**AN EXPLORATION OF THE KEY ISSUES AND CHALLENGES IN IMPLEMENTING
PUBLIC-PRIVATE PARTNERSHIPS:
A CASE STUDY OF THE CENTRAL JAVA POWER PLANT PROJECT, INDONESIA**

FIKRIYATUL FALASHIFAH

**School of Geography, Environment and Earth Sciences
Victoria University of Wellington New Zealand**

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ABSTRACT

Over the last two decades, Indonesia began to implement Public-Private Partnerships (PPPs) to provide an alternative mechanism for providing public infrastructure. The need to accelerate development, fulfil national demands and address mounting fiscal constraints are the reasons behind choosing PPP approach. One of the infrastructure projects using PPP mechanisms in Indonesia is Central Java Power Plant (CJPP) project, which is claimed to be the largest power plant in Southeast Asia. The project bidding was won by three consortia including ITOCHU Corporation, Adaro Power and J-Power, while the Government of Indonesia provided a guarantee for this project through the Ministry of Finance (MoF) and the Indonesia Infrastructure Guarantee Fund (IIGF). The project is built under Build, Operate, Own, and Transfer (BOOT) PPP model.

In continuing academic research about PPP in general and CJPP in particular, this study was conducted with the aim of exploring critical issues and challenges in implementing PPPs in CJPP project. Three issues were chosen for particular examination, including governance, environment and social issues. This study was conducted by adopting a qualitative approach under a constructivist epistemology to gain meaning and knowledge from certain phenomena or specific circumstances, in this case, by using CJPP as a single case study. Document reviews, semi-structured interviews, and unstructured observation were carried out from July to September 2018 to gain information and perspectives from multilevel stakeholders who are in charge, involved in and were impacted by the implementation of PPP mechanism in CJPP. Stakeholder Analysis and Sustainable Livelihood Approach were taken as the framework for data analysis.

This study found that top-down approach applied to implementing PPP in CJPP project left some governance issues and dynamics about power relations and regulations; conflicting stakeholders' interests; communication and knowledge gaps; and dualism perspectives for viewing the scheme. The Governments of Central Java and Batang Regency underwent difficulties in structuring and implementing Environmental and Social Impact Assessment (ESIA), or in Bahasa Indonesia known as AMDAL. Meanwhile, coal, the major resource that will be utilised in this project, faces issues

surrounding its emissions, stock, and sustainability. Several issues regarding five forms of capital for sustainable livelihood – human capital, social capital, economic capital, natural capital and physical capital – also arose during the project period. These issues included differing perspectives and sentiments among the surrounding societies and economic inequalities, as well as cultural and migration issues.

It is hoped that this research can inform our understanding of PPP implementation, both in policy and in practice. Based on this study, PPP practice at the national level should standardise documents and processes as well as having project assistance. At the regional level, the local government must be more empowered regarding their roles, responsibilities and resource management. Moreover, the impact of PPP on environment and society should be more precisely predicted and managed.

Keywords: Central Java Power Plant, Strategic Issues, Public-Private Partnership, Social Constructivism, Stakeholder Analysis, Sustainable Livelihood Approach

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DEDICATION

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“Great works are performed not by strength but by perseverance.”

(Dr. Samuel Johnson, 1709 – 1784)

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ABBREVIATIONS

CJPP	Central Java Power Plant (PLTU Batang)
PPP	Public-Private Partnership
JBIC	Japan Bank for International Cooperation
IIGF	Indonesia Infrastructure Guarantee Fund (PT Penjaminan Infrastruktur Indonesia)
MoF	Ministry of Finance (Kementerian Keuangan)
MNDP	Ministry of National Development Planning (Kementerian PPN/BAPPENAS)
PLN	State-Owned Electrical Energy Company (PT Perusahaan Listrik Negara)
KPPIP	The Committee for Acceleration of Priority Infrastructure Delivery (Komite Percepatan Pembangunan Infrastruktur Prioritas)
BPI	Private Sector (PT Bhimasena Power Indonesia)
BR	Batang Regent
KSH	Head of Kandeman Sub-district (Camat Kandeman)
HUV	Head of Ujungnegoro Village
HPV	Head of Ponowareng Village
HKV	Head of Karanggeneng Village
BDPA	Batang Development Planning Agency (Badan Pembangunan, Penelitian dan Pengembangan Kabupaten Batang)
BDEA	Batang District Environment Agency (Dinas Lingkungan Hidup Kabupaten Batang)
BIISLA	Batang Investment, Integrated Service and Labour Force Agency (Dinas Penanaman Modal, Pelayanan Terpadu Satu Pintu dan Tenaga Kerja Kabupaten Batang)
BMFAA	Batang Marine, Fisheries and Animal Husbandry Agency (Dinas Kelautan, Perikanan dan Peternakan Kabupaten Batang)
BRFAA	Batang Revenue, Finance and Asset Management Agency (Badan Pengelolaan Keuangan, Pendapatan, dan Aset Daerah Kabupaten Batang)
BPSA	Batang Public Works and Spatial Planning Agency (Dinas Pekerjaan Umum dan Penataan Ruang Kabupaten Batang)

BITCSA	Batang Industry, Trade, Cooperatives and SMEs Agency (Dinas Perindustrian, Pendapatan, Koperasi dan UKM Kabupaten Batang)
UIQPS	Unit for Improving the Quality of Public Service (Unit Peningkatan Kualitas Pelayanan Publik/UPKP2 Kabupaten Batang)
UVS (1-3)	Ujungnegoro Village Society
KVS (1-3)	Karanggeneng Village Society
PVS (1-3)	Ponowareng Village Society
PJPK	Person in Charge of the Cooperation Project (Penanggung Jawab Proyek Kerjasama)
UNESCAP	The United Nations Economic and Social Commission for Asia and the Pacific
HNSI	Indonesian Fisherman Association (Himpunan Nelayan Seluruh Indonesia)
BI	Bank Indonesia (The Name of Indonesian Bank)
DFID	Department for International Development (UK)
DEFCV	Department of Environment and Forestry, Central Java Provincial Government

PREFACE

This section will provide a snapshot of my personal reasons for choosing this topic for my research.

As a person who has lived in the Batang Regency since I was born, I feel close to the CJPP project as one of the mega projects which has been developed in this small district, although this project was not established directly in my own sub-district and does not directly affect my family. I spent four and half years pursuing my bachelor's degree in Geophysics and Meteorology at Bogor Agricultural University, West Java. I struggled for two years in Jakarta and its satellite cities to be accepted in the LPDP Scholarship program from the MoF, before departing to New Zealand to pursue my Master's degree. Thus, time and activities outside Batang constrained my ability to learn more about the development in my city.

When I applied to get an LPDP scholarship, one premise I have made in my personal statement is that someday I will contribute to regional development, especially the development in my own regency, Batang. I have a long-term plan and dream of working in the local government in Indonesia, mainly to contribute to the Batang Regional Planning Agency or the regional planning agency. To be a part of local government, I need the knowledge about how this regency is planned, governed and lived in from various perspectives. In addition, I need to have a proper level of knowledge about regional planning. Hence, Regional Planning is a subject that has long interested me. I believe that the planning of a development shows a new hope and a new direction for where this society will go in the future, including in the CJPP development planning, that could potentially affect me, my family and my surroundings.

One day, a person from government bodies informally told me: "there is always the positive and negative side effects of development, wherever it is". This statement encouraged me to understand CJPP project holistically from the deeper and broader perspectives of those who are involved and affected by the CJPP project. As I have heard a lot of information from the media, whether the news is positive or negative, it leaves me with the curiosity to study for this project, considering that my Master's

background (Development Studies program) enables me to explore about this project through my Master's thesis. This thesis will be my small contribution as stated in my personal statement for the LPDP scholarship.

I never thought that PPP would be something that I could be passionate about, and not only allow me to decide “what is my research topic?” but even think “what topic interests me to spend the whole year study about it?”. Research on PPPs implemented in the CJPP project allowed me to meet a lot of people and to obtain information, documents and experiences which are helpful for my thesis, as well as build the network and get to know people who work for my regency and who live in other parts of Batang.

The reality on the ground level left a reflection for me regarding this research. I have advantages because I can speak the local languages that enable me to communicate with the local people. I am a young woman who is lucky to have a chance study abroad to pursue a Master's degree and spread positivity among my participants. However, I humbly said that before going to the field, I do not feel well-informed about the circumstances on the national and the ground level. This reality confirms the saying that “the more you study, the more you feel that you know nothing”.

Finally, before conducting this research, I perhaps understood some of the “black” and “white” about this project. However, this research has allowed me to see many of the “grey” areas of CJPP project, and its complexities.

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF RESEARCH

Public-Private Partnerships, or “PPPs” have been increasingly deployed in development. Scholars have defined PPPs as a tool of development (Akhmetshina & Mustafin, 2015), a new catalyst of economic growth (Shediac et al., 2008), the core of overseas aid (Brogaard & Petersen, 2018), and a partnership instrument for resolving the world’s problems (Kolk et al., 2008), particularly in addressing the challenge of sustainable development (Hamilton & Holcomb, 2013). Furthermore, when PPPs are developed throughout the world, the ability of the private sector to meet public needs is enhanced and the amount of investment is increased (Colverson & Perera, 2011).

Research and debates concerning PPPs have proliferated across theory and practice. A study by Mostepaniuk in 2016 examined how PPPs are historically grounded in many development theories, spanning Mercantilism, Classical Economic Theory, Neoclassical Economics, Liberalism, Keynesianism and Institutionalism. Several case studies showed that PPP evolves the way the global partnership shapes the framework of cooperation and project financing across countries and sectors.

Infrastructure is one of the crucial sectors under the PPP mechanism. A report from EY Global Government and Public Sector (2015) stated that the global “infrastructure gap” will reach around USD 40 - 50 trillion by 2030. Thus, it will be a huge challenge for countries who have underinvested in infrastructure. The report from EY Global government and Public Sector (2015) also underlined the crucial nature of infrastructure:

‘Wherever you go in the world, infrastructure is the bedrock of economic and social well-being. It supports the efficient transport of people and goods. It delivers essential utilities such as water, waste and power services. It provides accommodation for education, health and judicial functions..’ (EY’s Global Government & Public Sector, 2015, p.2).’

Electrical energy, mentioned in the EY's quote above as 'power services', is one of the essential needs of society as it becomes one of the most critical resources for various activities, both in the home and in industry. At the national and regional level, electricity plays a vital role since electrical energy consumption can also be an indicator of improving quality of society and economic growth. Electricity demand will increase as the population increases and technological development advances.

Indonesia is a country with a vast population. According to the World Population Review (2018), the current total population of Indonesia is more than 266 million, and 56,7% of them live on the island of Java. This number increases year by year. Indonesia's rising population, rising income per capita and structurally low electrification ratio should imply significant growth in electricity demand (PwC, 2017). The review from Regional Energy Outlook in 2005 stated that the production of electricity in Central Java Province is too low for its demand so that Central Java still imports electricity from other regions (Regional CAREPI Technical Team, 2005).

To accommodate the demand for electricity in Java, mainly Central Java, the Government of Indonesia has initiated a new mega power plant which is called Central Java Power Plant (CJPP) under a Public-Private Partnership (PPP) scheme. This power plant will be the first electrical energy provision project and service using the PPP mechanism. CJPP will be operated under a Build, Own, Operate, and Transfer (BOOT) structure of PPP and was awarded to a consortium of PT Adaro Energy, J-Power and Itochu groups in 2011. The construction of the power plant is ongoing and is expected to come into operation by 2020. This project is located in Central Java, particularly in Batang Regency, with a capacity of 2 x 1,000 MW and an estimated investment of USD 4.2 billion, according to ITOCHU report (2011).

While PPP can be applied in various types of agreements and studies, this research focuses on the critical issues and challenges in the PPP implementation in CJPP project. The research also examines how the dynamics of the CJPP project are embedded in several development theories and practices.

1.2 RESEARCH QUESTIONS, AIMS AND OBJECTIVES

This research is conducted to answer this principal research question:

“What are the key issues and challenges in implementing Public-Private Partnerships in the Central Java Power Plant Project, Indonesia?”

Specifically, this research aims to explore the critical issues and challenges in implementing the public-private partnership mechanism in Central Java Power Plant Project, Indonesia, before the Power Plant comes into operation in early 2020. This research is also aimed to understand the current PPP ecosystem in Indonesia and how the PPP mechanism is deployed at the national and local level, and to determine the positive input and lessons-learned of PPP mechanism in CJPP project.

The Public-Private Partnership project to be studied in this research will be narrowed to the critical issues regarding governance, environment and social issues in the CJPP in Indonesia. I choose these issues as I hypothesize that these would be the main three issues in implementing PPP in CJPP project. Hence, this study will focus on the following secondary research questions:

1. *Governance issues*: what are the governance issues of the PPP mechanism? How does the government maintain the institutional roles and responsibilities in this project?
2. *Environmental issues*: What are the environmental effects that have already occurred and will likely happen in the future?
3. *Social issues*: What are the impacts of the project on the society's livelihood? How are the society leaders' perspectives, roles and participation in resolving the social issues during the construction period of the CJPP project? How are the surrounding societies' perspectives regarding social issues, particularly towards changing livelihoods during the project construction?

1.3 SIGNIFICANCE AND RELEVANCE

The idea of this research comes from some considerations regarding the relevance or significance of this study. Two points of view will be explained: first, the view of the CJPP project's significance, and second, the potential significance of this study towards the relevant literature.

The CJPP was listed in MP3EI or the Masterplan for Acceleration and Expansion of Indonesia's Economic Development 2011 - 2015. Thus, this project had a significant impact on the regional and national level. Moreover, this project is the first project which uses the Public-Private Partnership Mechanism in the large-scale electrical energy provision in Indonesia, particularly for Java Island.

This study will also contribute to the academic literature in the field of development studies, particularly in the fields of regional development, project management and the development roles of government and private capital. The outcome of this study itself may help stakeholders to see a review of their project from the academic point of view.

1.4 THESIS STRUCTURE

This thesis is organized into ten chapters, including this introductory chapter as Chapter 1.

Chapters 2 and 3 of this research are the literature reviews. Chapter 2 focuses on PPP implementation worldwide, the mechanisms, categories, history, the differences between PPP and privatisation, and how the strategic issues of PPP have been managed. Meanwhile, Chapter 3 focuses on reviews in an Indonesian context – particularly how PPP was implemented locally in previous infrastructure projects. Preliminary studies of the CJPP project are also embedded in this chapter.

Chapter 4 breaks down the methodologies used in this research, such as the research questions, conceptual framework, methodologies for data collection and analysis, sampling methods, and ethical consideration as well as reflexivity and positionality.

Chapter 5 discusses the research findings of the recent PPP ecosystem in Indonesia by reflecting the case of CJPP project. This chapter is a synthesis of interviews, literature and document reviews. As I argued that before discussing the issues in each sector, it is necessary to acknowledge the progress and the positive sides of PPP implementation in this project.

Chapter 6 discusses the strategic issues related to governance, including the stakeholder interests, power relations, top-down approaches, and the dynamics of regulation both in the national and local level. This chapter also provides the broader context of discussion by analyzing the complexity and flexibility point of view regarding PPP implementation in the CJPP project, reflecting the interviewees' perspectives and combined with the literature.

Chapter 7 examines environmental issues within two scales, including the local scale (towards the ESIA/AMDAL implementation) and national scale (regarding coal stocks and energy demand).

Chapter 8 examines social issues surrounding the CJPP project location. First, the chapter focuses on perspectives and attitudes of different social groups towards the project. This discussion provides the foundations for analysing the social structure and sentiments, the issues of employment opportunities and migration in the regency and also provides the wider context about the dimension of the social impact of the CJPP and the five capitals of sustainable livelihood.

Chapter 9 summarizes the research findings and reflections based on the findings, provides the recommendation for PPP mechanism based on the CJPP case study and recommendation for the future research. This chapter also shows that PPP implementation is an intriguing subject with strong implications for the future of millions, especially in the case of CJPP project that affects people in Java and Bali.

CHAPTER 2

LITERATURE REVIEW

As described in the introductory chapter, I have chosen Public-Private Partnerships (PPPs) as the main focus of this study. Hence, this chapter begins by defining PPP and introducing basic PPP concepts. It then examines how PPPs have been deployed in various types and models, and analyses ongoing debates about the value of PPPs. The chapter will then discuss the potential issues and challenges surrounding PPP implementation worldwide, particularly for issues regarding governance, environment, and social issues.

2.1 PUBLIC-PRIVATE PARTNERSHIP: AN INTRODUCTION

Over the last two decades, PPPs have been widely used as an instrument to run major public infrastructure projects worldwide. Due to population increases, urbanisation, and other developmental trends, the ability of the public sector to cover all of society's needs are increasingly limited. A suggested ideal solution to the public sector's shortcomings is the inclusion of the private sector through investment and PPP-based service provision to enhance the quality and quantity of public services. Having the government and private sector as the key stakeholders, the dynamics within a PPP project is influenced by various goals and interests to achieve better Value for Money (VfM) and create an equilibrium between profitability and sustainable public services.

2.1.1 Public-Private Partnerships: Determination and Fundamental Matters

To get a better understanding of how PPPs have been implemented internationally, it is essential to understand how PPPs are determined. Generally, the way PPPs are defined is based on how the institutions or actors involved see the function of PPP. The European Commission (2004, p.1) – add bibliography highlights the function of PPP as an 'instrument' to cover various projects in public service, in line with Yescombe's (2011, p.3) point of view that PPP in the recent development is more like a 'project-based partnership'. Linder (1999) as cited in Bult-Spiering and Dewulf (2008, p.16) defined PPP as a 'power sharing tool', where state-market relations are altered through

cooperation, trust, responsibility and risk sharing, and negotiation. Friedman (2016, p.5) argued that PPPs are forms of ‘creative alliances’ between the public and private sectors to work towards common goals. In general, PPPs are the ‘contractual agreement’ which combines the best value for money and public services for both public entity and project company (Kirkemann and Appelquist, 2008, p.2; Sharma and Bindal, 2014, p.1272; Roman, 2015, p.ii).

The purposes, general elements, and characteristics of PPPs need to be understood before in-depth analysis of PPP implementation. PPP projects around the world aim to reduce poverty by promoting economic growth and social development (Kirkemann and Appelquist, 2008). In particular, the PPP model has four essential elements to be considered: Actors or parties; networks; projects; and relationships (Bult-Spiering and Dewurf, 2008). The ‘project’ acts as a tool to activate the public and private network, while a ‘relationship’ will be developed through the formation and operation phases. Discussing the characteristics of a PPP project, this type of cooperation happens typically at all stages of the project, from the initial feasibility phases, through the procurement phases and construction period, until the operation phase (Yescombe, 2011). This cooperation involves all project risks under contractual arrangements, with contributions from all parties, added values, and opportunities for generating cash flow (Bult-Spiering and Dewurf, 2008). Hence, PPPs clearly differ from privatisation, as summarized in Table 2.1. As a project-based partnership, several structural aspects underlie PPP, as Bult-Spiering and Dewurf (2008) summarized the institutional factors of PPP through table 2.2.

Table 2.1 The differences between PPP and privatisation (adopted from Yescombe, 2011, p.16)

Aspect	PPP	Privatization
Public Authority	Politically accountable	Privatised service
Ownership of physical assets	Public sector	Private sector
Means of system	Provision of monopoly services	Competition in service provision
Fixation of the scope and cost of service	By a contract between the public and private sector	The forces of market competition

Table 2.2 Institutional aspects of PPP (Bult-Spiering and Dewurf, 2008, p.19)

Financial Aspects	<ul style="list-style-type: none"> - Project finance - Risk Division - Revenue sharing
Legal Aspects	<ul style="list-style-type: none"> - Contracts - Legal entity - Law and regulations
Administrative and Organizational Aspects	<ul style="list-style-type: none"> - Tasks and responsibilities - Project organization - Formal decision-making requirements

Several considerations emerge before using PPP mechanism in developing an infrastructure project, including the dimension of the partnership itself as well as the benefits and limitations of PPP. Before taking a decision to use PPP mechanism, several partnership dimensions need to be considered, such as the purposes and strategic programs (“what”); the key actors and the structure of partnership (“who”); time or the period of partnership (“when”); scales of geographical area (“where”); and the mechanism for implementing PPP (“how”) (Osborne, 2002, p.13). Preliminary study discussed the potential advantages and risks of PPP as shown in Table 2.3.

Table 2.3 The advantages and risks of PPP projects (Pârvu and Voicu-Olteanu, 2009, p.192).

Advantages	Risks
Possibility for smaller investments	Limited influence of the public authority over the investment
Possibility for conducting other public-investments	Increase of the prices charged to the users of the infrastructure
Savings to the budget	Reduction the bargaining position of public authorities
Transfer of new technologies	High transaction costs
Sharing the risk	Poorer quality of the services
More competition on market	Limited accessibility to services
More competition on market	Decrease of employment in the public sector
Guarantee of the services for a longer term	Financial risks for public partner
Decrease of the political influence in economy	Opportunity risk for public partner
More transparency in the economy	Political risk for private partner

2.1.2 The Context of Development Theories

Theories underlying PPPs have been studied by many scholars and continue to be constructed. A study from Mostepaniuk (2016) reviewed the comprehensive

theoretical development of PPPs from the 16th century till the beginning of the 21st century to understand the key purposes, mechanisms and risks distribution of PPPs.

Mostepaniuk (2016) explained the core of PPPs in each economic development paradigms such as Mercantilism, Classical Economic, Neoclassical Economic, Keynesianism, and Neoliberalism, with each case study in a certain period of time.

This research will emphasise a Neostructuralist framework to see deeper PPP practice in a specific context. To determine the neostructuralist theory, Murray and Overton (2011) highlight Neostructuralism as a 'third way'. This means that the mixed or market-state approach supports economic growth and development. Leiva (2008) emphasised neostructuralist theory that highlights the relationship of economic development to create the equilibrium of democratic governance and social inclusiveness. Neostructuralism emphasises the function of PPPs to combine market competitiveness and government authority. Neostructuralism approach attempts to address social goals, such as poverty alleviation and lessening inequality. Moreover, Neostructuralism approach concerned with promoting market mechanisms and the promotion of economic growth.

2.1.3 Types and Models of PPP

Breaking down the theory into the strategy, scholars have defined types and models of PPP implementation. Turina and Car-Pušić (2006), in their study, developed PPP models based on various degrees of private sector role in the PPP project and duration, as depicted in Figure 2.1. However, this model seems too simplistic because many scholars argue that every PPP project is unique. Turina and Car-Pušić (2006) categorised five types of PPP as follows:

1. *service contract*: a legally binding arrangements between the public entity and a project company to perform the non-primary task for infrastructure project of up to two years duration;
2. *operation and management (O&M) contract*: the private sector hold the operation and management of the project within three to five years;
3. *lease*: project company lease some assets to government authority and maintains the operation task for 10 – 15 years;

4. *concessions*: the project company handles most of the responsibility of the service, such as operation, maintenance, management, and expansion, for 20 – 30 years of partnership;
5. *BOT (Build, Operate, Transfer) and variants*: normally used for megaprojects or large-scale infrastructure to get private sector involvement into the process of designing and building for 15 – 30 years of partnership. The variants including DBOT, PFI, BOO, BT, and other variants.

Figure 2.1 PPP models (Turina and Car-Pušić, 2006, p.3)

2.1.4 The History of PPP Implementation Worldwide

The history of PPP helps to get an in-depth view of how PPPs had been shaped in both theories and practices, also how it have evolved across time. The reviews below determine how PPPs have been seen and applied in several countries.

A study by Moore (2011) explained the history of the PPPs' roles for the United States government and financiers in the development of the USA between 1898 and 1916, where PPPs were formulated as an alternative means of development. PPPs were essential to regenerate urban communities and deal with the crisis of government in the US (Podziba, 1998). In general, PPP practices in the US had evolved to embrace policy-level and project-level partnerships (Grimsey and Lewis, 2005).

In the 1990s, PPP had broadly established as an essential tool for public policy worldwide. Osborne (2002) reviewed PPP implementation in several countries. In the UK, for example, a study by Falconer and Ross (1998 as cited in Osborne 2002) indicates PPP as a foundation for developing 'stakeholder society' in the New Labour government. Grimsey and Lewis (2005) reviewed PPPs as a different method for the private sector to deliver public services (through privatisation) in the UK and France. In Hungary, PPPs have been used to restructure the provision of public services (Osborne and Kaposvari, 1997, as cited in Osborne, 2002). The European Union has determined that PPPs are a mechanism for community development and a tool to combat social exclusion by involving local government and local communities (Osborne, 2002). A study by Ross (2004) in Australia highlights the benefit of cost saving by using PPP schemes for public school projects. In New Zealand, PPP schemes have been acknowledged for delivering high-quality infrastructure and services to the public (Rusmani, 2010).

Widespread PPP implementation has also been undertaken in Asia with various degrees of success. In Asia, according to Cheng et al. (2016), PPPs were introduced to China in the 1980s, then in the mid-1990s, developed to a broader scale. A study conducted by Bray and Sayeg (2013) reviewed the lessons learned from PPP implementation in an urban railway project in several cities in South East Asia, including Bangkok, Manila, Kuala Lumpur and Singapore. Bray and Sayeg (2013) conclude that PPPs have been used in those cities in terms of financing, procuring and operating the urban railway system. However, Bray and Sayeg (2013) in their study found a lack of effective government leadership and sound institutional arrangements in PPP implementation in these countries that need to be improved.

2.1.5 Growing Interests VS Criticism: Are PPPs successful?

The growing interest of PPP usage around the world has led to various critiques and debates. These debates emerged in response to how PPPs had been operated in the past and how they will be used in the future. A study by Boardman et al. (2015) highlighted controversial issues within PPP. There is continuing debate about basic matters, such as how PPP is defined; the legitimacy of PPPs and the lessons learned;

the specific project, infrastructure delivery, policy preference and governance (Boardman et al, 2015). A study by Hodge in 2008 stressed the question of regulation of PPP infrastructure, mainly about who makes the decision in the public sector, followed by a recent article by Hodge et al. (2018) that pressed about does PPP work and the lessons learned around PPP from a historical perspective.

The nature of PPPs which include government entities spill over to political debate. Yescombe (2011) discussed the key points that may arise, such as: a.) Complications in the relationship between “the business profit and the public expense” in terms of the marginal profit from the PPP project investment, b.) a “Poor operating standard” that may arise due to sacrificing general safety standards to increase the profit, c.) “erosion of working conditions” such as cutting workload due to the efficiency, and d.) adding “extra-layers” for administrative works such as proposals and negotiation (Yescombe, 2011, p.27-28). The debates may arise due to the paradox of PPPs, which are expected to increase efficiency but may add to the complexity of the project.

Several indicators have been highlighted to see whether the implementation of PPPs across the world are successful. Corrigan (2005) marks ten points to determine the success of PPP in his book *“Ten Principles for Successful Public-Private Partnership”* as follows:

1. Prepare properly for PPPs
2. Create a shared vision
3. Understand the partners and key players
4. Be clear on the risks and rewards for all parties
5. Establish a clear and rational decision-making process
6. Make sure all parties do their homework
7. Secure consistent and coordinated leadership
8. Communicate early and often
9. Negotiate a fair deal structure
10. Build trust as a core value

Most of the literature covers the lessons learned and potential improvement from the PPP practice in developing countries (Yong, 2010; Bray and Sayeg, 2013; Melville 2017) rather than the practice in the developed countries. Yong (2010) indicated several constraints in the PPP implementation in the Least Developed Countries (LDC), such as lack of political acceptability, clear policy statement and private sector players, as well as long-term debt and low capability of the public entities.

2.2 MANAGING STRATEGIC ISSUES IN PUBLIC PRIVATE PARTNERSHIPS (PPPs)

2.2.1 Defining Issues and Challenges in the Development Project

Issues and challenges may arise in managing megaprojects. Each megaproject is likely to be built with complexities throughout its development and construction period. To break down what are the issues and challenges specifically for PPP implementation, it seems worthy to begin by describing the general context of PPPs: the issues, the challenges, and how former project issues had been handled by certain institutional framework.

Unfortunately, the academic literature in defining the issues and challenges in development projects is limited. The Mosaic Project Australia, a company which specialises in project management training, gives the definition of project issue as well as its scope and category. They argued that “An issue is a current problem that was previously a risk to a project, whether identified or not, that will negatively impact the successful delivery of the project” (The Mosaic Project Australia, n.d, p.1). Carleton University in Canada provides a similar understanding; “Issues cover any event that has happened, was not planned, and requires management attention. It may be raised at any time during the duration of the project by any stakeholder” (Carleton University, n.d., p.1). However, the term ‘was not planned’ contrasts with ‘whether identified or not (planned)’ in the previous definition by The Mosaic Project. To conclude, particularly for this research, I assume that an issue is a triggered risk, whether identified or not, which may appear during the duration of a project and requires management attention, decisions, and appropriate action. By agreeing that issues are

the realised or triggered risk, it should not be confused with the potential risks or 'challenges' which may occur in the future of development project.

What matters when exploring the issues and challenges in the development project? Considine and Giguère (2008) provide a fundamental idea of the importance of managing issues through this statement:

'The more immediate success of partnership depends on their capacity to provide case-by-case solutions to the barriers faced at the local level (Considine and Giguère, 2008, p.7).'

From the importance of exploring the key issues of project development above, it can be seen that studying issues and challenges will be useful to provide a project's track record and recommendations towards similar project management in the future. Issues, or 'the barriers', need to be identified in order to know what categories or types and how it can be resolved. Several types of issues around development projects are: i.) resources (materials availability and skill levels), ii.) technology, iii.) stakeholders (internal or external – such as suppliers, vendors, and contractors), iv.) project management (communication, estimation, and plans), v.) other issues (policy, security, and regulation). Issue analysis comes after the problem identification process and enables a better understanding of who can manage various issues based on capacity and authority.

Much literature has been grounded towards the concepts of Strategic Issue Management (SIM) to reveal how can issues be managed after analysis. Dutton and Ottensmeyer (1987) conceptualized SIM as "one set of organizational procedures, routines, personnel, and processes devoted to perceiving, analyzing and responding to strategic issues". This fundamental concept can be applied in any type of development project. Health (2018) extended the scope by this definition:

'SIM is the co-management of organizational and community resources (material and symbolic) through the marketplace and public policy to create and enact plans that advance organizational interests and rights by striking a cooperative balance with those of stakeholders. SIM is a comprehensive perspective on how organizations are shaped by society as they seek to justify their strategic missions and goals (Health, 2018, p.1).'

My concern from Health's concepts of SIM is the way he provides a SIM tool through 'marketplace and public policy'. As marketplace is identical with the existence of the market – later could be extended, more or less, as a role of the private sector; while public policy is generated by the government. Health's (2018) concepts of SIM could be the core concept in managing strategic issues regarding PPP implementation. The term 'organizational and community resources' may also depict the nature of PPP projects; a reciprocal relation of who creates impact (organizational – public and private sector) and who have been impacted (the community). The relation of an organisation or agency and the community creates the dynamics of a project environment – these dynamics are the cause of many potential issues. Carleton University provides a table on who is responsible for managing project issues as shown in table 2.4.

Table 2.4. Issue Responsibility Matrix (Carleton University, n.d, p.2)

Severity	Impacts			
	Severe	Major	Moderate	Minor
Extremely high	To be managed by senior management with a detailed plan	To be managed by senior management with a detailed plan	Detailed management planning and attention is required	Needs senior management attention
High	Detailed management planning and attention is required	To be managed by senior management with a detailed plan	Detailed management planning and attention is required	Needs senior management attention
Moderate	Detailed management planning and attention is required	Detailed management planning and attention is required	Needs senior management attention	Managed by routine procedures
Low	Needs senior management attention	Needs senior management attention	Needs senior management attention	Managed by routine procedures

Table 2.4 shows the ideal framework for managing the issues. However, the reality on the ground is likely more dynamic. There are misplaced roles and responsibilities, potential issues which are not covered in the project framework of risk management, and other problem which left unsolved. Several fields of literature studied the chaos in the SIM implementation (Othman et al., 2010; De Meyer et al., 2002), and Atkinson (1999). However, I exclude the study of chaos in this research.

Instead, I focus my study on the issues and challenges in PPP implementation. I hypothesise the three key issues which may arise from PPP project implementation, such as governance, environment, and social issues. The final section on this chapter will address these key issues based on previous literature as the grounded theory, preliminary consideration and evidence on the practice level, which can strengthen my hypothesis of the cruciality of the mentioned key issues. In the end, based on the case study approach, I will explore these three key issues only in the energy sector project, particularly in CJPP as a single case study.

2.2.2 Governance Issues

As PPPs involves the combination of effort from two key actors (the public entity and the project company), the boundaries between these two actors are blurred. Hence, understanding PPPs requires deep analysis of governance. The focus of governance here means the focus on process rather than on institution. Stokes (1997 as cited in Bult-Spiering and Dewurf, 2008, p.1) defines the term 'governance' as "the interdependence of organization and tries to meet the requirement of this world" – that is, studying the organisation and the public entity as a whole, including the relation between all players in the public domain. Thus, good governance will involve all players to meet their shared goals.

Several issues may arise regarding governance of PPP project, most of them due to the multilevel governance and globalization (Pierre and Peters 2000 as cited in Bult-Spiering and Dewurf, 2008, p.1). Structural governance matters, for example, a country with the greater decentralization may add an extra layer of complexity within the PPP life cycle.

According to Declercq (1999), the difference between conventional co-operation and PPPs can be sought in the role and contribution of each partner. Most studies do not define and qualify the commitment of both partners in the risk allocation. The clear distribution of risks and benefits between the public and private partners is the key element for a successful PPPs. The level of participation of the stakeholders is the crucial factor. The risks for each partner vary according to the structure of the PPP (Declercq, 1999).

A study from Abednego and Ogunlana (2006) argued that the PPP project might challenge both project management and partnership due to monitoring, supervision and strategic decision-making over all parties. Abednego and Ogunlana (2006) develop an issue of the perception of what good governance means for each party. Every stakeholder's performance matters to attain the expected goals (Hashim et al., 2017).

2.2.3 Social Issues

Globalisation has brought growing pressure on social structures and circumstances that may affect the way a PPP project is shaped. Issues underlying social spheres such as livelihoods, the ageing population, migration, level of education and health care are potential drivers of PPP projects.

Former studies had been conducted to examine PPP practice and issues regarding the social sphere. Some studies categorise PPP projects as 'social infrastructure', rather than developing 'economic infrastructure' (Oktavianus and Mahani, 2018; Wang, 2000; Matraeva et al., 2016). A study by Rashid (2010) in Bangladesh commented on the social-related premises as follows:

‘The “public good” character of health and education and the scale of effort required to meet society's needs in these two areas call for close cooperation of all stakeholders in both public and private sectors; The current status and future prospects of public-private partnership are contingent upon country-specific circumstances (Rashid, 2010, p.1).’

PPPs have often been used as a tool to promote sustainable livelihoods for society and fulfilling basic needs based on the cooperation and inclusiveness of several parties. Greater concern about social wellbeing allows countries in the world to contribute toward the better future of the Sustainable Development Goals (SDGs). However, livelihoods may also add to the complexity of the PPP project itself, particularly regarding the changing livelihood of pre-construction phases. Conflicts such as resettlement and protests may trigger other social issues such as human rights

violations within PPP practice (Safitri, 2015). Thus, a review of social issues and considerations about the coping strategy of potential social conflict seems necessary to smooth PPP projects.

2.2.4 Environmental Issues

Working on infrastructure projects requires close attention to environmental conditions. The changing circumstances of pre-construction and post-construction phases as well as in the operation phases for some reasons shape the trajectory of a PPP life cycle and influence the way a PPP project will be seen in long term.

PPP project practitioners may also see the importance of the environment sphere (Faith-ell and Arts, 2009). They may use the issue of the environment to promote the added value that they may offer to attract partnership, such as labelling the procedure as a “green procurement”, “green construction”, “environmentally friendly”, and other “green” labels to show the environmental concern within the practice (Arts and Faith-Ell, 2010; Noteboom, 2000).

Countries with greater concern about the environment generally add the procedure of environmental impact assessment to agree upon the proposed project, evaluate the ongoing phases of the project and monitor the operational phases. Thus, engaging with environmental issues becomes an integral part of the PPP project.

2.3 PPPs IN THE ENERGY SECTOR

As a part of basic societal needs, electrical energy becomes a concern regarding the support of economic and social development for a country. Rather than being monopolized by the public authority, there is a growing interest in using PPP schemes to fulfil energy demands worldwide. The potential reason behind this is the lower level of government funding to make massive electrical energy provisions due to the chance of getting private investment and increasing the capability and expertise of human resource within the service.

Preliminary studies were conducted to examine the performance of PPP mechanism in several countries such as Portugal (Martins et al., 2011), Spain (Dinica, 2008), Thailand (Pongsiri, 2003), India (Ullah, 2015), and Indonesia (Safitri, 2015). Of the reviewed literature, there is a switching of PPP projects towards renewable energy sources, such as wind power and hydropower. While the developed countries are working towards the sustainable energy resource such as wind power, hydropower, solar, and other renewable energy sources, developing countries are still depending on the non-renewable resources such as coal-powered power plant.

2.4 SUMMARY

Public-Private Partnerships have become a popular way of building and delivering public services. Several definitions lead to a common definition of PPPs as the contractual arrangement between the public entity and the project company to work on specific tasks with the shared risks and responsibilities in a certain period. Neostructuralism underlies PPP as a theoretical framework as it argues that the combination of the state-market approach to create equilibrium and support economic development. Consideration upon the PPP usage might be based on the dimensions of PPP as a whole and the opportunity cost between the benefits and limitation of PPP mechanism.

Issues and challenges regarding governance, social and environmental issues need to be considered as a part of PPP life phases and in managing the potential risks. Of all reviewed authors, many focus on dissecting single issues to get a profound understanding of PPP. Only a few of them study the comprehensive issues and challenges within a specific project to see the whole body of PPPs in certain case. Many also argued that the dynamics of PPP might differ and are unique for every case. It is essential to have a comprehensive study towards the certain project stages and covers the key issues and challenge to get better lesson-learned for the future PPP project.

CHAPTER 3

PUBLIC-PRIVATE PARTNERSHIP: THE INDONESIAN CONTEXT

After the general and worldwide context of PPPs have been described in the previous chapter, this chapter will focus on outlining PPP implementation in the Indonesian context and the CJPP. The discussion will begin by explaining the history of PPP implementation in Indonesia, then follow by discussing PPP implementation in the provision of public infrastructure. As this study takes CJPP as the main focus, this chapter will also discuss the electrical energy provision system in Indonesia and why PPPs has been chosen to be the mechanism used in this project. This chapter will also provide an insight about development in the Batang Regency, a place where the project is located. The final section of this chapter will outline the project details and preliminary research towards the CJPP which has been grounded in the literature.

3.1 THE HISTORY OF PUBLIC-PRIVATE PARTNERSHIPS IN INDONESIA

The concept of Public-Private Partnership is not a new concept, yet it had been implemented in several countries for many projects as introduced in the previous chapter. In Indonesia, modes of PPP implementation have fluctuated from the 1990s to the present.

3.1.1 PPPs in Indonesia: Determination, Purposes, and Principles

The term used for representing Public-Private Partnership (PPP) in Indonesia is “*Kerjasama Pemerintah dan Badan Usaha (KPBU)*”, or cooperation between government and business entities. An alternative term is “*Kerjasama Pemerintah – Swasta (KPS)*”. According to MNDP/BAPPENAS (2013), PPPs or KPBU can be defined as:

‘Cooperation between government and private entities in the provision of infrastructure for the public interest which referred to the specifications that have been pre-determined by the Minister, Head of Institution , Head of Region, National State-Owned Enterprises Agency (BUMN), or Regional Owned Enterprises Agency (BUMD); which is partially or entirely using the

source power of business entity by paying attention to the risk sharing between the party.'

MNDP lists five main purposes of the PPP scheme, as follows (Directorate of PPPs, 2017, p.vi):

1. Meet the need for sustainable funding for infrastructure provision through the use of private funds.
2. Provision of the qualified, effective, efficient, targeted, and timely manner infrastructure.
3. Create an investment climate that encourages the participation of business entities in the provision of infrastructure.
4. Encourage the user's prepayment principle, or in some cases consider users ability to pay.
5. Provide certainty of a return on investment for a business entity through periodical payment by the government to a business entity.

The Government of Indonesia (GoI) holds six principles to implement PPP schemes, including partnership, benefit, competitive, effective, efficient, and control and risk management (Directorate of PPPs, 2017). To avoid misunderstanding of PPP schemes, Directorate of PPPs (2017) describes the concept of PPP and privatization in the perspective of the Government of Indonesia as follows:

1. PPP is not a transfer of government obligations in the provision of services to the community. Rather, it is the financing for the design, building, and operation of project infrastructure by the private sector;
2. Private investment is not a 'free donation' to the government in the provision of public service;
3. PPP is not a privatisation of public goods;
4. PPP is not a source government revenue that will burden the community in public service delivery;
5. PPP is not a government debt to the private sector.

3.1.2 Two Decades of PPPs in Indonesia

Indonesia began implementing PPPs in the period of Suharto's New Order Regime (1966 – 1988). During this era, Indonesia underwent rapid economic growth of up to 6-7% per year (Wibowo and Alfen, 2014). Due to the lack of government funding capacity as well as the purposes to attract investment and accelerate economic growth, the Government of Indonesia opened up a pathway for private sector involvement in several mega projects.

The 1990s marked a significant fluctuation in the Indonesian economic growth due to the era of Reformation (the fall of Soeharto's regime) and the Asian crisis affected the country in 1998. Prior to this year, in 1997, the Indonesian Rupiah (IDR) had undergone rapid falls in value from IDR 2700 to IDR 17000 for USD1, followed by the sharp rise in interest rates (60% per annum) and record inflation rates up to 77% (Wibowo and Alfen, 2014). These worsening conditions led to high uncertainty for the future of the ongoing PPP projects. In response to this situation, President Soeharto released three regulations: a.) The Presidential Decree No.39/1997 to review several infrastructure projects by the Government of Indonesia (GoI) or State-owned Enterprises (SoE). b.) The Presidential Decree No 47/1997 as a revision to the former Presidential Decree No. 39/1997, and c.) Presidential Decree No. 5/1998 to cancel several PPP projects (PPIAF, 2009).

Reformation period turned into the era of President Habibie (1998-1999), Abdurrahman Wahid (1999-2001) and Megawati Soekarno Putri (2001-2004). In the Habibie Era, an investigation into PPPs was held and caused some concessions and renegotiation. During Abdurrahman Wahid's Era, the State-Owned Enterprise for Electrical Energy (PT Perusahaan Listrik Negara/PLN) was restructured and several Power Purchase Agreements (PPA) was renegotiated (Wibowo and Alfen, 2014).

In the era of 2000s, Indonesia began economic resurrection by adopting the international guidelines of PPPs and created the new standard of PPP framework by releasing the Presidential Regulation No.67/2005 regarding Public-Private Partnership in Infrastructure Development. Prior to this year, in 2002, President

Megawati released the Presidential Decree No. 15/2002 to reactivate the postponed PPP projects in Soeharto's era (ERIA, 2015).

From the period of 2000 to 2014, Indonesia underwent rapid annual GDP growth at a rate of 5 – 6.5% under President Susilo Bambang Yudhoyono (ERIA, 2015). The legal aspect had been set under the Presidential Regulation 67/2005, which was amended with Presidential Regulations 13/2010, 56/2011 and 66/2012. All of these regulations concerned private sector involvement in Indonesian infrastructure development. It specifically regulated the types of project, contracting agencies, and the role of participants (Mardiana, 2015). Yudhoyono's era launched 88 PPP projects in 2009 and reached 100 PPP projects in 2010 (BAPPENAS, 2010). In 2009, the Ministry of Public Works also reported an increase in private sector interest on toll road development project after the release of Law No. 13/1987 and Presidential Regulation No.25/1987 (Ministry of Public Works, 2009; Pradono et al., 2012). However, due to some changes in the amount of investment, the updated data in 2013 only listed 27 PPP projects (BAPPENAS, 2013).

The recent economic development era (2014 – 2018) in Indonesia reflected government concern about future growth sustainability. President Joko Widodo has taken the initiative in reducing fuel subsidies to help government spending for infrastructure (ERIA, 2015). Starting in 2011, the Government of Indonesia created the Masterplan for Acceleration and Expansion of Indonesia Economic Development 2011 – 2025 (MP3EI) through several mega projects and programs, including the Central Java Power Plant Project (CJPP). The MP3EI consists of the National Medium-Term Development Plan (RPJMN 2015 – 2019) and the National Long-Term Development Plan (RPJPN 2005 – 2025). Overall, the MP3EI aims to achieve the country's economic growth towards GDP per capita of USD\$15000 by 2025. For executing the RPJMN 2015 – 2019, the government financing capability can only fulfil around 41.3%, while the rest are expected to be fulfilled by the private sector (36.5%) and state-owned enterprises (22.2%) (ERIA, 2015).

At present, there are three main PPP-related laws, such as Law 23/2004 about Regional Development; Government Regulation 27/2014 about Government Asset Management; and Presidential Regulation 38/2015 about PPP for Infrastructure Provision (Siagian et al., 2017). The Government Procurement Policy Institute (*Lembaga Kebijakan Pengadaan Barang dan Jasa Pemerintah/LKPP*) also released the Law 19/2015 about The Procurement Procedures of PPP Parties in the Provision of Infrastructure (LKPP, 2015). How the PPP-related laws evolve in Indonesia after more than two decades of implementation is summarized in Table 3.1.

Table 3.1 Indonesia's PPP evolution (BAPPENAS (2010) as cited in Pradono, 2012, p.56.)

Up to 1990	1990 – 1997	1998 – 2004	2005 – 2009	2009 – 2017
<p>PPP legislation:</p> <ul style="list-style-type: none"> • Law 15/1985 on electricity • Law 13/1987 on roads • Presidential Regulation 8/1990 on toll-roads • Presidential Regulation 10/1989 on electricity <p>Sectors:</p> <ul style="list-style-type: none"> • Toll roads • IPP (proposal) 	<p>PPP regulations:</p> <ul style="list-style-type: none"> • Presidential Decree 37/1992 on private electricity • Presidential Decree 55/1993 on land acquisition <p>Sectors:</p> <ul style="list-style-type: none"> • Toll roads • Water • Electricity • Ports 	<p>Presidential Decree (Keppres 7/1998):</p> <p>Cross-sector application</p> <p>Asian Financial Crisis</p> <p>Major changes:</p> <ul style="list-style-type: none"> • Global economy • Political system • Decentralization • Government institutions • Several new laws on infrastructure passed • Renegotiation on IPPs • KPPPI formed 	<p>Infrastructure Summit 2005:</p> <ul style="list-style-type: none"> • Infrastructure Summit 2005 • Presidential Regulation 36/2005 on land acquisition • Presidential Regulation 42/2005 on KPPPI • Presidential Regulation 67/2005 • PMK 38/2006 • Reform on sector laws • Establishment of RMU and Guarantee Fund • Land Revolving Fund • PT. SMI, IIFF • PDF 	<p>PPP legislation:</p> <ul style="list-style-type: none"> • Law 23/2014 on Regional Government • Law 27/2012 on Government Asset Management • Law 38/2015 on PPP for Infrastructure • Presidential Regulation 13/2010 • Presidential Regulation 56/2011 • Presidential Regulation 66/2012
Introduction for infrastructure		1998-2004: consolidation period following the Asian Financial Crisis and changes in the Indonesian political system	2005 – 2009: Laying the foundation for PPP project implementation through policy and regulatory reform to adopt international best practices	Masterplan for the Acceleration and Expansion of Indonesia (MP3EI) Economic Development 2011 – 2025

3.1.3 PPPs in Indonesia: Recent Status and Debates

The current situation of PPPs in Indonesia has led to a growing debate about this mechanism. The Economic Intelligence Unit (The Economist) commissioned by ADB (2015, p.6) reported that Indonesia was categorised as an 'emerging' nation for implementing PPPs, despite implementing PPPs for almost two decades. By contrast, other countries such as Korea, Japan, India and the Philippines were considered 'developed', and Australia was stated to have the 'mature' PPP environment (Economic Intelligence Unit & Asian Development Bank, 2015, p.6).

In 2014, a report by Lin (2014) through the McKinsey Company focused on the Indonesian PPP environment. She argued that Indonesia still has gridlocks in implementing PPP and raised an important question concerning PPP implementation in Indonesia: "Can public-private partnerships solve Indonesia's infrastructure needs?". She justified five major constraints in Indonesia as follows:

1. Lack of transparency regarding prioritising and selecting projects;
2. Complex hierarchy due to the involvement of multiple stakeholders. Thus, the government only considers PPPs as a last resort;
3. Lack of skills (financial analysis, legal expertise, modelling and structuring transaction) within the government contracting agencies;
4. Many overlapping laws over different involved agencies and multilevel government;
5. Land Acquisition is still being a primary problem.

While Lin (2014) questioned the environment of PPP in Indonesia, Wibisono et al. (2011) had already offered advice and input from the Indonesian experts and PPP practitioners. Wibisono et al. (2011, p.iii) highlight two primary solutions to unlock the PPP deadlock in Indonesia as follows:

1. To select a good project for PPP and have a consistent list of PPP projects, rather than changing the lists and postpone a certain stage of the project;
2. To make a proper preparation: having a team of experts, concrete project funding and viability gap funding.

The issues highlighted above show that it is still hard for the Government of Indonesia to implement PPPs. Lin (2005) also argued that not many PPP projects in Indonesia reached financial closure. However, Indonesia is still working on managing the PPP environment, marked by the initiation of the PPP Indonesia Company in 2004 to fulfil the needs of PPP experts training. MNDP/BAPPENAS (2018) also published a guideline and standard for selecting PPP projects, including the standards for under preparation project, ready-to-offer project, eligibility criteria for unsolicited proposals and concern of viability gap fund and government guarantee. Moreover, 114 PPP projects which have been run since the 1990s reached financial closure (World Bank, 2018), with total investment around USD \$54630 billion. Currently, there are 97 active PPP projects which are under construction or operation phase with total investment around USD \$48110 billion (World Bank, 2018).

3.2 PUBLIC-PRIVATE PARTNERSHIPS IN PUBLIC INFRASTRUCTURE IN INDONESIA

3.2.1 Defining and Scoping Public Infrastructure

It is necessary here to define public infrastructure before situating it in the local or specific context, as infrastructure plays an integral part in the development of a country.

Previous studies have defined public infrastructure in several categories. Yescombe (2011) stated that there are two categories of public infrastructure. First is 'economic infrastructure' which is used for daily activities such as transportation, water, electricity and sewage. Second, is the 'social infrastructure' which is vital for the structure of society such as schools, libraries, and hospitals. Buhr (2003) categorised infrastructure into three parts: institutional infrastructure (rules, facilities, and procedures which is implemented by government towards the society), personal infrastructure (the number of the working population or human capital), and material infrastructure (public facilities or capital goods such as water, transportation, schools, electricity and other social amenities).

Meanwhile, in Indonesia, the government divided public infrastructure into several categories as stated in the Presidential Regulation 38/2015 on PPPs (Directorate of PPPs, 2017). This classification system parallels Yescombe's system that divides public infrastructure into economic infrastructure and social infrastructure as a focus of PPP implementation in Indonesia. The categories of infrastructure prioritised for PPP projects are as follows:

- Transportation	- Drinking Water	- Prisons
- Highway, road	- Centered wastewater treatment system	- Health care facility
- Energy Conservation	- Local wastewater treatment system	- Housing
- Water resource and irrigation	- Area or public space	- Electrical Energy
- Urban facility	- Tourism Area	- Sewage system
- Sport and Art Facility	- Telecommunication and Informatics	- Oil, natural gas, and renewable energy

3.2.2 Institutional Framework for PPP Implementation

Infrastructure development in Indonesia is often constrained due to ineffective coordination between various stakeholders, whether from the government (ministries, institutions, local government, or state-owned enterprise), and private sectors. The variety of stakeholders – with different objectives and responsibilities – often causes delays in the implementation of infrastructure projects. Therefore, the Government of Indonesia has a committee that can work across ministries and agencies to bridge and assist Project Owners in preparing and carrying out the project's development.

The Committee for Acceleration of Prioritized Infrastructure Development (*Komite Percepatan Penyediaan Infrastruktur Prioritas – KPPIP*) was established with the main objective of operating a coordinating unit in decision-making to encourage the resolution of problems arising from the ineffectiveness of the coordination of various stakeholders. KPPIP was established under Presidential Regulation no. 75 of 2014 on the Acceleration of Prioritized Infrastructure Provision. KPPIP will work towards

coordination for the debottlenecking of National Strategic Projects and Priority Projects. The Committee is chaired by the Coordinating Minister for Economic Affairs as Chairman and consists of Minister of Finance, Head of MNDP (BAPPENAS), and Minister of Agriculture and Spatial Planning (KPPIP, 2016b).

According to the mandate of Presidential Regulation no. 75/2014, KPPIP will provide support to selected projects as priorities based on the criteria determined by KPPIP. For the priority project, KPPIP will ensure that project preparation is carried out in accordance with KPPIP quality standards and controlling the problem-solving steps. KPPIP is also tasked with capacity building to ensure the Project Manager's ability to run the projects and coordinating the issuance of infrastructure related policies and regulations. Besides, KPPIP will also responsible for the project's pre-feasibility studies, Value for Money (VFM), and environmental impact assessment for the selected projects (KPPIP, 2016b). Other institutions were also established by the Government of Indonesia to provide fiscal support for PPP implementation in Indonesia (ERIA, 2015), such as:

1. Government Contracting Agencies (GCA), to identify and implement PPP projects
2. Indonesia Infrastructure Guarantee Fund (IIGF), to offer financing, guarantee, or project development services
3. PT Sarana Multi Infrastruktur (SMI), a nonbank financial organization to provide advisory service, project financing, and project preparation services
4. PT Indonesia Infrastructure Finance (IIF), a shareholder (PT SMI, ADB, DEG, SMBC Japan and IFC) to provide various financing scheme and advisory infrastructure projects

3.2.3 Examples of Former PPP Infrastructure Projects in Indonesia: Issues, Challenges and Lesson Learned

The Indonesian Ministry of Public Works in 2009 reported the increase of private sector interest on toll road development project after the release of Law No. 13/1987 and Presidential Regulation No.25/1987 (Ministry of Public Works, 2009; Pradono et al., 2012). The release of this regulation made a stepping stone for "Preliminary BOT era". PPP mechanism under these regulations had successfully

built the Tangerang-Merak toll-road which has been actively operated (Pradono et al., 2012). Mardiana (2015) in his report stated that there were 38 PPP projects with the status of project preparation, 21 projects were under transaction period, two projects reached financial closure, nine projects were under construction, and 21 projects were operated, mostly the project of toll-road.

A study by Levy (1996 as cited in Wibowo and Alfen, 1996) stated that in the late 1994, there were 19 PPP projects with a total amount of investment up to USD\$11.8 billion to build nine power plants in Indonesia to generate the 7182 MW electrical energy capacity. However, the mechanism of PPP during Soeharto's era opened up a hole for growing corruption and collusion, mainly in the procurement process. Wibowo and Alfen (2014) gave examples of the Paiton Power Plant Project and other 107 projects with fraudulent management. Mardiana (2015) added an example of South Sumatera 9 and 10 Coal Power Plant Project in which the bidding process was postponed due to the regulatory issues. For instance, Tebo Coal Power Plant Project was not listed in the prioritized national project, so that has not supported by PT PLN; and Karama Hydro Power underwent rejection from the society and need to be re-designed. Thus, agreeing with Pradono et al., (2012), the growing use of the PPP mechanism in electrical energy provision and water supply in Indonesia is not as fast as in transportation projects.

3.3 ELECTRICAL ENERGY PROVISION SYSTEM IN INDONESIA

Indonesia is the home of various energy resources. Located on the Pacific "ring of fire", Indonesia can provide significant geothermal resources for energy supplies. Fossil fuels are also abundant in this country, especially coal. As a tropical area located in the equatorial zone, Indonesia has a tremendous potential to develop solar power energy. Having more than 16,000 islands and considering the benefit of Indonesian geographical location, this country is also enriched by other potential non-renewable and renewable energy resources.

Electricity demands in Indonesia had been fulfilled by PT Perusahaan Listrik Negara (State-Owned Enterprise for Electrical Energy Provision in Indonesia). This company regulates and monopolises electrical energy provision as well as controlling 70% of

power generating assets (Harrington, 2017). According to Indonesia Energy Balance from 2006 – 2015, the dominant energy source used for the electricity is coal, compared to the other energy sources (as depicted in Figure 3.1). The volume of coal used rose dramatically from year to year. Indonesia has 4.3 billion tons of preserved coal, as stated by Dapice and Cunningham (2011), and nearly two-thirds of this amount was used to fulfil electricity needs.

Figure 3.1 Indonesia Energy Balance 2006 – 2015 (Zuhal, n.d, p.10)

The Government of Indonesia through The MoF, Ministry of Energy and Mineral Resources, and Regional Government. The MoF play a significant role in subsidising PLN and maintain social benefits for the electricity provision, while Ministry of Energy and Mineral Resources responsible for planning, funding, regulating, mainly for the use of energy sources. The Regional Government have to feed-in tariffs towards the Independent Power Producer (IPP). In the end, the electricity will deliver to the customer, both for the electricity demand for personal or residential housing and the industry. However, since PT PLN underwent the financial crisis, the Government of Indonesia is now considering using a new system such as PPP, mainly to provide financing towards power generation.

In 2015, the Ministry of Energy and Mineral Resource stated that Indonesia reached 88.30% of electrification ratio, and the target is 97.35% electrification in 2019. This rate is still low compared to other ASEAN countries. The total of installed capacity for the power generation is 55528 MW. The electricity production is 283 TWh, most of these power generation use coal-fired power plant (50%), oil (14%), gas (25%),

and renewable energy for only 11%. The electricity consumption is 228 TWh, with the use of residential (38%), industry (40%), business (16%) and public (6%) (Amiruddin, 2016).

3.4 THE RECENT DEVELOPMENT STATUS OF BATANG REGENCY

Batang Regency is located in Central Java Province, the northern area of Java. The district that has the "*Batang Berkembang* – The Developing Batang" tagline has leading sectors in the textile and plantation industries. However, many other sectors are also supporting the economic improvement of local communities, such as tourism, livestock, and agriculture (Inonu, n.d).

In Batang Regency, "*Bupati*" or Batang Regent is the highest position of government who prioritises the quality of public services. The vision for the development of Batang Regency is to make the community harmonious, energetic, religious, prosperous and peaceful by 2022 (Batang Regency Government, 2016). The intended mission is to boost the quality of the public services implemented through e-government-based governance; optimizing the community empowerment to maximize the development of human resources; optimize information and communication technology to develop regional economies with the support of quality infrastructure and areas; carry out development based on religious teaching experience and noble cultural values to create conditions that are safe, peaceful and harmonious (Inonu, n.d).

From the vision and mission, it can be identified that Batang Regent wants to realise the concept of good governance by improving the quality of public services and the creation of *e-government*. Current development pathways in Batang Regency prioritise improving the regional economy, increasing the potential of local tourism, and developing activities by optimising the benefits of information and communication technology to organise good governance. According to Inonu (n.d), the measures required to achieve good governance include: 1.) Political efforts, such as the enforcement of legal powers, amending Political Law and National Law which ensures participation and reflects the people, agrarian reform and labour, as well as erase the TNI's (Indonesian Soldiers) socio-political role; 2.) Economic efforts to achieve economic prosperity; 3.) Social efforts, to create a prosperous society by realising the

interests of the community that are contained in the public interest, and 4.) Legal reform, or what can be called strengthening of the legal system.

The development progress of Batang Regency has been shown by the emerging CJPP, toll roads and hotels. There is even a plan that in the next few years, a large shopping centre will be built as well as malls and apartments. Domestic and foreign investors are very interested in Batang Regency after the construction of CJPP and toll roads. Batang Regency, which was once only a small area, is estimated to become a large modern area by 2025. Batang also launched a toll road development project that will connect from Brebes to Gringsing or called Gringsing Exit (Grexit) and then extended from Batang to Semarang. The construction of this toll road has been started since 2017 (Inonu, n.d).

Following the Law of the Republic of Indonesia Number 32 of 2009 concerning protection and management of the environment, the constitutional court ruling that a good and healthy environment is the right of every community and declining quality of the environment can threaten people's lives (Inonu, n.d). From the Act that has been explained, the environment around the community has a vital role in the sustainability of quality of life. Thus, maintaining environmental preservation is one of the most important things for the regency.

3.5 THE CENTRAL JAVA POWER PLANT (CJPP) PROJECT

3.5.1 CJPP Project: The Purpose and Location

Due to the electrical power crisis in Central Java in 2017, the government is trying to build more power plants. The development of a power plant in Batang will supply the household and industrial electrical needs in Central Java. Furthermore, the Government of Indonesia also wants to expand transmission capacity and power generation to face the problem of increasing housing demand, provision of electricity in rural areas, and for the immense industrial demand for electricity.

Batang is a potential area for the construction of a coal-fired power plant. CJPP is one of the largest projects carried out by the government in the past 33 years. It is termed a megaproject because this is the first large-scale PPP project with an investment value of more than IDR 30 Trillion as well as the first PPP project implemented under Presidential Regulation No. 67 of 2005 concerning Regional Government Cooperation

with the Private Efforts in Providing Infrastructure. CJPP is claimed to be the largest power plant in the Southeast Asian region.

The CJPP is built in Karanggeneng village, Batang. BPI, as the consortium for the construction of the CJPP, ensures that the location of the power plant will be built in the village because the location is considered to be best to meet the criteria requirements compared to the other several locations that have been studied along the northern coast. In addition to in-depth studies of potential locations, this decision was also supported by several technical studies, such as soil boring tests, topographic tests, environmental scoping, and other preliminary tests. The Central Java Provincial Government has prepared prospective land for the construction of a steam power plant (PLTU) owned by PT PLN with a capacity of 2X1,000 MW in Batang Regency. The land to be used is 370 - 700 hectares. It is estimated that CJPP will start to be commercially operated by the end of 2020.

The process of choosing Batang Regency as the project location began with the survey conducted by the Central Java Department of Energy and Mineral Resources (ESDM) in three districts, namely Kendal, Batang, and Pemalang as potential CJPP construction sites. The Central Java Department of the ESDM conveyed the advantages and disadvantages of each of these locations. As surveyed from these three locations, Batang district became the most suitable location for the construction of the PLTU because the coastline is stable and the sea depth is sufficient for port construction as a means of supplying coal raw materials.

3.5.2 The History and Consortium

PT PLN, which was tasked by President Joko Widodo to fulfil the needs of 35000 MW, had faced financial difficulties since the Asian Crisis occurred in 1997. Thus, PT PLN was unable to supply any funding to independent power producers (IPPs). In 2005, the Government of Indonesia proposed the infrastructure development of 2000 MW greenfield coal-fired power plant through Indonesia Infrastructure Summit, mainly to attract investment and encourage the use of PPP. Furthermore, the Government of Indonesia argued that to meet the electricity demand in 2013 would require around \$31.4 billion in investment.

The consortium which won the CJPP's bid consists of Itochu Corporation, Adaro Power, and J-Power. The Guarantee Agreement was signed by the Government of Indonesia through the Ministry of Finance (MoF), Indonesia Infrastructure Guarantee Fund (IIGF), and PT Bhimasena Power Indonesia (BPI). The consortium and the project agreement were signed in 2011 for running the Central Java Power Plant (CJPP) of 25-years contracts through Power Purchase Agreement (PPA). This project reached financial closure in 2016 (World Bank, 2018).

3.5.3 Project Details

The Central Java Power Plant (CJPP) will be built under the build, operate, own, and transfer (BOOT) system. This project will use ultra-supercritical technology to fulfil the electricity needs of around 7.5 million people on the island of Java. The estimation of investment is around US\$4 billion.

CJPP will be built in Batang Regency, Central Java, Republic of Indonesia. This power generation will use sub-bituminous coal which is produced in Indonesia as a fuel. For maintenance and operation, PT Bhimasena Power Indonesia or BPI (a company established by the consortium to handle the CJPP project) will be in charge since the construction was commencing in October 2012. For 25 years, PT PLN will be the seller of electric power.

3.5.4 Preliminary Research

Some scholars have researched the CJPP project. Wibowo et al. (2012) conducted a study about the model of heat distribution in waters from the location of the CJPP outlet in Ujung Negoro, Karanggeneng and Reban villages. This study used cluster sampling and observation methods to generate the primary data and uses the existing data from the related institutions.

Safitri (2014), through the report of East Asian Development Network, conducted a study about how Indonesia's Economic Corridor (IEC) could generate significant growth and how debottlenecking principles applied in the PPP implementation in the CJPP project and Sei Mangkai Industrial Area (KISMK). Debottlenecking, according to Safitri (2014), is a process of reducing or eliminating barriers in project implementation, especially bureaucratic and policy barriers. This study focused on the

role of the state, the concept of growth and privatisation as a strategy, then found that the government acts as a guarantor and deal with almost all impacts from the CJPP project. In 2015, Safitri continued her research and focused on the commoditization of energy in PPP mechanism in CJPP project. Safitri (2015) stated that the private sector, in this context PT BPI, plays a dominant role through the BOOT contracts. Safitri's studies seem focused on the economic corridor of CJPP.

Gunawan (2015) investigated the local government's efforts in the conversion of agricultural land into non-agricultural land in CJPP and found that local government plays a vital role in pricing the land compensation in this project. Fuad (2016) continued the research towards the CJPP and focused on determining compensation in the implementation of the land provision in the CJPP. These two studies provide a preliminary insight on how the stakeholders play a vital role in land acquisition.

In 2016, Prastiwi et al. (2016) studied the strategy of social approach in the development plan of CJPP. This study revealed the society's reaction towards the CJPP project and how CJPP should be more inclusive to involve the community into the discussion, mainly for the society near to the site. Yuniarti and Junita (2017) provided the framework of governance and raised awareness of risk criticality in PPP scheme of CJPP project. Harrington (2017) in his report raised awareness towards the global-related issues such as the Paris Agreement on reducing the greenhouse gasses emission. Harrington (2017) also argued upon the Government of Indonesia's limitations in energy policy, technical knowledge, and financing, mainly to develop renewable energy infrastructure. All of these studies provided preliminary knowledge about how the CJPP project should be considered more in various aspects.

3.6 SUMMARY

Indonesia has a history of implementing PPPs in public infrastructure provision. Applied since 2009, PPPs in Indonesia is still considered to be 'emerging' as the system for implementing PPPs are still developing. The implementation of PPPs in Indonesia faces many issues, mainly about land acquisition, lack of expertise, and the complexity of regulation.

Most of the PPP projects in the transportation sector have been successfully operated, compared to the water sector and electricity. Only the Central Java Power Plant project (CJPP) reached financial closure in 2016 for PPP implementation in the energy sector. This project will be a pilot project for electricity provision using the PPP mechanism.

Several studies had been conducted towards CJPP in the single or particular focus, such as from the economic point of view, how stakeholders play vital roles in the land acquisition and compensation, as well as raising awareness both locally and globally. As the CJPP might have several issues and challenges in various sector and impacted various stakeholders, thus, it is necessary to conduct the research with a more comprehensive focus to provide insight and lessons-learned of PPP implementation in the CJPP project.

The next chapters will focus on the research to reveal the PPP process based on the CJPP project. The issues and challenges in implementing PPP for the CJPP based on the methodology I have used will be explained in the following chapter.

CHAPTER 4

METHODOLOGY

This chapter highlights the methodology used in this research. Firstly, it explores the social constructivist epistemology as “the lens” or perspective used to navigate when choosing research methods; as well as using Stakeholder Analysis and Sustainable Livelihood Framework to view the results of this study. Then, this chapter explains the research methods I have used for data collection, sampling and data analysis. Finally, this chapter discusses the ethical considerations which arose when conducting this research.

4.1 THEORETICAL FRAMEWORK

Taking epistemology into account in research is crucial because it determines the way we frame our perspective towards the process of research and how we analyse the results that may occur. Following this argument, I took the philosophical epistemologies to shape my way of thinking and decision making.

4.1.1 Social Constructivist

The philosophical epistemology underlying this research is in line with the social constructivist perspective. This research considers human beings as the main subject, valuing the meaning of a particular issue based on their ideas, perceptions, and experiences. “Meaning” is the key that social constructivist holds as Ultanir (2012, p.196) argued that “The meaning of constructivism varies according to one's perspective and position”. I acknowledge that beliefs, meanings and desires play significant roles in shaping social culture (Miller, 2016) and the way knowledge is generated.

However, there is a growing debate around social constructivism, which also tested the way I took this philosophical perspective. Latour (2003) took a snapshot of one of the confusing premises of social constructivism that comes from the word “social” itself. Latour (2003) create an analogy of “building construction” that requires architects, builders, cranes, and masons, also all other materials that brought a “building” as a real product of this construction. Then, how about the “social”

construction? The word “social”, they argued, is a combination of many trades, skills, as well as agencies. Then social construction is a result of what these trades, skills and agencies built. Afterwards, agreeing with Latour (2003), I also question what types of agencies may contribute to a kind of “construction”. This question drags me towards the way I choose “who can contribute to my research”, considering the inner circle and external environment that leads to an explicit inclusion in my research design.

‘It will be clear that it is not the solidity of the resulting construct that’s in question, but rather the many heterogeneous ingredients, the long process, the many trades, the subtle coordination necessary to achieve such a result. The result itself is as solid as it gets (Latour, 2003, p.3)’

In critical thinking about the social constructivist perspective, I would also acknowledge the potential bias that could emerge. Small (2003) found a fallacy in constructivism, suggesting the possibility of “freedom for creating our knowledge”. Koirala et al. (2017) reinforce Small’s arguments by this statement “Constructivism is based on the fact that truth is dependent on perception”. Badie (2017) generated the assumption of constructivism in which societies develop their constructed knowledge based on their preconceptions and experiences about the world. Considering what Miller (2016) stated about religion, beliefs, desires in a social construction above, Latour (2003) added to this point by arguing that the more we add the adjectives in this “construction”, the more confused we are by the ensuing complexities. Even so, research is an activity to be aware of and understand the complexity.

Using a constructivism perspective led me towards a decision to take stakeholder analysis and sustainable livelihood approach to understand how knowledge about PPPs in Indonesia was constructed. I used stakeholder analysis to analyze the issues regarding governance and environment, while the sustainable livelihood approach was used to analyze the CJPP project impacts over societies.

4.1.2 Stakeholder Analysis

Stakeholder analysis is a part of the qualitative approach which requires exploration about the interest, impact, and intervention subjectively from each stakeholder. This idea was inspired by Badie (2017, September) about categorisation, as follows:

‘In the framework of constructivism, a categorisation (or classification) can be interpreted as a process of ‘constructing’, which is dependent on “representations” (Badie, 2017, September, p.689).’

To strengthen my decision to take the stakeholder analysis as a tool, another justification comes from the keyword of this thesis title itself, “an exploration”. Exploring is the critical activity I have undertaken in this research. This is a type of qualitative research, in which the goal is to answer the research question “what”, “who”, “why” and “how”.

Constructing the knowledge starts from “who”, of what Latour (2003) means by agencies. Thus, I argue that stakeholder analysis is an appropriate tool to be applied in this research. In analysing megaprojects such as the CJPP, gathering knowledge from the representatives as well as analysing the information is essential. During the process of research and developing knowledge, I conceptualise myself not only as a ‘drone’ to get the wide angle but also, as a ‘macro lens’ to get the brief picture of tiny things related to the PPP implementation of the CJPP. Thus, in applying stakeholder analysis, I choose various levels of stakeholder, from the high-level government to the ground level of marginalized societies. I used the Stakeholder Analysis Matrix to categorise the stakeholders’ interests and CJPP project impacts.

4.1.3 Sustainable Livelihood Framework

Sustainable Livelihood Framework is the theoretical approach used in this research mainly to analyse social issues. Based on DFID’s sustainable livelihood guidance sheet (DFID, 2000), Sustainable Livelihood Framework can be used to conceptualise how the people value their capitals or assets which are influenced by economic

shocks, a range of institutions and processes; and how the community response to the changing livelihood and develop their adaptation strategies to get the expected livelihood outcomes. I argued that this framework is appropriate to analyse social dynamics in the community. The idea of integrating this framework in this research comes from the characteristic of community whom I studied; they were 'affected' by PPP implementation of CJPP project. I argue that the keyword 'affected' shows the potential changes due to certain reason, and I stressed to view these changes towards livelihood dimension.

Sustainable Livelihood Framework comprises five elements of analysis, including vulnerability context; livelihood assets; policies, institutions and processes; livelihood strategies; and livelihood outcomes. Robert Chambers and Gordon Conway in 1992 defined livelihood as follows:

'A livelihood system comprises the capabilities, assets, and activities required for a means of living. A livelihood is sustainable when it can deal with and recover from stress and shocks and enhance its capacity and assets for long-term. (Krantz, 2001, p.1).'

In applying this framework, I particularly emphasised the viewpoint of the changing livelihood assets, how the community value their assets, the processes which drove the changing livelihood, and their livelihood strategies. I focused the analysis towards five capitals of Sustainable Livelihood Framework (Gutierrez-Montes et al., 2009; Krantz, 2001), as follows:

1. Human Capital: the knowledge, skills, ability, and health to support daily activities.
2. Social Capital: the networks, relations, and affiliations to support community livelihood strategies which require coordinated actions.
3. Economic Capital: savings, cash, and other economic assets.
4. Natural Capital: the natural resource and environmental service which are useful to support community livelihood, such as water, land, soil, air, genetic resource, pollution sinks, etc.
5. Physical Capital: infrastructure to support the livelihood such as infrastructure towards their access (road) and buildings (house, apartments, etc).

4.2 RESEARCH METHODS

As I stated in the previous sub-chapter, this research only focuses on qualitative research. This type of research is mainly used in social sciences discipline (Bradbury-Jones et al., 2014). Unlike the positivist paradigm that reveals the “how many” or other scientific research questions, the nature of qualitative research may end up with results based on judgements, confirming the hypothesis neither based on the statistics nor the equation, instead by narratives, pictures and objects (Sutton and Austin, 2015; Denscombe, 2014).

My hypothesis drags me towards the decision for choosing the qualitative methods. Qualitative methods allow me to test my own hypothesis whether these issues are literally ‘the key’ issues of CJPP, and how much these issues contribute to the project dynamics, revealing the facts on the high and ground level as well as having check and balance.

Taking a single case study helps me to limit the scope of this research, as I do not conduct a comparative study with other typical projects or cases. I acknowledge the time limit for conducting this research. However, within a single case study of CJPP project, I argued the key issues can be comprehensively analysed based on three dimensions – governance, environment, and social issues – that I had examined on this research.

Hence, in applying qualitative research, this study was conducted by using some secondary data collection (data/document/literature review), observation, and semi-structured interviews.

4.2.1 Data Collection

4.2.1.1 Document review as secondary data collection

To get the background of this study, preliminary data and information were gathered. This document review strategy was used to provide the sort of information that can be the background of research. The data were collected from academic journals, related websites, books, and reports related to the PPP scheme in general and the Central Java Power Plant Project in particular.

4.2.1.2 *Unstructured Observation*

Observation is used as supporting methodologies in this research. According to Mulhall (2003), there are two types of observational methods, namely structured and unstructured observation. Structured observation is used for quantitative research under a positivist epistemology. I used unstructured observation as this type of observation is in line with the constructivist epistemology and qualitative research (Mulhall, 2003) to construct meaning or knowledge. My position in this research is as an unstructured observer, mainly the observer who does not interact and maintains the distance with the participants and objects (Gold, 1957).

According to McKechnie (2008), the purpose of unstructured observation is to reveal the themes of interest and emphasise the context to construct knowledge. It is reported through narratives rather than checklists. The data are shown in the form of physical settings, the context, the history (through documents), and the participants' characteristics and activities. The tools I used to conduct the unstructured observation are field notes (jottings, diagrams and maps); and photography.

Field notes were taken during the fieldwork period to collect thoughts regarding theories and phenomena which were observed and reflected on in the field. The purpose of using fieldnotes in the unstructured observation method is to capture more information about the setting of interest and to investigate the context and process (McKechnie, 2008). Mulhall extended the detail of purposes as follows:

‘Careful attention to the form, meaning, use and construction of field notes will enable researchers to clarify their particular theoretical stance and define more closely when, where and how such notes should be recorded (Mulhall, 2003, 307).’

Using photography in social research is relatively new. The general framework of using photography for social research is divided into two concepts: using photos as research data, and using photography as a means or requirement to collect the research data (Petersen & Østergaard, 2003). In this research, photography is used in a limited way

as a form of research data, especially as evidence of interview results – namely *photo-documentation* (Kobayashi, Fisher, & Gapp, 2009). According to Kobayashi et al. (2009), this direct photo analysis is advantageous when the researcher is not close to the research objects or has difficulties in interacting with the research subjects. This technique is useful in describing or interpreting complex or highly abstract phenomena (Kobayashi et al., 2009).

McKechnie (2008) identified the potential bias of conducting the unstructured observation, as this method depends on the skills, experience, and reactivity of the researcher. Other concerns might be on how the investigators decide what to observe and how to analyse the data. To be an observer, the researcher's perspective is considered a part of the observation results (Mulhall, 2003). In this research, to minimize these potential biases, I also refer to other collected data such as interview data and documents to confirm the interpretation of observational data.

4.2.1.3 Interviews

Semi-structured interviews were used in the field. A list of questions guided the interviews, but neither the exact wording nor the order in which the questions were asked was determined ahead of time and condition. The interviews started with comprehensive open-ended questions and let the responses of the interviewees guide the flow of the conversation.

4.2.2 Sampling Methods

Figure 4.1 The methods for recruiting participants

As depicted in Figure 4.1 above, the method I used for recruiting participants in this research is arranged into four sequences: purposive sampling, stakeholder sampling, paradigmatic case sampling, and snowballs sampling.

Purposive sampling is one of the sampling methods which is ideal for qualitative research, particularly in the case study approach. In the purposive sampling, the researcher will see sampling as a strategic choice about with whom, where, and how one does one's research. Palys (2008) generates some types of purposive sampling, and I mix two of them, which called Stakeholder Sampling and Paradigmatic case sampling.

Stakeholder sampling involved identifying who the major stakeholders were involved in the designing, giving, administering or receiving the program, and who might otherwise be affected by it (Palys, 2008). In my research, I used this sampling strategy to choose the stakeholders which were involved in the implementation of PPPs in the CJPP project such as Government and Private Sector; and the stakeholders who might be affected by this PPP implementation such as community leaders and farmers who live in the surrounding areas of the project.

Paradigmatic case sampling sees that a case is paradigmatic when it is considered the exemplar for the specific class (Palys, 2008). In this research, this method of sampling helps me go deeper into the category of the groups I will interview. For example, I will choose the Batang Regional Government as an example of Government group who is involved in the PPP implementation in the CJPP.

Snowball sampling is a nonprobability sampling technique where existing study subjects recruit future subjects from among their acquaintances (Noy, 2008). Thus, the sample group is said to grow like a rolling snowball. As the sample builds up, enough data are gathered to be useful for research. In this research, I used this technique to get more respondents based on the recommendation of the former respondents.

4.2.3 Location

The Central Java Power Plant Project is being developed in Batang regency, particularly in Kandeman and Tulis districts that cover around 250 hectares of land. Three villages are directly impacted by the CJPP project, namely Ujungnegoro, Karanggeneng and Ponowareng Villages, or the “Ring I” villages. Thus, this research was conducted in these areas to explore social issues, particularly for interviewing the village head and the communities.

This research had also been conducted in the governmental office of the targeted institutions in Jakarta and Batang Regency to explore the government perspective towards governance issues. Interview towards the private sector was conducted through mobile interview due to their limited time and distance constraint.

4.2.4 Targeted Respondents

Based on the sampling technique mentioned before, in this research, four groups I have interviewed in my research, as follows:

Table 4.1 Lists of Interviewees

Stakeholder	
<i>Primary</i>	<i>Secondary</i>
<i>National</i> <ol style="list-style-type: none">1. MoF2. IIGF3. (former) Head of CJPP project, PT PLN (Mrs Assistya Semiawan)4. MNDP/BAPPENAS5. KPPIP	<i>Local Government</i> <ol style="list-style-type: none">1. BMFAA2. BRFAA3. BPSA4. BITCSA5. UIQSA
<i>Private Sector</i> <ol style="list-style-type: none">6. BPI	
<i>Local Government</i> <ol style="list-style-type: none">7. BR8. BDPA9. BDEA10. BIISLA11. KSH12. HUV13. HKV14. HPV	
<i>Society</i> <ol style="list-style-type: none">15. UVS (1-3)16. KVS (1-3)17. PVS (1-3)	

Based on Table 4.1 above, these four groups were chosen since they were the stakeholders involved in the CJPP project with the specific roles. The roles and interests of each stakeholder towards the CJPP are categorised as the “primary” and “secondary” stakeholder. The primary stakeholders are considered to be a group of institutions, agencies or individuals who are directly impacted or affected by the CJPP, while the secondary stakeholders are not directly affected by the CJPP but are somehow related to the project. Each stakeholder group is explained as follows:

- **MNDP as the regulator of PPP**

The MNDP was chosen as the primary stakeholder to be interviewed as it is an institution whose task is to oversee national development (Directorate of PPPs, n.d.), where some of its primary functions are related to PPP, namely:

1. Development and infrastructure;
2. Preparation of national development plans in a holistic-integrative manner;
3. Coordinating, facilitating, and implementing searches for domestic and foreign funding sources, as well as allocating funds for development.

In carrying out these functions, the MNDP has one special directorate, namely the “*Direktorat Kerjasama Pemerintah Swasta dan Rancang Bangun*” (Directorate of public-private partnership and development). Thus, in the CJPP project, the MNDP acts as a macro-PPP regulator. Specifically, MNDP – which is related to development planning – identifies the proposed PPP project and reviews the preliminary study.

After the prospective PPP project is determined, the MNDP assists the PJPK to prepare the initial Pre-Feasibility Study (Pre-FS), namely Outline Business Case (OBC). The Government of Indonesia assigns the Joint Office to market PPP projects in various sectors, including Energy and Electricity. By using the Joint Office, the investee can come once in the office to prepare the PPP process. Likewise, for investors, can come in one place to obtain information about the PPP (BAPPENAS, 2018).

MNDP Regulation No. 4/2015 regulates the procedure for implementing PPP. The criteria in this regulation have been designed to ensure that all projects are properly analysed and designed before listed on the PPP book. MNDP is responsible for providing information through the PPP Book in the form of sufficient information for the needs of prospective business entities to be interested in participating in the auction. The information submitted includes the project objectives, scope and responsibilities in project implementation.

The MNDP is tasked with setting criteria and requirements related to environmental assessment, land acquisition, government support and government guarantees for each project list in the PPP book, including the CJPP project. Other roles also carried out by MNDP including information dissemination and consultation, assisting public consultation, submission of PPP project lists, assisting OBC compilation, and capacity building (Directorate of PPPs, n.d.).

While the MNDP regulates and assists PPP implementation of CJPP in the national scale, the Ministry of Energy and Mineral Resources (hereafter “MEMR”) regulates CJPP in the sectoral level. The entire plan to procure electricity is regulated in the “Rencana Usaha Penyediaan Tenaga Listrik” (RUPTL – or the Electricity Supply Business Plan) generated by PLN under the regulation of the MEMR – currently under the MEMR decree 74/2015 concerning ratification of the planned procurement of electricity (Agustinus, 2017).

- **BPI as the key private sector**

PT Bhimasena Power Indonesia (BPI) is undertaking the leading role in developing, building and operating Indonesian coal-fired power plant. BPI, the key private sector in the CJPP project, is a joint venture company established by a consortium of J-Power, ITOCHU and PT Adaro Power. Contractually, BPI is responsible for designing, construction, financing, operation and maintenance of power plant facilities (generator), then transfer the ownership of assets to the government at the end of the concession period. The electricity produced is then sold by BPI to PLN as a State-Owned Enterprise (BUMN) in the field electricity as well as the PJPK through an agreement of

purchasing electricity (Power Purchase Agreement / "PPA") (Indonesia Infrastructure Guarantee Fund, 2017).

- **PLN as PJPK under the assistance of IFC**

PLN, a state-owned electrical company, was chosen to be PJPK due to their excellent business mindset and expertise to understand the private sector ways of thinking. In the CJPP project, PLN acts as a single off-taker which will buy electricity from the private sector on a regular basis on a take-or-pay basis during the PPA (Power Purchase Agreement) period. So, the risk related to PLN's financial obligations are considered as the main risk (Indonesia Infrastructure Guarantee Fund, 2017). Hence, after the business case was compiled, the Government of Indonesia through the MoF appointed IFC for assisting PLN in the CJPP project.

- **The Ministry of Finance and IIGF as the guarantor and risk manager**

When the business case was prepared, the MoF saw the importance of guarantees because there must be parties who guaranteed the PLN payment to the private sector. By 2006, the debates regarding CJPP had begun and been in the process of finding investors. Minister of Finance, Sri Mulyani Indrawati, formed a Fiscal Risk Management Center with the aim of reviewing risks in the infrastructure sector and examining how the MoF could provide guarantees.

Prior to the CJPP, the MoF had provided many guarantees for electricity projects, such as the electricity project in Cirebon. At that time, the MoF was committed to providing the CJPP with guarantees in a more prudent and governing manner than guarantees for other IPP projects. Therefore, since 2009, the IIGF was formed under the MoF and responsible for every aspect of guaranteeing the infrastructure projects using the PPP scheme. The CJPP was the first project to test the IIGF's guarantee system. IIGF acts as a guarantor and risk manager, as well as participates in assessing the CJPP project from its feasibility, environmental and financial aspects.

As a risk manager, IIGF had defined the scope of the risks under IIGF's responsibility. An interview with IIGF stated that IIGF would be responsible for guaranteeing the termination obligation of first loss basis up to 300 M, while MoF provides guarantees worth > 300 M, by this case, MoF confirmed this type of *amount sharing*. Risks such as weather, earthquake and other risks related to construction are allocated to the private

sector, which is in this case, BPI confirmed this type of *risks sharing*. For further details, IIGF provides risk-related guarantees that include:

1. The financial obligation of the contracting agency at the PPA. Example: termination obligation.
2. Political risk. The risks regarding government action or inaction, nationalisation, the difficulties for releasing license.

IIGF focuses on establishing the risk context from the guarantee context, in a sense, what future risks allow claims in the CJPP project. IIGF's rights as guarantor and obligator of the PJPK are outlined in a Regress Agreement between IIGF and PJPK. The Regress Agreement was signed before signing the Guarantee Agreement between IIGF and a business or private entity. As a risk manager, IIGF holds a series of updated data regarding CJPP for risk monitoring and mitigation. Following the ISO 31000, there are two methods which IIGF applies such as preventive steps (by reducing the cause of a risk) and mitigating control steps (by minimizing the impact that occurs due to certain risks). Example: controlling the rotation of PLN employees who are responsible for handling CJPP, control of the construction of transmission line projects that will have an impact on CJPP, and so on.

- **KPPIP as the point of contact**

Based on the official website, the Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) was established to become a coordinating unit in decision-making processes and encouraging effective coordination among various stakeholders towards certain issues. This committee was formed to revitalise KKPPI (former version of KPPIP) by downsizing institutional structure, giving authority in making decisions, involvement in projects since planning stage, and strengthening the capacity of human resources on the internal committee (KPPIP, 2016b). KPPIP membership based on Presidential Regulation No.75 of 2014 consists of:

1. Coordinating Ministry for Economic Affairs;
2. Ministry of National Development Planning / BAPPENAS;
3. Ministry of Finance;
4. Ministry of Agrarian Affairs and Spatial Planning / National Land Agency (BPN).

In accordance with Presidential Regulation No.75/2014, KPPIP is given the mandate to compile and establish a list of priority projects, improve the quality of project preparation, and encourage problem-solving (as a point of contact). This regulation is renewed along with the release of Presidential Regulation No.3/2016, in which KPPIP is mandated to conduct a review of the list of National Strategic Projects and recommend changes to the list in accordance with the latest developments (KPPIP, 2016). In implementing the PPP mechanism in the CJPP project, KPPIP holds several roles, such as: 1.) Supporting debottlenecking efforts from the working team., 2.) Provisioning Outline Business Case (OBC) or Pre-feasibility Study (PFS) Facilities. 3.) Preparing Final Business Case (FBC) and Transaction Advisory for PPP projects by PPP Unit (KPPIP, 2016).

- **Batang Regency Governments**

Batang Regency Governments are the unit of institutions which provides and support the CJPP project development on the regency and community level. The highest structure of the government in Batang Regency are Regent and Deputy Regent, who are assisted by regional working units, from the regional secretariat, Batang Regional Council, agencies in various sectors and specification, sub-districts, to “kelurahan” or villages. Basically, Batang Regency Governments accompanying the private sector for program’s information dissemination, monitoring as well as assisting the national government and private sector in terms of solving the arising problems related to the environment and local communities.

- **Head of Villages**

Village heads have crucial roles in the CJPP project they live around and could directly contact with the community. The village head also accompanies the government starting from location surveys, community gathering, information delivery, and gathering and conveying the aspirations of the people.

- **Communities**

The community, particularly Ring I village, were chosen to be participants in this research because they are directly impacted by the CJPP project. I chose three people in each village using snowball sampling technique on the recommendation of Village Heads.

4.3 ETHICAL CONSIDERATIONS

As a masters student at Victoria University of Wellington, I conducted this research after receiving ethical approval from The Human Ethics Committee of the University. While doing the survey, I considered the confidentiality of participants' names by mentioning only their organization only, except when they indicated they were mentioned.

When conducting the interviews and observations, I explained the purpose of the study, how the interview will be recorded, how the information will be stored and how it will be destroyed after analysis. I maintained confidentiality and avoided asking the sensitive topics and considered a suitable time and condition for conducting the interview. Also, the equipment and materials to be used were explained before performing research activity.

4.4 REFLEXIVITY AND POSITIONALITY

In conducting this research, I considered my position, status, and cultural background to maintain the objectivity and detachment that may cause the bias on my analysis, as Bourke (2014) stated in his paper as follows:

‘The nature of qualitative research sets the researcher as the data collection instrument. It is reasonable to expect that the researcher’s beliefs, political stance, cultural background (gender, race, class, socio-economic status, educational background) are important variables that may affect the research process. Just as the participants’ experiences are framed in social-cultural contexts, so too are those of the researcher (Bourke, 2014, p.2).’

As I did not include in the implementation of PPPs in the CJPP project, so I argued that my analysis is purely based on academic perspective. However, I am aware that as a part of the Batang Regency’s society, my personal connection with the participants will potentially create a bias in my analysis. However, I kept my position as the outside investigator representing Victoria University of Wellington during the research period as stated in the human ethics application.

4.5 SUMMARY

As this research was conducted under the social constructivist epistemology, it considers human beings to be the main subject as well as the meaning of the particular issue. In other words, this research was conducted to extract the knowledge that leads to the research findings by observing reality. A debate related to the constructivist epistemology arose regarding what materials required to build “social construction”. However, by using the constructivist epistemology, there will be potential bias as Small (2003) has found the fallacy of constructivism for having the fact that the truth is based on perception.

Stakeholder Analysis and the Sustainable Livelihood Approach were used as a tool and framework to construct the knowledge and produce the findings. Stakeholder Analysis was applied by gathering the knowledge and information from the representatives, from the high-level government to the ground level of marginalised societies, to get the objective view and the broad horizon. The Sustainable Livelihood Approach had been used mainly to analyse social issues by emphasising five capitals, including human capital, natural capital, social capital, economic capital, and physical capital.

This research used secondary data, document reviews, unstructured observations and semi-structured interviews as a way to collect the data and generate the findings. Four types of sampling, such as purposive sampling, stakeholder sampling, paradigmatic case sampling and snowball sampling were applied in the field to get the representatives or research participants. This research was conducted under the ethics approval from The Human Ethics Committee, Victoria University of Wellington with several guidance and considerations before, during and after fieldwork. Findings and discussion of this study will be outlined in subsequent chapters.

To conclude, this research uses social constructivism as a philosophical epistemology. It is scoped by a case study approach for taking only one single project to be analysed, and follows the qualitative methodology to lead towards the way of collecting the data. It applies the Stakeholder Analysis and Sustainable Livelihood Framework as a tool to view and analyse the data, generate the knowledge, and confirm my hypothesis.

CHAPTER 5

THE CENTRAL JAVA POWER PLANT PROJECT

Understanding the ‘issues’ means awareness of existing complexities as well as acknowledging the progress of project implementation. By noticing the progress of the project, we will later know what have been done (the baseline) and what needs to be done (solving the issues). Referring back to the literature review, in order to manage the issues, Health (2018) stressed the awareness of the existing organisational and community *resources* in order to gain cooperative balance. Thus, this chapter starts by addressing the progress and the dynamics of the CJPP project, giving the wide angle of PPP implementation in the recent period, before moving to the deeper discussion about the specific issues on the next chapters. With a better understanding of benefits and challenges of PPP implementation in CJPP, then this research may obtain insights on PPP implementation itself, lessons at a national and local scale, and lessons of wider international relevance.

1.1 THE ADVANCEMENT OF PUBLIC-PRIVATE PARTNERSHIP: PERSPECTIVE FROM THE NATIONAL GOVERNMENT AND THE PRIVATE SECTOR

The CJPP project is a landmark PPP project in the electricity sector and is by far the largest investment value project (up to USD 4.2 billion). By 2005, the application of PPP schemes to development projects was still relatively new. Then President of the Republic of Indonesia, Susilo Bambang Yudhoyono, re-inventoried PPP projects which were then realised by the holding of the Infrastructure Summit under the support of the World Bank. The results of this summit were ten project models that had been promoted as PPP project models.

According to the interview with MoF, among the proposed ten project models, nine projects were slightly hampered, such as the Ketapang Pelabuhan project, Lamong Bay, and Palapa Ring projects. The project which is continuously developing is CJPP due to the capability of PLN as PJPK.

This section elaborates how the CJPP project levels up the PPP project quality in Indonesia based on the literature and interview results. Interviews conducted towards several government bodies in Indonesia had confirmed the advancement of PPP environment in this country. The context of advancement in the PPP environment is as follows.

1.1.1 The Formation of the “PPP Joint Office”

Interviews conducted with MNDP and KPPIP officials affirmed PPP advancement by stating that since 2016, Indonesia has a shared office for PPPs, located in the IIGF's office, to facilitate the shareholder of PPP projects such as the CJPP. The shared office is called the “PPP joint office” under a one-stop service concept. The PJPK and all of the related institutions in charge in a certain PPP project can use this office for several activities regarding PPP, such as making ‘Outline Business Case (OBC)’ or creating Pre-Feasibility Study (PFS), discussing case-by-case solutions, as well as policy and decision-making. This PPP office will also help investors to get information about PPP projects, available facilities, and equipped licenses (Afrianto, 2017; BAPPENAS, 2018).

In the case of the CJPP, the Joint Monitoring Committee (JMC), a regular meeting for the CJPP project monitoring, used the PPP office to discuss and break down case-by-case solutions. With regard to efficiency and effectiveness, the PPP joint office is a milestone in bringing a sense of “joint ownership and responsibility sharing” among the shareholders.

5.1.2 Understandings of PPP mechanisms – the start a bottom-up PPP approach

Interviews with the MNDP, the MoF and the KPPIP expressed their satisfaction with PPP development in which PPP understanding is increasingly widespread. It is now understood in the departments of central government such as the MoF, Ministry of Public Works, MNDP, and Coordinating Ministry of Economic Affairs. More importantly, however, it has begun to be understood by various institutions as well as at the level of local government. Many PPP projects have also been initiated by the Regional Government, such as SPAM (Water Supply System) Umbulan in East Java, Hospital Project in Medan (North Sumatra), and in the eastern part of Indonesia, the Head of MNDP Bambang Brodjonegoro encouraged Papuan Government to build a call centre under PPP mechanism (Medistiara, 2017).

In the case of the CJPP project, understandings of PPPs touched other government bodies which had never applied this mechanism. PLN as PJPK had adjusted and applied the PPP mechanism for electrical energy provision in the first time as well as the IIGF and MoF had tried to apply a guarantee system for this project.

5.1.3 The Principles of Good Governance

Based on the concept of good governance by UNESCAP (n.d), PPP implementation in the CJPP project shows improvements of several good governance criteria, such as consensus-oriented, accountable, participatory, transparent, follows the rule of law, responsive, effective and efficient, and equitable and inclusive (UNESCAP, n.d).

Interviews with IIGF confirmed that the CJPP project is being handled by the stakeholders who have the capability in their fields and have high compliance with regulations. For example, PLN acts as a competent PJPK due to their high levels of skills and experience in the provision of electrical energy and business management. The MoF is a compliance-minded institution, as if IIGF, most likely due to MoF involvement in its founding. KPPIP and The Coordinating Ministries of Economics are facilitators. Finally, the consortium and investors (JBIC, PT ADARO Energy, and ITOCHU) are also known for their expertise and compliance towards the regulation. These shareholders are considered to be the good compound of PPP implementation in CJPP projects. The interview results confirmed that the CJPP holds the good governance criteria of *effectiveness and efficiency* (as the stakeholders have their own responsibility based on their capability) and *follows the rule of law* (the stakeholders have high compliance towards regulations).

An interview with MoF representative, a key stakeholder which forms IIGF to provide project guarantee, shows that they accentuated the principle of good governance by encouraging the CJPP to increase transparency, competitiveness, fairness and accountability of infrastructure projects in order to achieve the best VfM and provide appropriate pricing – in this case, electricity – to the public. The MoF review decided the procurement process in the previous order has a lack of governance. This was because there were many direct procurements which lacked transparency cost the public too much. For example, excessive guarantees and

facilities were funded by taxpayers and collected through the state budget. The MoF tried to prevent the CJPP from encountering the same circumstances. The MoF stresses that a project procured through the PPP scheme must have been procured through an open auction of at least three bidders.

The MoF also acts as a guarantor as well as the financial regulator in the CJPP project and ensures these principles of good governance are tightly held by the shareholders. Based on the interview, the MoF confirmed the good performance of PT ADARO Energy and ITOCHU – two consortium bodies. This good performance has led to excellent dynamics in the project as they are fast-learning investors, understand the ground dynamics of PPP implementation, are aware of any risks, understand each other, and have the willingness to help and adapt. Japan, through the JBIC, is also a high-quality investor which patiently follow the process until financial close and considered to be ready with the existing dynamics, as well as producing a good procurement scheme at the end. In this case, the characteristics of *accountability*, *consensus-oriented*, and *transparency*, the keys for good governance, have been assured in the CJPP.

To be *responsive*, especially for the risk mitigation, the MoF delegates authority for handling social risk in the CJPP project to the Coordinating Ministry for the Economic Affairs, which is considered to be able to coordinate the parties involved in the centre and the regions. The Coordinating Ministry of Economic Affairs then forms a high-level forum for coordinating the parties in certain cases. The forum from the Coordinating Ministry for Economic Affairs was an effective mitigation tool, even though not all problems could be solved.

Another alternative to be more responsive by taking the MoF's connection with PLN (PJPK) into account. PLN is 100% owned by the government. The existence of subsidies realises the MoF's connection with PT PLN. If the risks at PLN arise from sector policies, the contribution of the MoF to intervene in PLN is quite strong. In addition to subsidies, there is a commissioner of MoF who works actively at PLN. For certain cases such as the CJPP, this institutional connection may be an alternative – and informal – forum that can be used to mitigate the risks.

5.1.4 Commitment of Private Sector and Investor

The interview results with BPI, the key private sector provider in the CJPP, revealed that the commitment of BPI contributed towards the good governance criteria in the context of transparency, follow the rule of laws, participatory, equity and inclusiveness.

In a matter of transparency, BPI regularly reported on risk management based on the EIA procedures and the progress of the project to both local and national government bodies. BPI declared that the percentage target of the construction period has been reached even though there is a small deviation. Indeed, there are obstacles but only due to natural factors, such as high waves which create difficulties to support the ship for material distribution. This obstacle is also considered not significant. Overall, BPI claimed that all technical processes do not experience any obstacles. Material distribution via land transportation is manageable in the northern coastline. BPI predicts optimistically that the construction period will be finished on time and ready for operation by 2020.

BPI also demonstrates *respect to the laws*, considering that they carefully reached around 50 licenses from the Government of Indonesia before achieving financial close in 2016. BPI reciprocated its trust towards the Government of Indonesia through cooperation and guarantee agreements.

Participatory, equity and inclusiveness, the criteria of good governance, had been shown in the recruitment process of the employee – mainly for the unskilled labour and CSR programs of BPI which considers the program for men and women in the impacted societies.

Following EIA mandate, BPI put up announcements for employment opportunities at the village hall, especially for unskilled labour opportunities. BPI stressed the sub-contractors to take unskilled workers from society around the project.

Besides, BPI also has a programme which targets farmers specifically – the major proportion of the community – called Land Replacement and Social Compensation. BPI provides the land substitutes to *cultivating farmers*. These are farmers who previously did not have their own land. Instead, they worked on the land of others (*maro*). This

means that the results of productive land are divided between the owner and the cultivating farmers. *Farm workers* are given cash compensation as living allowances for 18-21 months. For 18 months, replacement land was prepared in Sigayung Village. BPI leaves the impacted farmers to manage the replacement land for free. Considering the distance of the location towards the farmers' homeland, BPI also provided the cars in each village (Ring I villages Ujungnegoro, Karanggeneng, and Ponowareng) for transport to the location of land replacement. BPI considered that farm workers can work elsewhere, but the cultivating farmers need the land replacement to continue their sustainable living.

Although not significantly impacted by the CJPP project, BPI also considered the programme for fisherman, in collaboration with BMFAA and HNSI. The programme aims to support the capital expenditure of fishing operations in the form of revolving funds – as the most important issue for fishermen in the fisheries business – and increase the entrepreneurial motivation of fishermen to develop other businesses in addition to fishing.

According to the document “PT BPI's efforts in community empowerment around the CJPP project location” in 2016, fishermen's activity in Ujungnegoro and Kedungsegog Villages, such as fishing route and fishing locations, were also impacted by the CJPP project. Parts of the project area are the sea – the livelihood of fishermen – which had been built as the intake pipe, construction pipe, and main harbour for material distribution of CJPP project. Based on the interview with BMFAA, some fishermen argued that the CJPP project will potentially diminish the fish population and reduce their fishing productivity.

Hence, several methodologies were applied by BPI to engage the fishermen (BPI, 2016):

- 1) Direct information dissemination of the programme in collaboration with BMFAA and HNSI;
- 2) Direct visits to the location (the fishermen's area);
- 3) The CSR programme, such as building the “*rumpon*” or artificial coral reefs to sustain the amount of fish and maintain productivity;

- 4.) Loan support or assistance to groups of fishermen who can be used as operational funds for fishing activity;
- 5.) Loan support or assistance for marine products groups such as fish seller groups, shrimp paste production groups, and smoked fish sellers;
- 6.) Aids in the form of tools, equipment, and capital for ship workshops used to repair the ships;
- 7.) Provide motivation and entrepreneurship training for fishermen.

BPI holds five pillars of CSR programs, including education, culture, infrastructure, economics, and health. Based on these pillars, BPI made an effort to engage the community. Through the CSR programs, they provided training for women in making handicraft bags from woven materials. Men received training in goat farming and manufacturing the fodder by applying the fermentation techniques. This training was considered as a substitute for work and other associated activities and was intended mainly for the people who stood to lose their land and jobs due to the construction of the CJPP. BPI also held the entrepreneurship seminars and EIA socialisation for the impacted societies by engaging local government bodies such as BDEA and BITCSA as facilitators.

Under regulatory supervising of the Government of Indonesia, BPI commits to comply with regulations, both locally and nationally. BPI held regular communication with PLN as the buyer of electricity, as well as conducting monthly monitoring and evaluation in Batang Regency. BR forms a supervisory team (monitoring team) legally under a Regent Decree, and the Head of BDEA acts as the head of the monitoring team. At the community level, there are the regular meeting, sub-district leadership meeting. Both are well-recorded, including the case-by-case meeting, which is rarely recorded. In each village, BPI appointed agents to communicate directly with the community, installed a help desk to accommodate grievances, an information board – mainly for job vacancies – and a suggestion box to accommodate community complaints.

5.1.5 The Importance of Project Assistance

According to MoF, it is essential to have the project assistance for the future PPP implementation as IFC's assistance towards CJPP. Before 2005, many projects failed because they were not supported as IFC assists the CJPP. In the context of the CJPP, even though it already has an experienced business sense, PLN still needs to be supported by IFC. Under the IFC's assistance, many investors were interested as they believed that this project had been taken seriously into account by the Government of Indonesia. Furthermore, the Government of Indonesia is currently able to create a PDF scheme that allows for hiring credible consultants in order to advance the preparation document. MoF argued that other processes in the PPP scheme need to be similarly assisted. MoF recommended the IFC mentoring become a model for mentoring PPP projects in the future.

5.2 THE MULTIPLIER EFFECT OF CENTRAL JAVA POWER PLANT PROJECT: PERSPECTIVE FROM THE LOCAL GOVERNMENTS AND SOCIETY

This section discusses the multiplier effects from the CJPP project experienced by local government and society. Why considering the multiplier effects? As the CJPP is owned mostly by the national government under the BOT agreement with the private sector, I argued that local government bodies also contribute towards the success of this project. This project is built in Batang Regency. Thus, the local government will be the representative of the Government of Indonesia on the local level to support the needs of the CJPP and to accommodate the aspirations of society. The local government can benefit from this project, both directly and indirectly.

As mentioned in Chapter 4, I conducted interviews with ten local government institutions in Batang Regency, three village heads, and nine people from the societies in Ring I villages. Structurally, I conducted the interview from BR as the highest governmental level in Batang Regency to the marginalized societies in each village.

As the highest governmental level in Batang Regency, BR has a vision and several missions towards the development in Batang – one of them is “Increasing regional economic development in a sustainable manner supported by the qualified infrastructure and areas based on information and communication technology” (Batang Regency Government, n.d).

Increasing the Regional Economy become one of the priority agenda for Batang Regional Government under the current BR as a leader. His spirit and concern about regional economic development are in harmony with CJPP. BR sees that CJPP is a project that can accelerate economic development. He argued that every source of energy attracts investment because potential investors will calculate the closeness and availability of energy for their future projects. In this case, the local government will get direct and indirect benefits.

For the direct benefits, the CJPP is constructed on regional land and the developer has the obligation to pay the property tax. BRFAA, an institution of Batang Regional Government that has authority to manage regional income, confirmed that the CJPP contributes to the increasing regional income of Batang Regency through several payment and taxes, such as the payment for building permit, property taxes and Hinder Ordonantie (hereafter “HO”, a kind of the obstacle permit). However, currently, the tax for HO had been deleted by the national government in an effort to ease the investors.

One of the forms of this indirect benefit is the absorption of labour in the company. BR argued that job opportunities could generate income, which later could increase the purchasing power of societies due to the acceleration of life quality. In the end, these circumstances will contribute to the economic growth.

BR stated that currently, many investors had approached the government to invest in Batang Regency. BIISLA confirmed a statement that there are currently 16 investors from various business sectors, such as the garment industry, coal, and fish canning, which are ready to invest in Batang Regency. However, they are still waiting for the establishment of the industrial areas in Batang Regency to consider the exact location of the project. BPSA confirmed that Batang Regional Government is still working for spatial arrangement and revising the previous regulation towards industrial area – namely regional regulation (Peraturan Daerah) 7/2011.

Due to the increasing number of newcomers into the surroundings, society – mainly in the Ring I village – built some places for rent and boarding houses to accommodate the employers of sub-construction of CJPP. Women villagers also set up grocery stores as well as providing laundry services and cafés. Material entrepreneurs also benefited

because the CJPP construction requires a lot of building materials, such as rocks, sand, and soil. These circumstances directly improve the economy of the local community.

In the end, PPP implementation in CJPP leaves a development model for BR. In the future, BR plans to build a smart city. Batang Superblock, the name of this new city, will be built near to the “*Hutan Kota Rajawali*” (Rajawali Green Space) with the purpose of accelerating the development process in Batang City. This city is planned to use the PPP mechanism as implemented in the CJPP.

5.3 SUMMARY

This chapter explained the way the CJPP levels up PPP implementation in Indonesia. Taking the perspective and practice from the national government and private sector, the CJPP advanced PPP in Indonesia as marked by optimizing PPP joint office, widespread understanding of PPP mechanism in the regional level, practising the principle of good governance, the commitment of private sector and investor, and project assistance.

The CJPP also benefited local government and society, both directly and indirectly. The CJPP was built on regional land, and thus increased regional income from taxes. Indirectly, the CJPP absorbed labour in the main company and sub-company of project construction. The CJPP also attracted investment in the Batang Regency and increased the number of entrepreneurs in the village near the project area, due to new opportunities for renting houses, laundry, cafés, and other types of businesses.

CHAPTER 6

STRATEGIC ISSUES: GOVERNANCE

The previous chapter explained the progress of a PPP project in the case of the CJPP. The chapter indicates what has been ‘done on the ground’ based on the literature, documents, and interview results. As mentioned in the previous chapter, understanding the ‘issues’ means being aware of the existing complexities. After acknowledging the progress of the project, this chapter will discuss what needs to be done or what are the existing issues. This chapter particularly shift a focus into greater detail of governance issues to answer SRQ1, which later could comprehensively answer the RQ.

To discuss the strategic issues regarding governance, it is first important to analyse the inclusivity of each stakeholder and discuss the impact, interests, and intervention of interviewees towards PPP implementation in CJPP project – the meaning of a ‘PPP in the CJPP’ for each participant. A critical review of the PPP structure is grounded in this chapter to compare the framework and practice, as well as to analyse the dynamics of regulation. To conclude, this chapter will explore the issues regarding people, organization, and regulation (policy).

Stakeholder analysis is the key tool used in this chapter. By using the stakeholder analysis technique, one can determine how power relations affect the strategic issues and vice versa. At the end, understanding the strategic governance issues will provide a structural and functional recommendation to the PPP implementation in the future, particularly in the case of the PPP project in the energy sector.

6.1 STRATEGIC GOVERNANCE ISSUE I: STAKEHOLDER INTERESTS AND POWER RELATIONS

In Chapter 4, the stakeholders involved in the CJPP were grouped into two categories: the primary and secondary stakeholders. In this section, the matrix is extended by mapping the interest and impact of the parties involved in the CJPP project as shown in Table 6.1. Theories of economic development and power relation are used to analyze

the dynamics of the CJPP at the practice level. Mostepaniuk (2016) chronologically summarized the economic development theories regarding PPP, in which some strategic governance issues in the case of the CJPP either fit or are incompatible with several theories.

Table 6.1 Categorisation of stakeholder interests and impacts

Stakeholder	Interest	Impact
<i>Primary</i>		
National Government		
1. MoF	Fulfillment of infrastructure targets & guarantees	+
2. IIGF	Infrastructure Guarantee	+
3. PLN	PIC of CJPP Project (Public Sector Representative)	+/-
4. MNDP	Fulfillment of national development targets	+
5. KPPIP	Accelerated development	+
Private Sector		
6. BPI	Development partner – profit oriented	+
Local Government		
7. BR	Fulfillment of regional development targets	+
8. BDPA	Fulfillment of regional development targets	+
9. BDEA	Monitoring the environmental impacts	+/-
10. BIISLA	Licensing Facilitation	+
11. KSH	Facilitating local communities	+/-
Society		
12. HUV	The village development targets	+/-
13. UVS (1-3)	Improved the living standard	+/-
14. HKV	The village development targets	+/-
15. KVS (1-3)	Improved the living standard	+/-
16. HPV	The village development targets	+/-
17. PVS (1-3)	Improved the living standard	+/-
<i>Secondary</i>		
Local Government		
1. BMFAA	Fishermen welfare and marine protection	+/-
2. BRFAA	Increasing revenue from regional income	+
3. BPSA	Conformity of development and spatial planning	+
4. BITCSA	Industrial and SME developments	+/-
5. UIQSA	Sustainable living standards of community	+/-

Based on Table 6.1, stakeholders can be classified according to the functioning and their respective interests. Three groups of parties shown in the table are:

1. *The state* is represented by who governs the community (both national and local government) at various scales. Smith's theory stressed the needs for the state in the economy by operating the public enterprises, in the CJPP case through PLN as PJPK (Mostepaniuk, 2016). In carrying out this duty, PLN is helped by the national government (MNDP, IIGF, MoF, KPPIP) and local

government (Batang Regency government, both primary and secondary stakeholders).

2. *Private capital*, in this case is performed by BPI, acts as development or cooperation partner as well as holding the profit-oriented principal.
3. *Society*, in this case are performed by the head of villages (HUV, HKV, HPV) and the villagers (UVS (1-3), KVS (1-3) and PVS (1-3)), acts as development targets.

6.1.1 Issues of Top-down Approach

The CJPP is a typical top-down project. This project structure is by various layers of government with their own scale of authority, from the level of central government ministries down to the level of marginalised society. In order to deliver economic and social development to their citizens by provisioning the needs for electricity through the CJPP, national governments position themselves as the parties who have more power, as they believe this project will increase community welfare. The local government, in line with their main tasks and functions, have an obligation for supporting the national government project at the regional level despite running their daily basis for serving the community needs. A question further raised from this power issue: *'Does the PPP top-down approach work in the case of the CJPP?'*

Before analysing whether the top-down approach in the CJPP project works, it is first necessary to review power divisions and relations, as well as issues experienced by each stakeholder within the CJPP project.

6.1.1.1 Self-task enforcement

In the context of the CJPP, the state, the public enterprise (PLN), and private capital are seen to have equal power. Through PLN, the MoF, IIGF, and BPI, the Government of Indonesia hold three types of agreements with private sector providers of capital. These include joint agreements (PPP agreements between the private sector and PJP as a public entity), guarantee agreements (agreements between the private sector and the guarantors), and regress agreements (an agreement between the guarantors and PJP).

By holding those agreements, the involved parties are supposed to have the self-enforcement in executing their tasks in the CJPP project. Through Table 6.1, it can be seen the interests of these parties are compatible with the CJPP goals. Therefore, CJPP results the positive impacts towards each of their interests, or in the matrix is shown by the plus mark (+).

6.1.1.2 Limited local government capacity

Although in Chapter 5 explained that the knowledge of PPP was increasingly widespread, in the case of CJPP, the PPP scheme was still not well disseminated at the local level. This was especially true when initiating the project activity as well as in the form of training, research and implementation of PPP policy making to government officials. In reality, therefore, associating concepts and realisation became an impediment. This happened because projects carried out at the regional is generally small-scale and funded by APBD (*"Anggaran Pendapatan dan Belanja Daerah"* – the regional income and expenditure budget) or APBN (*"Anggaran Pendapatan dan Belanja Nasional"* – national income and expenditure budget) (Rifai, 2016). Thus, the experience of the local government in handling PPP megaproject is still limited.

For instance, in terms of ESIA/AMDAL preparation, local government has limited experience in handling a mega-project. Thus, local government – in cooperation with the private sector – needs longer times than scheduled in compiling ESIA/AMDAL documents. The Central Java Provincial Government does not yet have a reference to assess ESIA/AMDAL documents because this project is the large-scale power plant with more modern technology. Furthermore, this is the first time that the project will be undertaken at Batang Regency, Central Java.

6.1.1.3 Communication and knowledge gap: lack of national government's assistance

The Central Government of Indonesia revealed that they are aware of the limited capacity and authority of the local government. As stated by the MoF, the capacity of local governments to understand project management and financing needed to be improved. Otherwise, the time needed for things related to project management such as investment, will be relatively long.

However, local government bodies confirmed that they did not receive any fundamental training and capacity-building regarding PPP mechanisms, especially for handling the CJPP as a megaproject. This is the dilemma because the national government also keeps a record of their basic tasks and functions and expects active participation from local government to contribute towards the CJPP project. Local government bodies also confirmed that they have limited understanding of the dynamics of PPPs regulation and expect comprehensive information and routine communication from the national government, in order to bridge the knowledge gap.

Based on the interview, MNDP stated that they are willing to assist the local government agencies through internship if any of the local government people is willing to develop their skills and expertise towards PPP mechanism and implementation. However, this program was not well-informed towards the local government in Batang. In this case, there was a communication gap between local government and national government in terms of project officer assistance.

6.1.1.4 Overlapping tasks of local governments

Interview results with several local government bodies showed that they experienced overlapping tasks and functions. In fact, they have limited scale of authority, as well as limited human and financial resources to support CJPP project at the ground level, such as facilitating the needs of society and ensuring the development and construction period of the CJPP project were under control and at the same time helping BPI to reach the targets. CJPP, under the classification of ‘mega project’, leaves many additional tasks towards the local government bodies. It requires their extra time and energy to concentrate mainly towards CJPP rather than focusing on their interests to meet the local development targets by running their own action plans.

“Actually, in the context of CJPP, the government authority is unclear, so that when problems occur, we are confused about to whom can express our aspirations and find solutions. Also, as KSH, I am too focused on the villages affected by CJPP while less focus on developing other villages...” (Interview with KSH, August 2018)

However, local government bodies are quite optimistic since this project greatly contributes towards positive aspects of development in Batang Regency as presented in Chapter 5. Therefore, in Table 6.1, CJPP could potentially have positive and negative impacts towards local government's interests, or in the matrix are shown by the plus or minus mark (+/-).

6.1.2 Power Relation between Local Government and The Private Sector

The relationship built between the local government (Central Java Provincial Government and Batang Regency Government) with BPI as a private sector is classified as equal in terms of power and authorities.

6.1.2.1 Mutual benefit

The local government functions as an agent in helping investors and the private sector in the construction of CJPP projects. The provincial government assisted BPI in issuing AMDAL documents, while the Batang Regency government helped in handling social issues that occurred in the community and acted as the monitoring team for the implementation of the ESIA/AMDAL mandate at the project site and its surroundings.

As a part of the private sector, BPI is very respectful and complies with the regional regulations written in the AMDAL document and works together with the local government to succeed the development of the CJPP project. BPI also conducts consultations with local governments in terms of handling case-by-case solutions.

6.1.2.2 Restricted authority

Despite the equal power relation between local government and BPI as the developer, BR and other local government agencies cannot impose the expectation and abuse their power. On the one hand, even for any government person, access to the project location must be the same as the procedures of other guests. On the other hand, BPI cannot violate the (national and local) laws and has limited power to resolve the case by case issues in the social field. The relationship between local government and BPI can only produce a limited number of recommendations which are later agreed upon as joint decisions.

6.1.3 Authority over Societies: Imposed Power?

In the context of CJPP, the state dominates the power in determining the construction of CJPP rather than society. Meanwhile the private sector also able to cooperate and get support from the state in carrying out the construction of the power plant. The communities affected by the CJPP construction are weak in terms of power, even their power that is manifested in the ownership of land is seized by the state. However, the state – represented by the Government of Indonesia – have a particular reason, future plan and priority for converting the private-owned land to be the project site, as they argued that the CJPP project will support the need of electricity among millions who live in Java and Bali islands.

According to KPPIP (2016), thousands of Batang Central Java Province members who are members of the Batang People's Association for Conservation held a demonstration on September 4, 2011, in front of the Semarang State Administrative Court (PTUN). The action was carried out together with the filing of a lawsuit to PTUN against the Decree of the Batang Regent No. 523/194/2012 regarding the reserve of the Ujungnegoro-Roban coastal park area. In this action, Batang residents urged the Batang Regent to prioritize the livelihood, safety and welfare of citizens beyond the interests of CJPP investors. These protests and opposition were carried out from 2011 to 2016 but subsided after then.

Despite the long period of opposition, CJPP continued to be built. Interviews with HKV revealed that no matter how big the efforts are put against the government, they will never have the power to compete. The head of Ring I villages confirmed that this project is not actually what they need because they have no problem with the existing electricity on their villages.

6.2 STRATEGIC GOVERNANCE ISSUE II: THE PROJECT STRUCTURE

Project structure had been synthesized from this research as one of the strategic governance issues. This issue was manifested by the national governments such as MNDP, PLN, and the MoF, and local government bodies such as BDPA, BDEA, BIISLA and KSH. As this project involves various stakeholder with each interest, the complexities of the project implementation increased. These complexities are shown

through various perspectives, such as business, investment, and governance perspectives.

6.2.1 Project Complexity from the Business Perspective

PLN, a state-owned electrical company in Indonesia, holds the business principal for its manner which prefers to be eased through the appropriate business mechanism and somehow profit-oriented. However, the PPP mechanism for the CJPP project was not in keeping with PLN's preferences. First, PLN is tasked by the Government of Indonesia as PJPK under the social purpose to ensure fulfilment of the needs of electricity in Java and Bali during the CJPP operational period. Therefore, to perform this obligation, PLN is required to price electricity tactically to allow profit for the investors as well as affordable tariffs for the public or societies. Second, from the business perspective through PLN's point of view, the PPP scheme for the CJPP project is regarded to be complex and dynamic. This complexity is shown in Figure 6.1 below.

Figure 6.1 The comparison between Direct IPP scheme and PPP scheme

Source: Interview with former PT PLN' head of CJPP Project, Asistya Semiawan, 22nd August 2018

Figure 6.1, drawn by PLN representatives, confirmed the complexity of the PPP scheme in the CJPP. The first circle shows the direct IPP scheme without guarantee system, and the second circle shows the PPP mechanism with the guarantee system (by using a record and guarantee agreement) through the MoF and IIGF (in Figure 6.1 is depicted as "PII"). Direct IPP was seen to be secure and simple in terms of the organization, PLN

pointed, while PPP was not in PLN favour since it required more parties and interests under the common goals.

While PLN accentuated that direct IPP mechanism is more convenient, contrastingly, BPI elaborated the private sector or investor's perspective which stated that the PPP mechanism was preferable. Also, in the perspective of the private sector, BPI representative explained that the government guarantee matters to the investment regarding the certainty for purchasing electricity produced by CJPP.

CJPP-related issues occurred on the ground left questions of PLN towards PPP project management, such as "Does the public participation have to be in the form of investment guarantees? Is there any other form, such as the ease of licensing?" In this context, it can be seen that determining public sectors' participation is crucial. Regarding energy provision system, the former IPP scheme has PPA to secure or guarantee the investment. If the project structure is added, it will increase the complexity.

An extra layer on the project structure, when examined further, will cause various bureaucratic delays. There will be inefficiencies in the bureaucratic system and coordination between institutions, good communication, experience and in terms of capacity. Furthermore, the scheme will be less structured and setup immature documents.

6.2.2 "Where Does the Local Government Stand?"

During the project period, the relationship between national and local governments became less optimal because the regency is only assumed as the location of project activities. This means that involvement and certain roles of local government are still limited, such as consultation, information dissemination and legality, but not yet involved in other things. Furthermore, it created the difficulties in coordinating the central and local government because local government's obligations had not formally defined in the project's organisational structure as depicted in the project structure (Figure 3.5 in Chapter III).

6.3 STRATEGIC ISSUES III: THE DYNAMICS OF REGULATION

In Indonesia, PPPs are not a new system. This system has long been implemented. The most prominent milestone was the Presidential Regulation 67/2005 which is currently replaced by Presidential Regulation 38/2015. However, in the case of CJPP, some of the project's impacts are opposite towards the regulation, both in the national or regional level.

6.3.1 Issues Regarding Regulation at the National Level

PPPs are not only regulated through Presidential Regulation No. 13/2010 but also regulated in other regulations, such as: 1) Government Regulations No. 6/2006 about National or Regional Asset Management amended through Government Regulation No. 38/2008; 2) Government Regulation No. 50/2007 concerning Procedures for Implementing Regional Cooperation; 3) Sectoral regulations, such as infrastructure, land and other regional regulations (Rifai, 2016). This condition directly raises different interpretations and understandings from each of these rules.

Besides, the magnitude of complexity is also likely to the occurrence of dualism in project implementation towards the same activity. Presidential Regulation No. 56/2011 and PP No. 50/2007 failed to explain the realm of cross-sectoral regulation. This means that there is a possible conflict of various existing regulations. This will be confounding which one will be referred to, whether complying the highest level of regulation, the latest regulations or the rules are directly involved in sectoral basis. The unclear regulation system will cause inefficiency, especially in the aspect of compliance synchronisation which potentially leads to overlapping regulation, as stated by PLN below:

"Frankly, this project is rather complicated due to the difficulties to synchronize. Actually, the government always asks for zero risk, while it is rather difficult for PLN to structure due to the long negotiations and coordination. When we follow these rules [PPP scheme], we undergone many obstacles in time. MNDP said [we have to follow] the sector policy under the sector regulation by MEMR. However, in terms of investment guarantee, we have to comply with the regulation by MoF. Somehow PLN must run together, it must be in terms of sectors and guarantees"

(Interview with former PT PLN' head of CJPP Project, Asistya Semiawan, 22nd August 2018).

6.3.2 Conflicts in Land Use Change

The CJPP project is developed built across or adjacent to special areas, such as protected areas (conservation), agriculture and plantations. Thus, CJPP construction disturbs the ecosystems, routine activities, and cause social conflicts. The condition often not easy to solve by referring to the applicable regulations, because of these potential factors:

- *Sectoral regulations are not yet interrelated*, as confirmed by BIISLA that during the negotiation, there is a sectoral debate with the Department of Agriculture;
- *Limited higher rules that cover inter-sectoral intersections*; this overlapping rule had been shown by the District Head Decree No. 523/306/2011 about land use change of Batang Beach Coastal Area from marine conservation to be cultivation area that violates the higher rules namely National Spatial Planning No. 26/2008 Appendix VIII No. 13 and Provincial Spatial Planning No. 6/2010 concerning the determination of the Batang Coast as a Protected Area.
- *Limited experience of cross activities different sectors in the same location*, especially for the local government and BPI as “the controller” of any local issues.

6.3.3 Conflicting Regulations at the Local Level

At the local government level, an interview with BITCSA confirmed that the influx of migrants in the Ring I village had negative impacts that were contrary to the regulation, such as local norms and the regulation regarding alcoholic beverages. Residents from outside Batang Regency and foreign investors from Japan and Korea who came to the village had the habit of drinking alcohol after eating. Thus, the food stalls in the Ring I villages sold alcoholic beverages illegally.

6.4 TOWARDS PROJECT COMPLEXITY: THE WIDER REFLECTION

Meanwhile, the MoF and IIGF acknowledged the debatable perspectives towards PPPs scheme that occurred across institutions. Based on MoF and IIGF points of view, all actors involved in the CJPP are professional and created the ideal compound to overcome the project dynamics. However, the MoF stressed the rationale for providing the guarantee system in the CJPP. The MoF argued that the long period took for negotiation, coordination and repeatedly amended agreements were required to raise the governance quality in terms of enhanced accountability and transparency. As a reverse, any parties who want the PPP process to be implemented in a short time may reduce the governance quality, especially in the project preparation phase. MoF, rather than viewing PPP implementation in CJPP project as complexity, seen PPP as a mechanism that allows flexibility in the process. This flexibility aims to advance the project structure.

“Flexibility does require a relatively long time, but it is not a bad thing. Technically, some parties interpret flexibility as complexity, or more likely to “block”. (Interview with MoF, July 2018)

A question further raised in this research to reflect the various outlook of CJPP: *to what extent these perspectives were the complexities of PPP implementation in CJPP rather than the flexibilities?*

In reviewing the question above, the previous literature in Chapter 2 referred back to the nature of the PPP project. PPP projects are paradoxical combinations between efficiency and complexity, as both perspectives of several government bodies were explained before. Efficiency, because each stakeholder can work optimally and professionally in their respective fields following standard procedures. Complexity, as Yescombe (2011) argued align with PLN’s outlook, PPP project is adding the “extra-layers” for administrative works such as proposals and negotiation. Bult-Spiering and Dewulf (2006) acknowledge that the parties, during the project period, put efforts to balance the collective project goals and their own organisation goals which are usually compatible but could also have discrepancies.

Furthermore, Bult-Spiering and Dewulf (2006) stated the rationale for maintaining the partnership along the project period since PPP projects are normally in the long-time contract. During this long period of contract, several disturbances may occur and affect the project dynamics, such as the regional election period, changing policies, and other uncertainties within inter-organisational interactions.

‘The success of partnership will depend on the level of commitment for an extended period and also a flexible attitude to the operating procedures and framework of the actor’s own organisation. Trust and joint image are important elements in the creation and functioning PPPs because all projects are confronted with uncertainties that cannot be banished by means of contracts (Bult-Spiering and Dewulf, 2006, p.33)’

Ghobadian et al. (2004) agreed that the MoF take the guarantee system into account. They noted if there is no explicit guarantee, the risks will not be transferred if things go wrong. This point enforces the level of importance for the guarantee system to be applied in PPP projects.

However, the guarantors must have self-awareness regarding their own capacity to act as guarantors. In this case, the state must have a standard or strategy to allocate funding for guarantees, in which the value cannot be smaller than the project’s value. During the interview session, PLN raises questions regarding the capacity of the Government of Indonesia, such as: 1.) Does the Government of Indonesia have enough funding support for providing a guarantee?; 2.) How much funding does the Government of Indonesia have to provide guarantees?; and 3.) How many projects can be supported?

6.5 SUMMARY

The top-down approach to implementing a PPP in the CJPP project requires improvements in some aspects, such as communication and coordination to bridge the knowledge and capacity gap between national and local government, as well as mapping the power and authority to avoid overlapping tasks, functions and regulations. All roles of project-related parties must be well-defined to ensure each institution's responsibilities and position.

In the end, both perspective either complexities and flexibilities cannot be avoided from the PPP project cycles, as (Bouma & Berkhout, 2015, p.9) expressed that “a good balance is difficult to find”. The dynamics of PPP projects require long-period of interactions, trust, and perseverance among the involved actors and high-level adaptability for overcoming the uncertainties. In the case of CJPP, for both complexities and flexibilities, confirmed Bult-Spiering and Dewulf (2006, p.33) called as ‘nurturing’ process for 25 years contract, or what Adam Smith called as “natural harmony” (Mostepaniuk, 2016, p.378).

CHAPTER 7

STRATEGIC ISSUES: ENVIRONMENT

The construction of the CJPP is expected to help society, especially those who live in Java and Bali, enabling people to carry out their daily activities, increasing transactions and other activities which aim to contribute to improving Indonesia's economy. Meanwhile, besides developing the economy, the environmental effects must be considered since as is known that developments, both locally and globally, can have impacts on the guarded ecosystem.

The following part of this research moves on to describe in greater detail the environmental issues regarding the CJPP project. This chapter is synthesised based on the baseline energy demands in Central Java Province and how the CJPP contributes to the environment, from the local level in the surrounding areas up to the national level. The issue raised from the local level will be discussed based on the ESIA/AMDAL document implementation in managing environmental impacts on the CJPP. This discussion will be continued by analysing the potential emission, coal stocks and sustainability at the national level.

7.1 STRATEGIC ENVIRONMENTAL ISSUE I: THE LOCAL-TECHNICAL ISSUES OF ESIA/AMDAL FRAMEWORK AND IMPLEMENTATION

Assessing environmental impacts is obligatory before building a project. In Indonesia, the applied Environmental and Social Impact Assessment (ESIA) complies with International Standards (Equator Principles or EP III, IFC Performance Standards 2012, and Japan Bank for International Cooperation (JBIC) guidelines) for considering, predicting and managing the environment, health and safety. The ESIA process produces the documents of Environmental Impact Assessment (EIA – referred to as ANDAL in Indonesia), Environmental Monitoring Plan (EMoP), Environmental Management Plan (EMaP), and additional social components. All of these ESIA documents are referred to as AMDAL in Indonesia.

Based on the EIA document issued by BPI in 2013, in the case of the CJPP, the assessment of the AMDAL document was carried out by the Central Java AMDAL Commission, and the Governor of Central Java issued a decision on environmental feasibility. This AMDAL assessment is also following the Regulation of the Minister of Environment No. 05 of 2008.

In the preparation of the ESIA, analysing the detailed project activities are essential to consider the potential effects of the project on the environment, as well as to analyse the influence of project activities on the community and, as reverse, analyse the influence of community responses to the project sustainability as well. One thing that matters before describing the project activities is considering the project location. BIISLA, a local government institution with authority to release the location permit of the CJPP, emphasised that in order to issue a license, a project must have two fundamental conformities: spatial planning conformities and societal acceptance. Regarding spatial planning conformities BDEA, BPSA and BMFAA confirmed that the construction zone of the CJPP – including land and sea dimensions – complies with the Coastal Zoning Plan (RZWP), Regional Regulation (Perda) 7/2011, Law No. 26-27 of 2007 and Law No. 23 of 2014. While in terms of societal acceptance, the project plan to prevent social issues has followed the AMDAL requirements, even though the social dynamics still occurred (see Chapter 8).

As explained in Chapter 4, the CJPP project is located on the north coast of Java in Batang Regency. The site is located approximately 80 km west of Semarang and is accessible by land via the northern coastal highway. Approximately 226.4 hectares of land was required for the power plant and its associated facilities as shown in Figure 7.1 below.

Figure 7.1 CJPP project location and area distribution (KPPIP, 2016, p.5)

Broadly speaking, according to the EIA document (BPI, 2013), the scope of the CJPP construction activities includes the construction of the Main Block (Power Block), Special Terminal (Jetty), dredging in the sea, dumping and the construction of a 500-kV transmission line (SUTET or Extra-High Voltage Transmitters) from the project site to the substation and from the substation to PLN's existing 500 kV grid. Based on Figure 7.1, the main mode of transport of equipment to the site will be by barge and ship to the coal unloading jetty or a temporary-equipment unloading jetty. The construction of a 500-kV substation is located in Simbangjati village, located about five km south of the project site. About 19 hectares of land will be required for the substation, and about 76 hectares will be utilised for the transmission line.

In embodying the effects of the CJPP project, a matrix of hypothetical important impacts was generated, containing potential components of impacts. Based on this matrix for every project activity of the CJPP, several components are categorised as important impacts, such as: 1.) physical chemistry components (air quality, noise, odour, surface water quality, seawater quality, landscape, land water discharge, vibration, TENORM exposure, groundwater quality, sedimentation, land use, and

coastline); 2.) biological components (plants, animals, river biota and marine biota); 3.) transportation components (land and sea traffic); and 4.) a group of social, economic and cultural components are categorized as social impacts, such as the emergence of land speculators, community unrest, patterns of social relations, community perceptions, livelihoods, income levels, employment opportunities, customs, business opportunities, comfort, public health, and cultural heritage.

Following the ESIA procedures, BPI and the related stakeholders carried out AMDAL mandate to handle the potential issues under the framework and timeline shown in Table 7.1.

Table 7.1 Workplan schedule of handling the impact of CJPP project (KPPIP, 2016, p.13.)

ACTIVITIES	2012				2013				2014				2015				2016				2017				2018				2019				2020				2021 - NEXT			
	PRE CONSTRUCTION																CONSTRUCTION																OPERATION							
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Socialization of Project Activities
Land Procurement
Environmental Permit (Amdal)																																								
Environmental Permit Application																																								
Handling of the Impacts on Farmers																																								
Distribution of Social Compensation																																								
Land Replacement Procurement																																								
Preparation of Land Replacement																																								
Use of Land Replacement																																								
Handling of the Impacts on Fishermen																																								
Installation of Artificial Reef																																								
Installation of Navigational Aid																																								
Economic Development of Fishermen																																								
Employment (Local Residents Priority)																																								
Pre-Construction
Construction
Operation
CSR																																								
Infrastructure Support																																								
Worship
Health
Education/School
Installation of Clean Water/Environmental Sanitation
Other Public Facilities
Educational Support																																								
Learning Tool
Scholarship
Health Support																																								
Enhance Quality of Service
Sanitation and Hygiene Campaign
Economic Development Support																																								
Form a Business Groups
Micro Finance Institutions
Provision of Temporary Jobs
Social, Culture, Religious and Environmental Support																																								
Social Support
Religious Support
Environmental Conservation Support

Note:

Plan

Finished/On Going

Based on Table 7.1, the work plan for handling the impacts of the CJPP seems comprehensive. It shows a sequential work plan from the pre-construction period up to the operating period, with each activity having focuses and goals. Socialisation (consultation and information dissemination), land procurement and the CSR programme seem to be applied for longer periods than other activities. Based on the interview, the residents admit that they had been informed generally about the environmental impact through AMDAL socialisation.

Several issues occurred during the implementation of the work plan (See Table 7.1), such as the socio-environmental issues, the unpredictable issue of 'leakage', the issues regarding environmental risk management framework and the issue of soil quality on the replacement land. These issues will be discussed afterwards.

7.1.1 The Issues of Socio-environmental Dimension

On the ground level, BPI was able to control and handle the three components of important impacts mentioned before (physical chemistry, biological and transportation components). However, extra effort was required to tackle the social, economic and cultural components of impacts, since these impacts are more dynamic and unpredictable. BPI, in collaboration with the local government, struggled to appease the people who felt disturbed and did protest about environmental discomfort caused by the construction of the CJPP project.

Based on the interview results, the causes of protests by the community regarding environmental issues were:

1. Land use change from productive land to be the project location. According to the EIA/AMDAL document (BPI, 2013), CJPP requires 226,4 hectares for the main block, 41 hectares for dredging, 150 hectares for dumping, 61.4 hectares for transmission line and 25 hectares for the substation. This mass of land use change seemed to threaten local livelihoods and bring about unemployment.
2. The spread of dust in the dry season due to material transportation, as several interviewees confirmed. Dust is blown by the wind into residential areas, causing respiratory problems among residents. Indeed, the volume of dust obstructed the vision of residents. In 2011, BPI had counted the volume of

vehicles on the Bakalan road segment as shown in Figure 7.2. Based on Figure 7.2, the volume of vehicles may cause the traffic and spread the dust around the villages.

Figure 7.2 Average vehicle volumes in Bakalan segment road – 2011

Source: EIA Document (BPI, 2013, p.101)

- Concerns about the growing cafés around the project location, which added the volumes of unmanaged waste as shown in Figure 7.3.

Figure 7.3 Unmanaged waste in Ujungnegoro village (Observation, 2018)

- Future environmental disturbances related to potential pollution – and global warming. This issue will be more discussed in the next subsection.

5. Noise. Another factor that caused inconvenience to the residents, according to the interview results, is the noise, but this noise issue is not as significant as the four issues above.

7.1.2 NGO Perspectives, Media Framing and Opposition

Since coal will be used as a primary energy source for the CJPP, environmental concerns towards the emissions were raised. The construction of the CJPP – which is expected by the government to add the electricity supply in Java and Bali – did not receive positive responses by community and NGOs. The number of potential negative impacts that will reduce the local quality of life – especially towards their health and economy – are the main reason for the rejection. This is supported by the real impact that national industrial development – according to the protesters – is detrimental for the residents living in the vicinity.

Together with NGOs such as Greenpeace and Go Green Batang, as well as various supports such as Legal Assistance Institution (LBH – Lembaga Bantuan Hukum), Semarang residents continued to defend their livelihoods and environment – preventing the government from using the land for the construction of the CJPP.

Research conducted by Hardinia (2014) identified the roles and perspective of Greenpeace in the rejection of the CJPP construction in 2011-2013. Greenpeace is an NGO, providing people with information and encouraging debate. In this case, Greenpeace encouraged participation of civil society so that the organisation can achieve the goals to preserve a green, safe and peaceful environment.

Moreover, Hardinia (2014) added that Greenpeace helped the Batang community movement against the CJPP construction by advocating the communities' interests and supervising the government by researching the CJPP development plan. Based on the research, Greenpeace revealed that the impact of coal on the environment with mercury and other substances would damage marine biota and cause acid rain which can cause skin diseases, respiratory problems and other things. Moreover, Greenpeace also estimated the annual emissions that will be released through the operation of the CJPP as shown in Table 7.2.

Table 7.2 Estimated Annual Emissions of GHG from CJPP (Fiyanto, 2014b, p.3)

Air Pollutant	Estimated Annual Emissions ³
CO ₂	10.8 million tonnes
SO ₂	16,000 tonnes
NO _x	13,000 tonnes
PM ₁₀	1,800 tonnes
PM _{2.5}	780 tonnes
Mercury	200 kilograms

Greenpeace also participated in monitoring the law, the presidential regulation, and the presidential decree issued by the Government of Indonesia. In addition to using research data, Greenpeace also made lobbying efforts through peaceful actions and speeches to attract government sympathy. Diplomatic efforts were also made by meeting the Coordinating Minister for Economic Affairs Hatta Radjasa, sending an official letter to President Susilo Bambang Yudhoyono, and meeting with the investment owner (J-Power) (Hardinia, 2014).

Fiyanto (2014), a Climate and Energy Campaigner from Greenpeace Southeast Asia, told his story in 'Move Beyond Coal: The Global Movement in 2013' – an article for the Huffington Post. He depicted the incompatibility of the Indonesian government goals and World Bank Group's new strategies in the case of the CJPP. In 2013, Indonesia was committed to reducing greenhouse gasses emissions around 26% by 2020 and making 25% of energy renewable by 2025. The CJPP development undermines this commitment. The World Bank Group, which previously rejected the coal-fired power plant, provided USD 33.9 million for the CJPP guarantee in helping IIGF.

Despite direct movement against the CJPP's construction from NGOs and society, various media and newspapers – both national and international – had also reported NGOs' and community refusal of CJPP as summarised in Table 7.3. Based on Table 7.3, online media for the recent five years discussed the CJPP in negative terms through negative diction such as *threatens, stop construction, the dirty coal, odds, controversial, and environmental problem*. These media headlines potentially drive the negative public opinion of the CJPP and strengthen the opposition.

Table 7.3 Summary of media framing of the CJPP

Media	Title/Framing	Citation	Date
Huffington Post and Sierra Club	Move Beyond Coal : The Global Movement in 2013	Fiyanto (2014a)	2014
JBIC Media Japan	Coal Power Plant in Batang Threatens Food Security and Contributes to Climate Change	Fiyanto and Herawan (2014)	24-Sep-14
JBIC Media Japan	Batang coal-fired power plant misses the deadline again.	Fiyanto and Novayanti (2014)	27-Oct-14
Reuters	Indonesia govt, farmers still at odds over Batang power project	Asmarini et al. (2015)	5-Mar-15
World Coal website	Mega power plant project <i>gets the green light</i>	Green (2015)	13-May-15
Tempo	Greenpeace Slams Batang Power Plant Project	Widyanto (2015)	29-Aug-15
Jakarta Globe	Greenpeace Criticizes Joko for Groundbreaking of Batang Power Plant	Robert (2015)	30-Aug-15
Eco-Business	Indonesia's largest coal plant will be built despite protests , minister says	Parker (2016)	6-Jun-16
Indonesia Investment Website	Indonesia's Controversial Batang Power Plant: Human Rights & Environment	Indonesia Investment (2016)	7-Jun-16
Mongabay	As construction begins on Java's Batang coal plant, a divided community faces environmental problems	Woods (2017)	24-Jan-17
Dominican Today	Activists stop construction at Southeast Asia's biggest planned coal plant	Ganguly (2017)	30-Mar-17
Jakarta Globe	Greenpeace Urges Gov't to Stop Coal-Fired Power Plant Projects in Java and Bali	Sinaga (2017)	16-Nov-17
Earth Justice Website	Fighting to Keep a Dirty Power Plant out of a Tropical Paradise	Burt (2018)	25-Jun-18

Sources: summarized from various media

As the Head of Monitoring in the CJPP project, BDEA responded to this issue of opposition by stating that NGOs overstepped the authority of local governments and accessed society directly to respond to the CJPP development planning. NGOs were supposed to be inclusive and objective by engaging local government. Also, on the national level, departments of the Government of Indonesia, such as IIGF, KPPIP, PLN, and MNDP, stated that it takes time to leave coal behind and move to greener options such as renewable energy. They argued that for the time being, coal is still cheap, abundant, and dependable in the context of high national demand for energy.

In this case, it can be seen a coordination gap between NGOs and government. While NGOs stated that AMDAL/ESIA implementation should be more community-driven or participatory, the local government regretted that NGOs overstepped the local government in driving public reactions. Media framing is also biased by neglecting government perspectives.

7.1.3 The Unpredictable Issue: “Leakage on the Water Canal”

The impacts such as dust and garbage and the procedures for handling those impacts, both technically and socially, are provided and have been described in the AMDAL document (or see Table 7.1). However, according to the interview with BDEA, some unexpected impacts occurred on the ground that needed to be tackled case-by-case. For instance, the "leakage" of the water channel to the location of the replacement land resulting in a lack of water on the replacement land in Sigayung village. These "leaks" are caused by the resident taking water given to recipients of replacement land, while residents in the village near to the canal also need water for their land.

7.1.4 The Issue of Soil Quality on the Replacement Land

Another issue which arose is that the replacement land cannot completely replace rice production which was farmed on the appropriated land. BDEA stated that the soil quality on the replacement land is not commensurate with the former fertile land that is currently being converted for the CJPP project, due to differences in soil that requires additional treatment to fertilise the land. Furthermore, a protest came from the residents in other villages who are not directly affected but are affected by derivatives impacts, such as deposits of project soil material that disrupt their surroundings. These issues also needed to be accommodated.

7.1.5 Marine Conservation Issue

Some environmental groups, such as Greenpeace, objected to the project because the planned site for the project, the Ujungnegoro-Roban coastal area, is a marine conservation area. They pointed out that it was declared as an area for development of marine tourism under a 2006 government regulation. They expressed concerns that the power plant will pollute coastal fishing water and threaten the livelihood of local fishermen.

In response to concerns about pollution to coastal fishing waters, BPI stresses that the seawater intake and outfall system has minimal impact on the temperature of the seawater close to the power plant and any small temperature change would not have any impact on the life of organisms there. There is also a changing status for the sea dimension, from Regional Marine Conservation Area (Kawasan Konservasi Laut

Daerah – KKLD) to Marine Tourism Park (Taman Wisata Alam Laut – TWAL). Because the status of the project area is in the limited utilisation zone and not in a conservation zone, it allows the CJPP construction to be continued. Previously, the problem was rooted in societal acceptance, which prolongs the land acquisition process. After the social issues had been solved, BIISLA issued the location permit for constructing the CJPP.

7.1.6 Environmental Risk Management Framework: Too Complex?

In realising the work plan in Figure 7.2, the environmental risk management framework, according to BDEA, is far too complex due to the number of sub-construction companies of BPI. Each sub-construction company works on each subsection of the project with their respective potential impacts. BDEA, the party responsible for monitoring environmental impacts, found it difficult to coordinate because there are too many layers. BPI as an umbrella for each sub-construction simplifies the answer by emphasising that each impact has been handled appropriately according to the AMDAL mandate.

7.1.7 Communication and Knowledge Gaps

During the interviews, participants were asked about how much the environmental impacts were informed on the early stage of the project. Most of them stated that they had only been informed about the long-term impact of this project and understood that generally, the technology could reduce the detrimental effect of the power plant in the future and would not harm local society. They admitted that they have not been informed of the short term and detailed impacts, and how to cope with the environmental disturbance. Being asked about how they deal with the environmental problems in the future, they are still wondering and have no specific strategies. Thus, according to Fiyanto (2014b), the ESIA/AMDAL process and socialisation failed to accommodate the community concerns and voices.

In the case of the CJPP, based on KPPIP document (2016), modelling of air emissions for operational phase estimation has been done and indicated that all relevant international, national and regional air limits are met. The SO_x and NO_x emissions from the power plant at 300 mg/Nm³ are far below the maximum permitted level of 700 mg/Nm³.

To address environmental concerns, each unit will be fitted with ultra-supercritical boilers for CO₂ emissions. The application of ultra-supercritical (hereafter “USC”) technology increases the combustion efficiency of the power plant to about 43% (KPPIP, 2016) which possibly could increase the efficiency up to 45-55% as depicted in Figure 7.4 and Table 7.4 (World Coal Institute, 2009), from a typical level of around 35% for coal-fired power plants (KPPIP, 2016). The USC uses steam temperature and pressures above the supercritical point of water, which results in lower fuel consumption and hence reduces CO₂ emissions. The combination of a very high running temperature 593°C and very high pressure ensures virtually all the coal is burnt.

Figure 7.6 CO₂ Emissions from Coal-fired Power Plants

Source: World Coal Institute (2009, p.17)

Table 7.4 Average Efficiency Levels at Pulverised Coal-fired Power Plants (World Coal Institute, 2009, p.29)

Plant	Low Efficiency	High Efficiency	Supercritical	Ultra-supercritical
Average Efficiency Levels	29%	39%	Up to 46%	50-55%

Although the ultra-supercritical technology is considered the most efficient towards the environment compared to other coal technologies, the fact that emissions will be released to the earth as estimated in Table 7.2 is unavoidable. Hardinia (2014) in her research took a case study of the US and China. Since 2012, China had been trying to develop wind energy, solar panels and other renewable energy sources. In the United States, although many coal power plants claim to use cleaner technology, in reality, 13,000 people were killed of being exposed by pollutants emitted from the power plant. This situation prompted the United States government to issue clean air quality regulations in 1970 and caused hundreds of coal companies to be prosecuted and stop operating.

Considering the capacity for the greener movement, the circumstances in Indonesia could not be directly compared to the steps taken by China and the USA. The Government of Indonesia, through partnership and capacity building, has tried to move forward into the greener options as stated by President Yudhoyono regarding Indonesia commitment to reduce emission, as well as the low carbon development initiatives launched by MNDP.

However, some of the interviewees provided the information through similar case studies – how others live near to the power plant area. They had experienced site visit (arranged by BPI) to Paiton Power Plant and ensure that the power plant will be built under the proper environmental management and will not cause any damage to their health as well as economy. In this case, for the society, Paiton Power Plant had been taken as evidence.

7.2 STRATEGIC ENVIRONMENTAL ISSUE II: THE NATIONAL ISSUE OF COAL STOCKS AND ALTERNATIVES

It requires 8 million tons of coal per year (mtpa) for operating CJPP (KPPIP, 2016). In more detail, the CJPP project's coal consumption will be 490 tons/hour or 3,700,000 tons per year for one power plant (BPI, 2013). Based on KPPIP document (2016), it is likely PT Adaro Energy will supply 5 mtpa, and PT Kaltim Prima Coal will supply the remaining 3 mtpa. This will generate concerns about the availability of coal stocks as well as CO₂ emissions.

As the non-renewable energy resources, according to PLN (interview result, 2018), the coal stocks may run out around the next 30 years. To confirm this statement, the data shows that in 2015, Indonesia has coal resources at around 120.5 billion tons, oil resources at approximately 3.69 billion barrels, and natural gas reserves at roughly 101.54 trillion cubic feet. This translates into about 23 remaining years of oil reserves, 59 years of gas, and 146 years of coal at current production rates. However, due to the population and economic growth, the demand for electricity will increase, as shown in Table 7.4. This means that the current stocks of coal do not guarantee to fulfil the electricity demand for the years ahead.

Table 7.4 Forecast of electricity needs, 2016–2025 (Lauranti & Djamhari, 2017, p.14))

Year	2016	2018	2020	2022	2024	2025
Energy demand (TWh)	216.8	267.9	315.3	366	424.9	457
Growth (%)	8.2	9.9	8.1	7.7	7.7	7.6
Costumer (million)	64.1	69.9	74.7	78	81.1	82.6
Consumption per capita (kWh/capita)	845.6	1,020.00	1,173.00	1,333.30	1,517.10	1,616.50
Economic growth (%)	5.2	5.5	6.5	6.46	6.42	6.4
Electrification ratio (%)	90.65	95.89	98.8	99.81	99.99	99.99

Although, as proven in Chapter 5, the use of coal still reached the national target for under 33% of total primary energy use. The availability and sustainability of coal itself for the contract period, however, is uncertain. The Government of Indonesia must scrutinise the capacity of coal stocks. An interview with former PT PLN head of the CJPP Project, Asistya Semiawan, confirmed this issue when discussing sustainable development goals perspectives:

“It is somehow incompatible with the SDGs concept. SDGs have three pillars: society - economy - environment, these aspects must be balanced. The CJPP will certainly support the economy. For social aspect, if it is well socialised then society must be ready to accept this project. However, for the environmental aspect, it must be maintained. The use of ultra-supercritical technology will only answer emission problems, but the coals used are high calories, could CJPP sustain it? Are there still any sufficient calories from the source in Indonesia? Will it be sustained for 30 years? Why is there a mine mouth concept because the good quality calories will be gone...” (Interview with PLN representative, 22 August 2018)

Currently, according to PLN representatives, the power plants in Java use the coal with a calorie average of 4200 kcal/kg, transported from mines in Kalimantan and Sumatra. If these 4200 kcal/kg calories have long run out, the calories below 4200 kcal/kg will be utilised. PLN offers the concept of mine mouth since it uses low calories. The coal with 4200 kcal/kg calories is still in high demand and can be exported, but the low-calorie coal does not have sufficient market. Ms Asistya Semiawan, as a former PLN's head of CJPP project, stated that the concept of mine-to-mouth power plant must be linked to the PPP concept in the future. Moreover, PLN said, if the state failed to accommodate the coal stocks issue, it would be required to have imported coal to fulfil the electricity needs in the future.

Talking about the use of renewable energy as an alternative for the power plant, according to PLN, the capacity of renewable energy in Indonesia are still limited, compared to the capacity of coal which can generate and produce the electricity for 28.8% (MEMR, 2016, as cited in Lauranti and Djamhari, 2017). Based on Figure 7.5, the capacity of renewable energy can only contribute 6% of the national energy demand in 2015. According to PLN, the possible alternatives for substituting coal is natural gas, which can fulfil 22% of the national energy demand (Lauranti and Djamhari, 2017). Renewable energy, according to PLN, can be utilised in the remote area (Interview with PLN representative, 2018).

Figure 7.4 Primary Energy Mix 2015 (MEMR, 2016, as cited in Lauranti and Djamhari, 2017, p.5)

7.3 SUMMARY: Environmental Issues and Reflections

It is noticeable from the case of CJPP that the three components of important environmental impacts (physical chemistry, biological and transportation components) affected the social, economic and cultural components of impacts. Thus, it can be viewed the point that an impact or issue is not a single issue, instead of the multi-dimensional issues, and requires mitigation and adaptation from the system consists of social, technical, environmental and governance aspects. For instance, the spread of dust will reduce the air quality to the residential area, then lead to the discomfort of the residents and finally lead to protests.

As Morgan & Memon (1993) explained that many impact assessors, in assessing the options, like to indicate the preferred choice, not only regarding the environment but also with reference of other factors, such as governance, economic and technical aspects. Environmental management seems required to be more holistic and participatory to strengthen the capacity of the community to adapt to the potential issues, for example, by mainstreaming people-centred solution.

The reason of why the governance dimension is also considered in this local environmental issue is, according to Maxwell (2010), because local governments in cities, provinces and regions provide political and administrative space closer to the source of impacts. To implement the national regulations and policies, local governments articulated policy-making, regulatory and planning functions in the key sectors to mitigation and adaptation, including public services, local advocacy, social protection and natural resources management. In the case of PPP in the CJPP, local governments are in collaboration with BPI in playing this mitigation and adaptation strategies. However, due to the remaining socio-environmental dynamics on the ground – such as the technical issues, monitoring and critics from NGOs as well as oppositions – the mitigation and adaptation strategies included in the work plan (See Figure 7.2) need to be re-evaluated.

Implicitly, the CJPP has an ecological modernisation spirit. Ecological modernisation appears in green politics discourse which tries to combine economic growth and environmental sustainability (Kurniadi, 2016). Economic growth and environmental sustainability have been considered to be the opposite in the perspective of green politics. CJPP is feared to cause environmental damage. The Government of Indonesia and BPI made efforts to respond to these concerns by increasing the use of environmentally friendly technologies. Even though it has sought to be environmentally friendly, the CJPP was still rejected when viewed from an ecological perspective. Coal mining – and the result of greenhouse gasses emitted from the CJPP project – will never be environmentally friendly.

Environmental issues cannot also be separated from other factors, such as community resilience and environmental management (mitigation, policy, and adaptation). Hence, it is important to see these environmental issues as an aggregate, together with the comprehensive solutions of triangle aspects: government–environment–society. Several questions left from the analysis of CJPP cases discussed above and lead towards further reflection, such as:

1. For every environmental impact which created discomfort towards the residents, are the applied grievance mechanisms effective?
2. How much has society been informed and shared about the environmental impacts?
3. How resilient, adaptable, and ready is the society towards future environmental impacts?
4. Is the coordination between BPI and Batang Regency Government effective towards the action plan of risk management which complies with the AMDAL mandate?

These questions might be useful for further research.

Finally, defining issues and limiting the scope of derivative issues are matters for BPI as AMDAL mandate executors. The clear framework must be addressed on the socialisation process for avoiding extra expectations from the societies for every occurred damage during the project construction and operation period. BDEA also confirmed that this project was a project with the biggest funds for handling social-related impacts.

CHAPTER 8

STRATEGIC ISSUES: SOCIETY

The occurrence of the CJPP project can be analogous to "*a giant elephant in a small jungle*". Why a giant elephant? This imagery attached to the CJPP as a mega project that not only guarantees electricity supply in Java-Bali but also has an impact and influence on surrounding communities and can be analysed in various dimensions – just as how the giant elephant leaves a huge boom when he hits the ground. The "*small jungle*" relates to the small-scale communities in Batang Regency.

This chapter will address the secondary research question regarding the social issues within the CJPP project, particularly by analysing the interplay of this "*small jungle*" and "*the giant elephant*". The discussion begins by breaking down the profiles and perspective of societies towards the development impacts of the CJPP and continued by determining the dimension of the issues. The sustainable livelihood framework is mainly used afterwards as it draws the five livelihood aspects (human, natural, physical, social, and economic capitals). Interviews were conducted with residents over 1-12 September to explore livelihoods in the Ring I villages which are directly impacted by the CJPP, namely Ujungnegoro, Karanggeneng, and Ponowareng villages. At the end of this chapter, several development theories are used to provide a wider reflection on the phenomenon that occurred.

8.1 HUMAN CAPITAL

In analysing human capital aspects of the society, it is useful to break down the participant's profile, as I argue that their age, occupational or skills, educational background, gender and health condition might shape the way they view and value the CJPP project. My argument was supported by the interview statement of BPI that highlights the societies' level of education in responding to the project existence. BPI believes that society's level of education will affect response and readiness towards the change of their environment. Informal interviews with some societies confirmed that highly educated people worked in BPI companies at the management level, while

others are allowed to register and work for the unskilled jobs in the company. In responding this education issue, Figure 8.1 regarding societies' education level are generated, based on the statistical data of Tulis and Kandeman sub-districts in 2012, a year after PPP agreement of the CJPP was signed and land acquisition process had started.

Figure 8.1 Educational Background of Ring I Villagers

Source: Statistics of Tulis and Kandeman Subdistricts (BPS Kabupaten Batang, 2012)

Based on Figure 8.1, the educational background of the inhabitants of the Ring I villages is dominated by non-educated and elementary school, followed by junior high school and senior high school. This data confirmed BPI's hypothesis that education might be one of the internal issues within the society for low employment absorption, weak understanding about the project nature, low level of adaptability, and unexpected reaction towards the project. The following charts are the societies' profile based on the interview.

Figure 8.2 Participants' occupation (interview result, 2018)

Figure 8.3 Participants' educational background

As shown in Figure 8.2 and 8.3 above, interviews are conducted towards societies across educational background and occupations. The purpose is to get a holistic view about “what does CJPP means” for the people with the various background in the society, and how they could adjust to the new environment created after the CJPP project developed in their surroundings, as well as how they analyse the given information.

Each group of participants provides distinguished perspectives and information about the CJPP, based on their roles and views. Three village heads in each village play vital roles in shaping people's mindset about the project in each village. They softly engaged their fragmented community – the supporters and the oppositions. In the end, the project was able to be socially accepted by most people. The school's teachers provide information about BPI's CSR program on the education sector, as well as people works on SMEs provide an information about BPI's impact towards SMEs development in the village. Farmers depicted how the CJPP affects their land and how they cope with the offered alternative for job opportunities. Civil servants provided information from the people who are not directly related to CJPP.

Two of the participants are employees at BPI's sub-constructions. They shared their deeper views about being in two roles at the same time: as a part of society and a part of BPI. Being BPI employees, they could generate a sufficient salary to support their family. However, the first period of their supports to BPI project left some struggling to maintain momentum against the societies who resisted the CJPP construction. Opponents of the project came to their house to demonstrate their dislike of the CJPP project, and it had psychological effects on the families in the house. After several periods, seeing that the CJPP construction was continuing, the oppositions people accepted the project.

Most participants argued that CJPP is a private sector project, while only one-fourth of the total interviewees understand that the CJPP was developed under the PPP mechanism. By this case, we could see the PPP understanding in the grassroots level is insufficient. By arguing that the CJPP is owned by the private sector, psychologically, societies put extra expectation towards the private entities. BR confirms this statement as he said that the societies' pretention for improving the economy and welfare due to the existing CJPP project is exaggerated considering this project is worth USD \$4 billion. This fact leaves a question about the way the information about PPP project was disseminated to the public and how it is framed and reacted. This issue matters because by understanding the institutional framework, they could point their reaction effectively and the stakeholders can handle the social issue in a better mechanism.

CJPP project affects the other aspects of human capital such as age, technology transfer, health and gender issues. Based on the KPPIP document (2016), the CJPP has different influences across ages. For example, towards the children, the practices of “*adiwiyata*” schools – the school program which aims to foster an understanding of the environmental issues – emerged as initiated by the CSR of BPI. For those of working age, the CJPP absorbs the labour for working in the company, both skilled and unskilled labour. Meanwhile, for the elderly, BPI provides land replacement and social compensation for elderly people who were previously active in farming activities. In terms of the science-technology transfer, the community is helped by the existence of the CSR program, even though the inhabitants questioned the program’s sustainability. The new job opportunities as BPI employees also added expertise and skills to the local society, as well as increase the employment rates in the surrounding areas of the CJPP project. Regarding health conditions, inhabitants admitted that the CJPP does not affect their health condition significantly, only disturbing them at certain times such as the spread of dust, noise and garbage.

Gender might also affect societies’ reaction towards the emerging CJPP project in their area. The CJPP project created the benefits for male residents in the form of skilled and unskilled jobs, technology transfer and assistance, both for the job in the company and CSR program such as raising goats and animal feed production. Meanwhile, the benefits for female residents are in the form of assistance in the form of KUB (cooperatives), laundry, food stalls, and other women empowerment activities. Considering gender profiles within the interviewees, among 12 respondents, only one respondent is female, while others are males. However, it is difficult to raise women’s voices in this research due to their reluctance and limited information. Besides the personal experiences as the main resources of information, the gender imbalance might also cause bias of the analysis.

8.2 SOCIAL CAPITAL

8.2.1 The Fragmented Perspective and Sentiments

During the period of CJPP construction, there was a change of neighbourhood and social structure such as sentiments between the supporters and the opposition which strained social relations. These changes were manifested in the lack of participation in certain traditions, although there are also benefits of relations gained, for instance, local people establish relations with the private sector, investors and expand networks with local and central government. However, societies still have a problem in language – particularly when communicating with foreign investors.

The sentiments occurred due to the different perspectives and attitudes of local inhabitants towards the CJPP project. For analysing these attitudes, information was gathered from the equal numbers of participants' attitudes, including the supporters, the opposition and the neutral group of societies. Hence, the data could be generated based on each point of view – from those who support the project, those to oppose the project, or those who are neutral.

Those who support the CJPP project do so on the basis of job opportunities and the advantages of CSR programs. For instance, a person from Karanggeneng Village saw the opportunities to be an employee at BPI since this project had firstly been socialised to his village. He saw this chance would be beneficial for him. Previously, he had worked in the garment sector in Jakarta and lived far from his family. As the CJPP emerged, he became a construction employee in a sub-construction company of BPI. He argued that by being BPI's employee, he could generate a better income as well as live in his house and close to his families. Moreover, by working at BPI, he could obtain new skills and social relationships as he was also eager to learn and take the benefit from the new environment. By looking at this particular case, the PPP projects may contribute to reducing inequality in the context of job opportunities between Jakarta (an urban area) and Batang (a rural area). As a result, he became a BPI agent to share the progress of CJPP construction, who could counter opposition in a mannerly, strategic way.

The opposition at first saw that the CJPP would be detrimental in the future, as it may harm the surrounding environment. Five out of 12 respondents confirmed that their understandings towards the environmental impacts of the CJPP were obtained from NGO socialisation and media reporting on the CJPP. As discussed in Chapter 7, several NGOs such as Go Green Batang and Greenpeace raised concerns around coal-powered power plants to be built through the CJPP. Other opposition groups, particularly the landowner, did not want to lose their land planned to be purchased and built for the CJPP as they could not see sufficient alternatives for securing their livelihoods. They saw many societies were not recruited to work at BPI even for the unskilled labour.

As explained in the former chapters, Batang Community – under the group named Batang People’s Association for Conservation (“*Paguyuban Warga Batang Berjuang untuk Konservasi – UKPWR*”) – issued an open letter with the detailed complaints about the construction of the CJPP as depicted in Figure 8.4. The complaint of Paguyuban UKPWR, categorised the actual and potential impacts as shown in Table 8.1.

We are from the Paguyuban UKPWR, of the community of Batang. We established this association in 2012 for the sake of defending our land and sea from the coal-fired power plant project which has already caused and if built will cause further, irreversible adverse impacts on our right to an adequate standard of living, including loss of our livelihood, and on our right to health.

We would like you to remind that we wish to keep our names undisclosed online, such as at any website. And even though we agree that our names could be disclosed to the Japanese companies and their partners, please note that we fear the physical threats and dangers we might face if the companies and Indonesian government discover our identities as the requesters. But we have already found that we don’t have any better option to voice out our concerns to you, due to our past experience as described below, including all the threats, intimidation, violence, arbitrary arrests, attacks, and impunity we have faced with the thugs in our community, as well as the company security forces and local police and army forces. There is the possibility for us to face serious risks and repercussions after dealing this complaint.

We are residents of Indonesia who have suffered actual and direct damage and who are likely to suffer additional damage in the future as a result of the project which Japanese multinational companies are investing in: a coal-fired power plant in our community in Batang. Our damage results from the project’s failure to comply with OECD Guidelines for Multinational Enterprises (hereafter, “Guidelines”), including the project’s lack of respect for human rights, and its lack of appropriate process of Environment Impact Assessment (EIA).

We speak for our community: We speak for our community organization, Paguyuban UKPWR, on behalf of around 7,000 members from Ujungnegoro, Karanggeneng, Ponowareng, Wonokerso, and Roban villages. It is thus *both* as individuals *and* as representatives that we call on the Japanese NCP to carefully conduct its assessment and take necessary action for the community adversely affected by the Batang coal-fired power plant project in Central Java, Indonesia.

Figure 8.4 Complaint against ITOCHU and J-POWER Regarding CJPP construction
(Greenpeace, 2015, p.1)

Table 8.1. The Adverse Impacts of CJPP Experienced by Society (Greenpeace, 2015, p.10)

Actual Impacts	Potential Impacts
<ul style="list-style-type: none"> - Human rights violations - Intimidation - Violence - Physical injuries - Wrongful and arbitrary arrest - Criminalisation of peaceful protests - Unfair trials - Efforts at bribery - Illegal and fraudulent land sales - Hostage taking - Community harmony endangered - Jobs lost - Income lost - Rice fields and other property damaged - Vandalism - Trespassing - Moral distress, anguish, and anxiety, and destruction of social fabric 	<ul style="list-style-type: none"> - Health impacts: death and sickness - Impacts on air, water, soil, and ecosystems - Crop losses - Fisheries losses - Livelihood losses - Involuntary resettlement of those who can no longer work and make a living there - Community harmony further endangered - Loss of cultural heritage (Sacred tomb for traditional Javanese Muslims): It is also the important site for the fishing community as this site is a place for the ritual to respect their ancestors. - Impacts leading to trans-boundary and global environmental problems and climate change - Damage to protected areas and conservation areas

The group of neutral people normally have no assets to be offered towards the CJPP. They are mostly holding secure jobs for supporting their families. In this case, they could see the dynamics between the supporters and oppositions in an objective manner, supporting as well as criticising the CJPP project and its effects. The considerable bias from the abstaining people is they also put the sectoral expectation based on the job they are holding, such as hoping that BPI's contribution towards education will be more meaningful and effective.

Power relations do not only occur vertically or top-down (from the government to society, or from the national government to the local government) as discussed in Chapter 6. The unequal power issue also happened horizontally (from society to other society) in the community, such as the forces and sentiments between the supporters and the oppositions. BIISLA analogized situation in the society as *"People when they have gathered, in groups, as if they were the strongest"* (Interview with BIISLA representative, September 2018).

Among the supporters and oppositions, there are sentiments that influence the way these societies carry out traditions. For example, when there was a marriage within the opposition group, the supporters were not invited to the wedding. Even when the brothers of supporters died, the neighbours from the oppositions group did not participate in the burial ceremony.

It took a long time to unite these sentiments between the two groups. The supporters acknowledged that the opposition was gathered and assisted by NGOs as their backing so that their power was stronger. The supporters were subjected to social pressure such as ignorance and demonstrations in front of their homes which caused anxiety and fear to other family members.

The role of the village head is crucial to bringing together two conflicting groups. For example, HKV and HUV are supporters. As the village head, HKV began slowly to approach the opposition groups and revived the importance of brotherhood among the community. HPV, which originally came from the oppositions, switched to support this project and invited the oppositions to support this project because he saw many benefits.

8.2.2 Cultural Impacts and Decreasing Participation

In supporting the cultural activities in the society, BPI through CSR programs provided aid for mosque building and development. Six mosques in six villages had been renovated, with 50% funding from BPI (BPI, 2016). However, there is a change in the culture due to a large number of migrants with various backgrounds as discussed before. Also, public participation decreased between supporters and oppositions, or, after becoming employed.

Based on the interviews, it was seen that since the emergence of the CJPP project, there was a decrease in active participation from the community and youth who had worked on the CJPP project. Due to their working hours from morning to evening, their concern for the environment and the desire to participate in events organised by the village government declined. This was the subject of a complaint by the HUV secretary who became the promoter of community and youth activities in Ujungnegoro village. He saw the positive economic impacts such as the absorption of labour but realised that

concern, empathy and the desire for community participation were not directly proportional. The tradition of mutual cooperation in the village community had diminished.

8.2.3 Social Capital Issues: Migration and the Impacts

In the case of the CJPP, according to the interview result with village heads and societies, many migrants came from different villages, regions or even islands in Indonesia to work (economic factors) in BPI or the sub-construction companies. This wave of migrants leaves both positive and negative impacts in the surrounding society. Positively, the migrants opened the opportunities for the societies to provide their needs and supporting their livelihood as the new economic sources – such as building the boarding house for rental, set up the café and groceries shop, and laundry services – which directly generate additional income for the society. Negatively, there are cultural issues due to a lot of newcomers. There are different habits and norms between workers and foreign investors vs local societies norms. The society of the Ring I village mostly holds Islamic religious principles, avoiding alcohol and unsupervised social contact with the opposite sex. Migrants and investors did not hold the same principles – they drink alcohol and stay together in the same house with friends of the opposite sex. These different norms and migrant activities disrupted local customs, norms and culture.

This particular issues about the changing norms revealed that the theory of modernisation stated by Moertopo in 1973 is still relevant, as he said that “modernization (the development of the CJPP) means changing norms which are no longer functional in the development of society and changing norms which hinder development” (Moertopo, 1973, p.51). Hindering development, in this case, is due to the decrease of public participation in the village. However, contrary to the push and factor theories, the CJPP also hindered migration because it opens the job opportunities for the local people who previously did internal migration by working on the other cities such as Jakarta. They saw the opportunity to work close to their house and their families.

8.3 ECONOMIC CAPITAL AND DEPENDENCY

Despite cultural issues, economic issues also occurred in the case of the CJPP, because the local people had to compete with migrants in terms of skills and job opportunities. Hence, due to societal pressures, the government and BPI prioritised the workers from the surrounding area. Governments and BPI, the two agents within a PPP project, had responded to the social expectation. BR had responded to the community's aspiration towards BPI and emphasised the private sector to have the optimum numbers of the unskilled worker from the surrounding areas. At the same time, BR, as the head of Batang Regency, avoided abusing his authority and position to pressure the investor and developer. BMFAA stated that society had unrealistically high expectations of the private sector, beyond their business. In this case, Batang Regional Government is handling two contrasting roles: to accommodate community aspirations, and at the same time, to work with investors.

The surrounding societies put a lot of expectations towards the CJPP, mainly for securing their livelihood in the present and future. They wondered over the period of work and job alternatives after no longer working at BPI (job sustainability). They are also expecting the job training centre, mainly for skilled work. There is also the potential for generating added value for the CJPP's side products, such as utilising coal waste. However, according to BDEA – the institution most concerned about the environment – several procedures and considerations must be taken before utilising the side-product of coal, and it needs to make an immense effort to socialise the procedures to the community. The CJPP's future operation is expected to be environmentally friendly for surrounding areas. CSR programs are also expected to be more in line with the village's potential and more sustainable.

By this case, it can be seen that CJPP creates societal dependencies – the increasing demand for jobs and other amenities. Dependency occurred as a result of unequal market relation towards commodities, capital or even labour power because development of parts of the system occurs at the expense of other parts (Santos, 1970). Normally, dependency is developed between urban and rural areas, with the periphery and centre becoming interlinked. In a greater way, as Dos Santos argued, dependencies

are generated in the dependent countries to the dominant countries (Santos, 1970). In the case of the CJPP, society became dependent on the project and the company which was built in the rural area – a dependency between one rural area (with the economic source – the company) and another (with less economic source).

8.4 STRATEGIC SOCIAL ISSUES IV: NATURAL CAPITAL

The main problem of natural capital was the productive lands which were privately owned by the surrounding communities and were then converted to be the project site. Wibowo (2015) confirmed that “the issue of land acquisition has become a problem since the government cannot acquire land without the consent of its owners (Wibowo, 2015. P.172)”. In the CJPP project, the issues such as inconsistent land prices, land speculators and community protests arose and caused social dynamics within the community during the land acquisition period.

Interview with the societies confirmed the emergence of speculators or vested interest developer in the form of a broker illegal to semi-formal who expect benefit from existence for a project. Before the emerging development plan for infrastructure projects (toll roads, roads, airports, power plants, ports), the land in the area was costed for a relatively low price and only a few were interested.

Since the emergence of the infrastructure project, land prices were improved in such a way as to multiply from the base price. For example, land prices in Batang Regency for the CJPP project (Ponowareng, Ujungnegoro and Karanggeneng) – previously only IDR 30,000-50,000 per metre – was growing to IDR 400,000-750,000, though the initial agreement with the developer previously reached IDR 100,000-150,000.

Left unmitigated, sometimes for the sake of large profit, environmental and social issues such as changes of work or loss of occupancy – were often developed in the community to refuse the deal prices and got prices by the interests of speculators. Blowing issues that smell a rejection of CJPP projects often develop faster in the community compared to information dissemination efforts carried out by the Government together with BPI (KPPIP, 2016). Batang Regency Government, BPI and

The Head of Villages were solved these issues together by the various approach. Currently, conflicts over land issues have subsided.

Moreover, regarding other aspects of natural capital, interview results with the societies revealed that soil and water conditions were not disturbed by the power plant project, while air condition was disrupted due to power plants pollution such as dust and garbage. Based on the interview, the residents confirmed that the pollution affected their health and disturb their activity. However, it rarely happens, and the period of disturbance is usually less than a week.

8.5 STRATEGIC SOCIAL ISSUES V: PHYSICAL CAPITAL

Due to the construction of the CJPP in the surrounding area, the roads had been renovated to support material transportation as depicted in Figure 8.5. Some new buildings (boarding houses, mess, house rented) were also built along with the construction of the Batang power plant as shown in Figure 8.6.

Figure 8.5 The renovated roads on Karanggeneng Village

Source: observation, 2018

Figure 8.6 Boarding house for migrant workers

Source: observation, 2018

Moreover, BPI also provides public and entrepreneurial facilities and technological assistance, including tractors, animal feed makers, ATMs and entrepreneur centres (Figure 8.7), and village libraries. However, access to the CJPP project location is restricted to workers and officers only.

Figure 8.7 ATM and Entrepreneur Center (KUB)

Source: observation, 2018

8.6 SUMMARY

The need for development, in this case was represented by the CJPP project, was challenged by social issues. Job opportunities, land, and cultural change are the major issues in the social dimension. These three things drive societal attitudes towards the CJPP, whether supporters, opponents, or neutral parties.

This section has analysed the way the CJPP creates social impacts across dimensions and the sustainable livelihoods of society after the emergence of the CJPP. The social issues found here are the education and occupational background of society which affect the way “*the giant elephant*” was responded to and accepted or not. Indeed, social issues are vital. A certain amount of time and effort are needed to secure the readiness of the “*small jungle*” to accept “*the giant elephant*”. The dynamics occurred between the project stakeholders and society prolonged the land acquisition process up to five years after the contract had been signed.

The findings of this research revealed that dependency has not only developed on a large scale such as developing countries towards developed countries, rural to urban, or periphery towards the centre. The key of dependencies remains dominated by economic factors. In this case, the emergence of the CJPP attracts dependencies from the surrounding societies in terms of job and other forms of development aid. The emergence of the CJPP also attracts migrant workers to the Ring I village who brought both positive and negative impacts on the society.

CHAPTER 9

CONCLUSIONS

9.1 SUMMARY OF FINDINGS

As an “emerging” nation for a PPP environment, together with other Southeast Asian nations, Indonesia shows progress towards PPP implementation. The CJPP project contributes to several aspects of PPP advancement, besides the concerned issues raised during the project period. The MoF confirmed that the maturity of the PPP system in Indonesia is still in the process of "developing". In a sense, it will continue to evolve along with the ongoing PPP process. This adjustment and development through regulation has not been completed and will continue to be developed with the aim of achieving the best value for money and encouraging transparency.

The findings of this research answering mainly the question of ‘what are the key issues and challenges in PPP implementation in the CJPP project’. To answer this research question, the research was conducted through a project-based case study with a qualitative emphasis. As planned in the methodology chapter, the semi-structured interviews carried out across various stakeholders related to the CJPP project were the core results.

Three dimensions of critical issues and challenges in applying PPP schemes in the CJPP project were explored in this study to answer the research questions, including governance, environment, and social issues. It is worth highlighting that despite separating the main research question and secondary research questions for purposes of clarity and analysis, they are each linked. The first secondary research question addresses the governance issues, highlights the stakeholder analysis and extracts the information about the power relations in the CJPP project. It also contributes towards the findings of social and environmental issues, mainly about who will be responsible and what the strategies are for solving other problems. Environmental issues brought to be answered in the second secondary research question are also the particular concerns which raise the social dimension in the third secondary research question.

Regarding governance, the top-down approach of PPP implementation left the dynamics of power relation and regulation, stakeholders' interests and dualism perspective for viewing this scheme. These dynamics are caused by several issues such as communication and knowledge gaps, the limited capacity and authority of the local government as well as unclear project structure. Based on this fact, the top-down approach of PPPs needs to be re-evaluated when implemented. However, multilevel governments maintain the institutional roles and responsibilities in this project by holding the agreement across parties which drove the self-enforcement to each party to create the best result of PPP implementation.

Meanwhile, concerning the environmental sector, CJPP project left several issues regarding the ESIA/AMDAL implementation and monitoring at the local level with some unpredictable impacts due to limited capacity and resources of local governments. Also, at the national level, coal stocks are evaluated by PLN for ensuring energy demands in the future, while Indonesia still not much expanding the use of renewable energy.

Regarding social impacts, the CJPP project underwent several social changes with the biggest 'social mitigation cost' in AMDAL implementation. Based on the five pillars of sustainable livelihood approach, the issues were analysed on the category of human capital, social capital, economic capital, natural capital and physical capital. According to BPI and the Government of Indonesia, the education of locals is the cause of their attitude and perspectives towards the CJPP. The CJPP also separated the societies' perspectives and attitudes into three groups: the supporters, the opposition and the neutral group. The supporters and the oppositions had the long period of sentiments particularly during the land acquisition period, and the community leaders played a vital role in calming down the situation and uniting the two confronting groups. After the financial close, the growing issues were migrant workers and employment competition. Migrant workers brought positive and negative impacts towards society. This project has different impacts experienced across age, culture, and gender.

Overall, among the issues and challenges that have been faced during PPP implementation period in CJPP, as a pilot project, national government representatives argued that PPP mechanism in CJPP project was the best PPP implementation so far among the other PPP mechanism applied, especially for electrical energy provision, besides the positive and negative input towards national and regional development and lesson-learned during the construction period.

9.2 REFLECTIONS

After conducting this research, it can be revealed that the issues discussed here (governance, environment, and social issues) intertwined with one other. These issues cannot be viewed partially as well as the solution for handling these issues are needed to be more comprehensive. For example, the social dynamics are being part of the environmental issues as they had demonstration together with NGOs under the “environmental” reasons. Also, in Chapter 8, the reason for postponing the land acquisition was due to the social dynamics.

9.3 RESEARCH LIMITATIONS

This study has some limitations because the fieldwork was conducted in a limited timeframe. Time was the biggest constraint because there were a lot of arrangements, bureaucracy, and administration that had to be conducted before doing fieldwork. The case study to be reviewed is only one case study, as there is no electrical energy provision in Indonesia using the Public-Private Partnership Scheme before the CJPP. The project is also still an on-going project. Thus, this research only analysed the challenges of PPP implementation before and during the project construction and could not cover the impacts during the operational period.

9.4 RECOMMENDATION FOR THE FUTURE PPP IMPLEMENTATION

According to the interviewees, this project is the last project under the PPP scheme by PLN. It might be clear that the main values of PPPs, such as financial effectiveness, increasing transparency, efficiency, and the performance-based condition is not to everyone's liking. However, several stakeholders are optimistic that the environmental effects, economic conditions, and political willingness for PPP will be more positive. In this case, there is no reason to make the CJPP the last PPP project of PLN. Other

stakeholders have seen that the electricity sector does not need to use PPPs because the former IPP mechanism was considered secure for the investors.

Recommendations for the future PPP implementation are summarised based on the interview. IIGF highlights the point of how to guarantee the PPP node that complies with the agreed regulations and agreements; leadership and trust in leaders and democratic systems; the role of supporting actors such as regulators and the public; and optimisation of checks and balances on regulations related to PPP with more stakeholders involved in the PPP mechanism.

The MoF suggests the improvement in the Implementation of PPP based on the CJPP case study, such as:

- 1) *Standardisation of documents and processes.* The length of the PPP process, required documents, and other standards must be standardised. Document and process standards will provide comfort and trust from the private sector because they will participate in tracking the project progress and risk anticipation.
- 2) *Project assistance.* Other processes in the PPP scheme need to be assisted similarly as IFC accompanies the CJPP. This IFC mentoring later became a model for mentoring PPP projects.

In the end, the inclusiveness of local government in the PPP structure needs to be reviewed in order to ensure the roles, responsibilities, and resource management. Also, environmental impacts and social dynamics need to be more precisely predicted.

9.5 RECOMMENDATIONS FOR FURTHER RESEARCH

As this study will be conducted before this project comes into operation in early 2020, there will be an opportunity to continue this research into another research project, such as the idea of comparative studies between two different forms of electrical energy provision before or after PPP mechanism. The potential for maximising the CSR program and the regional budget potential from CJPP project might also be useful for future exploration.

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APPENDIXES

Appendix I. Ethical Approval

Phone 0-4-463 6028
Email judith.loveridge@vuw.ac.nz

MEMORANDUM

TO	Fikriyatul Falashifah
FROM	Dr Judith Loveridge, Convenor, Human Ethics Committee
DATE	4 May 2018
PAGES	1
SUBJECT	Ethics Approval: 26014 An Exploration of the Key Issues and Challenges in Implementing Public Private Partnerships: The Central Java Power Plant Project, Indonesia

Thank you for your application for ethical approval, which has now been considered by the Human Ethics Committee.

Your application has been approved from the above date and this approval is valid for three years. If your data collection is not completed by this date you should apply to the Human Ethics Committee for an extension to this approval.

Best wishes with the research.

Kind regards

Judith Loveridge

Convenor, Victoria University of Wellington Human Ethics Committee

Appendix II. Research Permits

1. National Permit (Ministry of Home Affairs)

KEMENTERIAN DALAM NEGERI REPUBLIK INDONESIA DIREKTORAT JENDERAL POLITIK DAN PEMERINTAHAN UMUM Jl. Medan Merdeka Utara No. 7 Jakarta Pusat, Telp. (021) 3450038, DKI Jakarta 10110
SURAT KETERANGAN PENELITIAN NOMOR: 460.02 / 597 / 04	
DASAR	: 1. Peraturan Menteri Dalam Negeri Nomor 41 Tahun 2010 tentang Organisasi dan Tata Kerja Kementerian Dalam Negeri (Berita Negara Republik Indonesia Tahun 2010 Nomor 316), sebagaimana telah diubah dengan Peraturan Menteri Dalam Negeri Nomor 14 Tahun 2011 tentang Perubahan Atas Peraturan Menteri Dalam Negeri Nomor 41 Tahun 2010 tentang Organisasi dan Tata Kerja Kementerian Dalam Negeri (Berita Negara Republik Indonesia Tahun 2011 Nomor 168); 2. Peraturan Menteri Dalam Negeri Nomor 3 Tahun 2018 tentang Penerbitan Surat Keterangan Penelitian.
MENIMBANG	: Surat dari Victoria University of Wellington tsnggsi 24 Mei 2018 Perihal Permohonan Surat Keterangan Penelitian
N A M A	: Fikriyatul Falashifah
ALAMAT	: Jl. Dr. Sutomo Gang Palem 01/001 Watesalit Batang
JABATAN	: Peneliti Utama
NOMOR TELPON	: 082114850449
JUDUL PENELITIAN	: <i>"An Exploration of The Key Issues, Risks and Chalanges For Impleementing Public-Private Partnership: A Case Study of Central Java Power Plant Project, Indonesia"</i>
BIDANG PENELITIAN	: Sosial
LOKASI PENELITIAN	: Provinsi DKI Jakarta, Jawa Tengah
WAKTU PENELITIAN	: (Juli – September 2018)
STATUS PENELITIAN	: Baru
ANGGOTA TIM PENELITIAN	: -
<div>Dikeluarkan di : Jakarta Pada Tanggal : 11 Juli 2018</div> <div>a.n. DIREKTUR JENDERAL POLITIK DAN PEMERINTAHAN UMUM DIREKTUR KEWASPADAAN NASIONAL,</div> <div> Dr. AKBAR ALI, M.Si Pembina Tk.I (IV/b) NIP. 19750402 199311 1 001</div>	

2. Local Permit (BDPA Batang Regency – Bapelitbang Kabupaten Batang)

PEMERINTAH KABUPATEN BATANG
BADAN PERENCANAAN PENELITIAN DAN PENGEMBANGAN
Jl. RA. Kartini No. 1 Batang, 51215 Jawa Tengah, Telp. (0285) 391131, 392131 Fax. (0285) 391131

SURAT REKOMENDASI
Nomor : 072/244/2018

I. DASAR : a) Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 64 Tahun 2011 tanggal 20 Desember 2011.
b) Surat Edaran Gubernur Jawa Tengah Nomor 070/265/2004 tanggal 20 Februari 2004.

II. MENARIK : Surat Kepala Kesbangpol Kabupaten Batang Nomor : 070/177/VII/2018 tanggal 4 Juli 2018 Perihal Permohonan Ijin Observasi.

III. Yang bertanda tangan dibawah ini, Kepala Badan Perencanaan, Penelitian dan Pengembangan Kabupaten Batang, bertindak dan atas nama Bupati Batang menyatakan “TIDAK KEBERATAN” atas pelaksanaan penelitian/survei/praktek kerja lapangan/mencari data di wilayah Kabupaten Batang, yang akan dilaksanakan oleh :

1. Nama : **FIKRIYATUL FALASHIFAH**
2. Pekerjaan : Mahasiswa Victoria University of Wellington, New Zealand
3. Alamat : Jl. DR. sutomo Gg. Palem Desa Watesalit RT 001 RW 001 Kecamatan Batang Kabupaten Batang
4. Penanggungjawab : **Prof. John Overton**
5. Maksud & tujuan : Permohonan Ijin Observasi untuk melaksanakan Tesis dengan Judul: *“An Exploration of The Key Issues and Challenges in Implementing The Public Private Partnership: The Central Java Power Plant Project, Indonesia”*
6. Lokasi : Kabupaten Batang.

Dengan ketentuan sebagai berikut :

a. Pelaksanaan penelitian/survei/praktek kerja lapangan/mencari data/program sosialisasi tidak disalahgunakan untuk tujuan tertentu yang dapat mengganggu kestabilan pemerintah;
b. Sebelum melaksanakan penelitian/survei/praktek kerja lapangan/mencari data/program sosialisasi langsung kepada responden/masyarakat, maka harus terlebih dahulu melapor kepada penguasa/pimpinan setempat;
c. Setelah penelitian/survei/praktek kerja lapangan/mencari data/program sosialisasi selesai, supaya menyerahkan hasilnya kepada Badan Perencanaan, Penelitian dan Pengembangan Kabupaten Batang.

IV. Surat Rekomendasi ini berlaku dari tanggal 20 Agustus – 20 September 2018.

DIKELUARKAN DI : B A T A N G
PADA TANGGAL : 20 Agustus 2018

A.n. BUPATI BATANG
KEPALA BADAN PERENCANAAN, PENELITIAN DAN
PENGEMBANGAN KABUPATEN BATANG
Ub. Kepala Bidang Litbang,

SATORI, S.Sos., M.Si.
Pembina
NIP. 19651011 198607 1 002

Tembusan: disampaikan kepada Yth.
1. Kepala Kesbangpol Kab. Batang;
2.;
3. Arsip.

Appendix III. Research Schedule

Date of Interview	Participants	Location
31-Jul-18	IIGF	IIGF office
3-Aug-18	MoF	DJPPR office
6-Aug-18	MNDP	Directorate of PPPs, MNDP
9-Aug-18	KPPIP	KPPIP office
15-Aug-18	PT PLN (representative)	PT Baramulti Sugih Sentosa office
14-Sep-18	PT BPI (private sector)	By phone
4-Sep-18	BR	BDPA office
6-Sep-18	KSH	Kandeman Sub-district office
14-Sep-18	HUV	Home of HUV
3-Sep-18	HPV	Ponowareng Village office
30-Aug-18	HKV	Karanggeneng Village office
10-Sep-18	BDPA	BDPA office
31-Aug-18	BDEA	BDEA office
28-Aug-18	BIISLA	BIISLA office
31-Aug-18	BMFAA	BMFAA office
10-Sep-18	BRFAA	BRFAA office
17-Sep-18	BPSA	BPSA office
17-Sep-18	BITCSA	BITCSA office
28-Aug-18	UIQPS	UIQPS office
14-Sep-18	UVS (1-3)	Home of UVS 1-3
30-Aug-18	KVS (1-3)	Home of KVS 1-3
3-Sep-18	PVS (1-3)	Ponowareng Village office

Appendix IV. Interview Questions

1. Government

- How is the history of decision making regarding using PPP in this project?
- What is the role of your agency in this project?
- What is the major issue of governance in this PPP project? How does your agency deal with these?
- Is there any governance structure for renegotiating PPP terms in the future?
- What do you think are the mutual benefits from this project?
- What is the major lesson learned from using PPP in this project?
- Does your agency have a formal process for documenting and sharing knowledge and experience from this PPP implementation?
- How does your government agency maintain the institutional roles and responsibilities in this project?
- What are the advantages and disadvantages of using PPP scheme in this project?
- Do you think this project will successfully support Indonesia's MP3EI or to achieve the Indonesian SDGs goals?

2. Private Sector

- What is the major lesson learned from running this PPP mechanism?
- What is the most challenging constraint regarding procurement in this project? How does the private sector deal with these constraints?
- What are the major risks that were addressed regarding procurement covered in the PPP agreement?
- Do you anticipate changes in the procurement and contracting process for future PPP in your state?
- How did the private sector party raise capital for this PPP project?
- How will the environmental condition be assessed and monitored before, during and after the project?
- What are the most challenging environmental issues in this project and how can the private sector be ready to handle it, in terms of operations? What roles did your private sector have?

- What will be the alternative for overcoming environmental impact from this project?
- How did your company maintain the relationship and responsibilities with the government and society?

3. *Head of Village*

- How much do you know about the PPP mechanism in this project?
- How useful is this project for the society?
- Did you have any roles in this project regarding risk management? How do you perform this role?
- What is the most challenging situation in the society that arise from this project?
- Have you experienced any discussion or negotiation related to this PPP project?
-If yes, about what? Do you find it useful?
-If no, how inclusive this project of the society?
- Have you found any major change in the environment and peoples' livelihoods before and after this project?
- Do you have any shared documents related to this project?
- How do you predict this project in the future?

4. *Society*

- How much do you know about this PPP project?
- What is the major challenge you face before and during this PPP project?
- Do you predict that this project will have a beneficial result for the society?
- Has there been any major change in your livelihood since this project began?
- Have you experienced any discussion or negotiation related to this PPP project?
-If yes, about what? Do you find it useful?
-If no, how inclusive this project to the society?
- Do you previously have any problem with the electricity scheme?
- What did you expect from this project?
- Do you have any other comments on this project?
- Were you satisfied with the previous electricity provision?

Appendix V. Participants Information Sheet

AN EXPLORATION OF THE KEY ISSUES AND CHALLENGES IN IMPLEMENTING THE PUBLIC-PRIVATE PARTNERSHIPS: THE CENTRAL JAVA POWER PLANT PROJECT, INDONESIA

PARTICIPANT INFORMATION SHEET*

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you choose not to participate, thank you for considering this request.

Who am I?

My name is Fikriyatul Falashifah and I am a Master's student in *Development Studies* at Victoria University of Wellington. This research project is work towards Master's thesis.

What is the aim of the project?

This project *aims* to explore the critical issues and challenges in implementing the public-private partnership mechanisms in the Central Java Power Plant Project, Indonesia; before the Power Plant comes into operation in early 2020. The critical issues to be explored is procurement, governance, environment and social issues during all of the project phases that had been done. This research is funded by Indonesia Endowment Fund for Education (LPDP) as a part of the full master degree scholarship. This research has been approved by the Victoria University of Wellington Human Ethics Committee with the reference application number i.e 0000026014.

How can you help?

You have been invited to participate because *you are a stakeholder with a specific role and you are possibly able to answer my research questions regarding the implementation of the PPP in Central Java Power Plant project*. If you agree to take part, I will interview you in your free time around the project location or in a place that we can discuss earlier. I will ask you questions and the interview will take 30 minutes to 1 hour. I will audio record the interview with your permission and write it up later. You can choose not to answer any question or stop the interview at any time, without giving a reason. You can withdraw from the study by contacting me at any time two weeks after our interview session. If you withdraw, the information you provided will be destroyed or returned to you.

What will happen to the information you give?

You will not be named in the final report but your organisation will be named (*provided you have the authority to agree to this on behalf of the organisation*).***

Only my supervisor and I will read the notes or transcript of the interview. The interview transcripts, summaries and any recordings will be kept securely and destroyed before 30 December 2019.

What will the project produce?

The information from my research will be used in my Master's thesis and academic publications and/or presented in the conference.

If you accept this invitation, what are your rights as a research participant?

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- choose not to answer any question;
- ask for the recorder to be turned off at any time during the interview;
- withdraw from the study two weeks after the interview session;
- ask any questions about the study at any time;
- receive a written summary of the interview and/or a copy of your interview recording;
- be able to read any reports of this research by emailing the researcher to request a copy.

If you have any questions or problems, who can you contact?

If you have any questions, either now or in the future, please feel free to contact me or my supervisor:

Student:

Name: Fikriyatul Falashifah
University email address:
Fikriyatul.falashifah@vuw.ac.nz

Supervisor:

Name: John Overton
Role: Supervisor, Professor
School: School of Geography,
Environment and Earth Science,
Victoria University of Wellington, New
Zealand
Email address: John.overton@vuw.ac.nz

Human Ethics Committee information

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convenor: Dr Judith Loveridge, email hec@vuw.ac.nz, phone 04 463 6028.

Appendix VI. Consent Form

AN EXPLORATION OF THE KEY ISSUES AND CHALLENGES IN IMPLEMENTING THE PUBLIC-PRIVATE PARTNERSHIPS: THE CENTRAL JAVA POWER PLANT PROJECT, INDONESIA

CONSENT TO INTERVIEW

This consent form will be held for one year.

Researcher: *Fikriyatul Falashifah*, Victoria University of Wellington.

- I have read the Information Sheet, and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to take part in an audio-recorded interview. Yes ☐ No ☐

I understand that:

- I may withdraw from this study at any point two weeks after the interview session, and any information that I have provided will be returned to me or destroyed.
- The identifiable information I have provided will be destroyed on 30 December 2019.
- Any information I provide will be kept confidential to the researcher and the supervisor.
- I understand that the results will be used for a Master's Thesis and academic publications and/or presented to conferences.
- I consent to information or opinions which I have given being attributed to my organization in any reports on this research and have the authority to agree to this on behalf of the organisation*: Yes ☐ No ☐
- I would like a copy of the recording of my interview: Yes ☐ No ☐
- I would like a summary of my interview: Yes ☐ No ☐
- I would like to receive a summary of the final report and have added my email address below. Yes ☐ No ☐

Signature of participant: _____

Name of participant: _____

Date: _____

Contact details: _____