Mechanism
ETM-CP	Indonesia's ETM Country Platform
EVN	Electricity of Vietnam
FIT	Feed in Tariff
G20	Group of Twenty
G7	Group of Seven
GDP	Gross Domestic Product
GFANZ	Glasgow Financial Alliance for Net Zero
GHG	Greenhouse gases
IEA	International Energy Agency
ILO	International Labour Organization
IMC	Inter-Ministerial Committee of South Africa
INA	Indonesian Investment Authority
IPG	International Partners Group
JET IP	Just Energy Transition Investment Plan
JETP	Just Energy Transition Partnership
LNG	Liquefied Natural Gas
MEMR	Ministry of Energy and Mineral Resources
MONRE	Ministry of Natural Resources and Environment of Viet Nam
NCCS	National Climate Change Strategy
NDC	Nationally Determined Contribution
O&M	Maintenance and Operating
PCC	Presidential Climate Commission of South Africa
PCFTT	Presidential Climate Finance Task Team of South Africa

PDP	Power Development Plan
PGII	Global Infrastructure and Investment
PLN	Perusahaan Listrik Negara
PT SMI	PT. Sarana Multi Infrastructure of Indonesia
RMP	Resource Mobilisation Plan
RUPTL	National Electric Generation Plan for 2021-2030
TIPS	Trade & Industrial Policy Strategies
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
WB	World Bank

## Executive summary

This report analyses and draws lessons from the preparation, development, and implementation of JETP in South Africa and Indonesia for the establishment and development of the JETP Secretariat and JETP Resource Mobilisation Plan (JETP RMP) in Vietnam.

### The concept of JETP

Just Energy Transition Partnership (JETP) is a new financing cooperation mechanism between developed and developing countries to help coal-dependent emerging economies make a just energy transition. The goal is to support self-defined pathways as recipient countries move away from fossil fuel production and consumption in the electricity sector in a way that addresses the social consequences involved, such as by ensuring training and alternative job creation for affected workers and new economic opportunities for affected communities.

JETPs, through financing from international and domestic public sources, aim to accomplish three main objectives:

- (i) facilitate the early decommissioning of fossil fueled, particularly coal-fired power plants;
- (ii) mobilise private sector capital to fund decarbonization activities; and
- (iii) deliver a “just transition” for citizens.

### JETP in South Africa – the frontrunner with high-level political engagement and intense stakeholder consultation

South Africa is the largest CO<sub>2</sub> emitter in Africa with the majority from the electricity sector, especially coal power. South Africa has over a decade of strong stakeholder processes for climate change mitigation strategy development, for example in the context of the introduction of a carbon tax. South Africa is the first country to agree on a JETP in November 2021 with the International Partners Group (IPG), which includes the United Kingdom, France, Germany and the United States of America. Initial committed funding of USD 8.5 billion will be mobilised in the next three to five years. JETP particularly builds on the highest level of political engagement by President Ramaphosa himself who established a Presidential Climate Finance Task Team (PCFTT) to engage with the IPG and analyse its financial offer in February 2022. Then, the South African JETP Secretariat was set up to provide technical and convening capabilities for developing the investment framework under the guidance of the PCFTT and IPG, through five technical groups. The Secretariat is supported by the World Bank’s Climate Investment Funds (CIF) and is responsible for coordinating the implementation of the Just Energy Transition Investment Plan (JET IP), ensuring stakeholder engagement and monitoring and reporting on JET IP progress.

PCFTT focuses on, among other tasks, the partnership with IPG and reports directly to the Inter-Ministerial Committee (IMC) for the finalization of the implementation framework and financial investment plan. In May 2022 it undertook consultations with JETP Secretariat, IPG, related government bodies and financiers to engage the parties to work on the development of JET IP.

The JET IP was developed over the course of 2022, in a dynamic context, along with several supportive policies and processes being launched, including the Climate Change Bill (February 2022) and the South Africa Green Taxonomy (March 2022) and intensive stakeholder consultations. The Just Transition Framework adopted by Cabinet in August 2022 provides a

strategic plan for achieving a just and equitable transition to net-zero CO<sub>2</sub> emissions in South Africa by 2050. The framework lays out some of the key value chains most at risk from the transition — coal, agriculture, tourism, and automobiles — and sets key policy areas to help address these risks, including human resource and skills development; industrial development, economic diversification, and innovation; and social protection measures. The JETP IP develops prioritization criteria regarding investments in the electricity sector, new energy vehicles sector, green hydrogen sector and skills equipment for just energy transition. It so far does not consider revenues from carbon markets.

### **JETP in Indonesia - unclear approaches to stakeholder consultation and five competing financial mechanisms**

Indonesia is highly dependent on coal for power generation and also exports coal internationally. It has been developing domestic carbon pricing policies such as an emissions trading system (ETS) for the power sector and a low level carbon tax. The massive problems that Indonesia has faced in the past regarding the reduction of fuel subsidies show that there is a high conflict potential if the public perceives itself to be a loser of a transition process. Indonesia became the second country to launch a JETP with IPG in November 2022. The Indonesia JETP will mobilize USD 10 billion each from public and private sources, the latter from financial institutions that are members of the Glasgow Financial Alliance for Net Zero (GFANZ), over the next three to five years. On 16 February 2023, Indonesia's JETP Secretariat was established by the Indonesian government and IPG co-leads in the Indonesian Ministry of Energy and Mineral Resources (MEMR); it is supported by the Asian Development Bank (ADB). The Secretariat is now supporting the government to develop a comprehensive investment and policy plan that reflects the targeted GHG emissions reductions and support for the affected communities. Key policies that inform the JETP include Indonesia's NDC (2021), Long-Term Strategy for Low Carbon and Climate Resilience (2021), and Low Carbon Development Indonesia (2021).

Four JETP Working groups were also established to support the Secretariat in special tasks. So far, stakeholder consultation has been lacking. Moreover, there are five energy transition schemes competing with the JETP, the CIF' Accelerating Coal Transition (CIF-ACT) program to support the faster retirement of CFPPs, ADB's energy transition mechanism (ETM), Indonesia's ETM Country Platform (ETM-CP); state utility PLN own version of its ETM; and the Indonesian Investment Authority's (INA) ETM. The Indonesian JETP IP so far lacks consideration of carbon market revenues.

### **Vietnam – JETP-related steps to date**

On 14 December 2022, Vietnam became the third country to sign a JETP with IPG “to support Viet Nam's low-emission and climate resilient development, as well as to support Viet Nam to accelerate the just transition and decarbonisation of the electricity system and develop new economic opportunities to support Viet Nam's transition towards net zero future”. Vietnam's JETP will mobilize at least USD 15.5 billion over the next three to five years, of which at least USD 7.75 billion is mobilized from public sector finance and at least USD 7.75 billion will be mobilized by the GFANZ Working Group members in private finance. According to the Political Declaration, the JETP aims to support Vietnam in three broad categories:

- Just transition
- Increase of decarbonization ambition
- Ensuring national energy sovereignty, security and affordability

The Political Declaration on Viet Nam JETP emphasizes the need of adopting low-carbon energy systems to reach this goal through promoting renewable energy development, improving energy efficiency and the importance of the transition away from unabated coal-fired power while ensuring national energy sovereignty, security and affordability.

The JETP Political Declaration of Vietnam also explicitly mentions the use of pricing and regulatory measures to promote investment in renewable energy, energy efficiency, and the strengthening of the country's electricity grid. Carbon pricing is a potential and powerful climate financing policy to facilitate the transition towards cleaner energy and help Vietnam achieve its climate targets in a cost-effective way. Effective carbon pricing can accelerate the adoption of low-carbon technologies, encourage the use of renewable energy, promote e-mobility, and reduce the use of fossil fuels. Moreover, international carbon markets, like the one under Article 6 of the Paris Agreement, are becoming increasingly important in providing the necessary financing for low-carbon technologies.

Vietnam is now in preparation to establish a JETP Secretariat by April 2023 to provide support for the management of the JETP and to facilitate and coordinate technical work according to the instructions of the Government of Vietnam and the IPG. The establishment will receive external financial and administrative support and engage with key stakeholders, including multilateral and bilateral development financial institutions, private sector entities and others. The first mission of the Secretariat is to provide administrative and technical support to develop a JETP – Resource Mobilization Plan (RMP) to submit to IPG by November 2023. The RMP, as stated in the Political Declaration, will identify the new investment requirements and opportunities – for the development and implementation of wind, solar, transmission, energy efficiency, storage, electric vehicles, training, retraining and vocational support for employment among others - and measures to facilitate the deployment of support and overcome barriers to investment.

**Lessons learned from JETPs in South Africa and Indonesia and implications for Vietnam**

From the experience from South Africa and Indonesia, the key lessons for the general implementation of JETP and its governance structure are derived as follows:

*Table 1: Lessons learned and recommendations for Vietnam*

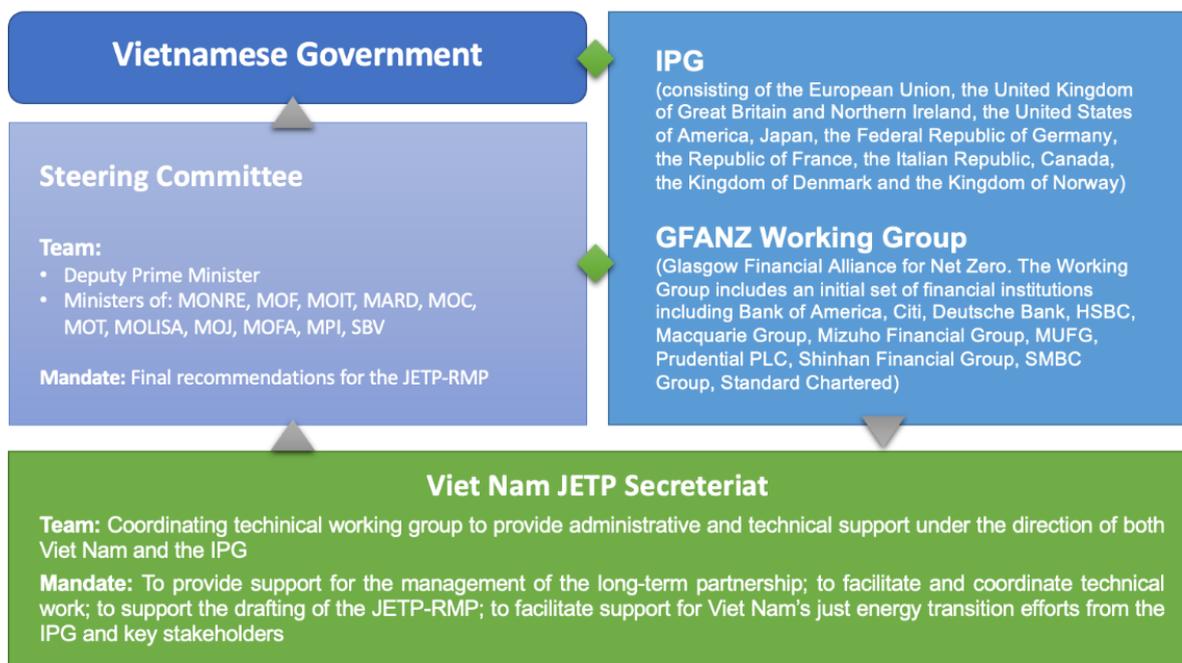
Aspect	Lessons learned and recommendations for Vietnam
Negotiation dialogue	<p>Negotiations are slow and resource-intensive.</p> <ul style="list-style-type: none"> <li>● JETP is a broad commitment responding to a specific political window, but the specificities of the financing terms, reform plans, coordination structures, etc. take time to pin down.</li> <li>● Seeking support from different sources of donors and engaging them in the early stage of the negotiation is resource-intensive but vital to provide additional resources to support Vietnam in this stage.</li> </ul>
National coordination	<ul style="list-style-type: none"> <li>● Having a centralised, high-level body which coordinates and manages the just transition is key to the success of developing the RMP. Full engagement by the highest level of government is critical to overcome the potential resistance of line ministries. The Steering Committee of the National Program</li> </ul>

Aspect	Lessons learned and recommendations for Vietnam
	<p>on Economical and Efficient Use of Energy 2019-2030 –should be updated and upgraded accordingly.</p> <ul style="list-style-type: none"> <li>● Maintaining high political agreement and consensus with the line ministries, local authorities and impacted groups is essential in the development and implementation of the RMP.</li> <li>● Broader coordination and engagement are needed to move away from sectoral approaches that hinder the achievement of the JETP target due to inconsistent and counterproductive policies and “siloes” approaches.</li> </ul>
Legislative framework	<ul style="list-style-type: none"> <li>● So far, the two policy documents mentioned in Vietnam’s JETP Political Declaration, namely the NDC and National Climate Change Strategy, do not mention any just energy transition issues. A JETP requires a conducive/enabling legislative environment.</li> <li>● The JETP RMP of Viet Nam should include criteria for the prioritization of the development of climate-related policies, electricity-related policies, just transition-related policies, finance-related policies, and industrial-sector related policies. Such policies should include: <ul style="list-style-type: none"> <li>○ National Energy Transition Comprehensive Programme for nation-wide management of climate change, including harnessing of various means of international public climate finance and carbon market revenues</li> <li>○ Sector Emissions Targets framework</li> <li>○ Amendment of the Law on Electricity enabling incentives for renewable electricity generation that are stable in the long term (emulating those that led to the breakthrough in solar PV)</li> <li>○ Electricity competitive market development (i.e. Electricity price auction mechanism/New electricity project bidding mechanism)</li> <li>○ Revision of electricity subsidy system for households taking onto account their socio-economic status</li> <li>○ Domestic carbon credit market regulation</li> <li>○ Domestic carbon tax regulations, including using of carbon credits against the tax</li> <li>○ Revision of PDP VIII</li> <li>○ The promulgation of a Law on Renewable Energy outlines specific requirements for renewable energy, investment procedures, transfer mechanisms, job transition support, training programs, and emerging technologies, with a special emphasis on offshore wind power.</li> <li>○ Renewable energy producer auction.</li> </ul> </li> </ul>

Aspect	Lessons learned and recommendations for Vietnam
	<ul style="list-style-type: none"> <li>o Amendment to the Land Law – with a new policy on multi-purpose land use for renewable energy development.</li> </ul>
Finance package, structure and the distribution of funds	<p>The negotiations on the RMP and finance package should focus on:</p> <ul style="list-style-type: none"> <li>● JETP is a new term and new initiative form of partnership. International finance comes from a broad mix of multilateral development banks, bilateral, philanthropies, private sector... The challenge is to ensure that all these partners deliver, over a period of several years. This needs to be enshrined in robust agreements which cannot be “evaded” once the novelty of the JTP fades. Relabelling of existing finance sources needs to be avoided and an adequate portion of grants or soft financing needs to be negotiated in the RMP. Carbon markets need to be brought in.</li> <li>● The justice elements, such as retraining workers and subsidizing livelihoods for an interim period, are typically the hardest to negotiate and fund. On the other hand, these justice elements cannot raise capital in conventional markets, so should be the priority for grants.</li> <li>● Assess results-based finance thresholds and risk if the implementation of the JETP projects later does not meet the target agreed.</li> </ul>
Evidence-based strategies and studies	<p>JETP in Vietnam is currently designed as a high-level political commitment. The “just” term is not well researched and reflected in evidence-based strategies.</p> <ul style="list-style-type: none"> <li>● Develop reliable data and evidence-based strategies for a just transition is essential for developing an effective roadmap and strategy for a just transition, measuring progress, and evaluating the effectiveness of transition policies and programmes.</li> <li>● Commission more in-depth research, and scoping studies to provide evidence base and strategies with wide participation of experts in different fields (academia, business, labour, and associations) to support RMP development and implementation.</li> </ul>
Design an effective governance model	<ul style="list-style-type: none"> <li>● Effective, accountable and transparent management and coordination of efforts are key to ensuring fairness and inclusive participation, minimising negative economic and political impacts, and safeguarding the lives and livelihoods of the most vulnerable.</li> <li>● The governance at the national and provincial levels to achieve a just and equitable transition should be clearly demonstrated in the RMP.</li> </ul>

Aspect	Lessons learned and recommendations for Vietnam
Engage wide public and stakeholders in policy dialogue	<p>JETPs are highly political: Direct negotiations between the government of Vietnam and the IPG are integral to securing the scale of ambition needed to satisfy both sides. The relatively closed nature of those negotiations has also been important for forging the partnership. However, it can lead to a lack of transparency and lower the support from the public, private sector..., and even other key governmental authorities in the implementation phase of the RMP.</p> <ul style="list-style-type: none"> <li>● There is a need for a formal platform to allow various stakeholders (and particularly society organisations) to be engaged, consulted, and share and receive information. This formal process is necessary for continuity throughout the actual implementation of RMP.</li> <li>● Public dialogues need to be organised early in the preparation of the RMP and then repeated throughout the process of a just transition. This supports a more inclusive process to strike compromises between diverse stakeholders and balance economic, social, and environmental objectives or competing interests.</li> </ul>
Collaboration between recipient countries	<ul style="list-style-type: none"> <li>● Sharing experience and strengthening the collaboration with South Africa and Indonesia should be undertaken as early as possible to learn about the setup of the Secretariat, the governance systems and the draft of RMP. It can be done via organising workshops with and conducting site visits of technical experts and high-level ranking officials...)</li> <li>● In the longer run, the establishment of a platform for collaboration and frequent exchange of information among recipient countries may lead to combine actions and strengthen the voices and negotiation powers.</li> </ul>

*Governance structure for JETP in Vietnam is proposed as follows:*



## 1 Introduction

### 1.1 What is JETP

**Just Energy Transition Partnership (JETP)** is a new financing cooperation mechanism between developed and developing countries the aims of which are to help a selection of coal-dependent emerging economies make a just energy transition. The goal is to support these countries' self-defined pathways as they move away from fossil fuel production and consumption in the electricity sector while doing so in a way that addresses the social consequences involved, such as by ensuring training and alternative job creation for affected workers and new economic opportunities for affected communities<sup>1</sup>.

Fundamentally, JETPs through financing from international and domestic public sources aim to accomplish three main objectives:

- facilitate the early decommissioning of fossil fuel, particularly coal-fired power plants (CFPPs);
- mobilise private sector capital to fund decarbonisation activities; and
- deliver a “just transition” for citizens.

The “country-driven” approach is the key factor that differentiates JETPs from traditional climate finance. JETPs are expected to crystallise specific country investment needs coherent with long-term climate and development goals.

JETPs are a potentially promising approach if developed and done properly, to increase the effectiveness of international public climate finance and carbon market funding by removing non-monetary barriers to the energy transition through a focus on the social aspects of the energy transition.

<sup>1</sup> Kramer, K. (2023) *Just Energy Transition Partnerships: An opportunity to leapfrog from coal to clean energy*. <https://www.iisd.org/articles/insight/just-energy-transition-partnerships>

Given that emerging economies have vast differences in their contexts, especially in domestic energy transitions and policies such as energy sources and structures, development status of competitive markets, and rates of electrification, commitment, and targets to reduce greenhouse gas (GHG) emissions, it is natural for JETPs to be designed in different structures.

## 1.2 The current JETP development worldwide

At COP26 in November 2021, the governments of South Africa, France, Germany, the United Kingdom, and the United States of America, along with the European Union, issued a Political Declaration announcing a **new ambitious, long-term JETP**. Under this Political Declaration, South Africa was promised USD 8.5 billion in financing by France, Germany, the United Kingdom, the United States, and the European Union (collectively referred to as the International Partners Group, or the IPG<sup>2</sup>). The committed funding is to be mobilised over a three to five year period to generate “a just transition to a low carbon, climate-resilient society that promotes employment and livelihoods”<sup>3</sup>. These funds were to be mobilised through various mechanisms including grants, concessional loans and investments and risk sharing instruments. In November 2022, one year after announcing JETP at COP26, the South African government launched the JET Investment Plan (JET IP) as envisaged in the Political Declaration.

On 15 November 2022 at the G20 summit, Indonesia became the second country to launch a JETP with IPG. The Indonesia JETP will mobilise USD 20 billion over the next three to five years, of which USD 10 billion of public finance will be mobilised by the IPG members and at least USD 10 billion of private finance is planned to be mobilised and facilitated by the Glasgow Financial Alliance for Net Zero (GFANZ) Working Group<sup>4</sup>. GFANZ consists of over 550 financial institutions from more than 50 countries. The Working Group members include Bank of America, Citi, Deutsche Bank, HSBC, Macquarie Group, Mizuho, MUFG, Prudential PLC, Shinhan, SMBC, and Standard Chartered.

On 14 December 2022, Vietnam became the third country to sign a JETP with IPG “to support Viet Nam's low-emission and climate resilient development, as well as to support Viet Nam to accelerate the just transition and decarbonisation of the electricity system and develop new economic opportunities to support Viet Nam's transition towards net zero future”<sup>5</sup>. Vietnam's JETP will mobilise at least USD 15.5 billion over the next three to five years, of which at least USD 7.75 billion is mobilised from public sector finance and at least USD 7.75 billion will be mobilised by the GFANZ Working Group members in private finance.

As of the time writing this report, the Philippines, India, and Senegal are negotiating JETPs. The inclusion of Senegal, which is not a significant coal user, has broadened the scope of the JETPs so that they now have the potential to apply to all fossil fuel-dependent countries<sup>6</sup>.

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<sup>2</sup> However, it should be noted that different JETPs will have different members of IPG. See details in Table 1 for the list of IPG of each country.

<sup>3</sup> Political Declaration on establishing the Just Energy Transition Partnership in South Africa, The Republic of South Africa's Head of State, President Cyril Ramaphosa declaration. Press release. [https://ec.europa.eu/commission/presscorner/detail/it/ip\\_21\\_5768](https://ec.europa.eu/commission/presscorner/detail/it/ip_21_5768).

<sup>4</sup> Political Declaration on establishing the Just Energy Transition Partnership in Indonesia. Press release. <https://www.gov.uk/government/news/indonesia-just-energy-transition-partnership-launched-at-g20>

<sup>5</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 17.

<sup>6</sup> International Institute for Sustainable Development. (2022) Policy Brief: The need for Just Energy Transition Partnership to support leapfrogging fossil gas to a clean renewable energy future. <https://www.iisd.org/publications/brief/just-energy-transition-partnerships>

### 1.3 Scope and objectives of this Report

The scope and objective of this Report are to analyse and draw the lessons learned from the preparation, development, and implementation of JETP in South Africa and Indonesia for the establishment and development of the JETP Secretariat and JETP Resource Mobilisation Plan (RMP) in Vietnam.

The first section of the report will provide general information on JETPs, while the second section provides country context and implications of JETP for Vietnam. The third and fourth sections will provide detailed JETP preparation and development in South Africa and Indonesia. The last section will draw lessons learned and recommendations for Vietnam in preparing for its own JETP.

## 2 JETP in Vietnam

### 2.1 Country context

#### 2.1.1 Electricity sector context

The power sector in Vietnam is managed by the government through the Ministry of Industry and Trade. The power market in Vietnam remains heavily state-dominated, despite the government's stated intention to establish a competitive market-driven environment. The Government is currently the largest investor in the electricity market. By the end of 2020, out of the 109 generators, the three main state-owned energy enterprises of Electricity of Vietnam (EVN), Petrovietnam, and Vinacomin held nearly 89% of the installed capacity. EVN remains the sole electricity off-taker and distributor in Vietnam. EVN owns and operates approximately 58% of generation capacity across Vietnam and controls transmission and distribution; tariff collections are at nearly 100%.

In 2022, Vietnam's electricity output reached 268.44 TWh, of which 39.1% came from coal, 35.4% from hydropower and 12.6% from other renewable sources<sup>7</sup>.

The period 2011-2020 saw annual growth of coal-fired thermal power of 18% per year, while gas and oil-fired thermal power insignificantly increased in this period.

Over the past decade, the Government of Vietnam has actively improved policies to support the development of renewable energy. The decision on a feed in tariff (FIT) mobilised a surge of renewable power capacity from 13.7 GW in 2012 to 42.7 GW in 2021<sup>8</sup> with solar PV reaching 4 GW in just two years<sup>9</sup>. In 2022, solar power (including rooftop solar) reached about 16.7 GW and wind power reached 4.7 GW<sup>10</sup>.

However, the power system is still heavily dependent on coal. The figure below shows the electricity mix and relevant policies that support renewable energy development in Vietnam over the past decades.

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<sup>7</sup> Vietnam Energy Association. (2023) *Summary report on implementation of the Plan in 2022, objectives and tasks of EVN in 2023 - December 2022*. <https://nangluongvietnam.vn/tap-doan-dien-luc-viet-nam-nam-2022-thu-thach-huong-phat-trien-30102.html>

<sup>8</sup> International Renewable Energy Agency. (2022) *Renewable capacity Statistics 2022*. <https://www.irena.org/publications/2022/Apr/Renewable-Capacity-Statistics-2022>

<sup>9</sup> Thang N. Do. (2020) Underlying drivers and barriers for solar photovoltaics diffusion: The case of Vietnam. <https://doi.org/10.1016/j.enpol.2020.111561>

<sup>10</sup> Vietnam Electricity. (2022) *National Load Dispatch Centre, EVN*. <https://www.nldc.evn.vn/FullNewsg/200/Cong-suat-huy-dong/default.aspx>

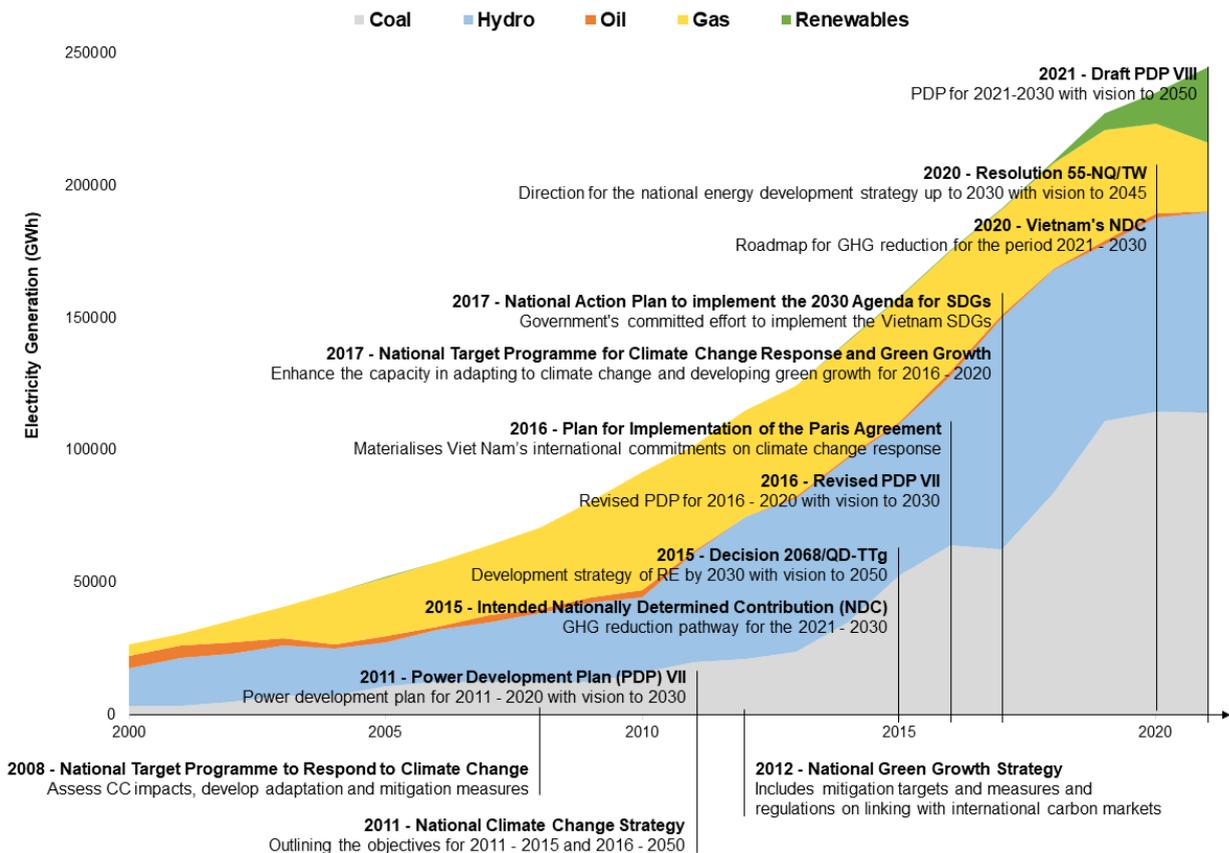


Figure 1: Viet Nam's electricity generation output and supportive policies period 2010-2021<sup>11</sup>

Vietnam's Updated NDC 2022 estimated that Vietnam's total emission in 2020 is 528.4 million tCO<sub>2</sub>-eq. The energy sector accounts for 66% (347.5 million tCO<sub>2</sub>-eq) of which electricity generation accounts for 39% (207.5 million tCO<sub>2</sub>-eq)<sup>12</sup>.

According to the draft National Power Development Plan (PDP) for the period of 2021-2030, with a vision to 2045 (PDP VIII) on the energy structure, the installed capacity of coal-fired generation in 2030 will be 36.3 GW and 29.3 GW and 7.0 GW of co-firing with biomass/ammonia by 2045. Gas-fired generation using domestic gas is a reliable active source of electricity which plays an important role in energy security. This source will reach the maximum capacity in 2030, then about half the capacity is maintained and the rest is converted to LNG and later completely hydrogen. Gas-fired generation from imported LNG will reach the highest capacity in 2035, then it will switch to hydrogen and be completely replaced by hydrogen. By 2045, the installed capacity of renewable energy sources and hydropower will account for a very high proportion, at 68.5% of the total installed capacity of the entire power system. In addition, offshore wind power sources are considered to be responsible for producing green hydrogen or ammonia to store energy as fuel for thermal power plants to actively generate electricity<sup>13</sup>.

<sup>11</sup> The Consultant's self-compilation

<sup>12</sup> The Government of Vietnam. (2022) Viet Nam's Updated Nationally Determined Contribution 2022. <https://unfccc.int/documents/622541>

<sup>13</sup> Ministry of Industry and Trade. (2022) Draft Power Development Plan for the period of 2021 - 2030, with a vision to 2045, November 2022

## 2.1.2 Social context

Between the period 2002-2011, over 10 million people were lifted out of poverty with the World Bank's (WB) Low and Low Middle Income Countries' poverty rate (USD 3.2/day 2011PPP) dropping from 16.8 to 5%<sup>14</sup>. Although Vietnam is a successful story of poverty alleviation, there is an increasing trend in income inequality among classes of the population, with the GINI coefficient increasing from 0.34<sup>15</sup> in 2014 to 0.37 in 2020<sup>16</sup>. Income inequality between the 20% richest households and the 20% poorest households ("wealth gap") increased from 7 times to over 8.5 times during 2004-2010<sup>17</sup> and further 9.8 times to 10.2 times between 2012 and 2020<sup>18</sup>. In addition, the average income of the poorest group to the nearly richest group is quite close to each other, while the average income of the richest is far ahead of the four others, which shows that it is very difficult for the first four groups to break into the richest group<sup>19</sup>. Notably, in rural areas, where local communities are most affected by the energy transition, the income gap between the lowest and highest groups increases from 8.4 times in 2016 to 9.6 times in 2019<sup>20</sup>.

Vietnam currently has 39 operating coal-fired power plants with a total installed capacity of 25.8 GW with 28 state-owned plants (EVN, Vinacomin, Petrovietnam) and 11 private owned plants. The total employment in the maintenance and operating (O&M) roughly corresponds to 17,500 people. While coal mining and quarrying employment in 2021 accounts for 0.2% of Viet Nam's workforce,<sup>21</sup> or around 94,000 workers.<sup>22</sup>

Under JETP, Vietnam aims to reduce 6.8 GW of coal fired power plant capacity by the year 2030 compared to the planned peak capacity of 37 GW. The Consultant's initial estimation of jobs lost due to decommissioning of 6.8 GW coal-fired generation in O&M will be around

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<sup>14</sup> The World Bank. (2022) *Vietnam Poverty and Equity Assessment – From the Last Mile to the Next Mile*. <https://www.worldbank.org/en/country/vietnam/publication/2022-vietnam-poverty-and-equity-assessment-report>

<sup>15</sup> The World Bank. (2023) *Gini index - Vietnam*. [https://data.worldbank.org/indicator/SI.POV.GINI?locations=VN-ID-ZA&most\\_recent\\_year\\_desc=false](https://data.worldbank.org/indicator/SI.POV.GINI?locations=VN-ID-ZA&most_recent_year_desc=false)

<sup>16</sup> General Statistics Office of Vietnam. (2021) *The trend of inequality in income distribution in Vietnam 2016-2020 period*.

<https://www.gso.gov.vn/en/data-and-statistics/2021/06/the-trend-of-inequality-in-income-distribution-in-vietnam-2016-2020-period/>

<sup>17</sup> The World Bank. (2013) *2012 Vietnam poverty assessment*. <https://documents.worldbank.org/en/publication/documentsreports/documentdetail/563561468329654096>

<sup>18</sup> General Statistics Office of Vietnam. (2021) *The trend of inequality in income distribution in Vietnam 2016-2020 period*.

<https://www.gso.gov.vn/en/data-and-statistics/2021/06/the-trend-of-inequality-in-income-distribution-in-vietnam-2016-2020-period/>

<sup>19</sup> Oxfam Vietnam. (2018) *Social Mobility and Equality of Opportunity in Vietnam: Trends and Impact Factors*. <https://vietnam.oxfam.org/latest/publications/report-social-mobility-and-equality-opportunity-vietnam-trends-and-impact?q=latest/policy-paper/report-social-mobility-and-equality-opportunity-vietnam-trends-and-impact>

<sup>20</sup> General Statistics Office of Vietnam. (2021) *The trend of inequality in income distribution in Vietnam 2016-2020 period*.

<https://www.gso.gov.vn/en/data-and-statistics/2021/06/the-trend-of-inequality-in-income-distribution-in-vietnam-2016-2020-period/>

<sup>21</sup> General Statistics Office of Vietnam. (2022). Press conference on Labor and employment situation in the fourth quarter and 2021 and Vietnam Human Development Index (HDI) for the period 2016-2020. <https://www.gso.gov.vn/en/data-and-statistics/2022/02/press-conference-on-labor-and-employment-situation-in-the-fourth-quarter-and-2021-and-vietnam-human-development-index-hdi-for-the-period-2016-2020/>

<sup>22</sup> Quang Ninh Provincial Government Portal. (2023). TKV: Tiếp tục đẩy mạnh tái cơ cấu. <https://www.quangninh.gov.vn/chuyen-de/baucu/Trang/ChiTietTinTuc.aspx?nid=113863>

4,600 jobs. As for the total coal supply chain for CFPPs, it is estimated that 15,642 to 21,160 jobs will be lost depending on the scenarios in which total electricity generation will be between 551.2-595.5 TWh<sup>23</sup>.

Along with the decommissioning of CFPPs, JETP will also help Vietnam increase renewables (mainly wind and solar energy) from 36% to 47% of total electricity generation by 2030. This increase is estimated to add 294,098 new jobs to Vietnam's employment pool in which wind (onshore, nearshore, and offshore) accounts for 110,842 new jobs while solar accounts for 183,256 new jobs. The estimation of jobs for renewables includes jobs in O&M, construction and manufacturing. The assumption of the localising rate of manufacturing is 50% by 2030.

### 2.1.3 Economic context

Over the past decades, Vietnam has achieved significant results in economic development, transforming from one of the poorest economies in the world to a lower-middle income economy<sup>24</sup>.

The country maintains an annual economic growth of 5-6% between 2002 and 2021 with GDP per capita increasing 3.6 times, reaching almost USD 3,700 in 2021<sup>25</sup>. Given the rapid rate of economic growth, the demand for electricity is increasing at an unprecedented rate. According to EVN, Vietnam's power demand grew by 10.3-11.3% per year during 2016-2020. As a result, Vietnam has relied on fossil fuels to meet its fast-rising energy demand, making CO<sub>2</sub> emissions increase at a rapid rate of 7.9% annually, faster than the real GDP rate (6.5-7% annually)<sup>26</sup>. With a projected annual GDP growth of 7% during the 2021-2030 period, the National Master Plan period 2021-2030 submitted to the National Assembly on 5 January 2023 sets up the target to become an upper-middle income country by 2030 with GDP per capita reaching USD 7,500<sup>27</sup>. The electricity demand is therefore projected to grow by 6.8–8.4% annually from 2021-2030<sup>28</sup>. It is estimated that an annual financing need of over USD 11 billion to upgrade Vietnam's electricity system as proposed in PDP VIII, with much of which will be allocated for renewables, to meet the stated goals<sup>29</sup>.

According to the WB at a bigger scale Vietnam needs USD 114 billion through 2040, including USD 81 billion in investments and USD 33 billion for social programs, for decarbonising the economy and Vietnam alone cannot finance this without external sources. Moreover, the report stresses the high level of climate change-related damages, essentially caused by the GHG emissions already generated by other countries<sup>30</sup>.

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<sup>23</sup> The numbers of jobs lost and created are calculated by using the Consultant's self-developed tool based on studies by Ram et al. (2022) on "Job creation during a climate compliant global energy transition across the power, heat, transport and desalination sectors by 2050".

<sup>24</sup> The World Bank. (2023) *Vietnam: Achieving Success as a Middle-income Country*. <https://www.worldbank.org/en/results/2013/04/12/vietnam-achieving-success-as-a-middle-income-country>

<sup>25</sup> The World Bank. (2022) *The World Bank in Vietnam: Overview*. <https://www.worldbank.org/en/country/vietnam/overview#1>

<sup>26</sup> Nhan Dan News. (2023) *National appeal for energy transition assistance receives big responses*. <https://en.nhandan.vn/national-appeal-for-energy-transition-assistance-receives-big-response-post123044.html>

<sup>27</sup> Vietnamnet news. (2023) *Vietnam targets \$7,500 GDP per capita by 2030*. <https://vietnamnet.vn/en/vietnam-targets-usd7-500-gdp-per-capita-by-2030-2098122.html>

<sup>28</sup> V. H. M. Nguyen. (2018) *Forecast on 2030 Vietnam Electricity Consumption*. DOI:10.48084/etasr.2037

<sup>29</sup> IUCN. (2022) *Unlocking international finance for Vietnam's renewable energy transition*. <https://www.iucn.org/news/viet-nam/202205/unlocking-international-finance-vietnams-renewable-energy-transition>

<sup>30</sup>The World Bank. (2022) *Country Climate and Development Report for Vietnam*. <https://www.worldbank.org/en/country/vietnam/brief/key-highlights-country-climate-and-development-report-for-vietnam>

## 2.2 JETP overview

According to the Political Declaration, the JETP aims to support Vietnam in three broad categories:

- **Just transition**

JETP support is centred on leading a just transition to ensure all of society can benefit from a green transition to increase access to affordable energy. Relevant organisations and stakeholders will be supported to help meet the needs of those most affected by the green transition, such as workers and communities in sectors and areas affected by the transition. Vietnam will address both climate and development issues in an integrated way, and, in the energy sector, focus on energy access and security at the same time as decarbonisation.

- **Increase of decarbonisation ambition**

The JETP Political Declaration outlines three key specific targets in decarbonisation:

- **To reduce the total GHG emissions generated by the electricity sector:** Before JETP, Vietnam was planning to hit peak emissions from the electricity system in 2035 at 240 MtCO<sub>2</sub>-eq. However, under the JETP agreement that target has been revised down to 170 MtCO<sub>2</sub>-eq by 2030. This target is achieved by the realisation of the two later targets.
- **To reduce the capacity of CFPPs in Vietnam:** CFPP capacity is to be reduced from a peak of 37 GW to 30.2 GW.
- **To develop more renewable energy and more effective energy infrastructure:** Vietnam was planning for 36% of its energy generation to come from renewable sources by 2030. The JETP, however, is targeting to increase that figure to 47%.

- **Ensuring national energy sovereignty, security and affordability**

The Political Declaration on Vietnam JETP emphasises the need of adopting low-carbon energy systems to reach this goal through promoting renewable energy development, improving energy efficiency and the importance of the transition away from unabated coal fired power while ensuring national energy sovereignty, security and affordability<sup>31</sup>.

## 2.3 Preparation and implementation of JETP

The JETP of Vietnam builds on the UK-launched G7 Partnership for Global Infrastructure and Investment (PGII), which aims to narrow the infrastructure investment gap in developing countries. G7 leaders agreed in June 2022 to move forward in negotiations with several countries on JETPs, which are a core delivery mechanism of the PGII<sup>32</sup>.

Prior to the JETP announcement, all the preparation works were mainly for negotiating on and preparing for the Political Declaration that has been done between the representatives of the Government (key line ministries) and the representatives of IPG (UK and EU). No public

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<sup>31</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724)

<sup>32</sup> Viet Nam News. (2022). *Just Energy Transition Partnership to mobilise \$15.5 billion to support Viêt Nam's green transition*. <https://vietnamnews.vn/society/1415207/just-energy-transition-partnership-to-mobilise-15-5-billion-to-support-viet-nam-s-green-transition.html>

consultation has been made at this stage. From the Government side, the negotiation team has been established in July 2022 including representatives from some key line ministries and led by the Ministry of Natural Resources and Environment (MONRE).

After announcing the Political Declaration in December 2022, Vietnam is now in preparation to establish a JETP Secretariat by April 2023 to provide support for the management of the JETP and to facilitate and coordinate technical work according to the instructions of Vietnam and the IPG. The establishment will receive external financial and administrative support and engage with key stakeholders, including multilateral and bilateral development financial institutions, private sector entities and others. The first mission of the Secretariat is to provide administrative and technical support to develop a JETP RMP to submit to the IPG by November 2023. The RMP, as stated in the Political Declaration, will identify the new investment requirements and opportunities – for the development and implementation of wind, solar, transmission, energy efficiency, storage, electric vehicles, training, retraining and vocational support for employment among others and measures to facilitate the deployment of support and overcome barriers to investment<sup>33</sup>. This plan will be fully led by the Government of Vietnam and presented for endorsement by the IPG.

On 20 February 2023, the Task Force to draft the RMP has been established by the Government that includes representatives from MONRE and all line ministries.

The negotiations and discussions with the representatives of IPG (UK and EU) at this stage are still closed to the public. However, more donors (Asian Development Bank - ADB, United Nations Development Programme - UNDP, United Nations Office for Project Services - UNOPS, GFANZ) have expressed the willingness to support the Government in setting up and operating the Secretariat and fleshing out the RMP.

So far, MONRE is the leading agency in negotiating and preparing for JETP in Vietnam.

### **Development of the JETP-RMP**

The goal of the JETP-RMP is to aid in the development of an ambitious and dependable long-term legal framework for the country's green transition, including the use of pricing and regulatory instruments. Improvements to the regulatory framework will be considered and expected to support:

- (i) Facilitating investment in renewable energy and energy efficiency and strengthening the electricity grid in Viet Nam.
- (ii) Negotiation of the closure of old, inefficient unabated coal-fired power plants to facilitate access to clean energy.
- (iii) Developing and implementing educational, vocational training and re-skilling programs to develop necessary skills and competencies and support job creation for labour in sectors and regions affected by the transition.
- (iv) Defining the role of the private sector and creating an enabling environment for businesses to proactively participate in the transformation process.
- (v) Realizing multi-purpose land use for renewable energy production.

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<sup>33</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724)

## 3 JETP in South Africa

### 3.1 Country context

#### 3.1.1 Electricity sector context

With abundant coal resources, South Africa became the world's 13<sup>th</sup> largest GHG emitter in 2020 with a total emission of about 435 million tCO<sub>2</sub>-eq, making the country the largest emitter in Africa<sup>34</sup>. 85% of electricity generation comes from coal; there are 15 CFPPs with a very high average age of 41 years providing 38.7 GW out of a total installed capacity of 52.5 GW of the whole country<sup>35</sup>. The electricity sector accounts for 41% of the country's CO<sub>2</sub> emissions. Eskom, the state-owned electricity monopoly, holds USD 32 billion in debt, which it is struggling to service, and it is characterised by high costs<sup>36</sup>. The inefficient, rapidly ageing and repeatedly failing CFPPs are unable to keep electricity production at a level that satisfies demand, leading to rolling blackouts and a growing frustration of the private sector and the general population<sup>37</sup>.

Eskom is a big obstacle to South Africa's energy transition and needs to be addressed first, although initiatives in the transport and industrial sectors such as switching to electric vehicles and green hydrogen will become important as the transition deepens.

The figure below shows the electricity mix and relevant policies that support renewable energy development in South Africa over the past decades.

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<sup>34</sup> IDDRI. (2022). *Just energy transitions and partnerships in Africa: A South African case study*. <https://www.iddri.org/en/publications-and-events/report/just-energy-transitions-and-partnerships-africa-south-african-case>.

<sup>35</sup> The World Bank. (2022). *World Bank approves \$497 million in financing to Lower South Africa's greenhouse gas emissions and support a just transition*. <https://www.worldbank.org/en/news/press-release/2022/11/04/world-bank-approves-497-million-in-financing-to-lower-south-africa-s-greenhousegas-emissions-and-support-a-just-transit>.

<sup>36</sup> World Resources Institute. (2021). *South Africa Foundation for a Just Transition*. <https://www.wri.org/update/south-africa-strong-foundations-just-transition>

<sup>37</sup> Foreign Policy. (2023). *Why South Africa Is in the Dark, Again*. <https://foreignpolicy.com/2022/07/08/south-africa-energy-crisis-eskom-power-cut/>

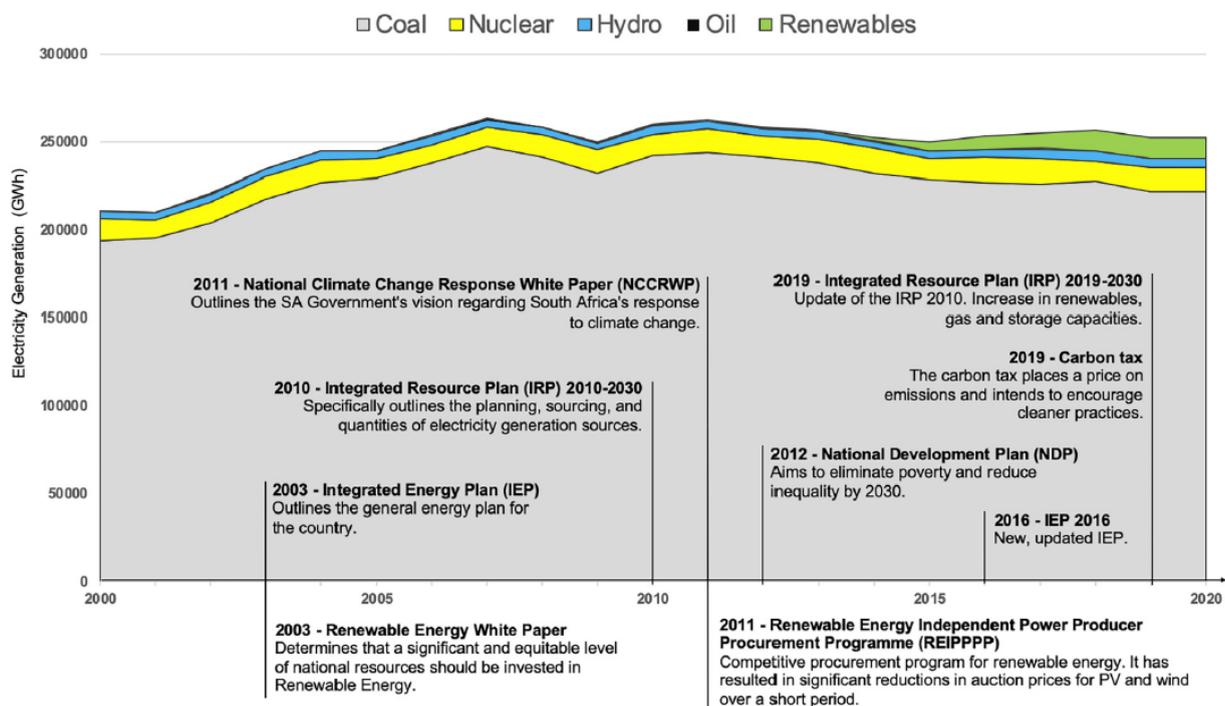


Figure 2: South Africa's electricity generation output and supportive policies period 2000-2020<sup>38</sup>

### 3.1.2 Social context

South Africa is widely known for its high levels of inequality, which is a consequence of its apartheid past, as well as other economic and social factors. Based on WB's global poverty database of 164 countries, South Africa is the most unequal country, with a GINI coefficient remaining at 0.63 over the last decade<sup>39</sup>. This means that the distribution of income in the country is highly skewed, with a small proportion of the population holding a disproportionate share of wealth and income, 80.6% of the financial share is owned only by 10% of the country's population<sup>40</sup>.

The impact of inequality in South Africa is far-reaching and affects various aspects of society, including access to education, health care, and housing. The country also has a high poverty level of more than 50% of the population<sup>41</sup>. In addition, there is a large racial gap in income, with Black South Africans earning significantly less than their White counterparts<sup>43</sup>.

The government has implemented various policies and programs to address inequality and poverty, such as social grants and affirmative action policies. However, progress has been slow and uneven, and inequality remains a major challenge for the country. It is estimated that up to 200,000 workers were employed in South Africa's coal mines, CFPPs and coal transport in

<sup>38</sup> Jonathan Hanto, (2022). *South Africa's energy transition – Unraveling its political economy*. <https://doi.org/10.1016/j.esd.2022.06.006>

<sup>39</sup> The World Bank. (2023). *Gini index - South Africa*. <https://data.worldbank.org/indicator/SI.POV.GINI?locations=ZA>

<sup>40</sup> World Bank. (2023). *Inequality In Southern Africa: An Assessment of The Southern African Customs Union*. <https://documents1.worldbank.org/curated/en/099125303072236903/pdf/P1649270c02a1f06b0a3ae02e57eadd7a82.pdf>

<sup>41</sup> Presidential Climate Commission. (2022). *Supporting a Just and Climate-Resilient Transition in South Africa*. <https://www.climatecommission.org.za/just-transition-framework>

2019. This is equivalent to roughly 1% of formal employment in 2020, including an estimated 82,000 workers in the mining sector (2018) and nearly 50,000 workers employed in Eskom's coal-fired power plants<sup>42</sup>.

### 3.1.3 Economic context

South Africa is a middle-income country with 55% of the population living below the poverty line<sup>43</sup>, but in many aspects, it is considered a developed country. The country has a diverse economy that includes mining, manufacturing, agriculture, and services. However, the country has faced a number of economic challenges in recent years, including slow economic growth, high unemployment, income inequality and most recently COVID-19.

According to the statistics from the WB, the country experienced a period of relatively strong economic growth in the early part of the decade, with growth rates above 2% in most years. However, growth slowed significantly from 2014 onwards, and the country entered a recession in 2018-2019<sup>44</sup>. South Africa's GDP growth rate was just 0.3% in 2019 with an unemployment rate of 29.1%. The COVID-19 pandemic had a major impact on the country's economy, leading to a sharp contraction of 6.3% in 2020. The pandemic has exacerbated existing economic challenges, including high unemployment and inequality. In 2021, GDP growth of 4.9% was reported, however, the unemployment rate was still major, reaching 35.3% and especially high among the youth with the rate of 66.5%<sup>45</sup>.

According to JET IP, the country needs USD 98.7 billion over the next five years to begin South Africa's 20-year energy transition<sup>46</sup>. This amount is substantial considering the multiple socio-economic challenges of the country, including a massive increase in public debt shown in the figure below.

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<sup>42</sup> World Resources Institute. (2021). *South Africa Foundation for a Just Transition*. <https://www.wri.org/update/south-africa-strong-foundations-just-transition>.

<sup>43</sup> The World Bank. (2020). South Africa: Poverty and equity brief. [https://datatopics.worldbank.org/public/ddpext\\_download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global\\_POVEQ\\_ZAF.pdf](https://datatopics.worldbank.org/public/ddpext_download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_ZAF.pdf)

<sup>44</sup> The World Bank. *World Development Indicators (WDI)*. <https://datatopics.worldbank.org/world-development-indicators/>

<sup>45</sup> The World Bank. (2021). *South Africa Overview*. <https://www.worldbank.org/en/country/southafrica/overview>

<sup>46</sup> European Commission. (2022). *Joint Statement: South Africa Just Energy Transition Investment Plan*. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6664](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6664)

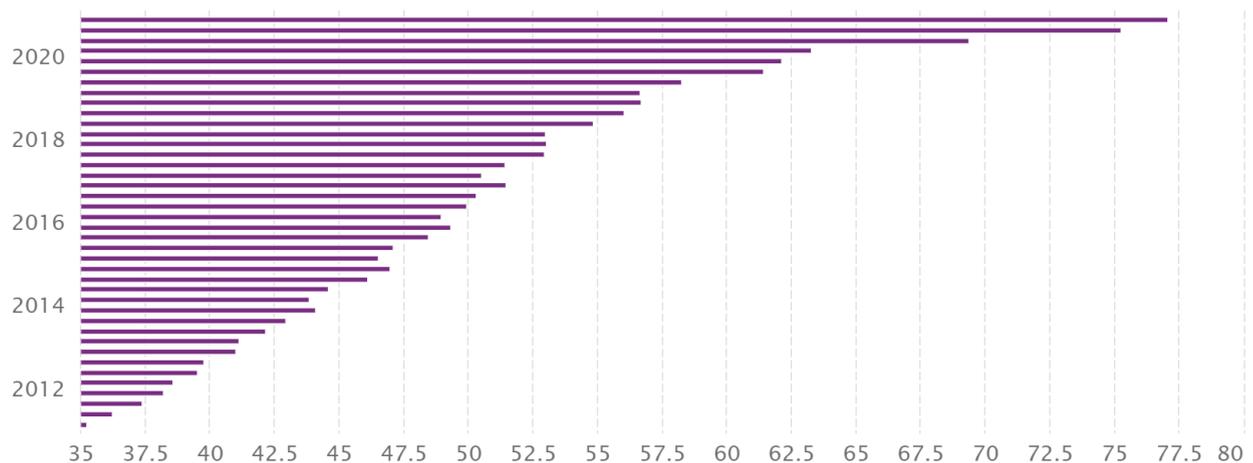


Figure 3: South Africa's Governments debt: % Nominal GDP<sup>47</sup>

### 3.2 JETP overview and precedents

In 2015, South Africa was the only country to mention a just transition in its initial NDC (World Resources Institute, 2021). Since then, the country has engaged in a variety of national dialogues, undertaken assessments, and tabled policies addressing adaptation measures to improve resilience to immediate events, as well as long-term climatic shifts and sharp reductions in GHG emissions. Tackling climate change requires urgent, significant, and transformational changes across all sectors, including a just transition in the energy sector, both in the economy and the legal framework of South Africa.

The JETP aim is defined as follows: “Establish an ambitious long-term partnership to support South Africa’s pathway to low emissions and climate resilient development, to accelerate the just transition and the decarbonisation of the electricity system, and to develop new economic opportunities such as green hydrogen and electric vehicles amongst other interventions to support South Africa’s shift towards a low carbon future.”<sup>48</sup>

The USD 8.5 billion will be mobilised over three to five years to support the achievement of South Africa’s low-carbon future in line with the most ambitious NDC scenario possible. The Political Declaration resolved to establish a partnership comprised of South Africa and international partners, to enable:

- *“The accelerated decarbonisation of South Africa's electricity system to achieve the most ambitious target possible within South Africa's Nationally Determined Contribution (NDC) range to the extent of available resources;*
- *South Africa’s efforts to lead a just transition that protects vulnerable workers and communities, especially coal miners, women and youth, affected by the move away from coal;*
- *South Africa’s nationally determined efforts to successfully and sustainably manage Eskom’s debt, define the role of the private sector, and create an enabling environment through policy reform in*

<sup>47</sup> CEIC. (2023). South Africa Government Debt: % of GDP. <https://www.ceicdata.com/en/indicator/south-africa/government-debt-of-nominal-gdp>, page 6.

<sup>48</sup> Political Declaration on establishing the Just Energy Transition Partnership in South Africa. Press release. [https://ec.europa.eu/commission/presscorner/detail/it/ip\\_21\\_5768](https://ec.europa.eu/commission/presscorner/detail/it/ip_21_5768), paragraph 16.

*the electricity sector, such as unbundling and improved revenue collection;*

- *Local value chains (including Micro, Small and Medium Enterprises) to benefit from new areas of economic opportunity; and*
- *Opportunities for technological innovation and private investment to drive the creation of green and quality jobs as part of a prosperous low emission economy.*<sup>49</sup>

### 3.3 Preparation for JETP

Prior to JETP, South Africa already has a strong foundation on just transition with more than ten years of acknowledgement and research. “The framework stands on the shoulders of years of research in South Africa on the just transition, done by government, business, civil society, academia, and labour unions”.<sup>50</sup>

The summary of key milestones and activities is presented in the following figure:



Figure 4: South Africa’s key milestones and activities in just transition prior JETP<sup>51</sup>

<sup>49</sup> The Presidency. (2022). *South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>50</sup> Presidential Climate Commission. (2022). *Supporting a Just and Climate-Resilient Transition in South Africa*. <https://www.climatecommission.org.za/just-transition-framework>

<sup>51</sup> Consolidated by the Consultant

These actions provide a strong legal foundation for the establishment of JETP and have a great influence on the approach of the country towards the preparation of the JETP Secretariat and development of JET IP.

### **3.4 Governance and development of JETP in South Africa**

#### *3.4.1 JETP governance structure*

- **Just Transition-related work prior to the Political Declaration**

The President of South Africa set up the Presidential Climate Commission (PCC) in 2020. This Commission is made up of 20 commissioners from the government and 11 from other constituencies including focal points from academic institutes, social communities, youth, and labour.

The PCC's main task for its first year was to develop a Just Transition Framework to help coordinate all related work across sectors and stakeholder groups. In 2021, the PCC commissioned several studies and undertook public consultations to help inform the development of the Just Transition Framework.

- **After the Political Declaration**

Unlike the ones in Indonesia and Vietnam, South Africa's Political Declaration on JETP does not mention the task of establishing a JETP secretariat. In order to give effect to the JETP, President Ramaphosa established a Presidential Climate Finance Task Team (PCFTT) to engage with the IPG and analyse the financial offer. South African JETP Secretariat was set up later to provide technical and convening capabilities for developing the investment framework under the guidance of the PCFTT and IPG. The Secretariat was established within the Department of Mineral Resources and Energy supported by the Climate Investment Funds (CIF) and is responsible for coordinating the implementation of the JET IP, ensuring stakeholder engagement and monitoring and reporting on JET IP progress.

PCFTT founded in February 2022 is – among other tasks – focusing on the partnership with IPG and reports directly to the Inter-Ministerial Committee (IMC) for the finalisation of the implementation framework and financial investment plan. In May 2022 it undertook consultations with JETP Secretariat, IPG, related government bodies and financiers to engage the parties to work on the development of JET IP.

The JET IP was developed over the course of 2022, in a dynamic context, along with several supportive policies and processes being launched, including the Climate Change Bill (February 2022) and the South Africa Green Taxonomy (March 2022). The Just Transition Framework adopted by Cabinet in August 2022 provides a strategic plan for achieving a just and equitable transition to net-zero CO<sub>2</sub> emissions in South Africa by 2050. The framework lays out some of the key value chains most at risk from the transition – coal, agriculture, tourism, and automobiles – and sets key policy areas to help address these risks, including human resource and skills development; industrial development, economic diversification, and innovation; and social protection measures.

- **Implementation of JET IP**

**South Africa's Just Energy Transition Investment Plan (JET IP)** is defined for an initial period of five years (2023-2027). During the World Leaders Summit at COP27 in November 2022, President Cyril Ramaphosa of South Africa officially published the JET IP prepared by

various actors in the JET space in South Africa. The JET IP covers three priority sectors, namely: the electricity sector, the new energy vehicle sector and the green hydrogen sector.

The JET IP is the first of its kind, detailing how South Africa proposes to use the USD 8.5 billion that the IPG has pledged towards the country’s transition to a low-carbon economy.

- *It includes detailed information on the financing structures, timing of financial flows, and other implementation modalities, which will, inter alia, address governance, accountability, results monitoring, and evaluation mechanisms to ensure the achievement of desired and impactful outcomes. It is planned to apply, refinements in response to unfolding conditions. Regular progress reports on the JET IP are envisaged.*<sup>52</sup>

The following figure illustrates the JET IP governance.

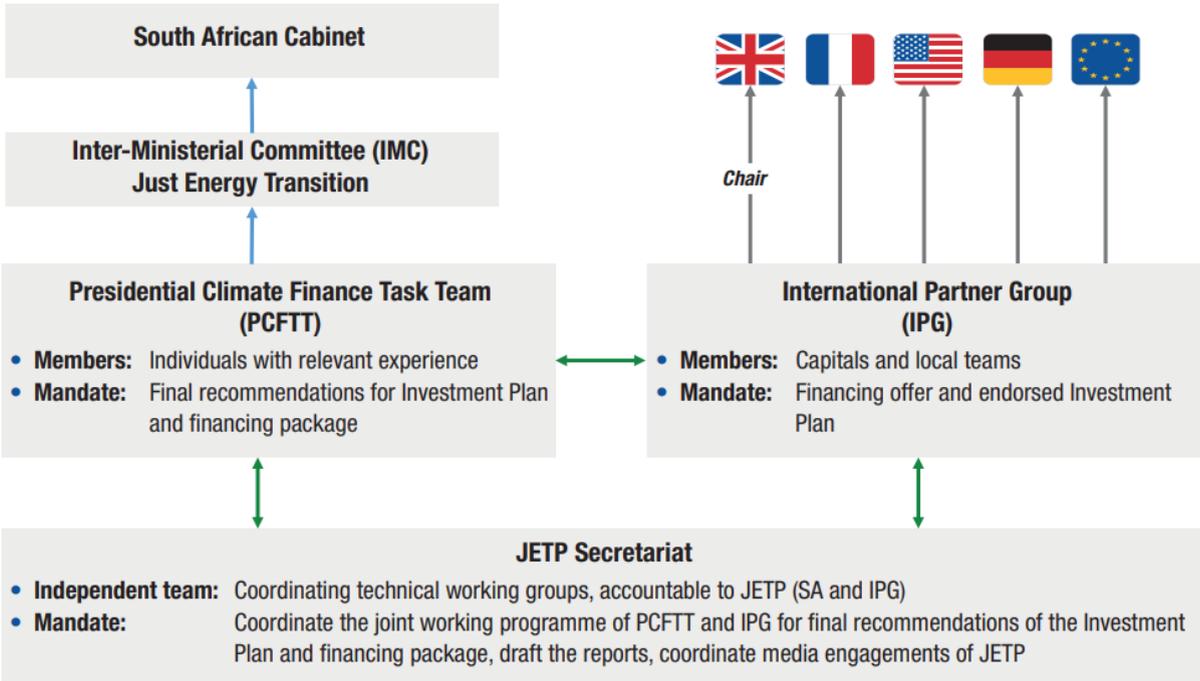


Figure 5. JET IP governance<sup>53</sup>

3.4.2 Key bases of the development of the JET IP

• Antecedents to and development of the Just Transition Framework

Over the last decade, comprehensive policy, regulatory, institutional, and governance frameworks that address climate risks have been developed by the Government of South Africa. Taken together, they constitute an enabling framework for climate related investments in adaptation, mitigation, and the just transition.

<sup>52</sup> The Presidency. (2022). *South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>53</sup> The Presidency. (2022). *South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

The figure below shows the key policy milestones which have enabled a conducive environment for a just energy transition.

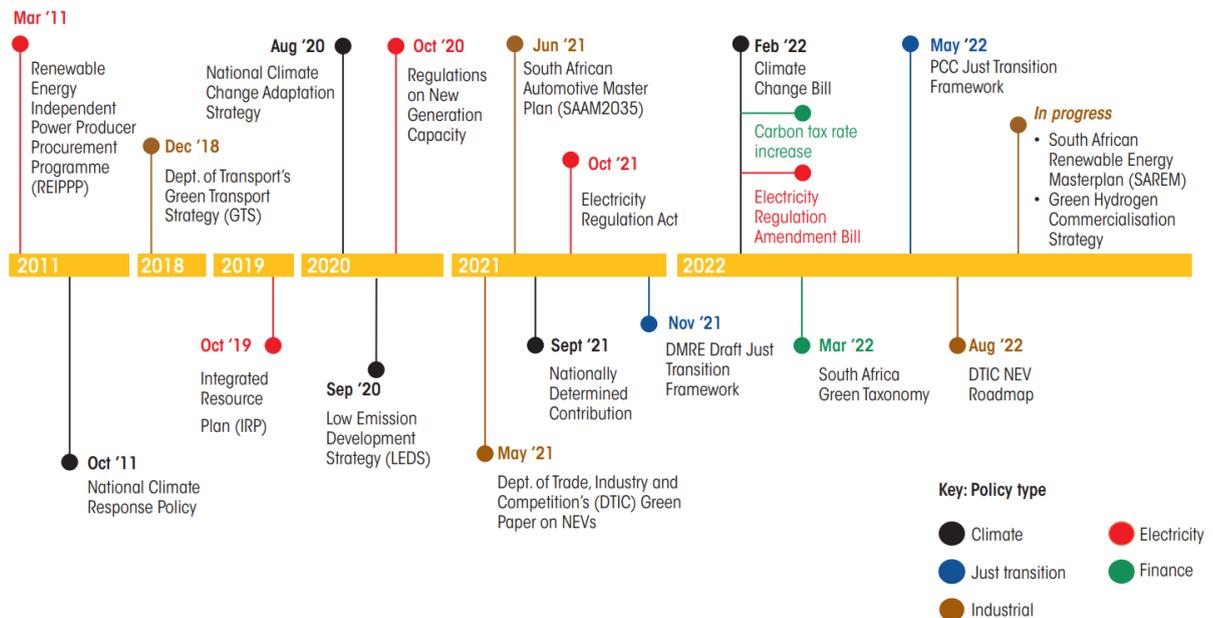


Figure 6. Key policy milestones enabling a just energy transition<sup>54</sup>

Key policy documents include:

**The National Climate Change Response Policy:** In 2011, South Africa issued the National Climate Change Response Policy, which is a plan addressing mitigation and adaptation in the short-term, medium-term, and long-term from the date of publication of the policy to 2050<sup>55</sup>. Accordingly, the policy's main objectives are (i) to mitigate the climate change impacts through interventions building and sustaining South African social, economic and environmental resilience and emergency response capacity and (ii) to develop a fair contribution to the global effort to stabilise GHG concentrations in the atmosphere<sup>56</sup>. The climate change response strategic priorities of the policy are categorised for a variety of areas including carbon pricing, water, agriculture and commercial forestry, health, biodiversity and ecosystems, human settlements, disaster risk reduction and management<sup>57</sup>.

**Low Emission Development Strategy:** in September 2020, the Low Emission Development Strategy of South Africa was adopted to make development climate compatible. The strategy is a country-driven policy instrument for national decision making through giving a

<sup>54</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>55</sup> Lukey, P. (2020). *The South African National Climate Change Response Policy – an evidence-based policy-making case study*. Department of Environment, Forestry and Fisheries, Pretoria. [https://www.dffe.gov.za/sites/default/files/reports/nccrp\\_nationalclimatechange\\_responsepolicy\\_casestudy.pdf](https://www.dffe.gov.za/sites/default/files/reports/nccrp_nationalclimatechange_responsepolicy_casestudy.pdf)

<sup>56</sup> South Africa Government. (2022). National Climate Change Response Policy White Paper. [https://www.gov.za/sites/default/files/gcis\\_document/201409/nationalclimatechangeresponsewhitepaper0.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/nationalclimatechangeresponsewhitepaper0.pdf)

<sup>57</sup> South Africa Government. (2022). National Climate Change Response Policy White Paper. [https://www.gov.za/sites/default/files/gcis\\_document/201409/nationalclimatechangeresponsewhitepaper0.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/nationalclimatechangeresponsewhitepaper0.pdf)

comprehensive analysis of mitigation potentials, costs, and co-benefits to support sector transformation in South Africa<sup>58</sup>.

*Nationally Determined Contribution:* South Africa has updated its NDC in 2021 addressing the country's climate change ambitions on mitigation, adaptation, and a just transition in a comprehensive way. Within the context of the Paris Agreement, the updated NDC reflects South Africa's targets of achieving emissions in a range between 420 and 350 MtCO<sub>2</sub>-eq by 2030<sup>59</sup>.

*The Climate Change Bill of South Africa* is currently being considered by the Parliamentary Portfolio Committee on Environment, Forestry and Fisheries. The Bill helps to create an enabling and conducive policy and regulatory environment in South Africa. It aims to facilitate effective coordination between the three spheres of government, the private sector, academia, and civil society, and establish systems to manage mitigation and adaptation policies and actions. Additionally, the Bill requires the mandatory implementation of a carbon budgeting system and the establishment of sector emissions targets across the economy. The government has developed a Sector Emissions Targets framework to guide the allocation and implementation of these targets<sup>60</sup>.

*Renewable Energy Independent Power Producer Procurement Programme:* The programme is considered an example for other African countries, and has resulted in 6,422 MW of renewable energy generation capacity being allocated to bidders across a variety of technologies, principally in wind and solar. It aims to bring additional megawatts onto the country's electricity system through private sector investment in wind, biomass, and small hydro, among others<sup>61</sup>.

*The Integrated Resource Plan 2019:* The plan sets out a long-term view of the electricity sector and its generation mix and guides investments in new generation capacity. Accordingly, South Africa continues to pursue a diversified energy mix including coal, nuclear, natural gas, renewable energy, and hydro that reduces reliance on a single or a few primary energy sources<sup>62</sup>.

In 2020, municipalities in South Africa are allowed to procure electricity independently for the first time, with at least 5 large municipalities in various stages of renewable energy procurement under the *Regulations on New Generation Capacity*.

*The 2021 amendment to schedule 2 of the Electricity Regulation Act 2006:* the amendment unlocks the pipeline of projects from the mining and heavy-emitting sectors. It also allows private suppliers to sell electricity to more than one customer, in addition to self-generation<sup>63</sup>.

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<sup>58</sup> South Africa Government. (2020). *Low Emission Development Strategy*. <https://unfccc.int/documents/253724>

<sup>59</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>60</sup> Parliament of the Republic of South Africa. (2022). *Climate Change Bill (B9-2022)*. <https://www.parliament.gov.za/bill/2300773>

<sup>61</sup> South Africa Government. (2023). *Renewable Independent Power Producer Programme*. <https://www.gov.za/about-government/government-programmes/renewable-independent-power-producer-programme>

<sup>62</sup> South Africa Government. (2019). *Integrated Resource Plan*. <https://www.energy.gov.za/irp/2019/IRP-2019.pdf>

<sup>63</sup> South Africa Government. (2021). *The 2021 amendment to schedule 2 of the Electricity Regulation Act 2006*. <https://www.gov.za/speeches/mineral-resources-and-energy-amended-schedule-2-electricity-regulation-act-4-2006-13-aug>

*The Electricity Regulation Amendment Bill*: after the engagement in the JETP in South Africa, the Government of South Africa has also published the Electricity Regulation Amendment Bill for comment in early 2022. The Bill provides legal ground for the emergence of a competitive electricity market with the participation of private suppliers. It also supports the ongoing restructuring of Eskom and the establishment of an independent Transmissions System Operator<sup>64</sup>.

The Ministry of Finance in South Africa has identified the carbon tax as the primary mechanism for reducing GHG emissions in the country, in line with its COP26 commitments. The carbon tax was introduced in 2019 and was subject to many exemptions, which means that most polluters were exempt from paying. As of February 2022, it was announced that the carbon tax rate would increase annually, as mandated.

In 2022, the National Treasury of South Africa published the South Africa Green Taxonomy, which outlines the minimum set of assets, projects, activities, and sectors that are eligible to be classified as 'green' in accordance with international best practices and national priorities. This taxonomy is intended to help investors, issuers, and other financial sector participants track, monitor, and demonstrate the environmental credentials of their green activities<sup>65</sup>.

With respect to the new energy vehicle (NEV) sector, South Africa has also published policy directions to support the sector such as the South African Automotive Master Plan 2035, the Department of Transport's Green Transport Strategy 2018-2050, the Department of Trade, Industry and Competition's Green Paper on NEVs and the recent announcement of a NEV Roadmap.

The South African government has identified the development of a Green Hydrogen economy as a crucial component of a just transition towards sustainable energy, consistent with the country's JETP. To leverage its competitive advantage in this sector, South Africa has developed the Hydrogen Society Roadmap, which seeks to decarbonize the country's heavy industrial base and create opportunities for new export markets, value chains, jobs, and skills. Additionally, South Africa has produced a Renewable Energy Master Plan that assesses the competitive value chains and proposes the development of a sustainable energy industry in the country<sup>66</sup>.

The key components of enabling policies provide the legal framework for constituting the Just Transition Framework and later the JET IP in 2022.

Throughout 2018 and 2019, the Department of Environment and Forestry commissioned the Trade & Industrial Policy Strategies (TIPS) to conduct research on just transition. This research led to the development of the National Employment Vulnerability Assessment and Sector Jobs Resilience Plans, which outlined key climate and transition-related risks across five value chains: coal, metals, petroleum-based transport, agriculture and tourism. These reports clearly outline the key risks facing these sectors, particularly job losses, both as a result of

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<sup>64</sup> South Africa Government. (2022). *Electricity Regulation Amendment Bill*. <https://www.gov.za/documents/electricity-regulation-amendment-bill>

<sup>65</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>66</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

climate change and from a low-carbon transition. Having these reports publicly accessible provides affected stakeholders with critical information. The reports also provided a baseline upon which a lot of subsequent important research has been based.

Throughout late 2021, the PCC hosted thematic dialogues with key stakeholders to gather input for the framework, publishing a policy brief on each topic. The topics included: policy dynamics; the coal value chain; employment and livelihoods; financing a just transition and water security. The PCC also commissioned a series of essays on adaptation and just transition written by experts in a wide range of fields, covering topics from psychology to waste pickers and agriculture.

The process of compiling the Just Transition Framework involved:

- Publication of policy briefs;
- The organisation of workshops and events which are publicly broadcasted on various channels;
- Learning from studies, data and inputs of experts;
- Consultations with a variation of potentially affected stakeholders including communities.

The Just Transition Framework outlines key principles which form the basis of the Just Transition in South Africa, namely: distributive justice, restorative justice and procedural justice<sup>67</sup>.

- Principle of distributive justice, means that the risks and opportunities from just energy transition must be distributed fairly, regardless of gender, race, and class inequalities. Impacted workers and communities are recognized as not carrying the overall burden of the transition, and the costs of adjustment are borne by those historically responsible for the problem.
- Principle of restorative justice, means that the historical damages against individuals, communities, and the environment must be addressed during the implementation of a just energy transition, with a particular focus on rectifying or ameliorating the situations of harmed or disenfranchised communities.
- Principle of procedural justice, aims to empower and support workers, communities, and small businesses in the transition, and define their own development and livelihoods.

#### ● **From the Just Transition Framework to the JET IP**

The Framework provides an overview of the just energy transition and the intended implementation of the just transition with a focus on at risk sectors and value chains having affected communities at the centre that then creates a strong evidence basis and a more realistic approach in the preparatory work of the JET IP.

During the development of the JET IP, the Secretariat did desk research, engaging with experts and stakeholders, including government officials, industry experts, civil society organisations, and academic institutions (see Figure below for an overview) and conducting a series of specialised working group roundtables during the period of August – September 2022. Topics included electricity decarbonisation, just transition, green hydrogen, IPG financing

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<sup>67</sup> Presidential Climate Commission. (2022). *Supporting a Just and Climate-Resilient Transition in South Africa*. <https://www.climatecommission.org.za/just-transition-framework>

agreements and new energy vehicles Individual consultations with governance bodies have also been organised. The working groups provide detailed input and analysis on technical aspects of the JETP to develop recommendations for the implementation of the plan. The table below provides an overview of these working groups.

*Table 2: JETP Secretariat Working Groups' Round<sup>68</sup>*

Secretariat Working Groups' Round			
Date	Expert focus	Number of participant experts	Experts' sites of work
23-Aug	Electricity decarbonisation	49	Universities, Research institutes, NGOs, SOCs, local and international DFIs, MDBs, Government departments, Municipalities, Business associations, listed companies, small and medium-enterprises, Industry associations.
24-Aug	Just Transition	54	
29-Aug	GH <sub>2</sub>	36	
30-Aug	IPG financing agreements finalised	40	
5-Sep	NEVs	29	

The PCFTT conducts constituency consultations facilitated by the PCC for the JETP IP within 5 groups including Youth, Business, Civil Society, Labour, and Local Government. Each group raised specific issues that the government should consider when implementing the JETP IP. For example, the youth group emphasized the importance of addressing gender, race, and class inequalities, equipping students with skills and education, and setting up policies to protect the integrity of funds. The business group focused on seed funding for Small, Medium and Micro Enterprises, grid modernization, and enabling policies for the transition. The labour group highlighted labour migration and community-owned renewable projects, while the civil society group emphasized equitable access to energy, new manufacturing jobs, and onshoring and employment of ex-coal workers. The local government group emphasized including rural districts and coordinating efforts related to the just transition throughout the country.

<sup>68</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>



Figure 7. Range of South Africa's key stakeholders involved in the development of the JET IP<sup>69</sup>

The interventions in the JETP IP have three areas of action<sup>70</sup>:

- Interventions within coal-producing and coal-reliant areas to spearhead diversification and socio-economic transition for those most impacted by the phase down of coal, in line with energy policy.
- Interventions within communities negatively affected by the shift away from internal combustion engine vehicle manufacturing and maintenance.
- Interventions across a multitude of forward-looking productive sectors in multiple localities to support decarbonization and promote economic diversification and industrial development at a national level. These interventions will be followed by the acceleration of investment in renewable energy capacity, electricity storage, and the usage of green hydrogen (along with its derivative, green ammonia) as potential substitutes for natural gas and coal in industrial processes.

- **Engaging with financiers**

South Africa used various approaches to engage international donors for the JETP. The JETP of South Africa has been actively introduced in international conferences and meetings including at the latest COP27 to promote and seek support from international donors. The South African government has mobilised different sources of support from donors in preparing the JETP IP but no details were published.

<sup>69</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>70</sup> The Presidency. (2022). *South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027*. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

## 4 JETP in Indonesia

### 4.1 Country context

#### 4.1.1 Electricity sector context

Indonesia is the 4<sup>th</sup> most populous country and the 12<sup>th</sup> largest energy consumer in the world. In 2021, Indonesia's energy sector's emissions were estimated at 600 Mt CO<sub>2</sub>-eq (of which the electricity industry contributed nearly 250 Mt CO<sub>2</sub>-eq), making Indonesia the 9<sup>th</sup> largest emitter of fuel combustion in the world. However, per capita energy CO<sub>2</sub> emissions reach only 2 tCO<sub>2</sub>-eq, half the global average. The power sector is projected to reach its peak emissions in 2037<sup>71</sup>.

Similar to Vietnam, the state-owned National Electricity Company, Perusahaan Listrik Negara (PLN) is responsible for most of Indonesia's electricity generation and centre of the energy transition in the country. It has almost exclusive powers over the transmission, distribution, and supply of electricity. However, private participation in the electricity market has also grown slowly, but steadily, in recent years.

Coal has become the dominant fuel in power generation in Indonesia over the past two decades. Coal-fired generation increased more than five-times from around 35 TWh in 2000 to nearly 190 TWh in 2021, accounting for nearly two-thirds of Indonesia's electricity generation. During the same period, oil use for power generation halved in absolute terms and its share shrunk from nearly a third in the mid-2000s to about 3% in 2021. Natural gas use in power generation has doubled since 2000, although in recent years it has stagnated and even declined slightly. Electricity generation from hydro, bioenergy and geothermal increased by nearly four-times over the two decades. Combined, these sources provided nearly 60 TWh of generation in 2021, almost a fifth of total electricity production. Wind and solar, on the other hand, are currently negligible in the generation mix, contributing only 1 TWh in 2021.

Over the past decade, Indonesia's government has made efforts to reduce its dependence on fossil fuels. The National Energy Law in 2007 and the National Energy Policy in 2014 set goals of reaching a 23% share of renewables in total energy supply by 2025 and 31% by 2050 while increasing annual electricity availability to 2500 kWh per capita by 2025 and 7000 kWh by 2050<sup>72</sup>. The latest incentive mechanism for renewable energy is Presidential Regulation II2 on the Acceleration of Renewable Energy Development for Power Supply in 2022.

The electricity mix and energy policy landscape of Indonesia is shown in the figure below.

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<sup>71</sup> International Energy Agency. (2022). *An Energy Sector Roadmap to Net Zero Emissions in Indonesia*. <https://www.iea.org/reports/an-energy-sector-roadmap-to-net-zero-emissions-in-indonesia>

<sup>72</sup> International Energy Agency. (2022). *An Energy Sector Roadmap to Net Zero Emissions in Indonesia*. <https://www.iea.org/reports/an-energy-sector-roadmap-to-net-zero-emissions-in-indonesia>

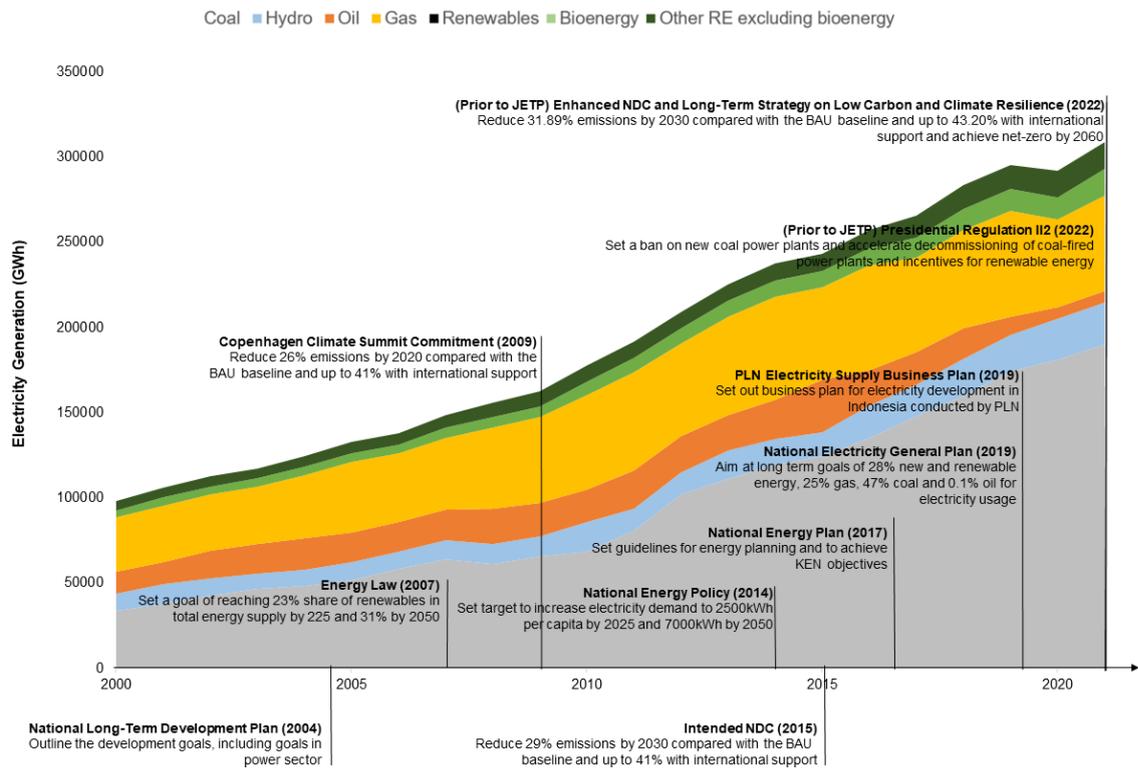


Figure 8: Indonesia's electricity generation output and supportive policies period 2000-2020<sup>73</sup>

#### 4.1.2 Social context

Indonesia is the world's 4<sup>th</sup> most populous country and the biggest economy in Southeast Asia. The country has been successful in poverty reduction, cutting the poverty rate by more than half since 1999, to under 10 % in 2019 before the COVID-19 pandemic hit<sup>74</sup>. In addition to that, income inequality is another challenge for Indonesia. The GINI coefficient in Indonesia has increased from 0.31 in 1999 to 0.37 in 2021<sup>75</sup>. According to Oxfam, Indonesia is now the country with the sixth-greatest wealth inequality in the world, with the four richest men in Indonesia having more wealth than the combined total of the poorest 100 million people<sup>76</sup>. A WB report on inequality reveals that most Indonesians consider income distribution in Indonesia to be "very unequal" or "not equal at all" and the top 20% earning as much as the bottom 60%<sup>77</sup>. The growing inequality in Indonesia undermines the fight against poverty while slowing the nation's economic growth.

<sup>73</sup> The Consultant's self-compilation

<sup>74</sup> The World Bank. (2023). *The World Bank in Indonesia: Overview*. <https://www.worldbank.org/en/country/indonesia/overview>

<sup>75</sup> World Bank. (2023). *Gini index - Indonesia*. <https://data.worldbank.org/indicator/SI.POV.GINI?locations=ID>

<sup>76</sup> Oxfam International. (n.d). *Inequality in Indonesia: millions kept in poverty*. <https://www.oxfam.org/en/inequality-indonesia-millions-kept-poverty>

<sup>77</sup> World Bank. (2015). *A perceived divide: how Indonesians perceive inequality and what they want done about it*. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/310491467987873894/>

Indonesia has 40.7 GW of coal fired power plant installed capacity<sup>78</sup> as of 2023, more than half of the country's power mix of 74 GW<sup>79</sup>. It was reported that Indonesia is the fourth largest coal-producing country in the world, producing 616 Mt of coal in 2019. This industry employs around 1-12 million workers, making up around 0.1% of the total working population of Indonesia<sup>80</sup>.

### 4.1.3 Economic context

Indonesia today is the largest economy in Southeast Asia and the 10<sup>th</sup> largest economy in terms of purchasing power parity. The country has charted impressive economic growth since overcoming the Asian financial crisis of the late 1990s<sup>81</sup>. Under the impact of Covid-19, Indonesia lost its upper-middle income status on 1 July 2021, with a GDP per capita of USD 3,870<sup>82</sup>. With an annual GDP growth of 5.1% in 2022, the WB projected that Indonesia will continue to grow at the same rate in the coming years. The new National Electric Generation Plan for 2021-2030 – Rencana Usaha Penyediaan Tenaga Listrik 2021-2030 (RUPTL) forecasts that electricity demand in Indonesia will grow 4.9% annually<sup>83</sup>. According to RUPTL estimates, by 2030 electricity demand from 94.1 million customers will reach 445 TWh, equivalent to adding 35 GW in power generation capacity to the system<sup>84</sup>. The International Renewable Energy Agency's Indonesia Energy Transition Outlook estimates the financing need for Indonesia from now until 2030 includes USD 44 billion in Solar PV, USD 22 billion in hydropower, USD 17 billion in other renewable energy technologies, USD 75 billion in grid expansion, and USD 5.5 billion in energy storage<sup>85</sup>. This huge amount of investment demand cannot be mobilised alone from internal sources.

## 4.2 JETP overview

The JETP aims to develop a comprehensive investment plan (the **JETP Investment and Policy Plan**) to achieve Indonesia's decarbonisation goals, the most significant ones being:

- a. bringing forward Indonesia's net zero targets by ten years to 2050, with CO<sub>2</sub> emissions from the power sector peaking in 2030 (seven years earlier than previous estimates) at 290 Mt CO<sub>2</sub>-eq compared to a baseline value of 357 MtCO<sub>2</sub>-eq;
- b. accelerating the deployment of renewable energy so that renewable energy comprises at least 34% of all power generation by 2030;

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<sup>78</sup> Global Energy Monitor. (2023). *Coal Plants by Country (MW)*. <https://globalenergymonitor.org/projects/global-coal-plant-tracker/>

<sup>79</sup> International Trade Administration. (2022). *Indonesia - Country Commercial Guide*. <https://www.trade.gov/country-commercial-guides/indonesia-energy>

<sup>80</sup> A Future Without Coal. (2021). *Coal: A Global Perspective*. <https://storymaps.arcgis.com/stories/3b7359e3f06049d9b5904736a5c97877>

<sup>81</sup> Octifanny, Y., & Halimanjaya, A., (2022). *Political Economy of Net Zero: Indonesia*. <https://climatestrategies.org/wp-content/uploads/2022/12/Political-Economy-of-Net-Zero-Indonesia.pdf>

<sup>82</sup> The Presidency. (2022). South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>83</sup> International Renewable Energy Agency. (2022). *Indonesia Energy Transition Outlook*. <https://www.irena.org/publications/2022/Oct/Indonesia-Energy-Transition-Outlook>

<sup>84</sup> Oxfam International. (n.d). *Inequality in Indonesia: millions kept in poverty*. <https://www.oxfam.org/en/inequality-indonesia-millions-kept-poverty>

<sup>85</sup> Institute for Energy Economics and Financial Analysis. (2023). *Navigating the many faces of Indonesia's energy transition schemes*. <https://ieefa.org/media/3454/download?attachment>

- c. accelerating, with IPG support, the early retirement of CFPPs, which was prioritised and identified by the Indonesian government in the JETP Investment and Policy Plan as a necessary element to achieve the above targets;
- d. restricting the development of captive CFPP in accordance with the Perpres 112/2022, and collaborating to find and implement potential zero-emission and renewable solutions for power generation facilities outside Java-Bali, including captive power facilities, provided that:
  - o the solutions are affordable (priced similar to or better than the non-renewable alternatives),
  - o reliable (can provide base load),
  - o accessible,
  - o and timely (can be deployed within similar or better timelines than the non-renewable alternatives) to balance the imperative of industrial development and economic growth of Indonesia with the commitment to net zero;
- e. freezing the existing pipeline of planned on-grid CFPP included in the current RUPTL for 2021-2030, and reaffirming a full moratorium on any new on-grid coal power generation capacity in accordance with Presidential Decree on Renewable Energy (Perpres 112/ 2022); and
- f. mobilising USD 20 billion over the next three to five years for achieving Indonesia's decarbonisation goals, of which USD 10 billion will be provided by the IPG members and the balance will be from the private sector.

This funding will be provided using a mix of grants, concessional loans, market-rate loans, guarantees, and private investments<sup>86</sup>.

### 4.3 Preparation for JETP

Before starting the JETP negotiation with IPG members in 2022, the topic of just and equitable transition has been discussed in Indonesia and led to several policy documents to address just transition principles. In its NDC in 2021, the government lists four critical components of the just transition of the workforce and the creation of decent work and quality jobs for an effective and inclusive transition to low greenhouse gas emission and climate resilient development. These include i) addressing challenges faced by sectors, cities and regions in transitioning to low carbon development and in ensuring a decent future for workers affected by the transition; ii) promoting low GHG emission and sustainable economic activities that will create quality jobs in cities and regions; iii) enhancing capacity of workforces to facilitate access to decent work and quality jobs, taking into account gender and inter-generational equalities, as well as the needs of vulnerable groups; and iv) enhancing participatory public dialogue to foster high employment rates, adequate social protection, labour standards and wellbeing of workers and their communities<sup>87</sup>.

<sup>86</sup> Thompson, B. and Chow, M. (2022). *Indonesia JETP - Accelerating Indonesia's Decarbonisation Timeline*. <https://www.mayerbrown.com/en/perspectives-events/publications/2022/11/indonesia-jetp-accelerating-indonesias-decarbonisation-timeline>

<sup>87</sup> Government of Indonesia. (2021). *Updated Nationally Determined Contribution*. [https://unfccc.int/sites/default/files/NDC/2022-09/23.09.2022\\_Enhanced%20NDC%20Indonesia.pdf](https://unfccc.int/sites/default/files/NDC/2022-09/23.09.2022_Enhanced%20NDC%20Indonesia.pdf)

In its enhanced NDC from 2022, Indonesia has committed to GHG reduction targets of 31.89% (unconditional) and 43.2% (conditional), representing an increase from the previous targets of 29% and 41%, respectively. The revised NDC sets clear goals for the restoration of 2 million hectares of peatlands and the rehabilitation of 12 million hectares of degraded lands by 2030. Additionally, the NDC proposes an increase in ambition for adaptation measures, aligning with the recently developed National Action Plan on Climate Change Adaptation. The NDC highlights several key areas for adaptation and resilience efforts, including agriculture, coastal zones, ecosystems, water, forestry, land use, energy, settlements, and disaster risk management<sup>88</sup>.

The 2050 Long Term Strategy for Low Carbon & Climate Resilience<sup>89</sup> (LTS-LCCR) low carbon scenario aims that GHG emissions to peak by 2030 and level off at 540 Mt CO<sub>2</sub>e by 2050. The LTS-LCCR is based on four pillars: human resource development, sustainable economic development, equitable development, and strengthening national resilience and public sector governance. Indonesia plans to shift to green energy sources, increasing the share of renewable energy in power and transport, increasing efficiency and reducing peatland emissions.

Just transition principles are identified as a cross-cutting approach in these two documents and applied to all priority sectors for mitigation and adaptation. These policy documents have set the foundation and shaped the approach for the development of Indonesia's JETP Secretariat and Investment Plan.

In its Low Carbon Development of Indonesia in 2021, the Government of Indonesia is committed to sustainable development through Low Carbon Development Indonesia (LCDI), which aims to balance economic, environmental, and social pillars of sustainability while maintaining low GHG emissions and minimizing natural resource exploitation. LCDI is a new development platform that aims to support a green investment climate, strengthen cross-sectoral integration in decision-making, and make Indonesia a leader in low carbon development<sup>90</sup>.

On September 13, 2022, the President of the Republic of Indonesia issued the Presidential Regulation No. 112 of 2022 concerning the Acceleration of the Development of Renewable Energy for Electric Power Supply (Presidential Regulation No. 112 of 2022). With the issuance of Presidential Regulation No. 112 of 2022, Indonesia introduces a set of policies to promote the use of renewable energy sources such as geothermal, wind, bioenergy, sunlight, water flow and fall, and ocean layer movement and temperature differences. These policies include *(i) simplifying the electricity procurement process, (ii) banning coal-fired power plants, (iii) introducing new electricity pricing, and (iv) providing government support*<sup>91</sup>.

***(i) Simplification of Electricity Procurement Process.*** Indonesia's state-owned electricity company, Perusahaan Listrik Negara (PLN), is required to give priority to

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<sup>88</sup> Government of Indonesia. (2021). *Updated Enhanced National Determined Contribution 2022*. [https://unfccc.int/sites/default/files/NDC/2022-09/23.09.2022\\_Enhanced%20NDC%20Indonesia.pdf](https://unfccc.int/sites/default/files/NDC/2022-09/23.09.2022_Enhanced%20NDC%20Indonesia.pdf)

<sup>89</sup> Government of Indonesia. (2021). *Indonesia Long Term Strategy for Low Carbon & Climate Resilience 2050*. [https://unfccc.int/sites/default/files/resource/Indonesia\\_LTS-LCCR\\_2021.pdf](https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf)

<sup>90</sup> Government of Indonesia. (2021). *Indonesia Long Term Strategy for Low Carbon & Climate Resilience 2050*. [https://unfccc.int/sites/default/files/resource/Indonesia\\_LTS-LCCR\\_2021.pdf](https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf)

<sup>91</sup> Assegaf Hamzah & Partners. (2022). *Presidential Regulation 112: Indonesia's Commitment to Renewable Energy*. <https://www.ahp.id/presidential-regulation-112-indonesias-commitment-to-renewable-energy/>

purchasing electricity from power plants that use renewable energy sources. The policy allows for a simplified procurement process, such as a direct appointment or direct selection, to be implemented by PLN when purchasing electricity from these renewable energy power plants. The type of procurement process used will depend on the type of renewable energy power plant being purchased from.

**(ii) Ban on Coal-Fired Steam Power Plants.** Presidential Regulation No. 112 of 2022 mandates the Minister of Energy and Mineral Resources to formulate a roadmap for the acceleration of the cessation of the coal-fired steam power plant operational period. It also bans the development of new coal-fired steam power plants, except those integrated with industries to increase natural resource value or included in national strategic projects that significantly contribute to job creation or economic growth. Such plants must reduce greenhouse gas emissions by 35% within 10 years of operation and operate until 2050. PLN is also instructed to accelerate the cessation of its own coal-fired steam power plant and power purchase agreements.

**(iii) New Electricity Pricing.** The regulation introduces two pricing models for electricity purchase prices: maximum benchmark price (subject to annual re-evaluation) and agreed price. The applicable pricing for determining electricity purchase price depends on the type, size, and location of the renewable energy power plants and the term of the relevant power purchase agreement. The maximum benchmark prices are exclusive of the price for power network facilities. The agreed price is determined through direct negotiation with PLN and must be approved by the Minister of Energy and Mineral Resources.

**(iv) Provisions of Government Support.** Presidential Regulation No. 112 of 2022 allows the Indonesian government to provide incentives to business entities developing renewable energy power plants. These incentives may come in the form of fiscal facilities, such as tax breaks, import tax exemptions, and financing through state-owned enterprises. Non-fiscal incentives, such as streamlined business licensing and fee reductions, may also be granted.

The New and Renewable Energy Bill (“NRE Bill”) has been discussed for the last three years<sup>92</sup>. The Government has been working on the NRE Bill since 2018, which aims to serve as the regulatory framework for renewable energy projects and green energy transition. The most recent draft of the NRE Bill, dated May 30, 2022, includes provisions for *an energy transition roadmap, new and renewable energy sources, licensing, health, safety and environmental requirements for NRE, NRE price, incentives, and funding*. One controversial provision in Article 9 of the NRE Bill is that liquefied coal and gasified coal are considered “*new energy sources*” and are given equal priority and incentives as renewable energy sources. This has prompted public criticism, with some calling for the removal of new energy sources from the

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<sup>92</sup> Mahiddin, Aziz, Hexagraha (2023). *Indonesia: Renewable Energy Laws And Regulations 2023*. <https://www.mondaq.com/renewables/1286536/renewable-energy-laws-and-regulations-2023>

Bill or the suspension of discussions around the Bill, as they are carbon-intensive and not considered green energy. The Government aims to finalize and issue the NRE Bill by the end of 2022. To date, the NRE Bill has not been approved yet.

The Government has enacted Presidential Regulation No. 98 of 2021 regarding the Implementation of Carbon Pricing to Achieve the Nationally Determined Contribution Target and Control over Greenhouse Gas Emissions in relation to National Development (PR 98/2021). This regulation introduces the GHG Emission Reduction Certificate, which can be obtained by registering with the National Registry System on Climate Change Control and undergoing a verification process. The GHG Emission Reduction Certificate can be used for carbon trading, result-based payment, or obtaining green financing. Additionally, PLN issues Perusahaan Listrik Negara Renewable Energy Certificates for three of its renewable power plants with a total capacity of 350 MW and 916,334 Renewable Energy Certificates quota. These Renewable Energy Certificates are only available for purchase through PLN's website. In 2022, the Indonesia government also issued two additional regulations to support carbon pricing: (i) Ministry of Environment and Forestry (MOEF) Regulation No. 21 of 2022 regarding Procedures for Carbon Pricing Implementation (MOEF Reg 21/2022); and (ii) Ministry of Energy and Mineral Resources Regulation No. 16 of 2022 regarding Procedures for Carbon Pricing Implementation for the Power Plant Sub-sector (MEMR Reg 16/2022)<sup>93</sup>. Indonesia's Carbon Pricing Implementation for the Power Plant Sub-sector will initially cover 99 power plants with a total capacity of 33.6 GW, connected to PLN's grids, and 500,000 tonnes of CO2 emissions ready to trade. The system will apply to power plants with a capacity of at least 100 MW and is planned to be rolled out to smaller coal plants and other fossil fueled plants, as well as those not connected to PLN in the next phases (Munthe, 2023).

PR 98/2021 has two schemes for carbon trading: emission trading and GHG emission offset. MEMR Reg 16/2022 requires all fossil fuel power plants, including CFPPs, to obtain GHG emission cap approval and participate in carbon trading. Renewable power plants, on the other hand, are only required to engage in GHG emission offsetting. The Result-based Payment mechanism is a payment or incentive for verified and/or certified GHG emission reductions and other benefits, as per PR 98/2021. The mechanism does not transfer carbon ownership, and the results will be counted towards achieving the NDC target. The Carbon Levy is a mechanism introduced under PR 98/2021 which includes tax, customs and excise, and other state levies based on carbon content and/or emission potential, as well as climate change mitigation performance. The carbon tax for CFPPs is planned to be introduced this year (2023) according to Law No. 7 of 2021 regarding the Harmonization of Tax Regulations.

It is also important to note that the Government of Indonesia considers JETP as the biggest among various financial schemes that support its energy transition. By the time of writing this report, there are at least five energy transition schemes in Indonesia competing with the JETP. These are the CIF' Accelerating Coal Transition (CIF-ACT) program to support the faster retirement of CFPPs, which works in tandem with ADB's energy transition mechanism (ETM) and the WB; Indonesia's ETM Country Platform (ETM-CP); state utility PLN own version of its

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<sup>93</sup> Mahiddin, Aziz, Hexagraha (2023). *Indonesia: Renewable Energy Laws And Regulations 2023*. <https://www.mondaq.com/renewables/1286536/renewable-energy-laws-and-regulations-2023>

ETM; and the Indonesian Investment Authority’s (INA) ETM. The summary of the schemes is provided in the figure below<sup>94</sup>.

Energy transition scheme	CIF-ACT, ADB ETM, WBG	G7 JETP-IDN	IDN ETMCP	PLN ETM	INA ETM
Committed/indicated amount	CIF-ACT US\$500 mn; ADB, WBG US\$2.2 bn; GOI & private sector US\$2 bn	US\$20 bn = US\$10 bn public funds; US\$10 bn private capital	Contribution from GOI to be confirmed	PLN has indicated a need for US\$726 bn until 2060	Undisclosed for CFPP retirement; US\$2 bn for the Green Fund
Participants	Climate Fund: CIF-ACT; MDBs: ADB, WBG; Private: IFC, ADB private sector	G7 countries + Denmark, EU, Norway; Private: BoA, Cit, Deutsche Bank, HSBC, Macquarie, MUFG, Standard Chartered	Platform manager: PT SMI; Steering committee: MOF, MEMR, MSOE, MOEF	PLN & partners	Indonesia Investment Authority (INA) **
Mode of financing	Grants, highly concessional loans, commercial loans, RBL, FIL through PT SMI, project loans	Grants, highly concessional loans, commercial loans, guarantees, technical assistance (TA)	GOI contribution (state budget), concessional loans, commercial loans, carbon credit revenues	A mix of equity, debt and grants	A mix of equity and debt
Coal retirement target	Up to 2 GW by 5-10 years	No GW target; to peak emissions from power sector at 290 MTCO <sub>2</sub> e by 2030	15 GW identified	6.7 GW of PLN's CFPPs by 2030	1.5 GW
RE target	400 MW installed RE and 90 MW storage	34% RE power mix by 2030		16 GW RE until 2030	

Figure 9: Different energy transition schemes in Indonesia<sup>95</sup>

Prior to the launch of Indonesia JETP, with Indonesia serving as the G20’s chair in 2022, major policy forums actively discussed and focused on achieving an inclusive and just transition with a special emphasis on the energy sector. Many governmental and non-governmental organisations, as well as the private sector, were prompted by Indonesia’s G20 presidency to launch new initiatives and align their strategic actions and programs with the transition agenda.

As mentioned in the previous section, at COP26 Government of Indonesia partnered with ADB and WB to create the ETM. In October 2022, Indonesia secured a USD 500 million loan from CIF through an investment plan sent to this financial institution. It is important to note that the investment plan indicates this fund will be combined with USD 2.2 billion in co-financing from ADB and WB, USD 1.3 billion in commercial co-financing, and another USD 1 billion from the state budget. In total, Indonesia aims at achieving a sum of USD 4 billion in funding through this scheme. The preparation and development of the ETM investment plan, though not publicly disclosed in detail, contribute to the negotiation and implementation of JETP in Indonesia<sup>96</sup>.

In order to further support the country’s energy transition, Indonesia launched its own ETM-CP last year in conjunction with the country’s G20 presidency. The ETM-CP is designed to

<sup>94</sup> The Presidency. (2022). South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>95</sup> The Presidency. (2022). South Africa’s Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027. Government Publishers. <https://www.thepresidency.gov.za/content/south-africa%27s-just-energy-transition-investment-plan-jet-ip-2023-2027>

<sup>96</sup> Journalism Network. (2022). *Experts Urge Awareness of Debt Trap as Indonesia Eyes Funding for Energy Transition*. <https://earthjournalism.net/stories/experts-urge-awareness-of-debt-trap-as-indonesia-eyes-funding-for-energy-transition>

serve as a framework for the mobilisation of various types of funding to enable it to upgrade the energy infrastructure and accelerate the clean energy transition to net zero emissions in a just and affordable way. The ETM-CP, managed by PT Sarana Multi Infrastruktur (PT SMI) under the Ministry of Finance, consists of two elements, namely (i) a Clean Energy Facility that focuses on the development of renewable energy projects, and (ii) a Carbon Reduction Facility with a focus on the phase-out of CFPP. Besides, a Strategic Environment and Social Assessment, including the issues of decent job transition, is planned to be part of the design of the ETM-CP<sup>97</sup>.

Besides, the state utility PLN and Indonesia's sovereign wealth fund INA also announced their own version of ETM to implement the transition at local and project scales. However, the establishment of ETM-CP is an important foundation and experience for Indonesia to take a further step to establish its JETP Secretariat. The secretariat is suggested to be incorporated into the ETM-CP and others to reduce overlap or duplication of effort and to optimise synergy among various initiatives.

#### **4.4 Governance and development of JETP in Indonesia**

The public company PT Sarana Multi Infrastruktur (PT SMI), was appointed as the country JETP "platform manager" by the Decree of the Minister of Finance Number 275 of 2022.

##### **4.4.1 A Secretariat for JETP**

On 16 February 2023, a Secretariat for JETP was established by the Indonesian government and IPG co-leads. The Secretariat, housed in the Indonesia MEMR and supported by the ADB, will coordinate the internal and external stakeholders' engagements on the JETP and will also play a critical role in the planning and project development function. In the next six months, the Secretariat will support the government to develop a comprehensive investment and policy plan that reflects the targeted GHG emissions reductions and support for the affected communities<sup>98</sup>.

The Secretariat is headed by an Indonesian national. There are a group of experts directly supporting the Secretariat head/CEO, including a lead analyst, supporting analysts, an administrator and communicators. The operation of the Secretariat will be technically and financially supported by ADB with one position of a technical advisor from ADB. In addition, the secondees whose offices are outside of the Secretariat are relevant ministries of the Government of Indonesia, PLN and other state-owned enterprises, ADB and other donor partners.

Besides, four JETP Working groups were established to support the Secretariat in special tasks, including:

- Technical Working Group: Create a roadmap for decarbonisation
- Policy Working Group: Develop recommendations for decarbonisation
- Finance Working Group: Assist and facilitate financing mechanism

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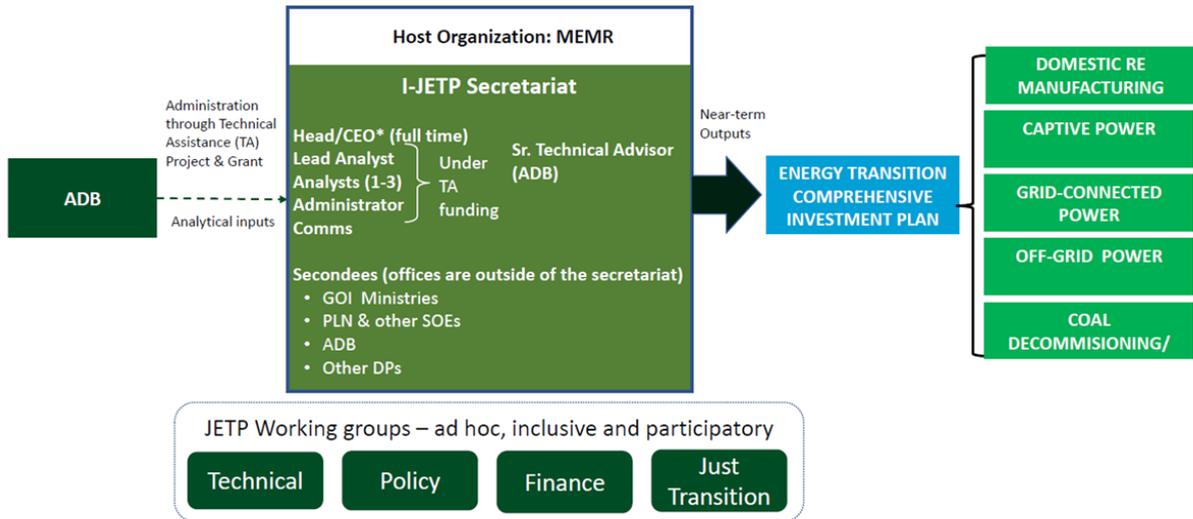
<sup>97</sup> Institute for Essential Services Reform. (2023). *Indonesia Energy Transition Outlook 2023*. [https://iesr.or.id/wp-content/uploads/2022/12/Indonesia-Energy-Transition-Outlook\\_2023.pdf](https://iesr.or.id/wp-content/uploads/2022/12/Indonesia-Energy-Transition-Outlook_2023.pdf)

<sup>98</sup> US Embassy and Consulates in Indonesia. (2023). Government of Indonesia and International Partners Launch Just Energy Transition Partnership Secretariat to Drive Indonesia's Energy Transformation. <https://id.usembassy.gov/government-of-indonesia-and-international-partners-launch-just-energy-transition-partnership-secretariat-to-drive-indonesias-energy-transformation/>

- Just Transition Working Group: Define ESG principles to mitigate negative impacts on welfare

The near-term output of the Secretariat is to develop a comprehensive investment plan that covers domestic renewable energy manufacturing, captive power, grid-connected power, off-grid power and coal decommissioning.

The organisational/operational structure of the Indonesia JETP Secretariat is illustrated in the figure below.



\* Indonesian National

Figure 10: Indonesia JETP Secretariat organisational structure<sup>99</sup>

#### 4.4.2 JETP governance structure

The latest JETP governance and workflow in Indonesia are summarised in the following figures.



Figure 11: JETP Indonesia governance and workflow

<sup>99</sup> Information shared by ETP

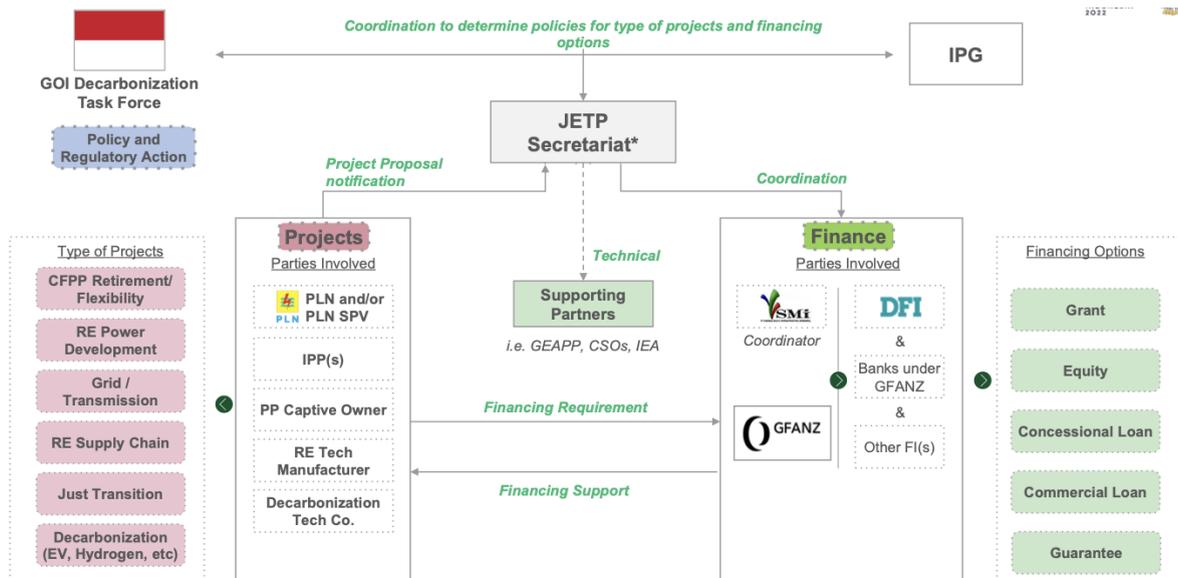


Figure 12: Indonesia JETP governance and workflow<sup>100</sup>

The Options for JETP flow of financing to fund decarbonisation projects identified above have been proposed that include both direct and indirect flows. The summary is presented in the following figure.

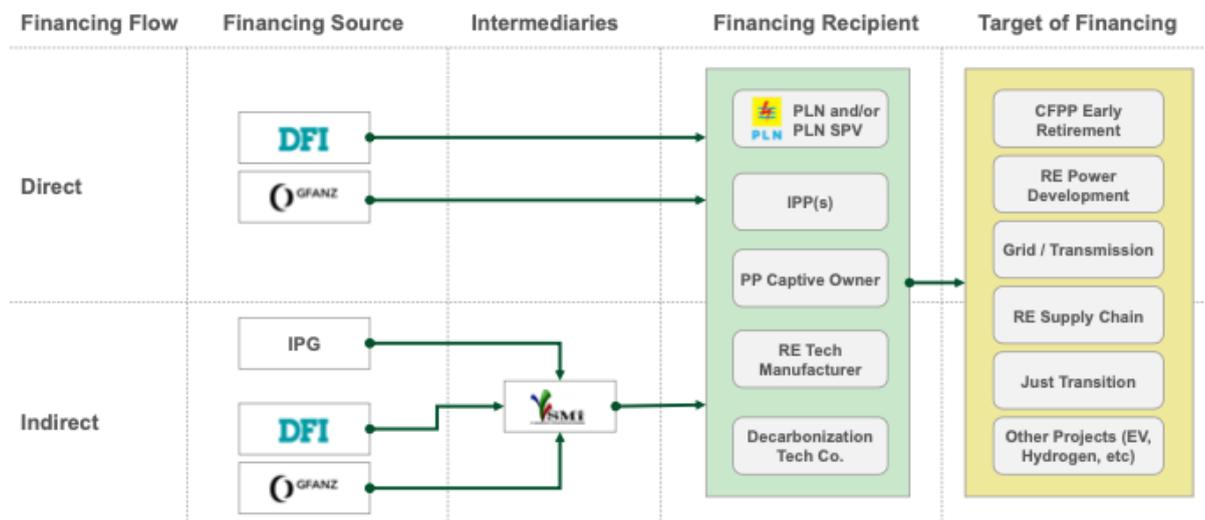


Figure 13: Options for Indonesia JETP flow of financing<sup>101</sup>

<sup>100</sup> Journalism Network. (2022). *Experts Urge Awareness of Debt Trap as Indonesia Eyes Funding for Energy Transition*. <https://earthjournalism.net/stories/experts-urge-awareness-of-debt-trap-as-indonesia-eyes-funding-for-energy-transition>

<sup>101</sup> Journalism Network. (2022). *Experts Urge Awareness of Debt Trap as Indonesia Eyes Funding for Energy Transition*. <https://earthjournalism.net/stories/experts-urge-awareness-of-debt-trap-as-indonesia-eyes-funding-for-energy-transition>

It has been reported that multilateral development banks and the CIFs will account for about a third of the USD 10 billion in public funding for Indonesia's JETP. As for the USD 10 billion to be provided by the private sector, US Treasury and State Department officials have announced that this will be funded by seven global banks.

There were a couple of key milestones on the Indonesian JETP to date<sup>102</sup>.

- **On February 24, 2023**, Pertamina Geothermal Energy Tbk, a subsidiary of Pertamina fully owned by the Indonesian government, completed its Initial Public Offering (IPO). The IPO is the second largest among state-owned enterprises in Indonesia and the largest Utility and Energy IPO in ASEAN in the past five years. It is also Indonesia's first public equity offering in the renewable sector. The transaction will drive exponential growth in the renewable energy sector and is aligned with the targets set under the Indonesian JETP. HSBC provided support to Pertamina Geothermal Energy Tbk in this USD 608 million IPO transaction as Joint Bookrunner and International Selling Agent.
- **From February 27, 2023, to March 1, 2023**, the GFANZ Indonesian Working Group held meetings with key stakeholders in Jakarta to lay the groundwork for the key elements of the Indonesian JETP and gain a better understanding of the current landscape in Indonesia. The focus is to quickly transition from conceptual discussions to project execution to differentiate the Indonesian JETP from the business-as-usual approach. Capacity building, education, and communication strategy are essential to ensure that the entire supply chain ecosystem understands what is at stake and how it can contribute. HSBC participated in two sessions co-hosted by GFANZ, the World Resources Institute, and the Indonesian Chamber of Commerce.

*The first session* of the meeting focused on renewable energy procurement by large corporations operating in Indonesia. It was highlighted that the industry sector contributes to around 74.5% of the country's greenhouse gas emissions, and in 2030, energy-related activities are expected to account for around 58% of Indonesia's GHG emissions. The session discussed the commitment of these corporations towards achieving net-zero emissions and addressed challenges such as significant scope 2 emissions in some industries, education on scope 3 emissions, and the need for more accommodative regulations and implementation guidelines for solar energy.

*The second session* discussed the role of the transportation sector in achieving net-zero emissions and Indonesia's progress in becoming the world's largest Electric Vehicles supply chain hub. The discussion highlighted the cost associated with adopting or converting to Electric Vehicles and the need for government incentives to stimulate growth in the sector. Proper development of infrastructure across the end-to-end supply chain is also essential. According to HSBC Global Research, global Electric Vehicles adoption will reach 27% in 2025, rising to 53% in 2030 and 73% in 2035. Additionally, the Electric Vehicles battery recycling market is expected to expand at a compound annual growth rate of 41% between 2021 and 2030.

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<sup>102</sup> Charles Kho. (2023). *Just Energy Transition Partnership - Indonesia Chapter. Where are we now?* <https://www.linkedin.com/pulse/just-energy-transition-partnership-indonesia-chapter-charles-kho/>

## **5 Key elements of the three JETPs**

The main elements in the JETP of each country are summarised and presented in the table below.

Table 3: Key elements in JETPs of Vietnam, South Africa and Indonesia in comparison

Criteria	South Africa	Indonesia	Vietnam
Year/month agreed on	November 2021 (COP26)	November 2022 (G20 Summit)	December 2022
Time period	2023-2027 (Start of monitoring: February 2023)	2024-2027/29 (Secretariat set up in February 2023)	2024-2027/29 (Secretariat to be set up in April 2023)
Planned volume/private finance (USD)	8.5 billion {share unclear} <sup>103</sup>	20 billion (1/2 private)	15.5 billion (1/2 private)
Coordinating IPG partners	The UK	The US and Japan	The UK and EU
IPG members	EU, France, Germany, UK, USA	Canada, Denmark, <b>EU, France, Germany,</b> Italy, Japan, Norway, <b>UK, USA</b>	Canada, Denmark, <b>EU, France, Germany,</b> Italy, Japan, Norway, <b>UK, USA</b>
Total funding needed for the just energy transition by 2035	USD 98 billion	Not available yet	Not available yet
Share of JET-P of total finance needs for the energy transition	<10%	Not available yet	Not available yet
Share of grants of promised finance	<b>&lt;4%</b> (USD 330 million, of which more than half by Germany)	Not available yet	Not available yet

<sup>103</sup> Text in braced brackets {...} indicates the Consultants' analysis and comments

Criteria	South Africa	Indonesia	Vietnam
Involved national actors/institutions	IMC – PCFTT (See Figure 5)	MEMR and Coordinating Ministry for Maritime and Investment Affairs (CMMIA) (See Figure 10)	MONRE is leading the negotiation and establishment of the Secretariat
Institutional mapping	A wide range of national/provincial/local government, local communities, civil society organisations, private sector, financial institutions, Eskom, and national multi-stakeholders (See Figure 5)	Not available yet	Not available yet
References to other (inter)national funders	Not available yet	<p>“Acknowledging the establishment of a country platform to manage some funds as necessary related to energy transition under PT Sarana Multi Infrastructure (PT SMI), a Special Mission Vehicle (SMV) of the Ministry of Finance”<sup>104</sup></p> <p>“Supporting the Climate Investment Fund’s Accelerating Coal Transition Investment Program and the Asian Development Bank’s Energy Transition Mechanism”<sup>105</sup></p>	Not available yet
Connection to NDCs	“The Political Declaration envisaged [...] to support the achievement of South Africa’s low-carbon future in line	“Peaking power sector emissions by 2030 at an absolute value of no more than 290 MtCO <sub>2</sub> (down from a 2030	Bring peak-emissions forward, from 240 MtCO <sub>2</sub> -eq. by 2035 to 170 MtCO <sub>2</sub> -eq. by 2030

<sup>104</sup> Joint Statement by the Government of the Republic of Indonesia and International Partners Group members on the Indonesia Just Energy Transition Plan. Press release. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6892](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6892), paragraph 11.

<sup>105</sup> Joint Statement by the Government of the Republic of Indonesia and International Partners Group members on the Indonesia Just Energy Transition Plan. Press release. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6892](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6892), paragraph 17.

Criteria	South Africa	Indonesia	Vietnam
	with the most ambitious NDC scenario possible” – only 350 MtCO <sub>2</sub> -eq by 2030  <i>{Relationship with NDC 2025 unclear}</i>	baseline value of 357 MtCO <sub>2</sub> ) and immediately declining thereafter on an ambitious trajectory and achieving net zero emissions in the power sector by 2050, including with the accelerated retirement of coal plants, conditional on international support.” <sup>106</sup>  <i>{much more detailed than South Africa’s Political Declaration}</i>	<i>{much more detailed than South Africa’s Political Declaration}</i>
Peak emission ambition – Emission reduction targets in the power sector	“Accelerate the decarbonisation of South Africa's electricity system to achieve the most ambitious target possible within South Africa's NDC range to the extent of available resources” <sup>107</sup>	“Peaking power sector emissions by 2030 at an absolute value of no more than 290 MtCO <sub>2</sub> -eq (down from a 2030 baseline value of 357 MtCO <sub>2</sub> -eq) and immediately declining thereafter on an ambitious trajectory and achieving net zero emissions in the power sector by 2050”	“Accelerate the decarbonisation of its electricity system from the current net-zero planning peak of 240 MtCO <sub>2</sub> e by 2035 with international support (down from 280 MtCO <sub>2</sub> -eq before COP26) towards reaching a peak of no more than 170 MtCO <sub>2</sub> -eq emissions from electricity generation by 2030” <sup>108</sup>
Coal-fired generation reduction targets		Freezing the existing pipeline of planned on-grid CFPPs and reaffirming a full moratorium on any new on-grid coal power generation capacity	“Reduce Viet Nam's project pipeline for coal-fired generation, currently standing at a planned capacity peak of 37 GW, towards a peak of 30.2 GW” <sup>109</sup>

<sup>106</sup> Joint Statement by the Government of the Republic of Indonesia and International Partners Group members on the Indonesia Just Energy Transition Plan. Press release. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6892](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6892), part of “Intends to”, paragraph 3, section i.

<sup>107</sup> Political Declaration on establishing the Just Energy Transition Partnership with South Africa. Press release. [https://ec.europa.eu/commission/presscorner/detail/it/ip\\_21\\_5768](https://ec.europa.eu/commission/presscorner/detail/it/ip_21_5768), paragraph 17, section 1.

<sup>108</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 24, section b.

<sup>109</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 24, section c.

Criteria	South Africa	Indonesia	Vietnam
Renewable energy targets		“Accelerating the deployment of renewable energy so that renewable energy comprises at least 34% of all power generation by 2030.” <sup>110</sup>	“Enabling Viet Nam to sustain a reliable grid and move beyond the currently planned figure of 36% towards at least 47% of electricity generation coming from renewables including wind, solar and hydroelectricity power by 2030, enabled by international support.” <sup>111</sup>
Other points in the JETP	“Establish an ambitious long-term partnership to support South Africa’s pathway to low emissions and climate resilient development, to accelerate the just transition and the decarbonisation of the electricity system, and to develop new economic opportunities such as green hydrogen and electric vehicles amongst other interventions to support South Africa’s shift towards a low carbon future.” <sup>112</sup>	“Establish a JETP as a long-term partnership to help Indonesia pursue an accelerated and ambitious just energy transition that supports a trajectory that keeps a warming limit of 1.5°C above pre-industrial levels within reach, and includes an ambitious power sector emissions reduction pathway and strategy based on the expansion of renewable energies and the phase down of on and off-grid coal-fired electricity generation; and the implementation of	“Establish the Just Energy Transition Partnership as a long-term, ambitious partnership to support Viet Nam’s low-emission and climate resilient development, as well as to support Viet Nam to accelerate the just transition and decarbonisation of the electricity system and develop new economic opportunities to support Viet Nam’s transition towards net zero future.” <sup>114</sup>

<sup>110</sup> Joint Statement by the Government of the Republic of Indonesia and International Partners Group members on the Indonesia Just Energy Transition Plan. Press release. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6892](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6892), part of “Intends to”, paragraph 3, section ii.

<sup>111</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 24, section d.

<sup>112</sup> Political Declaration on establishing the Just Energy Transition Partnership with South Africa. Press release. [https://ec.europa.eu/commission/presscorner/detail/it/ip\\_21\\_5768](https://ec.europa.eu/commission/presscorner/detail/it/ip_21_5768), paragraph 16.

<sup>114</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 17.

Criteria	South Africa	Indonesia	Vietnam
	<i>{South Africa and Vietnam's Political Declaration are almost identical in this term, vague intention; Indonesia's Political Declaration is much clearer}</i>	<p>concrete actions achieving a just energy transition for workers and communities, particularly those most affected by an energy transition away from coal.”<sup>113</sup></p> <p><i>{much clearer than South Africa's Political Declaration}</i></p>	<p>Explicit reference to ILO Declaration on Fundamental Principles and Rights at Work</p> <p>“[T]he RMP under development supports the delivery of the highest levels of ambition and consider whether, with more finance from international partners, additional to that described in paragraph 18, Viet Nam could go further to align with a 1.5°C compatible trajectory.”<sup>115</sup></p> <p>Financial instruments “should not divert critical development assistance away from existing development funding to support the needs of Viet Nam’s just energy transition in accordance with the national framework of public debt and external debt management.”<sup>116</sup></p> <p><i>{clearer than South Africa's Political Declaration}</i></p>

<sup>113</sup> Joint Statement by the Government of the Republic of Indonesia and International Partners Group members on the Indonesia Just Energy Transition Plan. Press release. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6892](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6892), part of “Intends to”, paragraph 1.

<sup>115</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 25.

<sup>116</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724), paragraph 18.

## 6 Implications and key recommendations for Vietnam

### 6.1 Implication of increase of decarbonisation ambition

The JETP targets of Vietnam were demonstrated under Article 24 paragraphs a) to m) of the Political Declaration announced on 14 December 2022<sup>117</sup>. Key elements of the JETP in Vietnam include the peaking of power sector emissions at 170 MtCO<sub>2</sub> in 2030 and a share of 47% of renewable energy generation by then.

The total emissions by 2030 were indicated in the National Climate Change Strategy (NCCS) promulgated in July 2022 but the emissions from electricity generation by 2030 are not explicitly provided in the NDC 2022 or NCCS. The draft PDP VIII was the input for NDC and NCCS, hence, we roughly estimated the emissions from electricity generation in 2030 based on the draft PDP VIII with the assumptions of emission factor for each electricity source in 2030 based on the emission factor for electricity published by Department of Climate Change so far<sup>118</sup>.

Based on the estimation of emissions of electricity generation by 2030 in NCCS, the emission peak in the JETP scenario in 2030 was established. The peaks in different scenarios are shown in the figure below<sup>119</sup>:

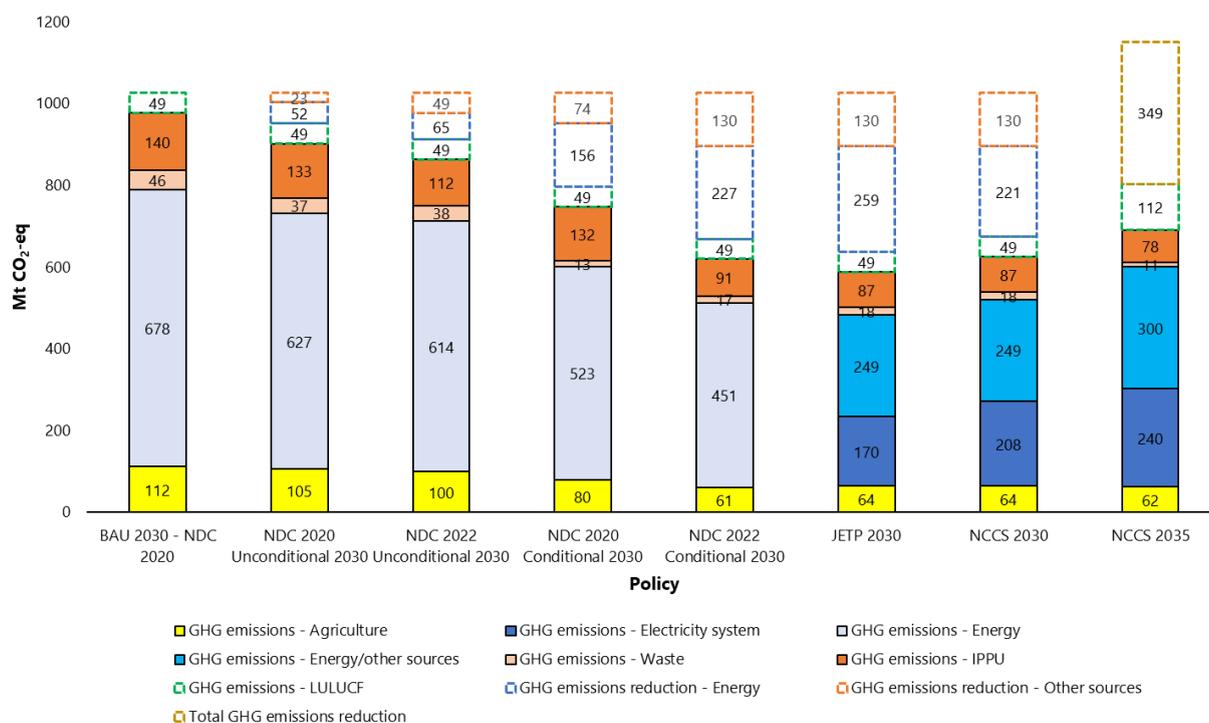


Figure 14: GHG emissions reduction targets according to NDC 2022, NCCS and JETP<sup>120</sup>

<sup>117</sup> Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Press release. [https://ec.europa.eu/commission/presscorner/detail/es/statement\\_22\\_7724](https://ec.europa.eu/commission/presscorner/detail/es/statement_22_7724)

<sup>118</sup> Department of Climate Change. (2022). *Nghiên cứu, xây dựng hệ số phát thải (EF) của lưới điện Việt Nam năm 2021 (kèm CV 1278/BĐKH-TTBVTOD)*. [http://www.dcc.gov.vn/van-ban-phap-luat/1102/Nghien-cuu,-xay-dung-he-so-phat-thai-\(EF\)-cua-luoi-dien-Viet-Nam-nam-2021-\(k%C3%A8m-CV-1278/BDKH-TTBVTOD\).html](http://www.dcc.gov.vn/van-ban-phap-luat/1102/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-1278/BDKH-TTBVTOD).html)

<sup>119</sup> For NCCS 2035 scenario, due to the lack of clear data on GHG emissions reduction of each sector (except LULUCF) then only the total GHG emissions reduction is shown.

<sup>120</sup> Consolidated and estimated by the Consultant

With the above approach and assumption, JETP will reduce an additional 37.64 MtCO<sub>2</sub>-eq from electricity generation by 2030 in order to meet the peak target of 170 MtCO<sub>2</sub>-eq in 2030 as stated in the Political Statement.

The above figure shows that the GHG peak target of Vietnam became more and more ambitious over time. The recent JETP statement aims to shift the peak target from 2035 to 2030 and the peak aimed in 2030 would be lower than the latest 2030 peak target stated in the NDC 2022 and NCCS 2022. In the updated NDC 2022, Vietnam indicated the need for USD 60.6 billion in financing until 2030 in order to achieve its conditional emission reduction targets in the energy sector alone, of which around USD 46 billion comes from international finance support. Hence, the financial commitment of USD 15.5 billion under the JETP must be a real addition to the financing need estimated in the updated NDC 2022 in order to be able to meet the commitment of emission reduction in the electricity system that is more ambitious than those stated in the latest NDC.

## **6.2 Key lessons and recommendations for Vietnam**

The review of experience in the two countries conducted here leads to the first lessons and findings categorised by different criteria. Based on these lessons and findings, recommendations for Vietnam are made and summarised in the below table.

Table 4: Lessons learnt from South Africa and Indonesia and implications for Vietnam

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
Negotiation dialogue	A detailed investment plan was only published by the Government of South Africa a full year after the JETP was announced at COP26.	Though the Indonesian JETP was agreed on in November 2022, and speaks of 3- and 6-month periods respectively, only mid-February 2023 – when the JETP secretariat was set up – is considered the starting point of these time periods.	<p>Negotiations are slow and resource-intensive.</p> <ul style="list-style-type: none"> <li>• JETP is a broad commitment responding to a specific political window, but the specificities of the financing terms, reform plans, coordination structures, etc. take time to pin down.</li> <li>• Seeking support from different sources of donors and engaging them in the early stage of the negotiation is resource-intensive but vital to provide additional resources to support Vietnam in this stage.</li> </ul>
National coordination	PCC made up of 10 government ministers and 21 members from labour, academia, advocacy, civil society, research institutions, youth, business, and traditional leadership has been established in 2020, even earlier than the announcement of JETP. This shows the highest level of engagement and has been effective to date.	ETM-CP set up in 2022 is the platform where all national stakeholders participate in delivering energy transition efforts in Indonesia with two main branches working on phasing out CFPPs and developing renewable energy. Its effectiveness remains to be seen.	<ul style="list-style-type: none"> <li>• Having a centralised, high-level body which coordinates and manages the just transition is key to the success of developing the RMP. Full engagement by the highest level of government is critical.</li> <li>• Maintaining high political agreement and consensus with the line</li> </ul>

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
	<p>The PCC has been critical in building the foundations for South Africa’s JETP through its convening power and the creation of the Just Energy Transition Framework – the precursor and key document which informed the JETP IP.</p> <p>The success of the PCC also lies in its positioning – in the office of the Presidency and having the President serve as the chair. This allows the PCC to work across all government departments and also elevates and reinforces the just transition</p>		<p>ministries, local authorities and impacted groups is essential in the development and implementation of the RMP.</p> <ul style="list-style-type: none"> <li>● Broader coordination and engagement are needed to move away from sectoral approaches that hinder the achievement of the JETP target due to inconsistent and counterproductive policies and “siloed” approaches.</li> <li>● Develop a multi-stakeholder governance structure with the participation of key stakeholders from the government, civil society organizations, labour unions, and the private sector, working together to support a just and equitable transition to a low-carbon economy in Vietnam.</li> </ul>
Legislative environment	In South Africa, numerous key pieces of legislation were already available and key precursors in laying the groundwork for the JETP.	In Indonesia, several policy documents have addressed the issues and principles for just energy transition.	So far, the two policy documents mentioned in Vietnam’s JETP Political Declaration, namely the NDC and National Climate Change Strategy, do not mention any just energy transition issues. A JETP

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
<p>Finance package, structure and the distribution of funds</p>	<p>The South Africa Government modelled that the justice elements would make up 6.5% of the total financing needs for the country’s transition. However, the justice elements only made up 0.6% of the IPG total.</p> <p>The IPG’s offer is largely comprised of risk mechanisms and concessional finance which raises questions regarding whether the terms of the financing deal are advantageous or not.</p> <p>Many actors in South Africa, including the PCFTT noted that more clarity should have been given by the IPG regarding the finance before the investment plan was discussed</p>	<p>There is an ongoing discussion surrounding the role of the CIF investment plan within the JETP, on which the JETP is vague: “Supporting the Climate Investment Fund’s Accelerating Coal Transition Investment Program and the Asian Development Bank’s Energy Transition Mechanism”<sup>121</sup>. The USD 500 million promised to Indonesia for its investment plan under the CIF-ACT Program might be accounted under the total of USD 20 billion instead of being additional.</p> <p>Regarding private finance, the first meeting with GFANZ was held before the JETP Secretariat itself was set up, and administrative hurdles remain – due to international commitments – to invest in early retiring coal infrastructure.</p>	<p>requires a conducive/ enabling legislative environment.</p> <p>The negotiations on the RMP and finance package should focus on:</p> <ul style="list-style-type: none"> <li>• JETP is a new term and new initiative form of partnership. International finance comes from a broad mix of multilateral development banks, bilateral, philanthropies, private sector... The challenge is to ensure that all these partners deliver, over a period of several years. This needs to be enshrined in robust agreements which cannot be “evaded” once the novelty of the JTP fades. Relabelling of existing finance sources needs to be avoided and an adequate portion of grants or soft financing needs to be negotiated in the RMP. Carbon markets need to be brought in.</li> <li>• The justice elements, such as retraining workers and subsidizing livelihoods for an interim period, are</li> </ul>

<sup>121</sup> Joint Statement by the Government of the Republic of Indonesia and International Partners Group members on the Indonesia Just Energy Transition Plan. Press release. [https://ec.europa.eu/commission/presscorner/detail/en/statement\\_22\\_6892](https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6892), paragraph 17

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
			<p>typically the hardest to negotiate and fund. On the other hand, these justice elements cannot raise capital in conventional markets, so should be the priority for grants.</p> <ul style="list-style-type: none"> <li>● Assess results-based finance thresholds and risk if the implementation of the JETP projects later does not meet the target agreed.</li> </ul>
Evidence-based strategies and studies	<p>Numerous research pieces have been conducted for years to set the scene for the just transition and build a body of evidence. The private sector has also been involved in producing research on sustainability transitions in various sectors.</p>	<p>Indonesia has researched the affordability and fairness as well as the social and economic impacts of clean energy transitions on people and communities.</p>	<p>JETP in Vietnam is currently designed as a high-level political commitment. The “just” term is not well researched and reflected in evidence-based strategies.</p> <ul style="list-style-type: none"> <li>● Develop reliable data and evidence-based strategies for a just transition is essential for developing an effective roadmap and strategy for a just transition, measuring progress, and evaluating the effectiveness of transition policies and programmes.</li> <li>● Commission more in-depth research, and scoping studies to provide evidence base and strategies with wide participation of experts in</li> </ul>

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
			different fields (academia, business, labour, and associations) to support RMP development and implementation.
Design an effective governance model	<p>South Africa's governance structure is centred on the national government planning system with a leadership role to align all national plans and strategies with energy transition and close collaboration of other ministries and departments. Other sub-national governments and social partners participate in the roles of coordinating and implementing energy transition at provincial and project levels with defined roles and tasks to form collective actions.</p> <p>Effective governance at the national, provincial, and municipal levels will therefore be central to achieving a just and equitable transition in South Africa.</p>	The detailed governance structure of Indonesia JETP has not been publicly provided, but at least the national level includes key stakeholders in the energy transition. The roles of sub-national and social partners need to be defined in detail. Current information is haphazard, pointing at serious governance risks emerging.	<ul style="list-style-type: none"> <li>• Effective, accountable and transparent management and coordination of efforts are key to ensuring fairness and inclusive participation, minimising negative economic and political impacts, and safeguarding the lives and livelihoods of the most vulnerable.</li> <li>• The governance at the national and provincial levels to achieve a just and equitable transition should be clearly demonstrated in the RMP.</li> </ul>
Engage wide public and stakeholders	Prior to the JETP, the just transition as well as the climate change policies (such as carbon tax) have a long history of intensive engagement with the public and key stakeholders.	Hardly any information on the JETP process in Indonesia is publicly available as of now and no 'inclusive policy dialogues' have taken place yet (likely in April and May). In fact, at a recent webinar by colleagues from the	<b>JETPs are highly political.</b> Direct negotiations between the host government of Vietnam and their international development partners the IPG are integral to securing the scale of

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
	<p>The just transition framework has been consulted widely with workers, communities, small businesses, and social partners in the country prior to the framework in line with international best practice guidance allowing impacted groups to discuss their own development pathways and livelihoods in order to form a comprehensive view of the major topics for a just transition framework.</p> <p>Even though, the JETP in South Africa and particularly the development of the JETP IP has been criticised due to the lack of transparency despite the wide engagement of stakeholders in the roundtables.</p> <p>a. The public did “not have access to the details of the partnership, including information on what is contained in the USD 8.5 billion pledge, and what specific activities the South African side plans to undertake with support,”<sup>122</sup>.</p>	<p>International Institute for Sustainable Development, a member of the board of the National Energy Council of the Republic of Indonesia did not share anything new.</p>	<p>ambition needed to satisfy both sides. The relatively closed nature of those discussions and negotiations has also been important for forging the partnership. However, it can lead to a lack of transparency and lower the support from the public, private sector..., and even other key governmental authorities in the implementation phase of the RMP.</p> <ul style="list-style-type: none"> <li>• There is a need for a formal platform to allow various stakeholders (and particularly society organisations) to be engaged, consulted, and share and receive information. This formal process is necessary for continuity throughout the actual implementation of RMP.</li> <li>• Public dialogues need to be organised early in the preparation of the RMP and then enacted repeatedly throughout the process of a just transition. This supports a more inclusive process to strike compromises between diverse</li> </ul>

<sup>122</sup> Amos Wemanya and Mohamed Adow. (2022) Implementation of the just energy transition partnership in South Africa. [https://www.germanwatch.org/sites/default/files/g7-g20\\_track-2\\_just\\_energy\\_africa\\_policy\\_brief\\_rev-1\\_met\\_1.pdf](https://www.germanwatch.org/sites/default/files/g7-g20_track-2_just_energy_africa_policy_brief_rev-1_met_1.pdf). p11

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
	<p>b. Additionally, the process of designing the investment plan did not directly include representatives of affected workers or communities and members of the working groups were kept secret.</p> <p>c. When the consultation was done, it was very late in the process and the draft investment plan was still not shared with a wider public.</p> <p>d. The investment plan was only made public <b>after</b> it was approved by the cabinet – so there was no opportunity for wider engagement with the public, civil society and affected groups before it was finalised and approved.</p>		<p>stakeholders and balance economic, social, and environmental objectives or competing interests.</p>
<p>Collaboration between recipient countries</p>	<p>South Africa and Indonesia are ahead of Vietnam in JETP preparation and implementation.</p> <p>The experience and lessons learnt from the two countries will be valuable for Vietnam and will benefit the country in the recent priorities, i.e. setting up the Secretariat and negotiating/drafting the RMP, mobilising support from different donors/sources.</p> <p>Exchange of information and collaboration with other recipient countries can bring benefits for all countries as well as increase the efficiency of JETP.</p>		<ul style="list-style-type: none"> <li>Sharing experience and strengthening the collaboration with South Africa and Indonesia should be made as early as possible to learn about the set up of the Secretariat, the governance systems and the draft of RMP. It can be done via organising workshops and conducting site visits</li> </ul>

Criteria	South Africa	Indonesia	Lessons and recommendations for Vietnam
			<p>of technical experts and high-level ranking officials...).</p> <ul style="list-style-type: none"> <li>• In the longer run, the establishment of a platform for collaboration and frequent exchange of information among recipient countries may lead to combine actions and strengthen the voices and negotiation powers.</li> </ul>

With regard to the participation of various stakeholders in the Secretariat, the recommendations are summarized in the section below:

As prescribed in JETP of Viet Nam, the JETP Secretariat is acting in the role of technical working groups. Such groups are also a key component of the JETP governance structure as they enable experts from various sectors to come together to develop policy recommendations and technical guidance on specific areas of the energy transition. This ensures that the partnership's activities are grounded in technical expertise and that they are well-informed by the latest research and analysis.

The JETP Secretariat may be hosted at the MONRE and will be backed by external donors.

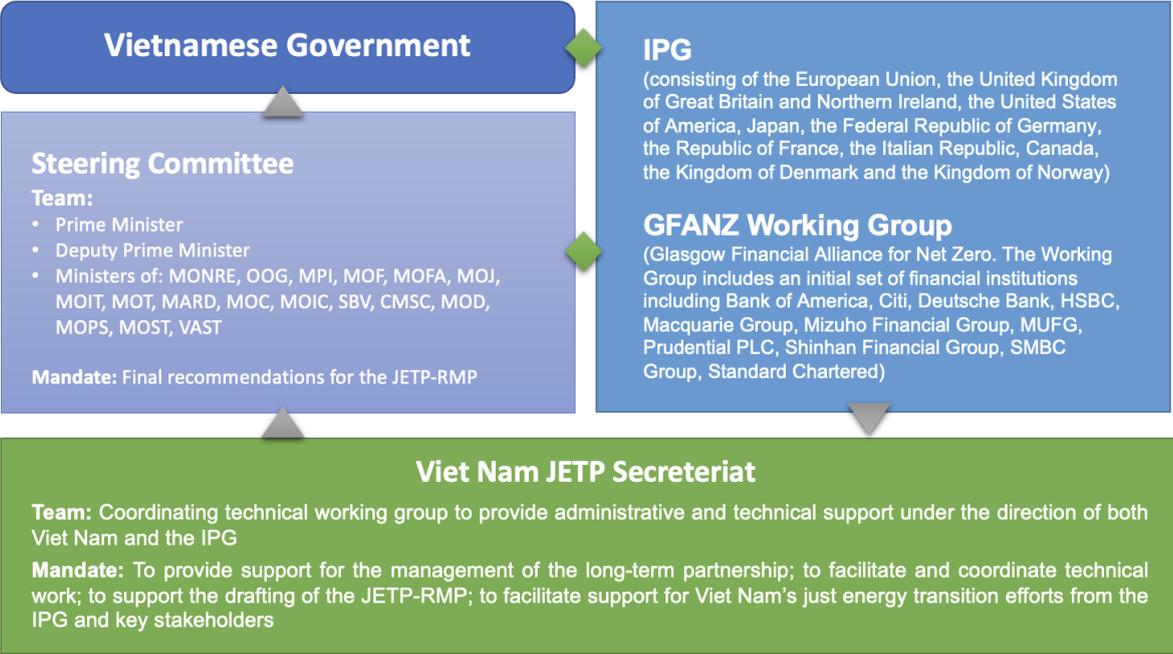


Figure 15: Proposed JETP governance structure of Viet Nam

Source: The consultant

**The Steering Committee of the National Program on Economical and Efficient Use of Energy 2019-2030 should be upgraded into a High Level JETP Steering Committee and assigned the roles of the Secretariate.** The Steering Committee was led by the Prime Minister of Viet Nam and established to assist the Prime Minister in addressing important and cross-cutting issues related to the National Program on Economical and Efficient Use of Energy for 2019-2030 (Program). It was initially established under Decision No. 1664/QD-TTg on November 19, 2019, and later restructured under Decision No. 1532/QD-TT on September 15, 2021, which replaced Decision 1664 from its issuance date. The Committee's operation and organization are managed by Regulation No. 461/QD-TTg issued on April 7, 2020, by the Prime Minister.

The Steering Committee currently has several duties, including proposing directions and solutions, assisting in directing and coordinating among relevant agencies, and urging them to resolve issues related to the Program. The Committee is responsible for approving work plans, regulations, and the use of central budgetary funds. Additionally, it periodically reports to the Prime Minister on the Program's implementation. Some main functions include:

- (i) Acting on behalf of the Prime Minister to make decisions on mechanisms and policies, and to resolve specific issues within the Prime Minister's authority related to organizing, supervising, and implementing tasks under the Program;
- (ii) Proposing policy adjustments and applying necessary measures to ensure the effective implementation of the Program. Directing relevant agencies to inspect the implementation of approved plans and projects;
- (iii) Enlisting domestic and foreign experts for a specified period to study and draft plans, projects, legal documents, and perform other assigned tasks;
- (iv) Assisting the Prime Minister in directing, reconciling, and coordinating among ministries, ministerial-level agencies, and government-affiliated organizations to resolve issues under the Program. This includes granting approval of the 5-year master plan framework and carrying out the Program's yearly tasks;
- (v) Assisting the Prime Minister in urging ministries, ministerial-level agencies, and government-affiliated organizations to resolve issues under the Program.

The Steering Committee consists of high-level leaders of Vietnam, including the Prime Minister, the Head of the Committee, a Deputy Prime Minister, Ministers, and other heads from various line ministries, including the Ministry of Natural Resources and Environment (MONRE), Office of Government (OOG), Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), Ministry of Foreign Affairs (MOFA), Ministry of Justice (MOJ), Ministry of Industry and Trade (MOIT), Ministry of Transport (MOT), Ministry of Agriculture and Rural Development (MARD), Ministry of Construction (MOC), Ministry of Information and Communications (MIC), State Bank of Vietnam (SBV), Commission for the Management of State Capital (CMSC), Ministry of National Defense (MOD), Ministry of Public Security (MPS), Ministry of Science and Technology (MOST), and Vietnam Academy of Science and Technology (VAST).

Based on the experiences of South Africa and Indonesia and the mandates of the line ministries of Vietnam, we recommend emphasizing the roles of MONRE, MOIT, MPI, MARD and MOF as focal points for implementing JETP.

- **Ministry of Natural Resources and Environment – National Climate Change Focal Point**

MONRE is a governmental ministry responsible for various aspects of land, water resources, mineral resources, geology, environment, hydrometeorology, climate change, surveying and mapping, and management of islands and the sea in Vietnam. The Department of Climate Change (DCC) within the MONRE plays an important role in promoting a just transition to a low-carbon and sustainable economy. The DCC's key responsibilities in this regard include proposing policies and strategies for sustainable development to the MONRE, promoting renewable energy and energy efficiency, ensuring social and environmental safeguards to protect communities and ecosystems affected by the transition to a low-carbon economy, and facilitating international cooperation and collaboration on climate change and sustainable development issues.

This involves participating in international negotiations, exchanging information and best practices, and promoting international partnerships and initiatives.

Given its roles and functions, MONRE is well-positioned to lead the team supporting the Vietnamese Government in implementing JETP and achieving the goal of a just energy transition.

- **Ministry of Industry and Trade (MOIT)**

To implement JETP, requires the participation of a state agency in charge of electricity generation and transmission. In Vietnam, the field of electricity production, sale, and transmission is under the management responsibility of the MOIT.

According to the relevant regulations of Vietnam, MOIT is responsible for state management of energy (including electricity, coal, petroleum, new energy, renewable energy, and other resources, management of energy utilising saving and efficiency), national electricity development plans, electricity grid, industrial production, and other trade matters. Together with MONRE, MOIT has key responsibilities in this regard including proposing policies and strategies for promoting renewable energy and energy efficiency, the transition to a low-carbon economy, and facilitating international cooperation and collaboration on energy development. This involves participating in international negotiations, exchanging information and best practices, and promoting international partnerships and initiatives relating to energy in particular and trade in general. At this moment, MOIT is given the key role of drafting the National Power Development Plan (PDP) for the period of 2021-2030, with a vision to 2045 (PDP VIII)

Therefore, engaging the MOIT in the implementation of JETP is crucial.

- **Ministry of Agriculture and Rural Development (MARD)**

Similar to South Africa, the Ministry of Environment, Forestry and Fisheries is primarily responsible for the implementation of the JETP. In Vietnam, issues related to agriculture, fisheries, forestry and rural development (especially for vulnerable groups) belong to the mandates of MARD.

MARD is a governmental ministry responsible for various aspects of agriculture, forest protection and rural development, especially poverty reduction in rural and mountainous areas. Therefore, MARD has a key role in the implementation of just transition for protecting vulnerable groups, especially the poor, minority people in the rural and mountainous areas, such as preparing job transit plans for such groups. MARD also plays a role in deciding the use of agricultural land and forestry land with other purposes to bring the highest land use efficiency to the farmers, especially in the context of developing renewable energy production.

- **Ministry of Finance - Finance Management**

According to the study, the governance structures in the JETPs in South Africa and Indonesia both involve a government agency responsible for financial management. In Indonesia, the Indonesian Minister of Finance appoints a country platform manager to oversee project-level coordination for the connecting layer, while in South Africa, the Presidential Climate Finance Task Team advises the Cabinet on financing package

composition and affordability, regulatory alignment, and coordinates relevant government departments, development finance institutions, and the private sector. The PCFTT also oversees the development of financing mechanisms and facilities to support South Africa's just transition.

All three JETPs share a common set of investment activities and source arrangements that require government agency involvement in finance management. Developing a mobilization plan for JETP of Viet Nam requires identifying appropriate financial instruments that will not divert essential development aid from existing funding sources meant to support a just energy transition. Furthermore, these instruments must align with the national framework governing public and external debt management.

In Viet Nam, the Ministry of Finance (MOF) is responsible for state management in finance, covering the management of the state budget, taxes, fees, national reserves, state financial funds, financial investments, corporate finance, cooperative finance, collective economy, public property as prescribed by law, customs, accounting, independent auditing, insurance, prices, securities, and other financial services. The Ministry also conducts ownership rights to the state's investment capital in enterprises, in accordance with relevant laws and regulations.

The engagement of MOF in the implementation of JETP is crucial.

- **Ministry of Planning and Investment (MPI)**

Together with MOF, MPI is a governmental ministry responsible for allocating public investment to various sectors, agencies and provinces. MPI has a key role in developing a mobilization plan for JETP such as the arrangement of public investment and attraction of private investment for JETP. So far, MPI is taking the lead in drafting and implementing the national economic development strategies, such as the National Action Plan for Implementation of the 2030 Agenda for Sustainable Development. The role of MPI in the implementation of JEPT is key for consolidating the national plans on economic development, energy transition and environmental protection and climate change.

With regard to the development of Vietnamese JETP RMP, the following policy recommendations are derived from the lessons of South Africa and Indonesia:

Vietnam should consider developing a Just Transition Framework, i.e. a process that aims to ensure a fair and equitable transition to an environmentally sustainable economy and society. Such a Framework should include measures such as training programs and job placement services to support workers impacted by the transition and support for communities that are reliant on high-carbon industries, such as coal mining or fossil fuel power plants, to help them diversify. Vietnam should also design an Energy Transition Master Scheme to manage all climate change schemes nationwide. The Energy Transition Master Schemes should be a comprehensive mechanism designed to manage all possible transition schemes in Vietnam for the transition. This should build on a Sector Emissions Targets framework like the one applied in South Africa. including quantitative and qualitative goals informed by sectoral policies and measures which must be implemented by the Ministers responsible for the administration of the relevant sectors. Moreover, the current Electricity Law should be supplemented with an electricity price auction mechanism as well as an electricity price auction mechanism where

electricity generators will bid to supply electricity to the grid, with the lowest cost bids being accepted. This will encourage competition among electricity generators and may help to reduce the cost of electricity for consumers.

International and national carbon markets should be explicitly addressed as a component of the JET IP, with activities under the JETP being encouraged to generate emission credits. Regulations for carbon credit generation, issuance and trade should be developed as well as activities will for capacity building and raising awareness about carbon market development undertaken. Additionally, Vietnam may consider promulgating a carbon tax as an effective tool for reducing GHG emissions.

It is urgent for the Government to review and approve the Electricity Master Plan VIII promptly, particularly for grid projects that will supply electricity to the North of Vietnam. It's important to note that power projects can take a relatively long time to implement, with grid projects taking about 2-3 years and power projects taking 6-7 years. Offshore wind power projects, for example, can take up to 5-11 years to develop, including surveying, licensing, project development, preparation, and construction. With Vietnam aiming for 7 GW of offshore wind power by 2030, it will be challenging to achieve this target and other electricity planning objectives if PDP VIII is not approved in time<sup>123</sup>. Vietnam should consider promulgating a Renewable Energy Law to provide a legal framework and clear guidelines for the development, management, and use of renewable energy such as solar, wind (onshore & offshore), biomass, and hydropower. The law should also promote investment in renewable energy projects through feed in tariffs and/or renewable energy producer auctions, and create incentives for renewable energy development and energy storage solutions.

According to the commitment of the Prime Minister at COP26, the MOIT proposes that new CFPPs will not be built from 2030. CFPPs with over 40 years of life will be considered to decommissioned or be converted to biomass and ammonia power plants before 2050<sup>124</sup>. Based on the experiences of South Africa, a clear legal framework for renewable energy in Vietnam is needed to help attract foreign investment in the renewable energy industry, create new job opportunities and support the decarbonisation especially decommissioning and early retirement of CFPPs.

Post-mining rehabilitation and repurposing of derelict, ownerless, abandoned and closing mines is important. Post-mining operations may lead to the return of land to the community that can be used for other purposes. In South Africa, one such purpose is for agricultural opportunities<sup>125</sup>. In respect of Vietnam, the current laws namely the Land Law 2013 address multi-purpose land in their regulations but do not prescribe in one Article. In the latest draft Land Law, multi-purpose land is prescribed in Article 209 containing new content that is not included in the Land Law 2013. This will help to form the legal ground and give incentives for

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<sup>123</sup> Thao, T. (2023). *The Ministry of Industry and Trade proposing soon consider approving the Power Developing Planning VIII*. Retrieved from Industry and Trade Magazine: <https://tapchicongthuong.vn/bai-viet/bo-cong-thuong-kien-nghi-som-xem-xet-phe-duyet-quy-hoach-dien-viii-102650.htm>

<sup>124</sup> MOIT. (2022). *Letter No. 4329/BCT-DL reporting on the contents of PDP VIII*. Retrieved from Ministry of Industry and Trade: <https://thuvienphapluat.vn/cong-van/Thuong-mai/Cong-van-4329-BCT-DL-2022-bao-cao-noi-dung-Quy-hoach-dien-VIII-523637.aspx>

<sup>125</sup> Kauthen, M. (2021). *A Just Transition – Repurposing Mine Sites for Agricultural Opportunities*. Retrieved from Farming First: <https://farmingfirst.org/2021/11/a-just-transition-repurposing-mine-sites-for-agricultural-opportunities/>

the development of future renewable energy projects using multi-purpose land, given solar panel system also creates shade, and reduces solar radiation and the rate of water evaporation. Therefore, the solar panel system is suitable for many types of plants that prefer scattered sunlight. Amending and supplementing the Land Law requires a thorough review and evaluation of existing multi-purpose land relationships to improve the regulations on multi-purpose land (i.e., for renewable energy development) more specifically.

The learning experience from South Africa and Indonesia, Vietnam should have a mechanism for intense stakeholder consultation for JETP of Viet Nam both RMP and its implementation. The Prime Minister can set up a consultative council/group which will have representatives from various social organizations (so called as civil society organizations) such as the Vietnam General Confederation of Labour, Vietnam Farmer Association, Vietnam Chamber of Industry and Commerce, Vietnam Energy Association and others to support a just and equitable transition to a low-carbon economy in Vietnam.