Section 1

Executive Summary

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For Indonesia, energy transition is a key step to mitigate the impact of the climate crisis, meet the Nationally Determined Contribution (NDC) targets, and realize its ambition to build a low-carbon economy. This transition actively supports Indonesia's industrialization trajectory while decoupling the long-standing historical correlation between economic growth and emissions. To do this, energy transition must decarbonize both the power sector and its interdependent demand-side sectors and industries. Given the uniqueness of each country's situation, energy transition needs to be country-led and country-owned.

On November 16, 2022, the Government of Indonesia (GoI) and the International Partners Group (IPG) launched the Just Energy Transition Partnership Indonesia (JETP Indonesia) on the sidelines of the G20 Summit in Bali, Indonesia. The IPG comprises the governments of Japan and the United States, who are co-leaders of the partnership, and Canada, Denmark, the European Union, the Federal Republic of Germany, the French Republic, Norway, the Republic of Italy, and the United Kingdom of Great Britain and Northern Ireland. At an initial commitment of US$20 billion, of which US$10 billion in IPG funding was pledged to catalyze US$10 billion of private financing from Glasgow Financial Alliance for Net Zero (GFANZ), JETP Indonesia marks the largest energy transition financing package in the world to date. Its immediate objective is to develop a Comprehensive Investment and Policy Plan (CIPP), a process that would be led by the JETP Secretariat. The CIPP is intended to be a "living document" that will be regularly evaluated and updated to reflect recent market developments and policy priorities.

The GoI and the IPG provide guidance to the JETP Secretariat, which in turn coordinates various working groups led by international institutions to produce a credible and workable CIPP. The JETP Secretariat receives institutional support from ADB with funding from the Government of Japan. The objectives for each working group are defined as follows:

- Technical working group, led by the International Energy Agency, with the main objective of consolidating the energy transition pathway for Indonesia's power sector and identifying priority projects to support the energy transition pathway;
- Policy working group, led by the World Bank, with the main objective of analyzing policy enablers and providing recommendations to support power sector decarbonization;
- Finance working group, led by the Asian Development Bank (ADB), with the main objective of identifying financing needs, requirements, and modalities for identified projects; and
- Just Transition working group, led by the United Nations Development Program (UNDP), with the main objective of synthesizing a Just Transition (JT) Framework to guide implementation.

It is envisioned that a fifth working group will be added after the launch of the 2023 version of the CIPP, with a focus on energy efficiency and electrification.

The Joint Statement by the GoI and the IPG announced a commitment to achieve groundbreaking climate targets conditional to international support. These targets provide recommendations that support Indonesia’s ambitious just energy transition pathway focusing

Disclaimer: The Comprehensive Investment and Policy Plan is a document for the implementation of the Joint Statement agreed in November 2022. The CIPP is a strategy document that the Government of Indonesia will use as a basis for power sector planning and policymaking as part of the JETP process. It does not constitute a legally binding document. The CIPP is dated November 21, 2023.

on the power sector. Furthermore, the Joint Statement has defined the following joint conditional targets for decarbonization, as stated in the “Intends To” section:

- Achieving peaking power sector emissions by 2030 at an absolute value of no more than 290 MT CO2 (down from a 2030 baseline value of 357 MT CO2), 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; and
- Accelerating the deployment of renewable energy so that renewable energy comprises at least 34% of all power generation by 2030.

The “Intends To” section of the Joint Statement sets out additional key strategies the fulfillment of which is critical for the achievement of the aforementioned joint conditional targets. These strategies include but are not limited to the mobilization of sufficient funding, including US$20 billion over the next several years as initial catalytic financing and accelerated retirement of coal-fired power plants. Out of the US$20 billion, US$10 billion from the private sector can be leveraged by: (i) the catalytic use of public finance aimed at driving private investment, and (ii) enabling environment, in which policies are addressed that are either wholly prohibitive of private investment or create a need for greater levels of public financing than would otherwise be required.

Furthermore, JETP Indonesia must follow its key principles: (1) positively contributing towards Indonesia's economy and ensuring energy affordability; (2) guaranteeing energy security and stability, while ensuring a just transition; (3) ensuring energy sustainability; and (4) maintaining the long-term financial sustainability for PLN and subsidiaries.

Based on a deeper understanding of Indonesia’s energy sector and its broader development goals, analysis by the JETP Technical Working Group has suggested that reaching all the joint conditional targets may not represent a realistic decarbonization pathway. In particular, this assessment is based on the exceptionally high solar and wind capacity buildouts and rapid rates of transmission development required within the next six years if current plans for captive coal capacity are unaltered, which would render reaching some of these joint conditional targets exceedingly difficult. However, modeling and analysis on the off-grid systems and possible alternative pathways for providing needed captive power is not yet complete and the GoI and IPG cannot say anything definitive until the experts complete their work. The GoI and IPG will continue to maintain the ambition that underpins the JETP Joint Statement.

In response, the GoI and the IPG have agreed to focus on addressing targets for Indonesia’s on-grid system, recognizing that more work is required to develop a viable decarbonization plan for the off-grid captive power system. This CIPP, proposed by the JETP Secretariat, will accordingly only set out an on-grid emissions target and pathway that retains a level of ambition compared to a business-as-usual (BAU) condition as originally intended in the Joint Statement. The on-grid pathway that this CIPP features includes:

- Total on-grid power sector emissions peaking by 2030 with an emission target of no more than 250 MT CO_2 in 2030;
- A renewable energy generation share of 44% by 2030; and

- Achievement of net zero emissions in the power sector by 2050.

Equally important, it was also agreed that the JETP Secretariat will carry out a more detailed study and roadmap on decarbonizing Indonesia's off-grid captive power systems. Hence, while the off-grid captive power systems are outside of the scope of the current CIPP, the GoI and IPG share a strong commitment to identifying and implementing viable solutions going forward. Like the CIPP, this captive power roadmap will be a strategy document that the Government of Indonesia will use as a basis for off-grid power sector planning and policy making as part of the JETP process to implement the JETP Joint Statement agreed in November 2022. It will not constitute a legally binding document.

To realize the on-grid power sector through the five investment focus areas (IFAs), an estimated investment cost of at least US$97.1 billion between 2023-2030 and US$580.3 bn between 2023-2050 is required. These figures exclude the full extent of the cost for just transition assessments and interventions, which are expected to cost at least US$0.2 billion by 2030. The initial commitment of US$20 billion is expected to act as a catalyst by covering approximately one-fifth of the total investment needed to reach the JETP targets set in 2030. The five JETP investment focus areas (IFA) agreed in the CIPP are:

1. IFA 1: Transmission Lines and Grid Deployment; around 14.000 km circuit of transmissions costing up to US$19.7 Bn by 2030;
2. IFA 2: Early Coal-fired Power Plant (CFPP) Retirement and Managed Phase-out; coal flexibility retrofits and early retirements requiring up to US$2.4 Bn by 2030;
3. IFA 3: Dispatchable Renewable Energy Acceleration; 16.1 GW built out by 2030, costing up to US$49.2 Bn by 2030;
4. IFA 4: Variable Renewable Energy (VRE) Acceleration; 40.4 GW built out by 2030, costing up to US$25.7 Bn by 2030; and
5. IFA 5: Renewable Energy Supply Chain Enhancement.

Based on approximately 1000 projects collected across the five IFAs from GoI, over 400 projects have been identified as JETP priority projects that would require investments amounting to a minimum of US$67.4 Bn. JETP priority projects are selected based on the criticality to the realization of the energy pathway, whether such projects have been included in the commitment of relevant institutions and jointly agreed by the related government institutions, have a start date up to 2030, and have not reached financial close at the time of writing. Out of the priority projects, the JETP Secretariat has identified nearly 50 top priority projects based on their strategic value to the JETP power sector pathway and Indonesia's energy transition.

Beyond the five investment focus areas, a sixth investment focus area, Energy Efficiency and Electrification, is planned to be added in the subsequent 2024 version of the JETP CIPP after the mobilization of the fifth working group. Energy efficiency can help better manage supply needs and to support ambitious decarbonization pathways. Nevertheless, the JETP Secretariat welcomes any interest in investments for the sixth investment focus area.

To optimize the utilization of JETP financing sources, matchmaking priority projects to the funding sources available under JETP financing is crucial. The basic financing philosophy of the JETP funds is to minimize the cost of the energy transition for Indonesia. As public funding is scarce, the use of such funds must be appropriately allocated. Below are the financing principles in determining the type and methods of funding:

- Effective and efficient use of public funding to avoid market distortion and crowding out commercial finance should be ensured;
- Funding allocation should follow the priorities of the JETP's five investment focus areas;
- Priority will be given to projects that are ready to finance during this JETP investment period window; and
- Selection criteria under the project readiness financing principle should be aligned with the recommendations contained in the technical assessment and the Just Transition Framework.

The JETP Secretariat shall use the 'prioritization of capital deployment approach' in project financing identification and selection. The capital deployment will be arranged and prioritized based on accessibility, cost of capital, and priority. Ideally, a blended finance scheme can be used to select projects where risk and returns could be balanced by combining the two sources of JETP financing. Projects that are traditionally low-yielding or deemed high-risk could be financed through concessional financing.

The flows of funds for JETP projects would use both direct and indirect options. Under the direct flow channel, financing from private financiers goes straight to project developers. Meanwhile, under the indirect flow channel, financing from public sources typically goes through either Development Financial Institutions (DFI), Multilateral Development Banks (MDBs), or PT SMI as the Country Platform. In cases of grant funding, it can also go through a select International Organization.

Achieving JETP ambitions will require the support of enabling policies. This document sets out recommendations of policy reforms to enable the execution of the energy transition while ensuring affordability, system stability, and sustainability. Eight overarching policy enablers are considered crucial to bringing forward Indonesia's ambition for energy transition, namely:

- Strengthening domestic supply chain of renewable energy by reforming Local Content Requirement (LCR);
- Adjusting supply-side incentives;
- Improving renewable energy procurement processes;
- Making power purchase agreements more bankable;
- Enabling early coal retirement and managed coal phase-out;
- Ensuring PLN financial sustainability;
- Strengthening financial policy to support Indonesia's energy transition; and
- Decarbonizing captive power.

Each of these eight enablers for the proposed policy addresses barriers that might hinder Indonesia's ambitious efforts in decarbonization. The policy reforms consist of comprehensive measures that cover the whole spectrum of short, medium, and long-term goals.

The energy transition is expected to bring positive direct and indirect impact on the Indonesian economy. Beyond driving economic growth, JETP investments can create jobs, contribute to reducing regional economic disparity, and positively impact a variety of sectors such as financial services and manufacturing. In addition, multiplier effects enable JETP investments to reverberate across the economy, spurring further investments that increase demand across sectors. Additional impacts can be expected for informal sector employment, though further analysis is required to understand the scale of the impact.

It is critical that Indonesia strive for a just energy transition in which the economic, social, and environmental risks and opportunities are shared equitably among stakeholders. Hence, the CIPP sets out a JT Framework that identifies a comprehensive set of potential risks and opportunities from JETP investments to ensure alignment with this principle. This JT Framework integrates existing safeguards in Indonesia and supplements them by adding one additional standard that addresses economic diversification & transformation, as well as one additional component to assessments that focuses on identifying and enhancing opportunities.

JETP governance plays a pivotal part in the success of the implementation of the CIPP as it is designed to ensure leadership and ownership that provides clear strategic direction, transparency, integrity, and accountability. It ensures a robust decision-making process to unlock and scale up funding from diverse sources that target appropriate financing instruments and JETP investment focus areas. The JETP Secretariat will coordinate with the GoI National Energy Transition Task Force, the Energy Transition Mechanism (ETM) Country Platform Steering Committee, and the IPG to receive input and endorsement, while liaising with the GFANZ working group members, project developers, other financiers, and various stakeholders on an implementation level.

The JETP Secretariat and the Government of Indonesia welcome all international investors, local investors, and donors to become partners in its pursuit of a just transition to a low-carbon, sustainable, and resilient economy.