

# 100 E-Bus Trial Jakarta

## Institutional and Legal Feasibility

June 26, 2020



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## ABOUT THE C40 CITIES FINANCE FACILITY

The C40 Cities Finance Facility (CFF) is a collaboration of the C40 Cities Climate Leadership Group and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The CFF supports cities in developing and emerging economies to develop finance-ready projects to reduce emissions to limit global temperature rise to 1.5°C and strengthen resilience against the impacts of a warming climate. The CFF is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), the Children's Investment Fund Foundation (CIFF), the Government of the United Kingdom and the United States Agency for International Development (USAID).

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### **Registered offices**

Bonn and Eschborn, Germany

Potsdamer Platz 10  
10785 Berlin, Germany

E [contact@c40cff.org](mailto:contact@c40cff.org)  
W [c40cff.org](http://c40cff.org)

### **Author/Responsible/Editor:**

GFA/ HEAT GmbH  
Habitat, Energy, Application & Technology

Seilerbahnweg 14  
61462 Koenigstein, Germany

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## LIST OF ABBREVIATIONS

ADB	Asian Development Bank
BRT	Bus Rapid Transit
CAST	Capacity Assessment Tool
C40	C40 Cities Climate Leadership Group
CFF	C40 Cities Finance Facility
DAMRI	Djawatan Angkoetan Motor Repoeblik Indonesia (Bus Company: SOE)
DKI Jakarta	Daerah Khusus Ibukota or Special Capital Region of Jakarta
E-bus	Electric bus
E-mobility	Electric mobility
EV	Electric Vehicle
GHG	Greenhouse Gas
GIZ	German Development Agency
HEAT	Habitat, Energy Application and Technology (HEAT GmbH)
ICO	Intermediate Capacity Outcome
ITDP	Institute for Transportation and Development Policy
MEMR	Ministry of Energy and Mineral Resources, Indonesia
MoT	Ministry of Transport
M&E	Monitoring and Evaluation
MYS	Mayasari Bakti Private Bus Company
PIU	Project Implementation Unit
PLN	Perusahaan Listrik Negara (Indonesia's state-owned electricity company)
PPD	Perusahaan Umum Pengangkutan Penumpang Djakarta (Bus Company: SOE)
SPA	Senior Project Advisor
SSI	Semi-Structured Interviews
TCO	Total Cost of Ownership
TJ	TransJakarta
TGUPP	Tim Gubernur untuk Percepatan Pembangunan (entity of DKI)
ToR	Terms of Reference
WB	World Bank
WP	Work Package

## EXECUTIVE SUMMARY

The development of the 100 E-Bus trial in Jakarta aims to reduce greenhouse gas (GHG) emissions for climate change mitigation. Successful implementation of this project can lead to reduced congestion, which can increase overall productivity of the city, leading to economic advancements.

However, the process of transitioning to E-bus transportation poses many significant challenges that must be addressed through careful planning and coordination. Therefore, the Due Diligence Study has recommended the development of a best practice legal and regulatory framework, increase cooperation among different stakeholders through mutual understanding, regular meetings and communication to increase institutional capacity, and improve managerial and organizational efficiency and experience. Carefully framed policies are required to ensure the success of this E-bus Trial project.

This first Paper prepares the Legal and Institutional Baseline Report of relevance for the 100 E-bus trials in Jakarta. Chapter 7 notes findings from the recent Due Diligence Study supplemented by the 100 E-bus Trial Study Team.

This Report will be followed by two further papers in sequence; the second Paper on brief assessment of different implementation and operational models and the third final Paper on recommended Legal and Institutional Framework for the 100-E-bus trial.



# **1 INTRODUCTION**

## **1.1 Background**

The Government of Indonesia through the DKI Jakarta has prepared a project entitled “Zero Emission Buses in Jakarta”. The project is being implemented over an 11-month period beginning February 2020, with the support of the C40 Cities Finance Facility (CFF).

TransJakarta (TJ) is a vital factor to expedite and improve public bus transport service across the BRT line in Jakarta region. The TJ was established as autonomous statutory agency to plan, manage and control the delivery of bus services across the Jakarta BRT network. The TJ operates as a corporate entity (BUMD-Regional Owned Company) with the major stakeholder being the DKI Jakarta government. It should operate as a commercial business.

## **1.2 Project Scope**

The City Government intends to completely ‘electrify’ commercial vehicles used for public transport in Jakarta. This project is the implementation of an operational trial fleet of 100 E-buses in the network of TJ. For Jakarta, the trial project and its preparation are seen as an opportunity to learn about the technology, operation and business model of E-bus fleets. A recent study concluded positive about the cost competitiveness of e-bus operations for TransJakarta and recommended to conduct a detailed technical and financial analysis for the roll out.

## **1.3 Purpose of this Report**

The purpose of this initial Report for WP 2.1.2 is the following:

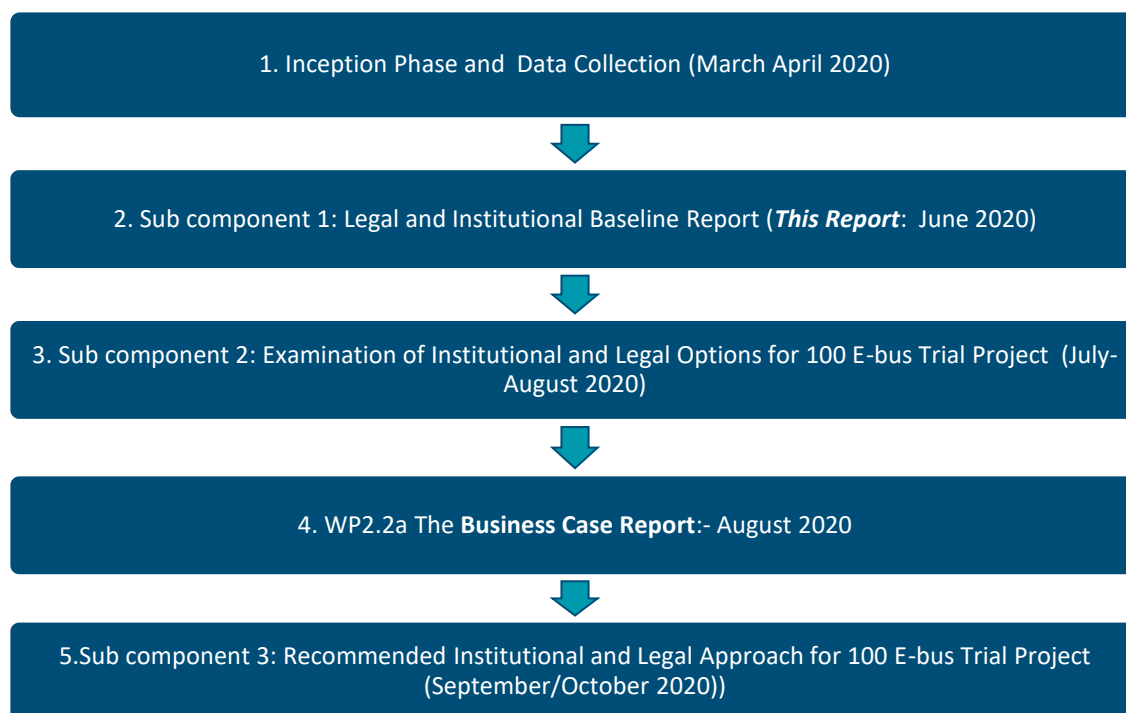
- i. Gather relevant information from all available sources; and
- ii. Summarize the Baseline Legal and Institutional situation for the 100 E-bus Trial project for Jakarta (Step 1 below).

The Baseline will be added to (as new documents arise or as new knowledge is captured) over the course of the coming month. The present target is to have completed the Baseline before the Business Case Study is published.

## **1.4 The Three subcomponents of the Institutional and Legal Workstream**

With the aim of establishing an effective and workable institutional structure in implementation and operation of the project, Jakarta requires support and recommendations based on its specific institutional circumstances. The Institutional and Legal Feasibility Study shall include three sub-components, as indicated in Annex 1.

The process to compile baseline information follows the steps shown in Figure 1.



*Figure 1 Main implementation steps for the WP 2.1.2 Workstream Activity*

## 2 LEGAL AND INSTITUTIONAL BASELINE APPROACH

### 2.1 Overview of Development of Institutional and Legal Recommendations

The Report for sub-component 1 (Baseline Study) has been grouped into the following five sub-sections, according to the ToR.

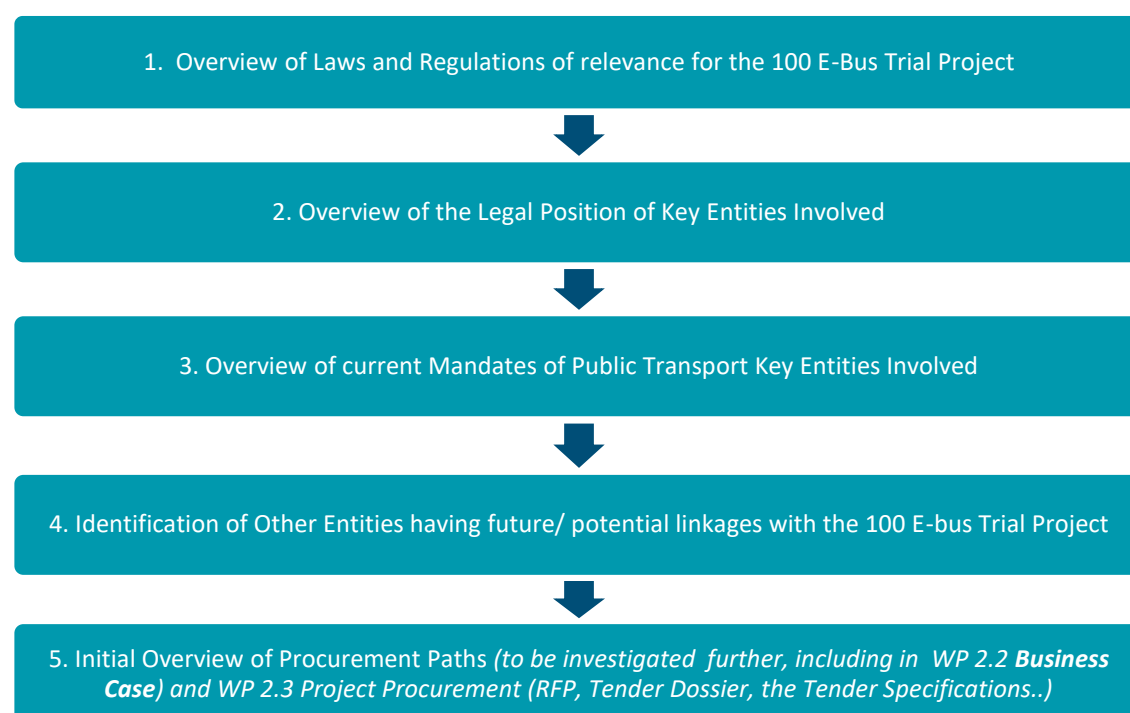


Figure 2 Implementation steps for subcomponent 1: Baseline Report

The five steps are described in the following sections of this report.

### 3 OVERVIEW OF CURRENT LEGAL BASIS FOR E-BUS SYSTEM DEVELOPMENT

#### 3.1 Background Legislation

The legal system for E-bus project implementation can be categorized into five groups as follows: Road Traffic, Air Pollution/Environment, Energy, Local Government, Project Scheme and Others (Spatial Planning, Technology).

A mapping of regulations and policies that will have an impact on the introduction and development of zero emission transport has been conducted by the Due Diligence Team and is presented in Appendix 3.

Details of the legal position, responsibilities /mandates of entities involved in implementation and operations for the 100 E-bus Trial phase are provided below.

#### 3.2 Guiding High level Legislation

Perpres 55/2019 'Acceleration of Battery-based Electric Vehicle Program for Road Transport' was promulgated on August 12, 2019 and stipulates that the objective is to provide direction, foundation and legal certainty in the implementation of the acceleration of the battery-based electric motor vehicle program which will be able to improve energy efficiency, energy security, and energy conservation in the transportation sector, and the realization of clean energy, clean air quality and environmentally friendly, as well as Indonesia's commitment to reduce greenhouse gas emissions.

PR 55/2019 outlines the institutional arrangements for the program. Below the table of the institutional arrangements is indicated.

*Table 1 Institutional Arrangements*

<b>Institution</b>	<b>Roles</b>
Coordinating Minister for Maritime Affairs and Natural Resources	As chair of Coordination Team for accelerating the development of the domestic battery electric vehicle industry.
Coordinating Minister for Economic Affairs	As Co-chair of Coordination Team for accelerating the development of the domestic battery electric vehicle industry.
Minister of Finance	To provide various fiscal and non-fiscal incentives to companies aimed at promoting the acceleration of battery electric vehicles.
Minister of Research, Technology and Higher Education	To conduct research for electric vehicle including supporting industry at large.
Minister of Industry	To develop roadmap of the national motor vehicle industry. To oblige the local content requirement

	fulfillment for EV Industry and EV Components Industry gradually.
Minister of Trade	To regulate and monitor an import the EV components in a Completely Knocked-Down ( <b>CKD</b> ) or Incompletely Knocked-Down ( <b>IKD</b> ).
Minister of Energy and Mineral Resources	To determine an electricity tariff imposed by the Charging Stations (mainly on SPKLU-Public Charging Stations).
Minister of Transportation	To conduct road-worthiness and technical requirements testing.
Minister of Environment and Forestry	MEF will issue the regulation regarding the managing battery waste.
Minister of Home Affairs	Both MOHA and regional government to ease the process for installing charging station in public areas. The delegation of production authority for certain EV technology whose patent is possessed by the central and/or the regional government.
The head of the Indonesian Police.	To carry out the type registration and identification of vehicle.
PLN	To provide and operate the Charging Stations, mainly on SPKLU.
Regional Government	To ease the process for installing charging stations in public areas. To carry out a periodical testing of vehicle.

Source: Compiled data.

Relevant Procurement laws and regulations are described further, in Chapter 7.

### 3.3 Vehicle and Operational Requirements

#### 3.3.1 Legislation for E-bus Operations according to Road Hierarchy and Vehicle Fleet

There are various types of roads in Indonesia by system, function and status. By system there are primary roads that are highways serving mainly to facilitate distribution of goods and services between provinces and secondary roads are those serving to facilitate distribution of goods and services in a city.

By function, there are arterial roads, collector roads and local roads. Arterial roads function to facilitate the main transport for long distance traffic having high speed. Collector roads function as feeder roads to facilitate collection and distribution of transport for mid-range transport with medium speed. Local roads function to facilitate short distance transport with lower speeds.

By status the roads in Indonesia are classified into national roads, provincial roads, district (regency) roads, city roads and village roads. National roads are arterial roads and collector roads in the primary road system. This system provides the highway

connection between provincial capitals and national strategic roads and toll roads. Provincial roads are collector roads in the primary road system providing connections between provincial capital and municipal cities or towns and between district capitals in a province and provincial strategic highways.

District (regency) roads are local roads in primary road networks providing connections between the capital cities of regency and lower district (kecamatan) municipal towns, between the municipal towns of kecamatan, the capital city of the regency and local activity centers in the regency. The roads also connect public roads in a secondary road networks in the regency and regency's strategic roads.

Urban roads are public roads in secondary road network that provide connection between service centers and residential areas in a city. Village roads are public roads that provide connection between areas and settlement areas in a village and with local roads.

Article 79(3) of PP 32/2011 stipulates that traffic restrictions on private vehicles and goods vehicles may not be conducted on national roads. So the applicable roads for E-buses are all roads, excluding national roads. Regional Regulation DKI Jakarta No. 5/2014 refers to the Management of the Jakarta BRT system. In PP 55/2012 on vehicle Article 6 (1) of PP 55/2012, stipulates that every motorized vehicle operated on the road must meet technical requirements.

### **3.3.2 Legislation for the Importation and Utilization of E-buses in Indonesia**

After an E-bus has been imported, or produced via the manufacturing and/or assembly process, E-buses must be registered with the police, with specifications of the vehicles provided during the process. Before E-buses are registered, businesses must conduct numerous tests and obtain approvals from the Ministry of Industry (MoI) and the Ministry of Transportation. These tests and approvals include homologation, vehicle type registration for testing, vehicle physical testing, type testing certificate (SUT), and type testing registration certificate (SRUT). Previously, businesses would have to go to MoT to apply for a type registration for testing, an SUT, and an SRUT with all the required documents that would later be keyed in manually by the MoT staff. However, on 31 March 2016, the Ministry of Transportation launched a vehicle type approval online application system that allows businesses to apply for an SUT and an SRUT online and reduces to approximately seven working days the time for getting certificates. Prior to this implementation, it took more than one month to obtain an SUT and an SRUT.

These vehicles must comply with the requirements under the relevant customs registration number (Nomor Induk Kepabeanan), as well as road-worthiness and technical requirements. They are also subject to periodical testing by the relevant working unit in the regency/municipal government or the private entities that are licensed to carry out such testing. Based on the result of the vehicle's type testing, the E-buses will be further classified, based on the characteristics of its chassis and electric motor. The data resulted from the identification and verification of motored

vehicle identity registration serves as forensic data of the national police. Finally, the trial for 100 E-buses should be in line with TJ's E-bus development program.

*Table 2 E-bus Introduction Process (Fleet Aspects only)*

<b>No.</b>	<b>Activities</b>	<b>Remarks</b>
1	E-Bus Imported, manufactured/Assembled	Operator, TJ
2	Homologation	MOT
3	Vehicle Type Registration for Testing	MOT
4	Vehicle Physical Testing	MOT
5	Type testing Certificate	MOT
6	Type Testing Registration Certificate	MOT
7	Customs registration number	MOF
8	Testing License	Dinas Perhubungan DKI Jakarta
9	Vehicle identity registration	National Police
10	E-Bus Trial	TJ

Source: compiled data

Article 4(2) of PP 55/2012 stipulates the classification of vehicle based on its function and type, the technical requirements of road vehicles, regulation on motor vehicle testing. Article 2 of PP 32/2011 also stipulates that management and traffic engineering activities are the responsibility of Governor and Head of Police of the Republic of Indonesia for provincial roads.

Article 5 of PP 97/2012 stipulates that the determination of criteria fulfillment for vehicle imposition shall be determined by the Ministry that is responsible for road traffic and transportation (the Ministry of Transportation). Based on Article 7 of PP97/2012, the regional government who will perform vehicle submits a request for determination of criteria fulfillment to the Ministry of Transportation. The Minister shall determine the fulfillment of criteria within maximum sixty (60) workdays effective from the date of the request receipt.

Therefore, in Head of Indonesian Police Force Regulation 5/2012, Article 31 (1) stipulates that identification and verification of motored vehicle identity registration is conducted towards:

- Physical data of the motored vehicle, type, variety, model, year of manufacture, cylinder, machine number, color, fuel, number of wheels and fuse;
- Functional data such as the utilization and eligibility of the motored vehicle;
- Juridical data such as the origin of the motored vehicle and identity of the owner.

Pursuant to the Article 31 (2) of Head of Indonesian Police Force Regulation 5/2012, the data resulted from the identification and verification of motored vehicle identity registration serves as forensic data of the national police. Finally, the trial for E-bus would be in line with the TJ trial program that E-bus would be released.



### **3.3.3 Motor Vehicle Registration Database held by the Head of Indonesian Police Force**

Regulation 5/2012, Article 31 (1) stipulates that identification and verification of motor vehicle identity registration is conducted towards:

- Physical data of the motor vehicle, type, variety, model, year of manufacture, cylinder, machine number, color, fuel, number of wheels and fuse;
- Functional data such as the utilization and eligibility of the motor vehicle;
- Juridical data such as the origin of the motor vehicle and identity of the owner.

Pursuant to the Article 31 (2) of Head of Indonesian Police Force Regulation 5/2012, the data resulted from the identification and verification of motor vehicle identity registration serves as forensic data of the national police. A current issue is that it is difficult to build an integrated database because the motor vehicle registration database varies, depending on the system manager.

### **3.3.4 Formulation of Regional Regulations for E-buses**

UU 22/2009, PP55/2012 and Perpres 55 /2019 do not regulate the details of imposition of E-Bus Implementation by regional authorities. Thus, the development of E-bus and E-charging infrastructure requires the parallel drafting of appropriate regional regulations.

### **3.3.5 Legislation for Enforcement**

Investigation of the crime of Traffic and Transportation shall be conducted by the Police force of the Republic of Indonesia and the investigator of specific civil servants in the field of traffic and road transportation, appointed by the Head of Provincial Department that is in charge of facilities and infrastructure for traffic and road transportation, in accordance with UU 22/2009. The enforcement body of E-Bus violations shall be determined under the UU 22/2009 as well as enforcement against violations of road traffic law.

## **3.4 Charging Infrastructure Requirements**

### **3.4.1 Legislation for E-bus infrastructure Power Supply: PLN – State Electricity Company**

PLN could be mandated/assigned to develop the charging stations. The provision of charging stations shall be carried out by a state-owned enterprise working in the energy sector and/or another business entity or entities. Initially, this service will be carried out by PT PLN , the state electricity provider, which will then be allowed to enter a partnership with another state-owned enterprise and/or business entity.

The sale of electricity at charging stations must be carried out by a company holding an electric power supply business license (Izin Usaha Penyediaan Tenaga Listrik) in the relevant working area. However, as the SPKLU (Stasiun Pengisian Kendaraan



Listrik Umum), the Government will also ease the process for installing charging stations in public areas such as gas stations, Government offices, shopping areas and other public parking areas.

### 3.5 Summary

For E-bus implementation, PP (Government Regulation) 55/2012 on vehicle and Perpres 55/2019 on the Acceleration Programme for BEB are the key regulations for the legal structure.

The government will establish a Coordination Team tasked with accelerating the development of the domestic battery electric vehicle industry, referring to the national motor vehicle industry development roadmap set out by the Minister of Industry. This Coordination Team will be chaired by the Coordinating Minister for Maritime Affairs and Natural Resources, with the Coordinating Minister for Economic Affairs as vice chair, and the following ministers/officials as members: (i) Minister of Finance; (ii) Minister of Research, Technology and Higher Education; (iii) Minister of Industry; (iv) Minister of Trade; (v) Minister of Energy and Mineral Resources; (vi) Minister of Transportation; (vii) Minister of Environment and Forestry; (viii) Minister of Home Affairs; and (ix) the head of the Indonesian Police. The Coordination Team will be assisted by a Working Unit established pursuant to a regulation issued by the Coordinating Minister for Maritime Affairs and Natural Resources, as the head of the Coordination Team.

For the project scheme, the 100 E-Bus Trial project is not included within the scope of Public Private Partnership (PPP) in Presidential Regulation 67 of 2005 (partially amended by Presidential Regulation 13/2010, 56/2011, and 66/2013) for PPP infrastructure of Indonesian central government. Thus, the E-Bus Trial project scheme has to be reviewed based on regulations of regional partnership project of local government, such as the widely applicable PP50/2007.

## 4 OVERVIEW OF CURRENT MANDATES

### 4.1 Phased Approach for the Development of Institutional Recommendations

The planned approach for institutional analyses is provided in Figure 3 below<sup>1</sup>.

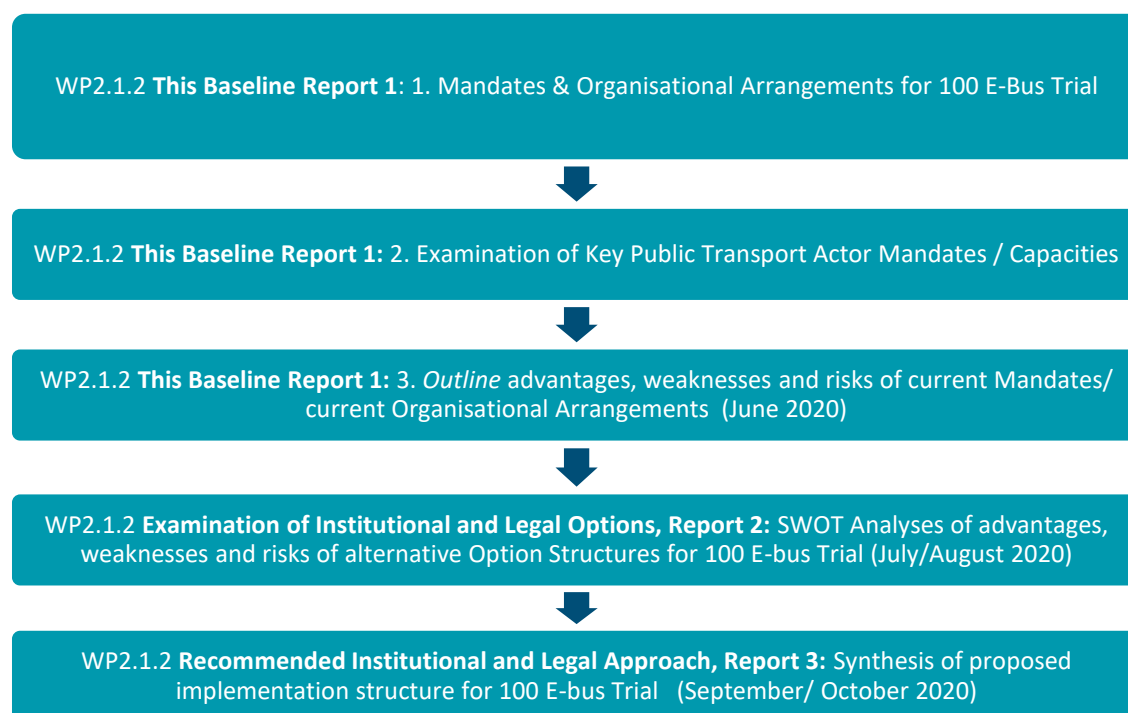


Figure 3 Planned approach for Institutional Analyses, Reports 1, 2 and 3

### 4.2 Current Mandates and Organisational Arrangements: Key Actors

#### 4.2.1 Elected Officials/Political Champions (DPRD)

The successful planning, implementation, and operation of the 100 E-bus system Trial relies on many partners: the local project sponsor, the public, the city planning agency for the jurisdiction in which the project resides, Transportation Agency, TGUPP, elected officials and political champions (DPRD), and the private business sector.

Some partners are engaged throughout the entire life of the project. Some partners' involvement is associated with the project preparation phase. The other category of

<sup>1</sup> Some minor adjustments (and rationalisation) of the timing of sub-components are suggested, as there are two subsequent reports in WP2.1.2 namely: Analyses of Different Options (Report 2), and Recommendations (Report 3).

partner and the timing of their engagement depend upon the 100 E-bus Trial project scope, scale, and detailed characteristics. The latter will be defined in other ongoing Studies under this Project: Technical and Financial Feasibility Study, culminating in a Business Case Report.

The section below includes a description of the main current primary stakeholders in turn, notably: (DKI Jakarta and Dinas Perhubungan, BPTJ and TJ).

A two-tier organization is to be considered with TJ being in charge of technical Feasibility Study and pilot design and City Hall (Asisten Perekonomian dan Keuangan, Sekretariat Daerah Propinsi DKI Jakarta) leading the overall project and the required government support and stakeholder management.

#### **4.2.2 Mandate of DKI Jakarta**

Unlike other provinces of Indonesia, DKI Jakarta has special tasks, rights, obligations and responsibilities as a capital city of Indonesia. Thus, this section reviews current laws and regulations on the special authority of DKI Jakarta in terms of E-bus introduction. According to Article 26 (4) of UU 29/2007, to the extent it has not been regulated or in conflicted with other prevailing laws and regulation of higher hierarchy, the DKI Jakarta provincial government has authority to enact an implementing regulation within its authority in the field of transport. The DKI Jakarta Provincial Government has the authority to determine and implement transport policy.

In order to provide public service in implementation of public transport, DKI Jakarta mandates to TransJakarta the assignment to undertake public transport services by providing subsidies.

The Provincial Government of DKI Jakarta acknowledges the need for a good, safe and reliable public transport system. The integrated Jakarta urban transport masterplan is revised by the JUTPI focusing to increasing the public transport modal share by introducing several public transport systems which are fast, safety, efficient and high level of capacity i.e. Bus Rapid Transit (BRT), Commuter line, Mass Rapid Transit (MRT) and Light Rail Transit (LRT).

DKI Jakarta has introduced several action programs, as follows:

1. An extensive development on both rapid and non-rapid transit bus systems;
2. Development of MRT and LRT networks;
3. Supporting infrastructure that facilitates the integration of transport systems by means of intermodal transfer;
4. Supports the improvement of services on the PT KAI Commuter Line; and
5. Supporting the revitalization of transport terminals.

However, during the implementation of these policies or mandates, some problems still occurred. One important aspect is the need of integrating policies in some areas, in particular for transportation, spatial plan, and environment policies. Thus, in the sustainable transportation concept, it is expected that there are integration and

harmonization, not only between transportation modes, but also between economic, social and environmental needs through better accessibility, and quality, implementation of multimode transportation, and interconnectivity between existing transportation patterns.

### 4.2.3 Jakarta Transportation Agency (Dinas Perhubungan) Mandate

The Jakarta Transportation Agency has the following mandate<sup>2</sup>:

- Planning of the route network (as well as regularly updating);
- Specification of service capacity/frequencies for each route;
- Specification of bus types for each route;
- Issuance of permits to Operators;
- Monitoring service performance, to ensure service delivery from the public transport Operators under their jurisdiction (including: TransJakarta, Mass Rapid Transit Jakarta, and Light Rail Transit Jakarta); and
- Enforcing relevant regulations (vehicle inspection, use of bus stops, etc.)

### 4.2.4 TGUPP Mandate

The current role of TGUPP is as a strategic institution to the champion of the project in which high level leadership is provided with direct access to City Hall (Asisten Perekonomian dan Keuangan, Sekretariat Daerah Propinsi DKI Jakarta) and the vice governor. According to DKI Jakarta (Dishub / TGUPP) the 100 E-bus trial will be included in the RKPD for 2020. The associated budget allocation was still subject to determination. The time line will follow the APBD cycle that would be proposed in early June 2020. The Governor has instructed, and TGUPP follows up on, the drafting of implementing regulations as mentioned under 'Regional Authority'<sup>3</sup>.

### 4.2.5 BPTJ (Badan Pengelola Transportasi Jabodetabek) Mandate

The Greater Jakarta area, known as JABODETABEK, faces a significant congestion problem noting that the high use of private vehicles, both motorbikes and cars. The total number of people traveling in the Jakarta, Bogor, Tangerang, and Bekasi areas from year to year continues to increase. According to data from 2018, there were at least 49.5 million people trips per day, while 23.4 million people trips is internal trip within Jakarta provincial boundary and the rest comes for other cities surrounding namely Bogor, Depok, Tangerang, and Bekasi.

Private transport comprises as much as 98%, whilst the proportion of public transport is only 2%, causing congestion at the entrances to Jakarta. The congestion cost is approximately Rp. 45. 2 Trillion/year including fuel, vehicle operating cost, time value, economic value and energy pollution (DKI, 2018.)

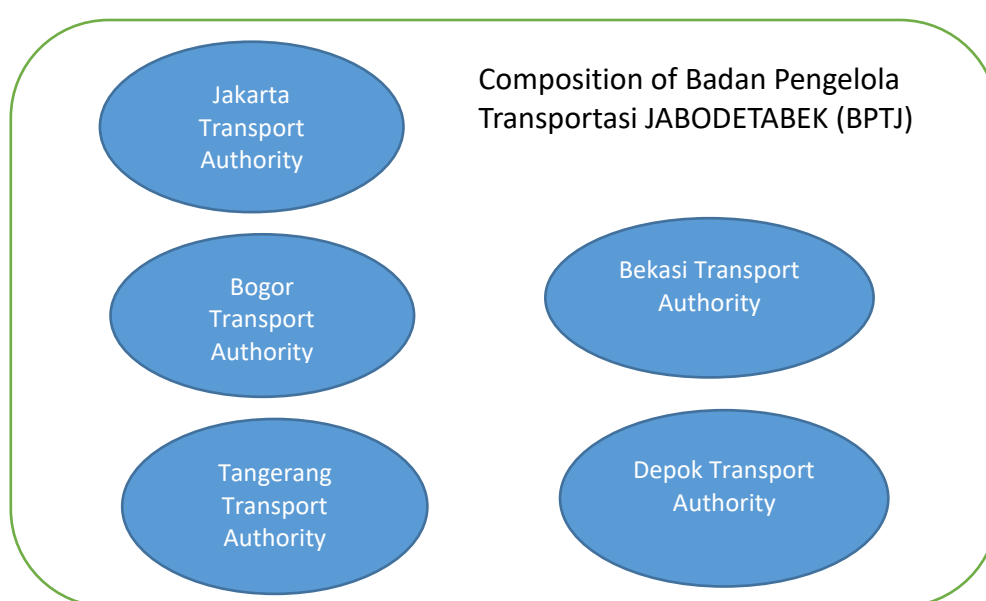
With their mandates, BPTJ has provided the premium Transjabodetabek bus, which serves the Bogor- Jakarta route, Bekasi – Jakarta route, BSD- Jakarta route. These

<sup>2</sup> Tupoksi Dinas Perhubungan Propinsi DKI Jakarta

<sup>3</sup> As a special region, Jakarta barely has special authorities. The classification of "special" under Law No. 29/2007 on The Special Capital Region of Jakarta (transportation, spatial, etc.).

bus operations are considered an effective cause of contribution to move passengers from private cars to public transportation and to cut travel time accordingly.

Integration in public transport is a critical issue in this area due to the administrative boundaries. The central government, therefore, released Presidential Regulation (Perpres) Number 55 of 2018 concerning the Jabodetabek Transportation Master Plan (RITJ) signed by President Joko Widodo. The presence of this Perpres has marked a new phase in the handling of integrated urban transportation in the Greater Jakarta area, both by the Ministry of Transportation and Regional Governments throughout Jakarta, Bogor, Depok, Tangerang and Bekasi.



*Figure 4 Coordination Schematic BPTJ with Local Transport Authorities*

BPTJ Jabodetabek has the task to develop, manage, and improving transportation services in Jakarta, Bogor, Depok, Tangerang and Bekasi with a good governance. BPTJ limits its function to planning and budget, budget allocation, monitoring and evaluation of public transport projects and operations that is established as non-ministerial agency. (Annex 3 Perpres103/2015).

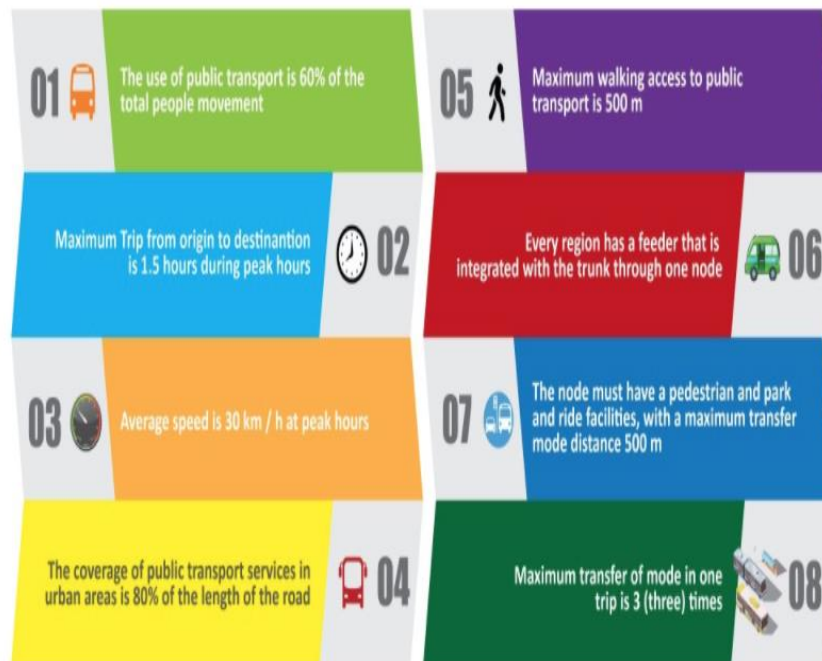


Figure 5 Key Indicator Measures (BPTJ, 2018)

There are the following aspects included in the 2018 regulations<sup>4</sup>, namely:

1. Urban transportation safety and security;
2. Urban transportation Infrastructure networks;
3. Road – Based Urban Transportation System;
4. Rail-Based Urban Transportation System;
5. Integrated Urban Transportation;
6. Traffic Performance;
7. Urban Transportation Funding;
8. Integration of Urban Transportation and Spatial Planning; and
9. Environmental Friendly Transportation.

The presence of Presidential Regulation (Perpres) No. 55 of 2018 on the Jabodetabek Transportation Master Plan (RITJ) has marked a new phase in handling urban transportation in the Greater Jakarta area. Thus, policies and steps to organize urban transportation in the Greater Jakarta area can be carried out in an integrated manner based on this RITJ particularly. The indirect benefit due to the implementation of RITJ substantially is how to create an integrated urban transportation system throughout Jabodetabek based on mass public transportation through contribution of 100-E-bus trial.

<sup>4</sup> MOT Regulation No 110 on Organization and Working Procedure of BPTJ.



#### 4.2.6 TransJakarta (TJ) Mandate

The implementation of Bus Rapid Transit (BRT) in Jakarta as one of the innovative urban transport policies in Indonesia and is expected to overcome urban transport problems and contribute to the transition towards sustainability. Unfortunately, after a decade of BRT operation, the daily patronage has been declining over years and the traffic congestion in Jakarta is still deteriorating. There is a growing awareness by the Government of Indonesia towards more sustainable urban transport that is stated in the National Midterm Development Plan 2015-2019 to give priority for the improvement and development of rapid transit systems in urban areas, including the further development of BRT Jakarta and its dissemination to other cities in Indonesia. The public transport system has been losing patronage for many years due to poor quality and unreliable services<sup>5</sup>.

Since 2014, the Jakarta Provincial Government (Jakarta) appointed a bus agency named PT Transportasi Jakarta (TJ) that has been transformed as a Regional owned Company to provide flexibility and transparency in providing a good and reliable bus transit system in Jakarta.

TransJakarta is supported by several operator companies that manage the fleet that serves each corridor. TransJakarta operated more than 3,800 buses in 2019<sup>6</sup>. TJ operates a small number of buses, whilst the operator owns most of the bus fleet. These operators are: Perum PPD, Perum DAMRI, Mayasari Bakti, Steady Safe, Pahala Kencana, Transwadaya, etc.

According to Pergub 48/2006 on TransJakarta, PT Transportasi Jakarta has the authority over operations throughout (the corridors 1, 2, 5, 9, 9A, 10, 13), surveillance and coordination with bus operators, as the system manager of the BRT system, and functions as a business with the following seven areas of responsibility:

- a. To plan the route network and develop services;
- b. To generate patronage and build revenue;
- c. Manage system efficiency and costs;
- d. Ensure financial performance;
- e. Manage fare collection and policy;
- f. Manage, monitor and enforce bus operator contracts; and
- g. Be responsible for customer service delivery and complaints and manage public relations, marketing and promotion.

The mandates of TransJakarta is stipulated on Pergub 62/2016. This is regarding Public Service Obligation and subsidy related with DKI Jakarta budget (APBD) allocation.

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<sup>5</sup> SYNTHIA ANGELINA, DIRK VALLÉE & CONNY LOUEN, 2019. The barriers in the implementation process and the operation of innovative urban transport: The case of BRT Jakarta. RWTH Aachen University, Institute for Urban and Transport Planning, Germany.

<sup>6</sup> TransJakarta website.

TransJakarta introduced recently an integrated ticket system namely Jak Lingko in 2018. The system can be used in all public transport modes, which are managed by the Jakarta Provincial Government (DKI).

TransJakarta creates a contract with a bus Operator in order to offer services in the Jakarta bus network system.

In accordance with article 51 of Perda No. 5 of 2014 concerning Transportation, in order to ensure the availability of public transportation services that meet roadworthy and environmentally friendly aspects, the lifetime of a public motor vehicle is determined. This is 10 years for large, medium, small buses and for freight transportation, and seven years for Taxis.

#### **4.2.7 Bus Operator Mandates<sup>7</sup>**

The appointed Operator shall fulfil the following TJ requirements:

- Purchase and maintain buses;
- Employ drivers, conductors, administrative, supervisory and maintenance staff, all on a salaried basis;
- Operate routes in accordance with schedules, conditions and standards specified by Dishub (and included in contract); and
- Provide operational data to TransJakarta as required for monitoring purposes.

A progressive route expansion in both BRT and Non-BRT routes led to a significant increase in the numbers of passengers. The number of passengers increased by around 30% per annum over the last three years, starting from 2017. TransJakarta aimed to reach 1 million passengers per day in 2020, which is targeted by the Government of DKI Jakarta<sup>8</sup>.

The target affects the provincial budget that requires submitting a public service obligation (PSO) or transportation subsidy through TransJakarta amounting to Rp 5.8 trillion, up from 2019, which was only Rp 2.7 trillion. The current ticket price is starting from Rp. 3,500 per trip at Rp. 5,000 (for Jak lingko service, including the transfer within 3 hours). The rest of operation cost is subsidised through PSO. This condition does not sustain for both for Provincial Budget and TransJakarta itself. Therefore, there is a need for TJ to gather additional sources than the farebox income i.e. advertising at stations and on buses, and managing bus terminals through a revitalization funding scheme.

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<sup>7</sup> Pergub 48/2006

<sup>8</sup> The target is unlikely to be met due to the onset of Coronavirus in March 2020.



## 4.3 Summary of some current Institutional Issues and Challenges

### 4.3.1 DKI Jakarta

#### 4.3.1.1 Advantages

The government, both City and National Government has been formulating and implementing a plan to develop sustainable transportation that serves the citizen of the Jakarta Metropolitan Area. This included the operation of the Jakarta Bus Rapid Transit system, the KRL Commuter Line and the Jakarta Mass Rapid Transit system. In the near future, both inner city and metropolitan light rapid transit systems will also operate in this area.

However, several points should be noted to optimize the benefit of such public transport modes to society. There are three components that are required to achieve sustainable transport development. Those components are:

- i) **Strong Transport Authority.**  
The presence of a Metropolitan Transport Organization (MTO) is required to create a master plan for integrated public transport development and to make a decision on public transport affair in a metropolitan area. Metropolitan public transport affair usually encompasses several cities and goes beyond administrative boundaries. It will be a disadvantage if the planning and development of public transport it is decided partially by different authorities / local government within the metropolitan area. The role of transport authority, therefore, is to coordinate transport system development among different authorities, and, at a more advanced level, become an institution that has strong authority for transport development that is followed/referred by different authorities.
- ii) **Integrated Transport Masterplan.**  
To achieve sustainable and integrated public transportation system, the existence of a transportation master plan for the JMA is highly necessary. It is synchronized also with RITJ (Rencana Induk Transportasi Jabodetabek) in which the action plan 2020-2024 will be formulated. The plan to integrated different transport mode and infrastructure as well as the land use (Transit Oriented Development) around public transport corridor should be laid out on the Master plan. Moreover, the masterplan should set the standard for the quality of public transport service. This encompasses convenience, equity, accessibility, safety, security, and reliability.
- iii) **Sustainable resources, funding, and finance.**  
To operate sustainably, public transportation system requires sufficient funding, technical expertise, and professionals. With respect to funding, public transport can gain more revenue from its passenger (fare-box ratio) by continuously improving the service. However, in many cases around the world, revenue from passenger alone is not enough to finance public transport operation. Even

though public funding is available, though limited, to subsidize public transport, possible opportunities for funding source should be identified and utilized. Public-private partnership scheme is one option that can be utilized by partnering with the private sector to build/operate public transport. In addition to that, value capture schemes such as property management, advertisement, etc. are several measures that can be considered to finance a public transport system.

#### 4.3.1.2 Weaknesses

DKI Jakarta as a Jakarta Metropolitan Area has been facing problem in terms of congestion and its chain effect, namely time value loss, high fuel consumption, and high greenhouse gas emissions. The problem is caused by many factors, namely high population, high use of private vehicles, inadequate current public transport supply, urban sprawl, etc. The 100 E-bus Trial project is intended to help reduce GHG emissions.

### 4.3.2 PT Transportasi Jakarta (TJ)

#### 4.3.2.1 Advantages

Many BRT projects have transit properties, operating across multiple jurisdictional boundaries and involving multiple stakeholders. These stakeholders typically bring their own priorities and agendas to the planning process. To work effectively, most BRT systems require transit agencies to reach agreement on issues related to infrastructure, technologies, operations, and responsibilities.

For any rapid transit system to be successful, a great deal must be known about the institutions that will plan, build, and operate the system. There is a wide and varied group of institutions that may be involved in the development of a BRT project, including the following<sup>9</sup>:

- National, local or regional public officials;
- National transportation, environment, or planning departments;
- Transit agencies and operators;
- Local planning, transportation, and economic development agencies;
- Local traffic engineering or public works departments;
- Police services involved in safety and traffic enforcement;
- Private developers or major landowners at station areas;
- Large private institutions such as hospitals, universities, commercial/retail organizations, or tourism facilities; and
- Representatives of local environmental or user groups.

Issues raised by any institution can have significant impacts on the location, alignment, or cost of a BRT project. These issues can also affect location of stations, integration with the regional transportation system, environmental constraints, staging options, and whether BRT will be considered a viable option at all.

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<sup>9</sup> National Academy of Science, Engineering and Medicine, 2003. Bus Transit Implementation Guidelines. Washington DC: The National Academy Press.

Inter-regional governmental agreements may be needed for agencies to reach agreement on the roles and responsibilities associated with a BRT project, including operation of the BRT system, traffic operations and signalization, zoning and land use planning, parking policies, fare policy, enforcement, finance, and construction of BRT facilities. These may also require an agreement for the shared use of funds for the development and operation of a BRT system. No single governance scheme and/or inter regional governmental agreement will be appropriate for all areas. In some areas, the local transit property might be the agency that implements a busway.

The 100 E-bus trial project as an advantage of TransJakarta and is expected to respond to the needs of transport that is safe and comfortable and having a wide range. TJ has extensive experience as the BRT system operator and has a technical competence; hence TJ is well placed to develop the 100 E-bus trials. In addition, TransJakarta buses have special lanes, so that the time taken by TransJakarta bus users is faster than other public transportation modes or other private vehicles.

All the systems have a leader, TJ that plans, manages, and controls several institutions consolidating infrastructure operations. The challenge for TJ is the preparation of the integrated mobility plans coordinated with land-use that is required.

However, TJ has an opportunity to obtain additional funding through land use and demand management measure such as parking management, as BRT systems have been successfully operated by TJ in reducing emissions and improving traffic safety<sup>10</sup>.

#### 4.3.2.2 Weaknesses

Coordination is seen as ineffective; Institutional arrangements within and between jurisdictions are dispersed. TJ as a lead transit agency has limited scope and cannot act on developing certain elements of the transit system, such as infrastructure.

However, the commitments to fully cover bus purchase costs and operational costs through fares limits the quality of service provided. The process of determining fares is politicized. A lower demand has created cashflow problem among operators, leading to service disruptions, difficulties financing fleet renewals, and public opinion concerns. Limited reorganization of existing bus routes and scrapping of older buses has impacted demand due to the road competition<sup>11</sup>.

TJ's institutional structure is problematic, for instance the routing and new designs in the new BRT corridors are being made without any consideration of passenger demand levels<sup>12</sup>. TransJakarta's leverage over bus operators and the ticketing system

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<sup>10</sup> Dorina Pojani and Dominic Stead, 2017. The urban transport Crisis in Emerging Economies. Springer International Publishing. Switzerland.

<sup>11</sup> Dorna Pojani and Dominic Stead, 2017. The urban transport crisis in emerging economies. Springer International Publishing. Switzerland.

<sup>12</sup> It is not related with the function of business, since the TJ is the agent of public services on transportation, which means a benchmark of government performance in serving the public.



is severely limited by its limited contracting authority, and because it does not have control over even its own revenue.

## 5 IDENTIFICATION OF OTHER ENTITIES WITH FUTURE / POTENTIAL LINKAGES WITH THE 100 E-BUS TRIAL

### 5.1 Introduction

The Chapter refers to other Entities and current laws and regulations that *may* affect the implementation and operation of the 100 E-bus Trial project, including a variety of topics<sup>13</sup>. The other entities that will have future, or potential, linkages with the 100 E-bus Trial Project as considered here are listed below.

### 5.2 Ministry of Energy and Mineral Resources

Ministry of Energy and Mineral Resources has the authority to set up electricity tariff. These tariffs are regulated under MEMR regulation No. 31/2014 2014 and No. 9/ 2015. According to the newest regulation, PT PLN will determine the electricity tariff, and tariff adjustment will be conducted on a monthly basis, based on an evaluation on the IDR—USD exchange rate, the Indonesian Crude Oil Price and the inflation rate.

Indonesia is still subsidizing several tariff classes, especially for the low power connections in residential, business and industry classes. By number of power connections, those classes compose the largest block of electricity users in Indonesia. Due to the directive of Perpres 55/2019 on acceleration of BEB, in future the MEMR should prepare a new tariff for EV's – including tariff exemptions.

### 5.3 The Ministry of Finance

The Government through the Ministry of Finance will provide various fiscal and non-fiscal incentives to companies aimed at promoting the acceleration of battery electric vehicles in the manner set out in Article 17(3) of PR 55/2019. The fiscal incentives include tax or import customs relief, discounts on vehicle charging fees, financial support for research or the construction of vehicle charging facilities, and certification for resources or products related to the industry. Non-fiscal incentives include exemptions from limitations on the use of certain roads, the granting of production rights for technologies whose patents are held by the government, and the maintenance of the safety and security of those areas where the BEV industry operates.

### 5.4 The Ministry of Trade and Industry

The Ministry of Trade is responsible for developing and supporting the implementation of strategies to improve, increase and promote Indonesia's exports and imports. In term of regulation<sup>14</sup> that functions for the following:

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<sup>13</sup> The Baseline is likely to be refined as the 100 E-bus Trial Project progresses. Later Project reports are likely to provide more detailed material on technical aspects (after the E-bus system design has been agreed **in the Technical Feasibility Study Report**) as well on financing, etc. (**in the Financial Feasibility Study Report**).

<sup>14</sup> Law No 7/2014 on Trade and other derivatives regulation.

- Ensure the application of rules and measures in international trade and counteract unfair trade practices such as dumping and subsidies by foreign companies and governments.
- Ensure a predictable tariff regime that reduces business risk and encourages investment in domestic production.
- Ensure export duties and taxes do not increase the cost of exports and make them uncompetitive in international markets.
- Prevent the control of imports from distorting efficient allocation of domestic resources.
- Ensure that import or export prices are stabilized in the most efficient manner possible.
- Prevent the control of exports and imports that increase competitiveness in international markets (quotas and tariff quotas)

The Government introduced Regulation PP No. 59/1999 on tax of luxury goods, which restructured taxes and import tariffs on automobiles. The regulation no longer linked import duty to local-content achievement, and liberalized procedures for CBU (completely built-up) car importation. The right to import CBU cars was made available to any company with an import license, often referred to as general importers. Furthermore, the new policy brought other changes, including relaxing the bonded zone company and the bonded warehouse regulations, removing import barriers, and strengthening the structure of the automotive industry by releasing import duties on raw material importation for the benefit of the component industry. In short, the new policy was aimed at enabling Indonesia's automotive industry to enter the regional free-trade era (AFTA) successfully.

There are no limits on foreign ownership in the automotive sector and no local-content requirements or incentives. Tariff barriers have also been lowered although they remain high by international standards. Automobiles are included in AFTA, which has lowered the import tariff on vehicles and automotive parts to 0-5%, provided a car has a minimum local content of 40% from any ASEAN country. The maximum tariff on automobiles is 80%. Tariffs on passenger car kits imported for assembly are 25%, 35%, 40%, or 50% depending on engine size. Tariffs on non-passenger car kits are a uniform 25%. Tariffs on auto components and parts imported for local assembly of passenger cars and minivans are a uniform rate of 15%.

The role of the Ministry of Industry is to prepare a roadmap of electric motor industry in which Presidential Regulation (PR) 55/2019 is the basis of (Battery Electric Vehicle) BEV development. It emphasizes that BEV or BEV component companies wishing to engage in the BEV industry in Indonesia must obtain the appropriate business licenses and build a manufacturing facility in the country. Companies can construct the facilities themselves or through a production partnership with another industrial company. PR 55/2019 also seeks to promote partnership between the government and private entities in conducting research, development and innovation in BEV technology.

It should be noted that there is a local content (*Tingkat Komponen Dalam Negeri*) requirement for the BEV industry under PR 55/2019, as set out in Article 8 of the



regulation. PR 55/2019 stipulates minimum local content of 35%/40% (depending on the type of BEV) as of 2019, which will be periodically raised to a maximum of 80% by 2026 or 2030 (depending on the type of vehicle). If companies are not able to produce the BEV components domestically, the component can be imported on an Incompletely Knocked Down or Completely Knocked Down basis (as applicable). Finally, the government will also control the distribution of fossil fuel-based vehicles in accordance with the national motor vehicle industry development roadmap set out by the Ministry of Industry.

## **5.5 Ministry of Environment and Forestry**

The Minister of Environment and Forestry will issue a further regulation regarding the policy that battery waste of BEVs must be recycled and/or managed by a company that is licensed to manage battery waste in accordance to the prevailing regulations. BEV or BEV component industries that manage battery waste in accordance with the prevailing regulations shall receive a token of appreciation for their contribution to the environment.

## **5.6 Ministry of Transportation**

UU23/2009 stipulates that usage of vehicle must obtain the approval from Ministry of Transportation. Permission for E-bus trial operation is also required based on the regulation in the Ministry of Transportation respectively.

## **5.7 City Planning Agency (Bappeda)**

The agency is the advisory agency that provides information on public transport best practices, possible financing strategies, and perspective on a project's context and how it could interact with and influence other stakeholders and local activities including publicity concessions, publicity rules, access to sites, firefighting and emergency rules, etc.

At the provincial level, the following directive is applicable:

- RPJMD 2019-2024 (5 year strategic development plan) included the commitment of Jakarta to introduce and promote the use of electric buses. The plan does not however provide for the specific commitment in terms of the quantity of e-buses deployment and timelines.

There is no provision for E-bus charging infrastructure in the RPJMD.

The Transportation Agency (Dinas Perhubungan, Public Works agency (Dinas Pekerjaan Umum), and planning agency (Bappeda) are responsible for developing land use and transportation plans and strategies to accommodate population and employment growth and the efficient movement of people and goods. Providing new transportation options, including E-bus services, would be a recommendation of the transportation, public works, or planning agencies that would be implemented by the local transit agency. These agencies, along with the transit agency (TJ), are often responsible for assessing the feasibility of an E-bus system and responding to any local-driven requirements.

## **5.8 Ministry of Home Affairs (MoHA): Spatial Planning/Environment**

Considering Article 61 of PP 32/2011, the introduction of E-buses needs to keep consistency with related spatial planning. The current urban spatial planning (Rencana Tata Ruang Wilayah) of DKI Jakarta has been approved by the MOHA (which conducts the governmental affairs in the field of spatial development) as stated in Regional Government Regulation 1/ 2012 concerning Area Spatial Planning of DKI Jakarta 2030. Article 29 of Regional Government Regulation 1/ 2012 includes implementation of traffic control mechanism along arterial roads. Therefore, this 100 E-Bus Trial project is consistent with current urban spatial planning.

## **5.9 Private Business Sector**

Improved access and mobility for customers, employees, and residents and better air quality and health can make businesses and land owners E-bus project supporters. When DKI Jakarta decided to renew its fleet for the BRT system, E-buses are at the forefront of TJ's Operator fleet requirements. TJ has received significant interest and enquiries, which demonstrates the appeal of E-buses/ low-emission urban transport solutions from abroad.



## 6 INITIAL OVERVIEW OF PROCUREMENT PATHS (STRATEGIES) AND LEGISLATION

### 6.1 Introduction

This Chapter provides an initial overview for the purpose of establishing the Baseline for the 100 E-bus Trial (present situation).

At the start, a brief note of where the procurement is addressed in the Consultants ToR is outlined. A note of pertinent laws and regulations related to Procurement follows this. Alternative Procurement possibilities are described. The Procurement activity flow process for Tender (by DKI Jakarta) and by Operators is included.

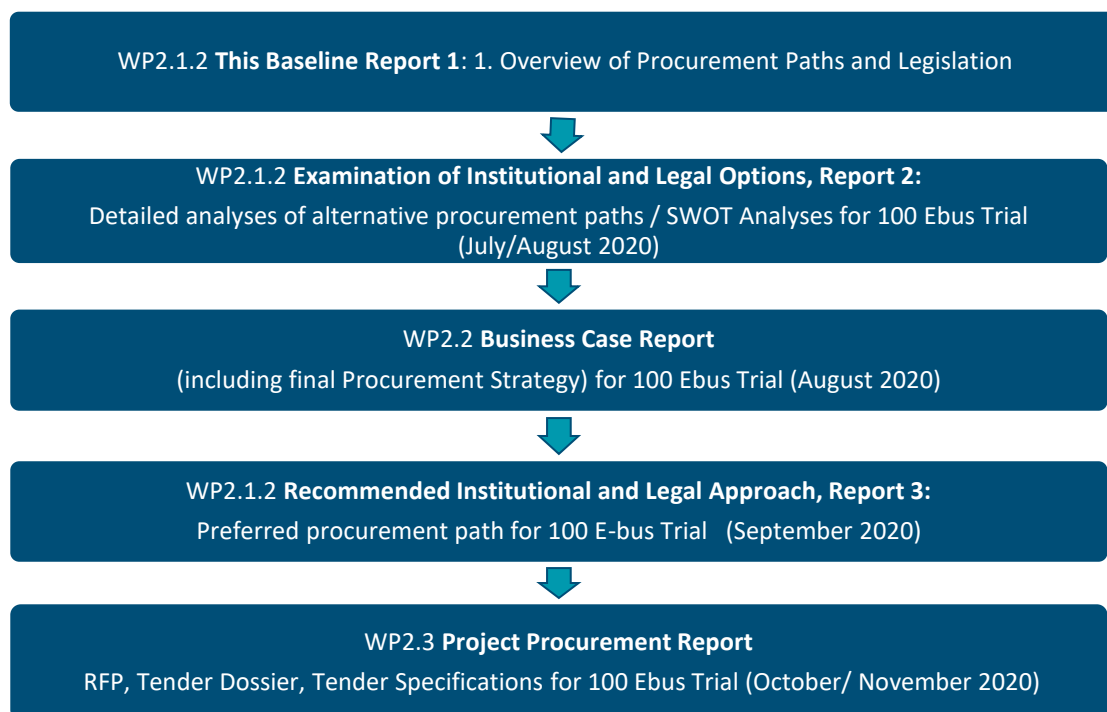
### 6.2 Baseline Report in relation to other Consultant Deliverables on Procurement

The order imposed by the ToR is relevant. The main procurement activity under WP 2.3 **100 E-bus Trial Project Procurement** will commence after acceptance of the preceding activity: **Business Case Report WP 2.2**, which will start after September 2020.

For early information, the main focus of WP **2.3 Project Procurement** will be on:

- **Recommendations for procurement:** based on the market study and the dialogue carried out, and in collaboration with the PIU, the Service Provider shall take stock of potential procurement strategies and develop recommendations for the selection of providers, operators and financiers. These recommendations shall be aligned with the selection mechanism that can be legally used by the city, which can include a national or international, open or closed bidding process or direct selection.
- **Draft bidding or contracting scheme and documentation (RFPs):** based on the institutional structure and capacity of the city, the legal context identified, and the specific services to be acquired and the model for acquisition selected (one contract for assets and operation or separate contracts).
- **Draft Bus Purchase Contract:** based on all of the above, including the technical schedules to be executed.

The planned approach in respect of Procurement is provided in Figure 9 below<sup>15</sup>.



*Figure 6 Holistic approach for Procurement under the 100 E-bus Trial*

### 6.3 Overview of Pertinent Procurement Legislation

There are several Laws and regulations that regulate Procurement (Tender Process). The Tender process is classified into 3 types of tender. Depending on the specification of the goods/services, as follows:

- (a) Public tender;
- (b) Limited tender; and
- (c) Simple tender.

The applicable laws and regulations to tender process are Presidential Regulation 54/2010 (Presreg 54/2010; lastly amended by Presidential Regulation 70/2012) and Head of NPPA Regulation No. 14 of 2012 ("NPPA Regulation 14/2012"). The

<sup>15</sup> Some minor adjustments (and rationalisation) of the timing of sub-components are suggested, as there are two subsequent reports under WP2.1.2 namely: Analyses of Different Options (Report 2), and Recommendations (Report 3).

competent authority in terms of general tender process is National Public Procurement Agency / Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah] "(NPPA)".

## **6.4 Alternative Procurement Path Options**

1. Government procurement of E-buses for the 100 E-bus Trial is eligible either by TJ or by the DKI Jakarta. If the procurement is under the TJ, an internal procurement system is used. However, If the procurement is undertaken by a bus operator, that will follow the existing mechanism (details below)

### **6.4.1 Procurement by Government Agency via E- Purchasing**

Regulations regarding electronic catalog (e-Catalog) and E-purchasing have been explained in Presidential Regulation No. 4 of 2015 concerning procurement of government goods/ services. This policy formulation was developed and formulated by the government policy / goods procurement service agency called LKPP as referred to in Presidential Regulation Number 157 of 2014.

Electronic catalog or commonly abbreviated as e-Catalog is part of the development of government procurement of goods / services through e-Purchasing. E-catalog is an electronic information system that lists, brands, types, technical specifications, prices and quantities of certain goods or services available from various providers. Inclusion of price and technical specifications of goods / services in the E-catalog is based on an umbrella contract between the Government Goods / Services Procurement Policy Agency (LKPP) and the goods / services provider.

This electronic catalog consists of three criteria including national, sectoral and regional electronic catalogs. The national electronic catalog is an electronic catalog compiled and managed by government procurement policy institutions / services or LKPP covering goods, construction work, other services, consulting services and / or goods / services contained in an online shop.

Sectoral electronic catalog is an electronic catalog compiled and managed by the ministry covering goods, construction work, other services and / or consulting services. While the regional electronic catalog is an electronic catalog compiled and managed by the regional government of goods, construction works (general and certain), other services and / or consulting services.

The stages of E-bus procurement prior to the arrival of E-catalog in general are through planning, procurement, acceptance, and distribution to service units. The procurement process by using E-catalog is almost the same as with conventional methods; the only difference is the existence of a predetermined list of E-buses. The list of E-buses in this E-catalog is a list of E-buses proposed by TJ. From the results of the pre-trial phase TJ will learn of the appropriate specification for E-buses that could be procured/operated in Jakarta. As per regulation Perpres 16/2018, the results of pre-trial should enable TJ to list the specifications for E-bus and thereafter provide with it to BPPBJ (the Goods and Services Procurement Service Agency) of DKI

Jakarta. BPPBJ will put the E-bus specification into the E-catalog, for procurement purposes.

#### 6.4.2 Procurement by TJ

According to the relevant laws and regulations, a BUMD such as TJ is not treated favorably in the tender process and is treated equally compared to other bidders.

Perpres 16/2018 concerning Procurement of Government Goods / Services only limits Government procurement. In accordance with the definition of Government Procurement as explained in Article 1 number 1, Government Procurement of Goods / Services is defined as the activities of Procurement of Goods / Services by the Ministry / Institution / Regional Apparatus funded by the State Budget / Regional Budget whose process starts from the identification of needs, up to the handover of work results. Referring to the scope and definition above it is clear that Perpres 16/2018 only regulates procurement in the Ministry of Central and Regional Government Institutions (KLPD).

The scope of Government Goods / Services Procurement that only applies to KLPD users of DIPA and DPA, is clearly not included in the Procurement of Goods / Services of BUMN / BUMD and Semi-Government Institutions and similar institutions. Because BUMN / BUMD and Semi-Government Institutions are not included in the KLPD and are not users of DIPA / DPA.

TJ is basically possible to get budgets sourced from the APBN / APBD, the mechanism is different from KLPD. TJ will get capital participation from DKI Jakarta, while Semi-Government Institutions will get the budget through a grant mechanism. The capital investment and grant budget goes to the TJ procurement payment process will be sourced from company or institutional cash with procurement and financial provisions in accordance with applicable regulations in companies and institutions. Therefore, Presidential Regulation 16/2018 does not guide the Procurement of the 100 E-bus trial.

From the description above, it is clear that TJ Procurement whose funding is sourced from the company cash or non-cash KLPD are not guided by Government Goods / Services Procurement Regulations. Therefore, TJ is required to draw up their own rules and procedures for Procurement of the 100 E-bus trial that reflect the principles of correct procurement. For TJ, preparation of TJ directors' regulations must refer to the Regional Head Regulation on Procurement of Goods / Services in the Local Government Environment in accordance with the mandate of the Government Regulation on Regionally Owned Enterprises.

TJ determines the number of fleet to be procured based on the BRT system requirements and the DKI Jakarta's assignment area. In carrying out the procurement of fleet, the TJ can cooperate with competent institutions, such as the Procurement Policy Institute for Goods/Services (LKPP)<sup>16</sup>.

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<sup>16</sup> Pergub 17/2015 on Jakarta Public Transportation Service.

Procurement of fleet is carried out by:

- a. Public auction or limited auction (selection) for new operators;
- b. Direct appointment for the existing operators (license holder);
- c. Self-Management Procurement; and
- d. Other procurement methods in accordance with regulatory requirements legislation.

To ensure the availability of transportation services Jakarta, the TJ is required to procure fleet through procurement of self-management (Swakelola) with a minimum amount of 20% (twenty percent) of the total that must be carried out based on TJ's operational plans.

Procurement through public auctions or limited auctions to award an operator in the scheme of Rp/km that is based on competitive fairness of the market price. The (Rp/km) is obtained and is also used as a basis for negotiation with the existing operators.

#### **6.4.3 Procurement by the DKI Jakarta**

However, if the procurement were to be under the regional government, it would follow the guidance in regulation PerPres 54/2010. For partnership between a regional government and a private entity based on PP 50/2007, the procurement of goods or services is conducted by way of tender.

#### **6.4.4 Procurement By Bus Operators**

The Operator is a legal entity entered into an Agreement with the TJ to providing busway public transport services (bus), feeder transport, and other public transportation. There are two operators consisting of:

- The old public transport operator is a legal entity in existence before the busway corridors were built that was given a route permit.
- The new public transport operator is legal entity that is awarded a contract through a public auction or selection process to become a transport operator.

The operator procures a fleet based on TJ's system requirements and an allocated fleet.

### **6.5 Flow of Procurement Process by Tender**

Pursuant to attachment of NPPA Regulation 14/2012 Chapter II A.8, generally, the tender process consists of the following stages. The stages are general in nature for post-qualification public tender with "one cover" or "satu sampul" method and an elimination system. Therefore, the actual tender stages may differ depending on the

qualification methods, the evaluation method, and submission of tender offer documents method:

- (i) Announcement of tender in website of DKI Jakarta and in NPPA website/invitation for Limited Tender;
- (ii) Registration and retrieval of procurement documents by tender participants;
- (iii) Explanation of the procurement documents;
- (iv) Submission of tender offer documents to tender committee;
- (v) Opening and checking of the tender offer documents;
- (vi) Evaluation by tender committee of tender offer documents and qualifications of bidders;
- (vii) Qualification verification of bidders who have fulfilled the required qualification;
- (viii) Drafting of Minutes of Tender Result by tender committee;
- (ix) Determination of the tender winner by tender committee;
- (x) Announcement of tender winner;
- (xi) Objection to the determination of tender winner (if any) to the tender committee;
- (xii) Appeal of objection to the determination of tender winner to the tender committee;
- (xiii) Appointment Letter of Goods and Service Provider by [-Commitment Determination Officer/ Petugas Pembuat Komitmen (PPK).

## **6.6 Next Steps: Procurement Mapping**

It is expected that the detailed Institutional and Legal Options analyses in detail (Step 2) and the subsequent presentation of the Preferred Institutional and Legal Option (Step 3) will help to refine the procurement mapping ahead of the main procurement phase WP 2.3.

## 7 EMERGING FINDINGS FROM DUE DILIGENCE AND GFA STUDIES

### 7.1 Introduction

Some Institutional and regulatory issues are highlighted below.

A CFF-GIZ mission undertook a due diligence to assess Jakarta's proposed project on the possibility to be transacted ultimo 2020, the CFF potential supports additionalities and the scope of support, which is relevant to facilitate the transaction of the trial project. In order to identify and design the eventual CFF support to Jakarta, a gap analysis has been made to identify the steps that still need to be taken to achieve a sustainable and operational 100 E-bus trial project.

### 7.2 Legal and Regulatory Findings

#### 7.2.1 Compliance with Planning Policies and Regulations

From a review of the planning regulations it can be concluded that the project is in line with national and regional planning regulations and can be considered a dedicated step forward to achieve an improvement of air quality and to reduce – be it modestly – GHG emissions. The wider policy and ambition of Indonesia to become a large player in EVs and supporting 'automotive' industries can be considered to support the transition from fossil to electric fuel. From a regional authorities perspective, the ambition for the 100 E-bus trial can be seen as putting into practice what has been advocated for more the 5 years at the level of several regional authorities<sup>17</sup>.

#### 7.2.2 Technical Regulations for Electrical Supply

A concern is that for sourcing of electricity for public transport, the sector is reckoned to be a commercial/private undertaking with no dedicated electricity-pricing plan in place. To enhance the viability of E-bus in Jakarta an active dialogue should be established with entities like the MOF and MEMR to get the right stimuli in place for E-bus to succeed.

In terms of the delivery of charging infrastructure/services: the Study will examine who could build charging infrastructure (PLN, TransJakarta, Bus Operators, and Fleet providers and the regulatory requirements that will be needed.

### 7.3 Institutional and Organisational Findings

#### 7.3.1 Institutional Complexity

The multitude of stakeholders that plays a role in the implementation of the Presidential Regulation 55/2019 and hence in determining the technical and

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<sup>17</sup> Due Diligence Final Report April 2020



financial/commercial parameters of the trial, requires the implementation of an active stakeholder management approach and ensuring proper alignment between implementing regulations at National and Regional level. There is limited awareness of the complexity of the migration to E-buses with decision makers as yet. The mainstream perception is a bus operator just buying E-buses instead of diesel units. The complexity and government role for this transition is not yet widely understood. These issues will be addressed within the next two papers under WP2.1.2.

### **7.3.2 Importance of the Institutional Structure / DKI Jakarta PIU**

The use and composition of the PIU depends on (i) the funding agency, (ii) the nature of the parent executing or implementing agencies, (iii) the type of project, and (iv) the country context. PIUs are primarily used as a mechanism to implement projects and to create capital assets, rather than as a tool to build human or institutional capacity. In principle, it should strive to implement its projects within the government structures, if necessary through PIUs, preferably of the integrated type, considering the loan modality, government policies, country systems, and project efficiency.

There is a need for a strong empowered organization (PIU), which has direct access and support from the Governor and his strategic advisory team TGUPP<sup>18</sup>. The PIU for DKI Jakarta was established in April 2020 and held its first Technical Working Meeting in May 2020, attended by SPA and members of the Project Team.

### **7.3.3 Active Stakeholder Engagement**

Active stakeholder- and process management is required to get the cooperation of the relevant stakeholders (at the national level) and to agree terms and conditions that would be applicable for the trial operation. If necessary exemptions should be agreed in the absence of (workable) regulations, etc. A critical path/timeline is to be agreed with e.g. Menko Maritim, who plays a coordination role in the operationalization of the PR 55/2019. DKI Jakarta has mentioned the need to be supported with contracting and tender documentation.

### **7.3.4 Importance of Technical and Management Capacity Building**

E-bus technology is nascent in Indonesia, as such; there is very limited knowledge on zero emissions E-bus operations both from the perspective of the public and private sectors. In recognition of this, there may be a requirement for technical and managerial capacity support to support the procurement of the project especially in relation to:

- Project and process management;
- E-bus technology and operations expertise;
- Financing and business model and -case modeling expertise; and
- Transaction/deal making expertise.

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<sup>18</sup> Findings from Due Diligence Study, Rebel Group Final Report, April 2020.



This will be examined further in the Procurement Strategy and Approach Paper as well as in WP3 Capacity Development. Mechanisms determining the route and type of modes appear not to be carried out in accordance with prevailing regulations.

## **7.4 Procurement Approach Findings**

### **7.4.1 Importance of Procurement Approach for E-bus Trial Implementation**

There is a need to consider the procurement principles: economy, efficiency, and transparency in the implementation program<sup>19</sup>. The relationship between procurement and good governance is gaining increasing attention. Effective procurement practices provide governments with a means of bringing about social, environmental and economic reform. Conversely, malpractice within public procurement is a Government's major source of corruption and financial loss. This will be investigated in detail under WP2.3.

### **7.4.2 Adequate Resource allocation during Procurement Phase**

It is noted that the Governor / City Administration is ready and willing to furnish subsidies to make the migration to E-bus operations viable. This will be channeled through the existing Public Service Obligation (PSO) mechanism. Currently DKI Jakarta is calculating the additional PSO needed for 100 buses in 2020. It is possible that TJ will propose funds in the 2021 APBD.

In addition to technical and capacity support for the procurement of the project, it is noted that it will also be critical for DKI Jakarta to ensure the availability of a dedicated team who can focus on the procurement of the pilot project on a full-time basis and play a leading role in the start-up and continuation of the trial project. This will not only ensure that there are ample resources deployed to facilitate the key requirements during procurement but also indicate the general commitment and buy-in of DKI Jakarta on the project.

Through professional management of the Trial DKI Jakarta should be enabled to issue new regulations and policies that enable the (later) larger scale migration to Zero Emission public transport.

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<sup>19</sup> Perpres 54/2010 on Public Goods/Services Procurement.

## 8 NEXT STEP

In terms of the way forward, whilst the WP2.1.2 sub-component Study has examined the past legal and institutional situation (Baseline), in the next step it will look ahead to the future situation and the options that DKI Jakarta and TJ might jointly face in implementing the 100 E-bus Trial. The Baseline findings thus serve as reference information for the selection of better and or / more targeted arrangements, in Steps 2 and 3 (according to the ToR progression, in Annex 1).

As mentioned earlier, as the study progresses and new information becomes available, it is expected that the Baseline will be refined, up until the time that the final Business Case Study Report for the 100 E-bus Trial has been approved (presently targeted for end September 2020).

## ANNEX 1 TERMS OF REFERENCE STEP 2: FEASIBILITY OF POSSIBLE IMPLEMENTATION AND OPERATION MODELS

This second step will focus on an examination of Institutional and Legal Options for the 100 E-bus Trial<sup>20</sup>. In the given institutional and legal framework, this study component shall analyze and compare:

- a. Specific solutions foreseen to all barriers in order to make the projects feasible
- b. *Possible models/scenarios for implementation and operation*, based on the existing legal and institutional context of the individual projects (including but not limited to public-private partnerships, contractual models, bidding processes)
- c. *Advantages and limitations of each model/scenario*, based on the existing legal and institutional context of the individual projects
- d. *Comprehensive analysis of the optimal model/scenario recommended* for these projects and the given institutional and legal context
- e. *Identification of mechanisms to access loans and private investment.*

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<sup>20</sup> A SWOT analysis may be proposed.

## **ANNEX 2 BIBLIOGRAPHY OF PUBLICATIONS CONSULTED DURING THE PREPARATION OF THIS PAPER**

- ADB, 2016. Indonesia's Summary Transport Assessment. Manila
- APEC, 2017. Gaps Assessment on APEC Energy Efficiency and Conservation Work toward Fulfilling the Leaders' Energy Intensity Reduction Goal. Philadelphia.
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- Bappenas, 2015. Strategic Environmental Assessment (SEA) for Indonesian Master Plan for Acceleration & Expansion of Economic Development (MP3EI). Jakarta.
- Brown and Peskett, 2011. Climate Finance in Indonesia: Lessons for the Future of Public Finance for Climate Change Mitigation. EDC 2020. Overseas Development Institute. London.
- Grutter Consulting, 2019. E-buses for BRT Corridors 1 and 6 of TransJakarta. Jakarta
- Grutter Consulting, 2019. Real World Performance of Hybrid and Electric Buses Environmental and Financial Performance of Hybrid and Battery Electric Transit Buses Based on Real World Performance of Large Operational Fleets. Germany.
- ITDP, 2004. Institutional and Regulatory Reform Options for TransJakarta BRT Systems. Jakarta.
- ITDP, 2019. Public Transport Reform Guideline for Indonesian Cities. Jakarta.
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- Low Emission Capacity Building Programme, 2014. Development of Bus Rapid Transit (BRT) in Greater Jakarta (Jabodetabek BRT NAMA). Jakarta.
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- Siddhartha and Widjaja, 2013. Investing in Indonesia. KPMG Hadibroto and KPMG Siddhartha Advisory. Jakarta.
- Philip Sayeg, 2015. Post evaluation of a decade of experience with Jakarta's TransJakarta Bus Rapid Transit System. Sydney.
- Rebel Group, 2019. Gap Analysis draft Report. Jakarta

- ITDP, 2004. Institutional and regulatory Reform Options for TransJakarta BRT System. Lessons from International Experience.
- Ministry of Transportation, 2012. Project for the Study on Jabodetabek Public Transportation Policy Implementation Strategy.

## **ANNEX 3 STRUCTURE OF THE LEGAL SYSTEM UNDERPINNING E-BUS DEVELOPMENT**

### **Transport (Road Traffic)**

- Law 22/2009 on Traffic and road transport: This law applies to fostering and organizes the Road Traffic and Transport safe, secure, orderly and smoothly through: a. moving vehicle activities, people, and / or goods on the road; b. activities that use facilities, infrastructure, and Traffic and Road Transport supporting facilities; and c. activities related to registration and identification Motor Vehicles and Drivers, education passed traffic, Management and Traffic Engineering, as well law enforcement of Traffic and Road Transportation.
- Law 38/2004 on Road: The scope of the provisions in this law include organization: a. public roads which include arrangement, coaching, development, and supervision; b. toll road which includes regulation, guidance, exploitation, and supervision; and c. special road.
- Government Regulation (PP) 32/2011 on Traffic Management: Traffic management and engineering activities are the responsibility of: a. the minister who is responsible for traffic infrastructure and facilities road transportation for national roads; b. the minister in charge of roads for national roads; c. Head of the Indonesian National Police for national, provincial, district / city and village; d. governor for provincial roads; e. district heads for district roads and village roads; and f. mayor for city street.
- Government Regulation 55/2012 on vehicles: Passenger type Motorized Vehicles as referred to in Article 3 paragraph (1) letter b includes: Non-sedan Passenger vehicles that have 2 (two) spaces consisting of: 1. Engine room; and 2. Driver's room, passenger's room and / or luggage.
- Government Regulation 80/2012 on Inspection Procedure: Inspection of Motorized Vehicles on Roads and Enforcement Traffic and Road Transportation Violations aim at: a. fulfill the technical requirements and roadworthiness of the vehicle Motorized; b. Completion of registration documents and identification of drivers and Motorized Vehicles; permit documents and completeness of Motorized Vehicles public transportation; c. supported disclosure of criminal cases; and d. the creation of compliance and security culture and traffic safety.
- Perpres 110/2018 on Organization structure of BPTJ: BPTJ has the task of developing, managing and improve integrated transportation services in the areas of Jakarta, Bogor, Depok, Tangerang and Bekasi by implementing good organizational governance. BPTJ in the framework of carrying out the tasks as intended referred to in paragraph (1) refers to the Master Plan Transportation Jakarta, Bogor, Depok, Tangerang and Bekasi.
- Indonesia Police Regulation 5/2012 on Registration and Identification of Motored Vehicle: Regident motor vehicle aims to: a. orderly administration, in

order to: 1. Guarantee the validity of motor vehicle and its ownership and operational motor vehicle in order realize legal protection and certainty and 2. The realization of the Resident motored vehicle information and communication system as a form of orderly administration as the basis for the implementation of police control and forensic functions;

- Regional Regulation of DKI PD 5/2014 on Transportation: The preparation of this Regional Regulation is intended as a legal basis for Transportation management that is reliable, efficient, harmonious, economical, friendly environment, and saving energy.
- PD 8/2007 on Public Order on Road, Public Space and Facilities in DKI Jakarta: Everyone who will use / ride public transport must wait at a designated stop. Every public transportation driver must wait, raise and / or drop off people and / or goods at the stopping places that have been determined. Every public vehicle must run on each designated road section.
- Governor DKI Jakarta Regulation PG 103/2007 on Macro Transportation Plan: The purpose of the arrangement of the Macro Transportation Pattern arrangement is to improve services and provision of transportation services that are safe, integrated, orderly, smooth, comfortable, economical, efficient, effective, and affordable by society, which aims to establish a Master Plan for the Transportation Network System in the Special Capital Province of Jakarta as an embodiment of the Regional Transportation Order.

## **Environment**

- Law 32/2009 on Environment: Protection and management of the environment aim: a. To protect the territory of the Unitary Republic of the Republic Indonesia from pollution and / or damage living environment;
- Government Regulation No. 41/1999 on Air Pollution Control: Air pollution control includes control of businesses and / or activities of mobile sources, specific mobile sources, immovable sources, and specific immovable sources that are carried out with efforts to control sources of emissions and / or sources of disturbances aimed at preventing the decrease in ambient air quality.
- Presidential Regulation No. 61/2011 on National Action Plan on Greenhouse Gases Emission Reduction (Perpres RAN GRK): Article 1 paragraph 1 states "National Action Plan for Reducing Greenhouse Gas Emissions (RAN-GRK) is a work plan document for the implementation of various activities that directly or indirectly reduce greenhouse gas emissions in accordance with national development targets." Article 1 paragraph 2 states: "Regional Action Plan for Reducing Greenhouse Gas Emissions (RAD-GRK) is a work plan document for the implementation of various activities that directly or indirectly reduce greenhouse gas emissions in accordance with regional development targets."
- President Regulation 55/2018 on BPTJ Masterplan Transportation Jabodetabek 2018-2029; migration to low emission vehicles (electric and



CNG): Jabodetabek RIT as referred to in Article 1 is a guideline for the Central Government and Local Government in development planning, development, and management, as well as supervision and transportation evaluation in urban areas of Jakarta, Bogor, Depok, Tangerang and Bekasi.

- Ministry of Environment Regulation No. 12/2010 about Implementation of Air Pollution Control in the Regions: This Ministerial Regulation aims to provide guidelines for provincial and district / city governments for implementing air pollution control.
- Regional Regulation of DKI Jakarta 2/2005 about air pollution control: Air Pollution Control is carried out with the principle of responsibility, participation, sustainability and justice and the benefits it aims to improve degrees and protect public health.
- Governor's Instruction 66/2019 on Jakarta Air Quality Monitoring: Ensure that there is no public transportation over the age of ten years and did not pass the emissions test operating on the road as well as completing rejuvenation of all public transportation through the JakLingko program in 2020, with the following action details: a. Head of the DKI Jakarta Provincial Transportation Agency, in order to speed things up rejuvenation of 10,047 (ten thousand forty seven) bus fleets small, medium and large through integration into JakLingko in 2020;

## **Energy**

- Law 30/2007 on Energy: In order to support national development as a whole, to provide sustainable and to increase national energy security.
- Government Regulation 70/2009 on Energy Conservation: National energy conservation is the responsibility of the Government, provincial government, government district / city area, entrepreneurs and the community.
- PP 14/2012 on Provision of Electricity Business; Electricity supply business for the benefit general business types include: a. electricity generation; b. electric power transmission; c. electricity distribution; and / or d. electricity sales.
- Presidential Instruction No. 13/2011 on Energy Efficiency and Water Conservation: Perform energy saving measures and innovations water in the environment of each agency and / or in the environment State Owned Company (BUMN) and Regionally Owned Company (BUMD) according to their respective authorities, with guided by the Energy and Water Saving Policy,

## **Local Government**

- Law 32/2004 on Local Government as amended UU 12/2008 amended UU 23/2014: Regional government as referred to in Article 2 paragraph (3) is: a. provincial regional government consisting of regional governments provincial and provincial DPRD; b. district / city regional government consisting of the government regency / city area and regency / city DPRD. The regional

government as referred to in paragraph (1) consists of regional heads and regional authorities.

- Law 29/2007 on DKI Jakarta Government: DKI Jakarta Province is a special area that functions as the Capital of the Unitary State of the Republic of Indonesia and at the same time as an autonomous region at the provincial level.
- PP 38/2007 on Government Affair Division between Central and Provincial: Government affairs are government functions which are the rights and obligations of each level and / or government structure to regulate and take care of those functions that become its authority in order to protect, serve, empower, and make the community prosper.
- MOHA Regulation 13/2006 on Management of Regional Finance: Regional financial management regulated in this ministerial regulation includes management authority regional finance, general principles and APBD structure, preparation of APBD draft, APBD stipulation, APBD preparation and stipulation for regions that do not have a DPRD, APBD implementation, APBD changes, cash management, regional financial administration, regional financial accounting, APBD implementation accountability, guidance and supervision of regional financial management, regional loss, and financial management of BLUD.
- Government Regulation 41/2007 on Organization of Regional Apparatus: Formation of Regional Apparatus Organizations stipulated by local regulations with based on this government regulation.
- Regional Regulation of DKI Jakarta No. 5/2014 Management of Jakarta BRT system: The formulation of this Regional Regulation is intended as a legal basis for the implementation of transport services that are reliable, efficient, harmonious, economical, environmentally friendly, and energy efficient.

### **Project Scheme and Other Components**

- Law 11/2019 on Science system and Technology: Institution of Science and Technology there are entities that form the relationship between organization and / or group of people to cooperate in Research activities, Development, Assessment and / or Application Science and technology
- Law 26/2007 on Spatial Planning: Implementation of spatial planning aims to create a safe, comfortable, productive and sustainable national territory based on the Archipelago's Insight and National Resilience
- Law 40/2007 on Limited Liability Company: The Company must have a purpose, objectives and business activities that are not in conflict with the provisions of the legislation, public order, and / or decency.
- Government Regulation 54/2017 on BUMD (Regional SOE): The Regional Head is the holder of regional financial management authority and represents the Regional Government in the ownership of the Separated Regional Wealth.

- Government Regulation 50/2007 on Regional Partnership Project of Local Government: The object of regional cooperation is the whole affair government that has become the regional autonomous authority and can be in the form of the provision of public services.
- Government Regulation 54/2010 on Procurement of Goods/Services amended 66/2013: Procurement of goods / services in the LKPD environment with financing either partially or wholly sourced from the APBN / APBD.
- Minister Regulation of MOHA 22/2009 on Technical Guidelines for Working Procedure of Regional Partnership: procedures for regional and cooperation form/model of cooperative cooperation.

*Table 3 Structure of the Legal System underpinning E-bus Development*

Category	Law Type	Competent Authority	Regulation	Title	Summary	Remarks
Road Traffic	Law	Central Government, Regional Government, and National Police	UU22/2009	Traffic and Road Transportation	This law regulates to develop and implement secure, safe, orderly, and smooth traffic and road transportation. The regulation of traffic and road transportation is through the activity of moving vehicles, people, and/or goods on the road; activity of using facilities, infrastructure, and supporting traffic and road transportation facilities; and activity in relation with the registration and identification of motor vehicles with its driver, traffic education, traffic management and engineering, and traffic and road transportation law enforcement. In terms of Vehicle, it stipulates the basic rights and obligations of traffic and road transportation users such as the duties of the government in managing the traffic and roads and the obligations of the road users to abide by the law.	
		Central Government and Regional Government	UU38/2004	Road	This law regulates the implementation of the regulation, development, construction, and monitoring of public road; regulation, development, concession and monitoring of toll road; and special roads (corridors). The regulation of road is through the classification of it from its function and status.	
		Minister of Transportation, and Governor	PP55/2012	Vehicle	This regulation stipulates the classification of vehicle based on its function and type; the technical requirements of road vehicles; regulation on motor vehicle testing.	
	Government Regulation or Minister Regulation	Minister of Transportation, Provincial Head of Road Traffic and Transportation Facilities and Infrastructure, Regency Head of Road Traffic and Transportation Facilities and Infrastructure, and National Police	PP80/2012	Motor Vehicle Inspection and the Prosecution of Road Traffic and Transportation Violation Procedure	This regulation prescribes the procedure of inspecting motor vehicle on the road and the procedure of the enforcement of traffic and road transportation violation	

		National Police and National Police Traffic Corps	Indonesian Police Regulation 5/2012	Registration and Identification of Motor Vehicle	This regulation states the system management of registration and identification of motor vehicles; the implementation of registration and identification of motor vehicles; the registration and identification of the ownership of motor vehicle. In terms of E-Bus, this regulation would set as the legal framework to classify the vehicles as object of permit charge.	
	Regional Regulation of DKI Jakarta	Governor, City Transportation Board, and Head of Transportation Unit	PD5/2014	Transportation	<p>This regulation states the types, elements and requirements of the Facilities and Infrastructure of Road Transportation; Train Transportation Facilities; River, Lake, and Crossings Transportation; the types, elements; the requirements for drivers on the road; the framework, elements and requirements of the traffic of Road and Train; the types, requirements of Road Transportation, Train Transportation, and River, Lake, and Crossings Transportation; the requirement of the facilities for the disabled and ill people, traffic impact analysis, retribution, information and statistic system, monitoring and control, criminal sanctions; and investigation.</p> <p>The regulation stipulates that vehicle could operate with a friendly environment with incentive accordingly.</p>	
	Governor of DKI Jakarta Regulation	Governor	PG103/200 7	Macro Transportation Pattern	This regulation states the direction of the development of transportation system; the development of transportation system through planning and implementation; the cooperation between DKI Jakarta with its neighboring cities; funding, coordination, control, evaluation, and report of Macro Transportation Pattern. In terms of E-Bus, this regulation prescribes the right of DKI Jakarta to cooperate with third parties in relation to the development of transportation system.	
Local Government	Law	Central Government, Minister of Domestic Affairs, and Minister of Finance	UU32/2004	Regional Governance	This regulation stipulates the establishment of local and special district, delegation of government affairs, regional government performance principles, local rights and obligations, local government, duty, authority and obligation of head and vice head of local government.	As has been amended twice by Perpu 3/2005 and UU 12/2008, and by Constitutional Court Decision No.97/PUU-XI/20 13

		Central Government (Minister of Domestic Affairs)	UU29/2007	Province Government of Capital City Jakarta	This regulation prescribes the DKI Jakarta as a special province and as the capital city of Indonesia with its special rights to regulate certain sectors independently.	
		Central Government (Minister of Domestic Affairs)	UU5/1962 (as amended UU23/2014)	Regional Owned Enterprises (BUMD)	This law stipulates regarding characteristic, purpose and business field, asset, capital, management, and supervision in the regional company.  1962	As amended PP 54/2014 on BUMD and  MOHA Regulation No. 43 of 2000 concerning the Guidelines for Regional Company Cooperation with Third Parties.
Spatial / Environment	Law	Central Government	UU26/2007	Spatial Planning	This law stipulates the principle and purpose of spatial planning: legal certainty, accountability and openness, the classification of spatial planning: main system function, administrative area, activities, strategic values area; duty and authority: aims for the people, performance of spatial planning, spatial planning management  2007and guidance by coordination, socialization, consultation, supervision and education on the implementation of spatial planning.	
		Minister of Environment	UU32/2009	Environmental Protection and Management	This law stipulates the environmental management, protection plan, continuing construction and ecosystem; protection and prevention of the destruction of environment, guarantying the environment; requirement to obtain environmental licenses, controlling the damage and destruction of environment, duty and authority of the government to manage the environment, the role of society, sanctions for non-compliance with requirement to manage the environment. In terms of E-Bus, this regulation prescribes the obligation of preparing environmental documents and the environmental documents will depend on the actual activity conducted in the E-Bus Project.	
Project Scheme	Presidential Regulation	President's Office	PresReg54/ 2010	Procurement of Goods or	This regulation stipulates the procedure of procurements: the principles; the parties of the procurements of goods; general plan of procurement of goods; managements of the procurements goods; procurements of goods by the	As has been amended two times: Perpres 35/2011 and Perpres 70/2012

				Government Services	good/services provision; use of production of procurement goods/ services; control, supervising, complain and sanctions, procurements of goods/ services by international selection, development of human resources, in the procurement organization, the fund raising of the procurement of goods/ services by the foreign debt and the participation of foreign company to the procurement of goods/ services. In terms of ERP, this regulation provides a detailed regulation of the Working Group ULP (Procurement Service Unit)/ Procurement Officer who prepares and establishes Goods / Works Construction / Services Provider selection method and tendering process.	
	Minister Regulation	Minister of Home Affairs	MOHA 22/2009	Technical Procedure of Regional Cooperation  This	This regulation prescribes the scope and procedures on cooperation among regional governments, and cooperation between regional government and third parties. In terms of E-bus, the regulation provides the possibility for cooperation between regional government and third parties in providing services and goods for E-bus Project.	
E-Bus Formulation	Law, PP, Perpres (President Regulation)	Central Government, Local Government	UU 22/2007.  PP 55/2012 and Perpres 55/2019	Acceleration program of Battery Electrical Vehicle.	The regulation stipulates to control a fueled vehicle and introduce e-Vehicle with aiming to use local content.	Development of E-bus and E-infrastructure needs the parallel drafting of appropriate regional regulations.

Note: PerPres 55/2019 sets out five main directives to accelerate BEV programs in Indonesia, namely: (i) accelerating the development of the domestic BEV industry; (ii) the provision of incentives; (iii) the provision of charging stations and regulating electricity tariffs for charging electric vehicles; (iv) satisfaction of the technical requirements of electric vehicles; and (v) environmental protection.



## **ANNEX 4 IMPORTANCE OF BUDGET CYCLE FOR THE 100 E-BUS TRIAL PROJECT IMPLEMENTATION PHASE**

As well as decision times anticipated; to ensure successful implementation of procurement, certain key policy and regulatory decisions have to be made. These decisions pertain to many different aspects of implementation, such as functionality, legislation, and technical considerations. Government decision makers often make key technical decisions without realizing that such decisions have broader policy consequences. Government policy toward the development and implementation of procurement should be fully consistent with promoting good governance, value for money (VFM), and economic development.

Article 26(1) of MOHA Regulation 13/2006 (as lastly amended by MOHA Regulation 21/2011) stipulates that income received from the collection of regional tax, regional retribution, revenue of ROE, and legally regional original revenue. According to Article 122 of MOHA Regulation 13/2006, all regional government revenues and expenditures for the implementation of local government affairs shall be managed within Regional Government Revenues and Expenditures Budgetary (APBD). In addition, according to Article 15 of MOHA Regulation 13/2006, under the framework of Regional Government Revenues and Expenditures Budgetary (APBD), changes of Regional Government Revenues and Expenditures, and implementation of Regional Government Revenues and Expenditures each year is set by regional government regulations.

In order to use the income received from collection of income received, such expenses must be formulated in Regional Government Revenues and Expenditures Budgetary (APBD), which is determined annually under regional regulation as well. Regional regulation on Regional Revenues and Expenditure (APBD) shall be formulated in accordance with the following flowchart. For formulation of Regional Revenues and Expenditure (APBD), regional regulation on APBD must be stipulated annually with approval of DPRD (Dewan Perwakilan Rakyat Daerah: Regional Parliament) and evaluation of MOHA.

The purpose of evaluation of MOHA is to ensure whether the draft of regional regulation is in accordance with higher hierarchy laws and regulations. In case approval by DPRD and/or evaluation by MOHA for draft regional regulation on APBD are delayed, there is a possibility that annual expenditure for subsidy from income received not conducted as scheduled.

## ANNEX 5: FORMULATION OF BUDGET CYCLE

Table 4 Details of Indonesian Budget Cycle

Period	Activity
	Preparation of General Policy on APBD (KUA) and Temporary Priorities and Budget Ceiling (PPAS) by Regional Government Budgetary Team (TPAD)
Early June	Submission of Draft KUA and draft PPAS to governor by TPAD
Mid June	Submission of Draft KUA and draft PPAS to regional Parliament (DPRD) by governor
Early of July	Discussion of draft KUA and draft PPAS by DPRD and TPAD
End of July	Memorandum of understanding regarding KUA & PPAS signed by DPRD and Governor
Early of August	Governor circular letter concerning guidelines on the preparation of working and Budget Plan of SKPD (RKA SKPD) and working and Budget Plan of Management Regional Budgetary Officials (RKA PPKD)
	Preparation of RKA SKPD by SKPD
	Submission of RKA SKPD to TPAD by SKPD
	Discussion of RKA SKPD by TPAD
	Revision on RKASKPD by SKPD based on discussion with TPAD
	Submission of revised RKA SKPD to management regional Budgetary Officials (PPKD) by SKPD basis for drafting regional regulation regarding APBD
	Preparation of draft regional regulation on APBD by PPKD
	Submission of draft regional regulation to governor
	Socialization of the draft regional regulation to society
Early October	Submission of draft regional regulation to DPRD
	Discussion between DPRD and Governor regarding draft regional regulation.
	<b>NOT APPROVED BY DPRD</b> <ul style="list-style-type: none"> <li>Preparation on governor regulation regarding APBD for minimum amount equivalent with the last year APBD</li> <li>Submission of draft governor regulation to MOHA for ratification</li> <li>Approval from MOHA (MOHA degree)</li> <li>No approval from MOHA (Governor regulation)</li> </ul>
	<b>APPROVED BY DPRD</b> <ul style="list-style-type: none"> <li>Agreement on the draft of regional regulation signed by governor and DPRD</li> <li>Submission of draft of regional regulation and governor regulation to MOHA for evaluation</li> <li>No revision is required (1. Issuance of regional regulation without revision; 2. Revision on draft regional regulation)</li> <li>Revocation of regional regulation by MOHA</li> </ul>

Source: MOHA Regulation 13/2006 (as last amended by MOHA Regulation 21/2011).

TJ's capital expenditure budget process has to follow the budget cycle in the city government as formulated by MOHA Regulation 21/2011. The expenditure capital budget for TJ, namely *Penyertaan Modal Pemerintah/Daerah* (The Government Investment Capital). The budgeting process as Pergub 62/2016 on PSO and subsidy to TransJakarta consists of 4 stages that are a proposal stage, a verification stage, a budgeting and implementation stage, disbursement stage, and a reporting stage.

**C40 CITIES FINANCE FACILITY**

### Stakeholder Map – Jakarta – Kick off mission

This diagram illustrates the stakeholder landscape for the E-Bus Trial in Jakarta, organized into concentric circles around a central core.

- Central Core:** E-Bus Trial
- Inner Circle (Key Actors):** Includes MoF, Ministry of Environment and Forestry, Governor, Ministry of Transport, Ministry of Trade, Monka Maritim, Office of the President, ESDM, UNEP/CTC Di Bea/Cukai Customs, Local Parliament, Dinas Ling Hidar, BPBM, BPTI, SEKDA, PLN, TransJakarta, Dines Perahu, TGUPD, CFF, Bus operators, E-bus manufacturers, MOHA, Dinas Binamarga, POLRI, Pertamina, Ino car manufacturers, ITDP, Academia, ADB, UNDP, German Mission, UK Mission, US AID, WB, GIZ, BPUMD, BKPM, BPPB, Bank DKI, RPPB, PT SMI, KADIN Chambers of Commerce, DPR, MTI, KPBB, DTJK, YLKI, and BPPB.
- Middle Ring (Primary Actors):** Includes Civil Society, Private Sector, State, and Key Actors.
- Outer Ring (Secondary Actors):** Includes Civil Society, Private Sector, State, and Key Actors.

**Abbreviations:**

- ADB – Asian Development Bank
- BKPM – Indonesian Investment Coordinating Board
- BPKD DKI – Badan Pengelola Keuangan Daerah Provinsi DKI Jakarta [DKI Jakarta Provincial Financial Management Agency]
- BPPB – Badan Pelayanan Pengadaan Barang dan Jasa Prov. DKI Jakarta (Goods and Services Procurement Service Agency Prov. DKI Jakarta)
- BPTI – Agency for the Assessment and Application of Technology
- BPTJ – Jabodetabek Transportation Management Agency
- BPJMD – Badan Pembinaan Badan Usaha Milik Daerah (Regional-owned enterprise development agency)
- Dinas Ling. Hidup – DKI Jakarta Provincial Environmental Agency
- Dinas Perhubungan – DKI Jakarta Transportation Agency
- DKI – Daerah Khusus Iukota – District of Jakarta
- DPR – People's Representative Council of the Republic of Indonesia
- ESDM – Ministry of Energy and Mineral Resources of the Republic of Indonesia
- ICCT – International Council on Clean Transportation
- ITDP – Institute for Transportation and Development Policy
- Jabodetabek - Acronym of Jakarta-Bogor-Depok-Tangerang-Bekasi-Puncak-Cenjur
- KPB – Joint Committee for Leaded Gasoline Phase-Out
- Menko Maritim – Coordinating Ministry for Maritime Affairs and Investments
- MoF – Ministry of Finance
- MTI – Masyarakat Transportasi Indonesia (Indonesian Transportation Community)
- POLRI – Polisi Republik Indonesia
- Pertamina – National energy company
- PLN – State Electricity Company
- PT SMI – PT Sarana Multi Infrastruktur
- SEKDA – Regional Secretary of DKI Jakarta
- UNDP – United Nations Development Program
- WB – World Bank
- YLKI – Yayasan Lembaga Konsumen Indonesia (Indonesian Consumers Foundation)

## ANNEX 7 CFF RISK MITIGATION FRAMEWORK

The CFF checklist seeks to ensure that CFF projects are carefully assessed with regards to potential risks and mitigation measures, and highlights points of concern at an early stage to better inform CFF decisions on whether to support a project and on actions to take to reduce the risks identified. It is recognised that most projects will have challenges, which underscores the need for the CFF, however this risk mitigation process seeks to inform and guide CFF decisions and safeguard the overall integrity of the CFF.

Figure 8 Political and Regulatory Risk Framework

A. RISK CRITERIA	B. RISK ASSESSMENT <i>Please select the score and level from the drop-down list</i>	C. JUSTIFICATION OF ASSESSMENT <i>Please indicate the reason for the assessment and level of risk</i>	D. RISK MITIGATION MEASURE <i>Please indicate a mitigation or potential risk control measure if MODERATE or HIGH was selected in column B. Indicate whether CFF support can mitigate this risk. Please indicate any other comment.</i>
<b>POLITICAL &amp; REGULATORY RISKS</b>			
1. Risk of upcoming city elections and/or state elections that may have implications for city or local-level political stability, over the next two years.	<b>1 Low</b>	The presidential election just took place and resulted in continuation of the incumbent. It hence may be expected that his decrees will remain standing policy. The next round of Jakarta Gubernur elections is due at spring 2022.	N/A
2. Risk of local government and/or city authorities lacking a commitment to transparency and integrity (e.g. Corruption events in the recent past in the current city government or amongst city officials involved in the project).	<b>3-4 High - Major</b>	Previous procurements of busses for Jakarta were graft tainted. Several city officials have been sentenced to prison. Due to the B2B context tender rules are a bit less strict and tenders tend to be less transparent.  <a href="https://jakartaglobe.id/context/city-officials-jailed-transjakarta-bus-procurement-graft/">https://jakartaglobe.id/context/city-officials-jailed-transjakarta-bus-procurement-graft/</a>	MoU between C40-CFF and the city should specifically address this issue and preferable all stakeholders should sign an integrity statement. The city should be stimulated to consider an open tender process for the procurement of the busses and infrastructure. In B2B context, The city should issue a list of parameters and unit prices for all important components of e-bus operation for reference.
3. Risk of the occurrence of a political event or events driven by civil society that may have a significant impact on the project.	<b>2 - Moderate</b>	A lawsuit was filed by citizens against Jakarta City and Central Government being negligent on air quality problems. This can be considered a positive risk as it may incentivize the city to make decisive steps towards implementing electric vehicles at a large scale	Good stakeholder mapping and communication are key to secure broad support for the project.
4. Risk of withdrawal of political support from the Mayor / city council.	<b>1 - Low</b>	It is clear that the policy statement of the Governor to increase Jakarta's air quality shows that the City is committed to	Seek active involvement of TGUPP/ The governor in the project development process.

**Disclaimer:** The information provided in this document is gathered via a careful assessment based on information and documentation available to the CFF, either provided directly by city authorities; gathered through discussions and interviews with sources deemed relevant and reliable; or via open-source online research conducted by CFF. The information represented here is filled to the best of CFF's knowledge and judgement, and is correct and reliable at the time of assessment.

4

A. RISK CRITERIA	B. RISK ASSESSMENT <i>Please select the score and level from the drop-down list</i>	C. JUSTIFICATION OF ASSESSMENT <i>Please indicate the reason for the assessment and level of risk</i>	D. RISK MITIGATION MEASURE <i>Please indicate a mitigation or potential risk control measure if MODERATE or HIGH was selected in column B. Indicate whether CFF support can mitigate this risk. Please indicate any other comment.</i>
<b>POLITICAL &amp; REGULATORY RISKS</b>			
1. Risk of upcoming city elections and/or state elections that may have implications for city or local-level political stability, over the next two years.	<b>1 Low</b>	The presidential election just took place and resulted in continuation of the incumbent. It hence may be expected that his decrees will remain standing policy. The next round of Jakarta Gubernur elections is due at spring 2022.	N/A
2. Risk of local government and/or city authorities lacking a commitment to transparency and integrity (e.g. Corruption events in the recent past in the current city government or amongst city officials involved in the project).	<b>3-4 High - Major</b>	Previous procurements of busses for Jakarta were graft tainted. Several city officials have been sentenced to prison. Due to the B2B context tender rules are a bit less strict and tenders tend to be less transparent.  <a href="https://jakartaglobe.id/context/city-officials-jailed-transjakarta-bus-procurement-graft/">https://jakartaglobe.id/context/city-officials-jailed-transjakarta-bus-procurement-graft/</a>	MoU between C40-CFF and the city should specifically address this issue and preferably all stakeholders should sign an integrity statement. The city should be stimulated to consider an open tender process for the procurement of the busses and infrastructure. In B2B context, The city should issue a list of parameters and unit prices for all important components of e- bus operation for reference.
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## ANNEX 8 ALTERNATIVE BUS ORGANISATION MODELS

Figure 9 Traditional Model For Bus Ownership

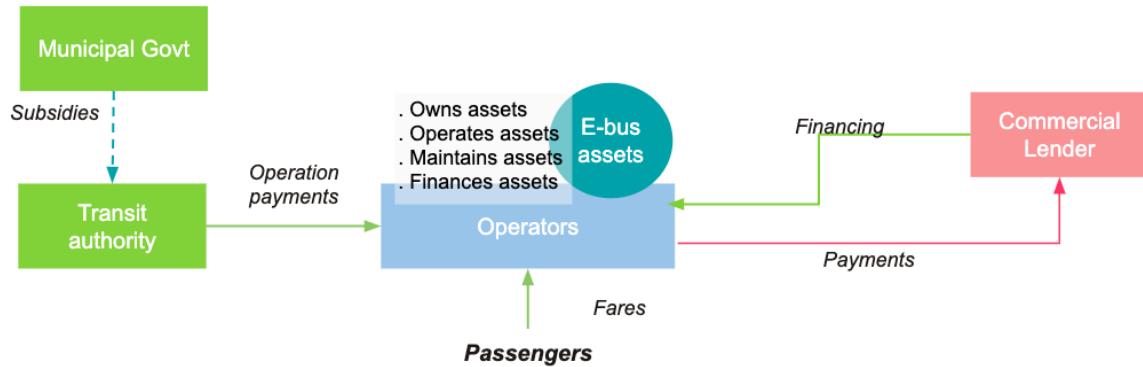


Figure 10 Alternative Model (Involving a 3rd-party asset owner)

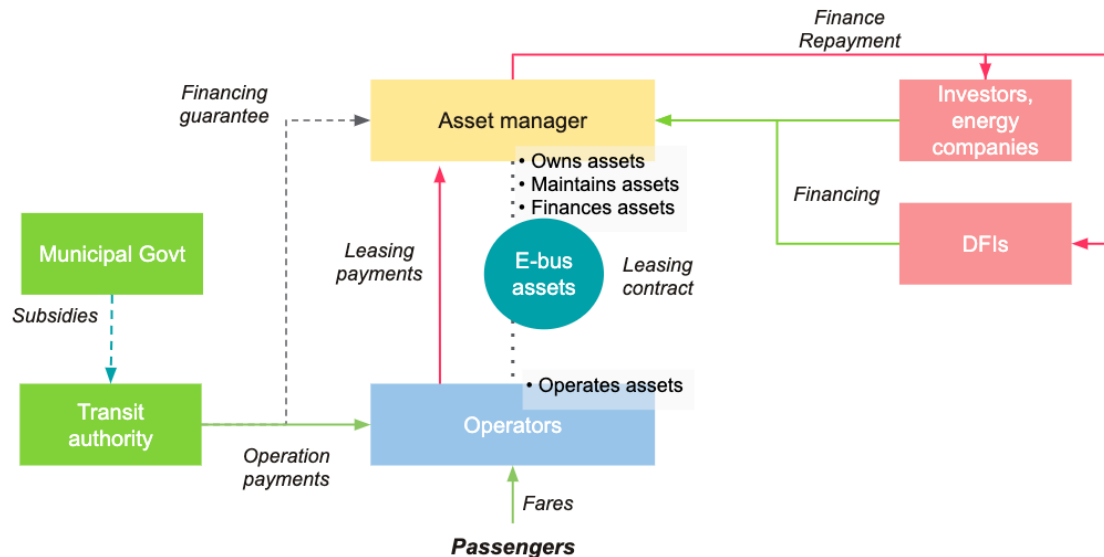
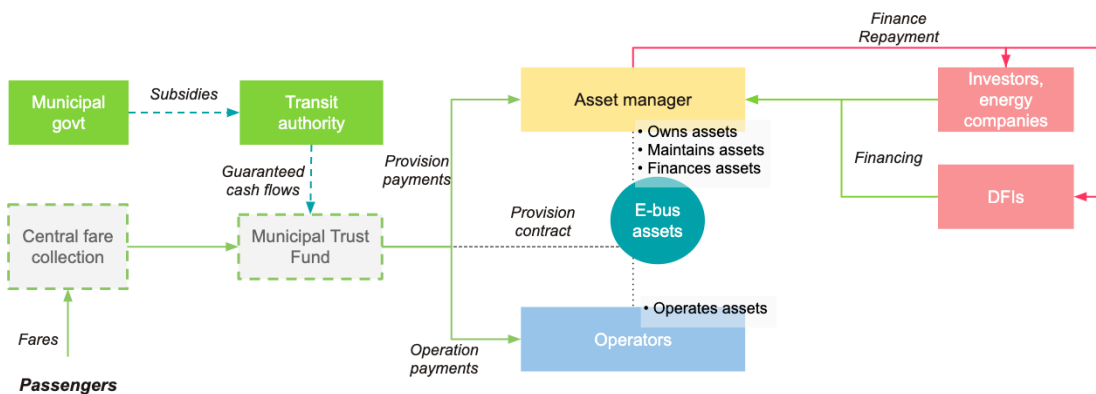


Figure 11 Improved Model (including centralized farebox, municipal trust fund, and separate contracts/payments for asset owner and operator)





**C40 Cities Climate**

**Leadership Group**

3 Queen Victoria Street, City  
London EC4N 4TQ  
United Kingdom

**Deutsche Gesellschaft für Internationale  
Zusammenarbeit (GIZ) GmbH**

Potsdamer Platz 10  
10785 Berlin  
Germany

**E** [contact@c40cff.org](mailto:contact@c40cff.org)

**W** [c40cff.org](http://c40cff.org)

**Funding partners:**



Federal Ministry  
for Economic Cooperation  
and Development



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UK Government**



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INVESTMENT FUND  
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Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

