## PROGRAM INFORMATION DOCUMENT (PID) APPRAISAL STAGE

October 28, 2015 Report No.: 100604

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Operation Name	First Indonesia Sustainable and Inclusive Energy DPL	
Region	EAST ASIA AND PACIFIC	
Country	Indonesia	
Sector	General energy sector (50%); Public administration- Energy	
	and mining (50%)	
Operation ID	P154291	
<b>Lending Instrument</b>	Development Policy Lending	
Borrower(s)	GOVERNMENT OF INDONESIA	
Implementing Agency	Coordinating Ministry for Economic Affairs and the	
	Ministry of Finance	
Date PID Prepared	October 4, 2015	
<b>Estimated Date of Appraisal</b>	October 23, 2015	
<b>Estimated Date of Board</b>	December 1, 2015	
Approval		
<b>Corporate Review Decision</b>	Following the corporate review, the decision was taken to	
	proceed with the appraisal and negotiation of the operation.	

#### I. Country and Sector Background

Over the past decade Indonesia has seen strong growth and job creation, supporting poverty reduction, but the end of the commodity boom has exposed deep structural weaknesses. Annual growth averaged 5.6 percent for the period 2001-12 but, as the external tailwinds of commodity prices and demand and global financing conditions have turned to headwinds, growth has slowed, down to 5 percent in 2014. While the national poverty rate was halved from 1999 to 2012, the rate of poverty reduction has begun to stagnate, vulnerability remains high and inequality has risen.

The DPL series forms an integral part of the World Bank Group's (WBG) overall energy strategy in Indonesia, supporting the Government's sectoral priorities and its Intended Nationally Determined Contribution (INDC) commitments to reduce greenhouse gas (GHG) emissions. At the top of the Government's priorities, the energy sector, in particular reliable electricity and gas supply, is seen as a key building block for economic development, including addressing the energy needs of the poor. The Government's key goals for the sector's development are to achieve nearly universal access to reliable electric power by 2020, to reliably and efficiently meet rising energy demand, mainly through domestic energy sources, transition to a sustainable energy sector development path through increased use of gas, renewable energy and energy conservation, make the energy sector more competitive and efficient. Additionally, in preparation for the Conference of Parties (CoP) in Paris, the Government of Indonesia has committed to a 29 percent unconditional GHG reduction compared to the business as usual scenario by 2030 and identified promotion of clean and renewable energy sources among the key measures to achieve this target. It also announced a

conditional reduction of an additional 12 percent subject to certain provisions in an anticipated global agreement.

## **II.** Operation Objectives

The proposed DPL aims to support the Government of the Republic of Indonesia's priorities for developing a sustainable and inclusive energy sector that would further the country's medium-term economic development and poverty reduction goals. The proposed operation, in the amount of US\$ 500 million, is the first in a planned programmatic series of two single-tranche operations supporting critical policy and institutional reforms that have four key development objectives:

- Pillar A: Reducing the fiscal cost of electricity provision through prior actions to reduce subsidies and move towards cost-reflective tariffs for electricity and to support improvements in the efficiency of PLN through moving to a Performance-Based Regulation Framework. These actions are expected to contribute to a reduction in the allocated budget spending on electricity subsidies;
- Pillar B: Improving the investment climate in the energy sector by supporting gas supply development and licensing reform to facilitate investment in new generation by the private sector.
  - For gas, the prior action on adoption of a regulation for a systematic and time-bound process for managing expiring production sharing contracts aims to reduce one source of regulatory uncertainty and support investment in the sector. Along with further actions under the second operation, this is expected to contribute to the signing of new long-term agreements for domestic and / or inter-island gas supply by PLN.
  - Prior actions on licensing reform streamline administrative procedures for setting up Independent Power Producer (IPP) projects and the delegation of licensing authority for such projects to the Indonesia Investment Coordinating Board for inclusion in its national one-stop service for investment. These measures aim to contribute to a reduction in the number of days to process an IPP license;
- Pillar C: Removing constraints to renewable energy expansion including by supporting geothermal power development and putting in place incentives for the development of other renewable energy resources. Prior actions supporting geothermal power development include the adoption of the 2014 Geothermal Law and submission to the Ministry of Law and Human Rights the draft regulation, under the Law, to implement a local benefit-sharing mechanism of a "production bonus" payment by geothermal companies to local governments. These measures are expected to contribute to implementation of new geothermal power projects under the framework of the new Law.
- Pillar D: Expanding access to modern, reliable energy by establishing a credible national approach to expanded electrification. This pillar of the programmatic DPL series supports an indicative trigger in the next operation in support of an improved national approach to electrification, which aims to support increases in the electrification rate.

#### III. Rationale for Bank Involvement

The PDOs of this operation closely support CPF and twin goal objectives. The PDOs are in line with the proposed engagement areas of Sustainable Energy and Universal Access, and Delivering National Infrastructure in the draft CPF FY16-FY20. This operation anchors the overall World Bank Group energy and extractives engagement strategy in Indonesia. The goals of this strategy are to support the Government's objective of moving toward universal access to reliable, modern energy, and to create opportunities for Indonesia to shift toward a more secure and sustainable energy development path, through alternatives to coal. The strategy draws on the World Bank Group's Energy Directions Paper that prioritizes universal access to reliable modern energy, supports all forms of renewable energy, and creates enabling environments for transitions to sustainable energy. The Indonesia strategy is informed by longstanding and in-depth technical assistance and analytical work and by the experience of energy sector investments by the IFC and IBRD, for example, in geothermal power and distribution. The WBG strategy mobilizes a wide range of resources for policy dialogue, investment and advisory services. The DPL anchors this engagement and reinforces the coordination and collaboration with other development partners - in particularly ADB, AfD, and KfW - which builds up overall international support to Indonesia in shifting its energy sector to a more sustainable path.

## IV. Tentative financing

Source:		(\$m.)
Borrower		0
International Bank for Reconstruction and Development		500
Borrower/Recipient		
IBRD		
Others (specify)		
	Total	500

# V. Tranches (if applicable) One tranche operation.

#### VI. Institutional and Implementation Arrangements

The program dialogue is ongoing as part of a broad and deep World Bank Group engagement with the Government on energy sector issues, including related technical assistance and investment projects. The policy dialogue on the DPL series is undertaken through joint discussions and regular coordination meetings with the Government and other development partners who are providing parallel policy-based financing. The main counterparts are the Coordinating Ministry for Economic Affairs on the overall program, the Ministry of Energy and Mineral Resources on electricity tariffs, renewables, access, and the Ministry of Finance on performance based regulation of PLN and with PLN on power sector issues. The results indicators and their monitoring will be based on, for example, PLN financial reports and government monitoring of the National Energy Plan and National Medium-Term Development Plan, as well as dialogue with key ministries and agencies as part of ongoing TA

and investment projects. Ongoing monitoring of progress towards results indicators will take place through dialogue on the proposed second operation and through the broader WBG energy sector engagement.

### VII. Risks and Risk Mitigation

The overall risk rating of this operation is Substantial. Major risks that could have a substantial impact on the operation achieving its development objective include: (a) political economy and governance challenges, and (b) relatedly sector strategies challenges, where risks appear strongest for gas; (c) environmental and social, and related stakeholder, risks particularly deriving from the fact that most geothermal potential is located on lands classified as forests (d) weak institutional and implementation capacity; and (e) uncertainty around the macroeconomic environment both globally and domestically. These risks, if materialized, could singly or jointly impact the Government's willingness and ability to implement the reform necessary to support its ambitious development agenda or make the outcome of the development agenda less successful. They also pose challenges to the ability to mobilize and implement the investment in infrastructure and services. A mitigating factor against these risks is the broad development partner support for improved energy sector policies, supporting implementation through TA and investment projects. As noted above, these risks must be set against the significant benefits of improved energy sector performance in Indonesia given the challenges the sector poses for improved growth and shared prosperity.

## VIII. Poverty and Social Impacts and Environment Aspects

The prior actions in the operation are expected to have positive poverty and social impacts over the medium-term with the potential near-term impact via tariff increases projected to be limited. Over the medium term the prior actions under Pillar B and C are expected to support expanded access to better quality electricity services, supporting reduced poverty and building shared prosperity. In the near-term the main channel of impact is through the possible effects of adjustments to electricity subsidies and tariffs under Pillar A. However, given their connection characteristics, the direct impact on the poor and vulnerable of 2014 and 2015 electricity tariff increases for industrial, business and large residential customers is relatively limited. There may also be localized impacts of new investments stimulated by the Prior Actions in Pillars B and C.

In terms of energy-related emissions, the DPL series is expected to generate positive net environmental benefits, and to reduce the risk for an even greater share of coal in power generation compared to the business-as-usual (BAU) scenario. The efficiency and demand reduction incentives created by the tariff reform prior actions to reduce subsidies and move towards cost-reflective electricity tariffs, and the measures supporting an increase in gas and renewables (including geothermal power) in the power generation mix, will have positive impacts on global and local emissions relative to a baseline absent such reforms. While the proposed programmatic series will not eliminate the increase share in coal-fired power generation, which currently represents 60 percent of the Government's generation program, the DPL policy actions will boost renewable power development and efficient use of electricity to mitigate local and global environmental impacts. This will complement GoI efforts for its Intended Nationally Determined Contribution.

The primary environmental and social risks associated with the geothermal prior actions, derive from the fact that most geothermal potential is located on forest land. When explored and exploited using appropriate technologies and sustainability measures, geothermal power development can provide an incentive for the proper management of forests and support the livelihoods of forest-dependent communities. If well developed, including strong benefit sharing mechanisms, in partnership with local communities, geothermal power development has the potential to serve as a vehicle for investing part of revenues toward forest protection and community development. Nevertheless, while geothermal power development has a relatively limited footprint compared to other energy options, the primary potential risks include the loss of forests and related ecosystems, forest fragmentation/modification, pollution during plant operation, and potential disruption of the natural water balance of forest ecosystems. Socially, primary risks are associated with land acquisition, particularly given the weak land tenure and access regime in forests. Indonesia does have a comprehensive legal and institutional framework for forests, biodiversity protection and environmental impact assessment and licensing which is applicable to geothermal expansion, including aspects related to management of direct, induced and cumulative impacts. There are, nonetheless, institutional and capacity gaps, particularly regarding enforcement of the existing legal framework, among government agencies and government levels, which may hinder the adequate implementation and management of environmental risks. Recognizing the important potential of sustainably exploiting geothermal resources for geothermal power in forests, the Ministry of Environment and Forestry as the licensing authority, has moved to address institutional constraints to geothermal power exploration and development in the Forest Estate. Finally, the prior actions covering administrative procedures for a set of central government licenses focus on streamlining of administrative procedures rather than changes in substantive processes, such as those relating to social or environmental due diligence. The World Bank's broader country engagement and the new Country Partnership Framework under preparation support a portfolio of activities which aim to improve the environmental sustainability of the energy and forest sectors.

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