

Environmental Social Governance (ESG) Framework for Public Private Partnership (PPP) in Indonesia

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Abstract

Environmental and social risks are risks that can disrupt the sustainability of infrastructure provision through the PPP scheme. PPP is a cooperation scheme involving many stakeholders and each stakeholder can be part of mitigating risks, including environmental risks. Environmental risk mitigation can be carried out through instruments and frameworks owned by each stakeholder. This research aims to map the ESG framework that exists in PPP schemes in Indonesia based on existing instruments for stakeholders to be able to make ESG an effective instrument for mitigating environmental and social risks. The research method used in this research is qualitative because the analysis used in this research is a descriptive and in-depth observation of the PPP ecosystem in Indonesia. The results of this research show that there are eight stakeholders in PPP in Indonesia. Each stakeholder has an instrument and can apply the ESG framework based on the instrument they have. Implementing the ESG framework can mitigate environmental and social risks in business processes carried out by stakeholders in the PPP ecosystem in Indonesia.

Keywords:

PPP, environmental and social governance, environmental risks, social risk

INTRODUCTION

Sustainable development is an important part of infrastructure development [1]. Community-based infrastructure such as SPAM has a high level of environmental sustainability [2]. Infrastructure has a role in carrying out economic growth and regional development [3]. Apart from bringing economic growth, at the same time, it has the potential to cause environmental problems [4]. Infrastructure has a positive effect on CO₂ emissions but has implications for the human development index, gross domestic product, and state spending [5]. Environmental and social risks are often encountered in infrastructure development, including infrastructure development in Indonesia [6]

Environmental risk is a risk that dominates human activities in the world and increasingly shows its dominance as time goes by. According to the World Economic Forum [7], the top 5 global risks in the next 2 years are dominated by environmental risks, namely 4 out of 5 global risks come from environmental and social risks. Meanwhile, in the next 10 years, 5 of the top 5 global risks will come from social and environmental risks. These risks are, failure to mitigate climate change, failure of climate change adaptation, natural disasters and extreme weather events, biodiversity loss and ecosystem collapse, large-scale involuntary migration, and natural resource crises. Climate change is a major threat to long-term growth prosperity, that has a direct impact on the economic well-being of all countries [8]. Failure to effectively plan for and manage future climate risks could result in significant

damage to businesses, economies, infrastructure, industry, and society in general [9].

Climate change poses two main sources of risk for financial investors, namely physical climate risk that affects assets in the consequences of climate change and climate transition risk related to the impact of policy and regulatory changes to reduce greenhouse gas emissions [10]. There is increasing concern about physical climate risks to businesses, especially to equity, debt, and real estate assets in investors' portfolios [11]. Therefore, the risk of climate change will have a direct impact on infrastructure development in several developing countries, including Indonesia.

In the 2020-2024 period, massive infrastructure development in Indonesia will be carried out using various creative financing schemes. The budget required for infrastructure development in the 2020-2024 period is IDR. 6,445 trillion. The budget does not fully use the state budget, most of the financing will be carried out through the involvement of the private sector and investors at 42% and SOE at 21% [12]. One of the creative financing schemes involving the private sector and investors is first Government Cooperation with Business Entities or what is known as Public Private Partnership (PPP). PPP is a contract method that can be used to develop large-scale infrastructure projects that have the potential to have negative impacts on the environment [13].

The two main actors in PPP financing are investors or the private sector and financing institutions which generally use a debt-to-equity ratio of 70:30. When financing infrastructure through PPP, the risk appetite of

both actors must be accommodated. According to [14], financial institutions globally are increasingly taking environmental and social risks related to their activities into account, which can lead to risks. The impact of environmental and social risks can affect production productivity and unexpected expenses, thereby creating risks for financial institutions that provide loans and investments [15].

For investors, environmental and social risks are risks that must be considered and must be mitigated. One indication of the increasing understanding of the importance of mitigating environmental risks is the increase in investment that applies PRI (Principle of Responsible Investment) which is depicted in Figure 1 [16]. Sustainable investment has begun to develop since the launch of PRI in 2006 by the UN [17].

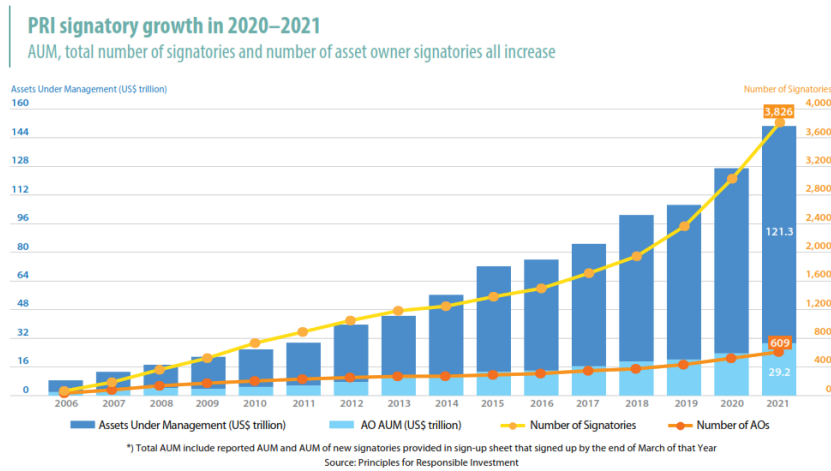


Figure 1. PRI Signatory Growth

Sustainability can be the key to successful decision-making in infrastructure projects [18]. One way to mitigate climate change can be done through sustainable development [19]. Sustainable development will reduce population exposure to drought by 70% compared to fossil fuel development [20]. Implementing a sustainable investment model can increase productivity and efficiency, especially energy, thereby reducing emissions [21]. One concept that can be applied to mitigate environmental risks is the application of the Environmental Social Governance (ESG) concept.

ESG is an organizational strategy to provide value to stakeholders [22]. ESG will be effective in encouraging sustainable infrastructure investment [23]. Risks originating from environmental and social sources will influence financial risks for infrastructure investors [24]. ESG implemented by an organization can be an indication of the resilience of the organization [25]. Increasing investment levels will along with the implementation of ESG in investor operations [26]. Companies with good ESG performance tend to have high levels of investment [27] The ESG score is a reference for asset managers in implementing ESG-based investment strategies [28]. Companies that implement ESG and have strong ESG performance have easy access to funding through the stock exchange [29]. Companies that have a high ESG score will be able to improve the company's financial performance [30]. ESG is also related to transparency. High transparency regarding ESG information can improve financial performance [31].

The ESG concept is used by investors for decision-making and continues to develop globally along with the growing trend of sustainable investment [32]. ESG is carried out by investors by involving the concept of sustainability to prevent negative externalities resulting from outside the company [33]. Several research results

show factors that influence investors in implementing ESG, namely: (1) Stakeholder interests [34], (2) Reducing risk [35], (3) Company incentives [36] and (4) Encouragement to implement green innovation [37].

The high concern of investors and financial institutions to implement ESG as risk mitigation is driven by quite strong factors. Although investors and financial institutions use large resources in implementing PPPs, other stakeholders also have a large role. The success of a PPP depends on the role of stakeholders [38]. Stakeholders have a strong interest in the benefits of the project [39]. Stakeholders can also influence the stability of social risks [21]. Thus, mitigating environmental and social risks through ESG instruments needs to be carried out by all stakeholders involved in the PPP. This article aims to map the ESG framework that exists in PPP schemes in Indonesia so that it can make ESG an effective instrument for mitigating environmental and social risks for each stakeholder.

METHODOLOGY

The research method used in this research is qualitative because the analysis used in this research is a descriptive and in-depth observation of the PPP ecosystem in Indonesia. This research was conducted in November-December 2023 in Jakarta. The data used in this research is secondary data sourced from the PPP Project Plan in Indonesia 2023, the PPP website owned by the Ministry of Finance of the Republic of Indonesia, literature related to PPP, and other literature related to PPP. The population of this research is all PPPs in Indonesia, while the sample taken is a census using the PPP sample criteria that have entered the transaction stage. The sample is used to see the PPP structure pattern in Indonesia. The research steps carried out are as follows:

1. Identify the PPP structure pattern that exists in Indonesia and the role of stakeholders in the PPP structure in Indonesia.
2. Identify instruments as driving factors for ESG implementation from each stakeholder in Indonesia.
3. Develop an ESG framework for the PPP scheme in Indonesia with an instrument approach from each stakeholder for PPP in Indonesia.

RESULTS AND DISCUSSIONS

Based on an analysis of the PPP structure in Indonesia, there are eight stakeholders. The following are PPP stakeholders in Indonesia and their roles in PPP in Indonesia:

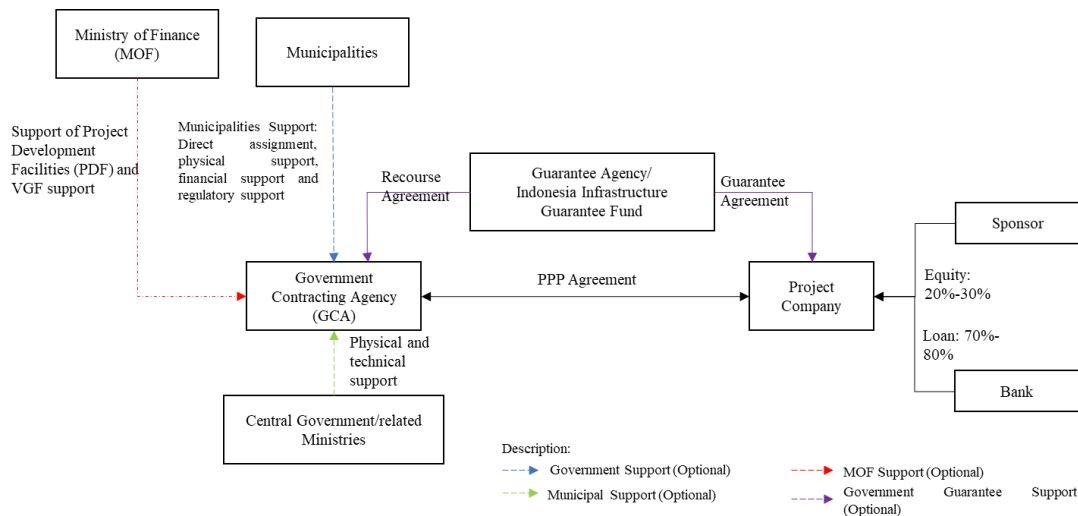


Figure 2. PPP Structure in Indonesia

1. Government Contracting Agency (GCA) is the person in charge of cooperation projects whose role is as a provider or administrator of infrastructure based on statutory regulations. In accordance with Presidential Regulation Number 38 of 2015, those entitled to become GCA are Ministers/Heads of Institutions/Heads of Regions/State Owned Enterprise (SOE) /Municipal Owned Enterprise (MOE). Based on the 34 PPP samples, the parties that become GCAs are the Minister, Head of Municipalities and MOE for drinking water. GCA can provide support to PPP in the form of physical, financial and regulatory support.
2. Ministry of Finance. In accordance with regulations, the Ministry of Finance can provide support for project preparation or Project Development Facilities (PDF) and Viability Gap Fund (VGF) which are optional and according to needs. In several sectors that have limited capacity to prepare projects, the Ministry of Finance provides PDF support and for several infrastructures that have a marginal level of feasibility and are needed by the community, the Ministry of Finance provides VGF, as was done for the Water Sector PPP project.
3. Central Government or Related Ministry/Technical Ministry. In accordance with the regulations and authority of the central government or technical ministries, they can provide support in the form of physical support so that the infrastructure services

Identification of PPP structure in Indonesia and the role of Stakeholders

Based on the Public Private Partnership Infrastructure Project Plan in Indonesia 2023, 34 PPP infrastructure projects are being carried out in Indonesia. Several sectors that have provided infrastructure through the PPP scheme are the electricity sector, toll roads, non-toll roads, satellites, fiber optic (palapa ring), drinking water supply systems, Multi-Lane Free Flow (MLFF) Toll Transaction System, proving ground motor vehicles, bridges, and public street lighting. The provision of infrastructure is carried out by the Central Government, Regional Government, and Municipal Owned Enterprise with the initiative of the government or business entity. The PPP structure pattern in Indonesia, based on 34 infrastructures implemented through the PPP scheme, can be seen in Figure 2.

4. Regional Government/Municipalities. In accordance with the regulations and authority possessed by the Regional Government, it can provide some support so that the provision of infrastructure through PPP can run well. Support that can be provided is in the form of (a) Assigning MOE to carry out PPP and acting as GCA, (b) In the context of assignment to MOE, the Regional Government can provide capital participation to MOE to carry out its duties, (c) If the investment value cannot be in accordance with the community's ability to use services, the Regional Government can provide support in the form of physical support and land provision, as is done in the Water Sector PPP, (d) The Regional Government can prepare regulations to ensure that the provision of infrastructure services through the PPP can run well. This support is optional and as needed.
5. Guarantee Entity/(BUPI). In PPP, the Central Government can provide government guarantee facilities to ensure that infrastructure provision through PPP can be accepted by investors and financial

institutions by strengthening creditworthiness and bankability aspects. Government guarantees through BUPI are implemented in a single window through Indonesia Infrastructure Guarantee Fund (IIGF). Government guarantees by BUPI are optional, but almost all of the 34 PPPs receive guarantees from BUPI.

6. Special Project Company (SPC). SPC is a company formed by the auction winner to provide infrastructure through PPP. Financing for infrastructure provision through SPC comes from sponsors who are auction winners with a portion ranging from 20% - 30% and financing through financial institutions with a portion ranging from 70% - 80%.
7. Sponsors. The sponsor is a consortium or single company that is the winner in the PPP procurement and will then form the SPC. The sponsor must provide capital or equity to run the PPP and get returns in the form of Equity IRR.
8. Banks. Banks have a big role in ensuring that the PPP can run well, because the portion of financing to provide infrastructure through the PPP is very substantial.

Providing infrastructure through a PPP will involve many parties and the success or failure of providing infrastructure through a PPP really depends on the roles and decisions that will be taken by the stakeholders [40]. Stakeholders must be able to work together well so that infrastructure provision targets can run well and minimize risks [41]. For PPP stakeholders in Indonesia, these eight stakeholders have very important and interrelated roles so that mitigating risks in infrastructure provision, including environmental and social risks, can run effectively if collaboration and cooperation run well.

Identification of ESG Implementation of Stakeholders' Instruments for PPPs in Indonesia

In sustainable development, investment and the environment are very important, development goals can be achieved if the financing gap can be overcome [42]. This financing gap can be overcome by the PPP scheme [37]. Using the PPP scheme to achieve sustainable development requires monitoring and evaluation based on complex learning outcomes [43]. PPPs that involve many parties and a series of processes that must be passed as well as long contracts mean that environmental and social risk mitigation through ESG instruments needs to be carried out through instruments owned by stakeholders. The instruments owned by PPP stakeholders in Indonesia can be seen in Table 1. These instruments are based on the PPP structure in Indonesia and the authority possessed by these stakeholders.

All stakeholders involved in PPPs have instruments to implement ESG in PPPs, but strengthening is needed to implement ESG in PPPs by stakeholders. The following are some of the reinforcements needed to implement ESG in the instruments owned by the GCA:

1. GCA. Currently, there are no regulations that stipulate that PPP agreements must apply ESG to the provision of infrastructure through PPPs. The GCA can include one of the clauses on BUP's obligation to implement it in stages according to the progress of providing

infrastructure through PPP as an instrument to strengthen ESG implementation. The implementation of ESG by Project Company (PC) is expected to be able to mitigate environmental and social risks and is expected to provide easier access to financing.

2. Ministry of Finance (MOF). The instruments owned by the Ministry of Finance in the form of PDF and VGF can be a strong driving factor for GCA and Project Company (PC) to implement ESG in PPPs that are given support. Currently, the Ministry of Finance has an ESG framework instrument and manual for PPPs which has support from the Ministry of Finance.
3. Central Government or Related Ministry. The Central Government through the Related Ministry can provide physical and/or technical support to the GCA or PPP so that the service rates paid by the community can be per the community's capabilities. In general, the provision of support by the Technical Ministry will be regulated in a cooperation agreement. The Technical Ministry can include a clause to implement ESG in the support provided to implement ESG as part of mitigating environmental and social risks.

Table 1 Instruments Owned by Stakeholders for ESG Implementation

No	Stakeholders	Usable Instruments
1.	GCA	<ul style="list-style-type: none"> • PPP Agreement • Recourse Agreement
2.	MOF	<ul style="list-style-type: none"> • MOF Regulation/Decision; • Approval for PDF/VGF
3.	Central Government/Related Ministries	Support Agreement;
4.	Regional Government/Municipalities	Municipality's Regulation
5.	Guarantee Institution	<ul style="list-style-type: none"> • Guarantee Agreement • Recourse Agreement • Company Policy
6.	Special Project Company	<ul style="list-style-type: none"> • PPP Agreement • Guarantee Agreement • Company Policy
7.	Sponsor	<ul style="list-style-type: none"> • Company Policy • Equity Agreement
8.	Bank	<ul style="list-style-type: none"> • Credit Agreement

4. Regional Government/Municipalities. Regional Government involvement in PPPs can take the form of acting as GCA providing assignments to Municipality Owned Enterprises (MOE) or as Regional Governments responsible for PPP locations. Regional governments can provide Regional Capital Investment to MOEs as financial support to run PPPs. In this scheme, Regional Governments can ask MOEs to implement ESG as part of mitigating environmental and social risks from the Municipality Capital Investment (MCI) provided. If the Regional Government is the GCA, the GCA can use a regress agreement instrument with BUPI which includes a Risk Mitigation Plan (RMP). GCA together with BUPI

can include environmental and social risks in RMP as part of PPP risk mitigation.

5. **Guarantee Institution/BUPI.** Guarantee agreements and regression agreements are two instruments that can be used by BUPI to implement ESG in PPPs. A guarantee agreement that regulates the rights and obligations between BUPI and PC can be an instrument for implementing ESG as part of mitigating environmental and social risks. BUPI can include an ESG implementation clause in the guarantee agreement and include environmental risk in the RMR in the regression agreement. Currently, Indonesia Infrastructure Guarantee Fund (IIGF) as BUPI has a policy for risk mitigation in the form of the Environmental Social Management Framework (ESMF).
6. **Project Company (PC).** The instruments that can be used and fully controlled by PC are company policies. If ESG is implemented in PPP agreements, guarantee agreements, and credit agreements, then PC is the party that must implement ESG based on these agreements. PC as an organization that will provide infrastructure services through PPP has a strong driving factor in implementing ESG because it is bound by three agreements.
7. **Sponsors.** Pragmatically, the sponsor who is the owner of the PC wants the capital paid in the form of equity

and ensures that the PPP runs according to plan and will try to mitigate risks as best as possible, including environmental and social risks. The instrument that can be carried out by sponsors is to ask PC to implement ESG as part of shareholder directives and performance contracts for paid-in capital.

8. **Banks.** Banks have a large portion of financing in PPPs and bank operations are highly regulated, meaning banks will be very careful about risks and carry out risk mitigation, including environmental and social risks. Currently, the Financial Services Authority/(OJK) has implemented several policies to mitigate environmental and social risks within the framework of sustainable finance, green taxonomy, and stress testing related to climate-related financial risks. Thus, banks have the potential to include ESG in credit agreement clauses.

Stakeholders' ESG Framework for PPP in Indonesia

The ESG framework is based on an analysis of the instruments and driving factors of each stakeholder involved in the PPP structure in Indonesia which was carried out in the two previous sub-chapters. The ESG framework for PPPs in Indonesia for each stakeholder can be seen in Table 2.

Table 2 Stakeholder's ESG Framework for PPP in Indonesia

No	Stakeholders	ESG Framework
1.	GCA	<ul style="list-style-type: none"> • GCA can include ESG implementation clauses in PPP agreements. • GCA together with BUPI can include environmental and social risk mitigation in the risk mitigation plan contained in the regress agreement.
2.	MOF	ESG framework and manual for PPP which supported by the Ministry of Finance.
3.	Central Government/ Ministries	Related <ul style="list-style-type: none"> • Related Ministries can include ESG clauses in support agreements. • Related Ministries can create internal policies to implement ESG in the provision of PPP infrastructure.
4.	Regional Government/Municipalities	Regional Government/Municipalities can request Municipal Owned Enterprises (MOE) or PPP implementers to implement ESG as part of mitigating environmental and social risks from providing support.
5.	Guarantee Institution/BUPI	<ul style="list-style-type: none"> • BUPI can include an ESG implementation clause in the guarantee agreement. • BUPI together with GCA can include environmental and social risk mitigation in the risk mitigation plan included in the recourse agreement. • BUPI can implement ESG policies in its business processes.
6.	Project Company	Project Company can prepare company policies to implement ESG as part of commitments from PPP agreements, guarantee agreements, and credit agreements as well as part of mitigating environmental and social risks.
7.	Sponsor	Sponsor can ask Project Company to implement ESG as part of the business work process as a work contract for capital participation or equity.
8.	Bank	Bank can ask Project Company to implement ESG and mitigate environmental and social risks as part of risk management and compliance.

CONCLUSIONS

Environmental and social risks are some of the risks that can result in the disruption of infrastructure services through the PPP scheme. ESG is an instrument for

mitigating environmental and social risks. There are eight stakeholders in the PPP structure in Indonesia. Eight stakeholders in PPPs in Indonesia have ESG implementation instruments and apply the framework in each institution. Based on the ESG framework analysis in

this research, environmental and social risks in PPPs can be mitigated by using instruments and frameworks that exist within these stakeholders.

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