



This document will explain all stakeholders on both national and local level related to ride hailing electrification effort.

Road Map and Timetable of Two-Wheeler Electrification in Greater Jakarta

Stakeholder Analysis Report

30/09/2021

Table of Contents

List of Figures	3
1. List of Related Stakeholders on Ride Hailing Landscape and BEV Acceleration	4
1.1. Governmental Institutions.....	4
1.1.1. National	4
1.1.2. Local.....	10
1.2. Business Entities	12
1.2.1. State-Owned Companies.....	13
1.2.2. Private-Owned Companies.....	14
1.3. End Users	16
1.3.1. Personal Use	16
1.3.2. Commercial Use.....	16
2. Relationship Diagram between Stakeholders	18
2.1. Stakeholder Analysis	18
2.2. Stakeholder Mapping Diagram	19
3. References	21

List of Figures

Figure 1 Stakeholder Analysis	19
Figure 2 Stakeholder Mapping Diagram	20

1. List of Related Stakeholders on Ride Hailing Landscape and BEV Acceleration

In this part of the report, all stakeholders related to the current ride hailing service provision and Battery Electric Vehicle (BEV) acceleration in Indonesia will be explained briefly. Those stakeholders will be divided further into three categories, which are Governmental Institutions, Business Entities, and End Users.

1.1. Governmental Institutions

This section will elaborate further on the role of governmental institutions related to current ride hailing service provision and BEV acceleration program in Indonesia. Those institutions will be divided into two categories, which are national level and local level. As there are many local governments involved inside Greater Jakarta (three provincial governments and eight city/regency governments), this report will focus on Jakarta Provincial Government instead on the local level.

1.1.1. National

As the national government already has the coordination task force to accelerate BEV adoption, all members of the task force must be related to the BEV acceleration program in Indonesia and need to be included in this report. Those institutions are the Coordinating Ministry for Maritime and Investment Affairs, the Coordinating Ministry for Economic Affairs, the Ministry of Finance, the National Research and Innovation Agency, the Ministry of Industry, the Ministry of Trade, the Ministry of Energy and Mineral Resources, the Ministry of Transportation, the Ministry of Environment and Forestry, the Ministry of Home Affairs, and the Indonesian National Police. Other national level stakeholders related to the current ride hailing service provision and BEV acceleration program include the Ministry of Communications and Informatics, the Ministry of State-Owned Enterprises, and the Ministry of Public Works and Housing, among other ministries and national institutions.

1.1.1.1 Coordinating Ministry for Maritime and Investment Affairs (CMMIA)

CMMIA is responsible for carrying out coordination, formulation, and supervision of policies in the field of maritime and investment sector (CMMIA, 2020a). As a coordinating ministry, CMMIA has the responsibility to coordinate with four ministries including the Ministry of Transportation (MoT), Ministry of Marine Affairs and Fisheries (MMAF), Ministry of Tourism and Creative Economy (MTCE), and Ministry of Energy and Mineral Resources (MEMR). CMMIA does not seem to have a direct responsibility related to the ride-hailing landscape in Indonesia, but they are part of the BEV acceleration task force. They help coordinate investment-related BEV acceleration between ministries, formulate national policy to support national BEV adoption, and are also in charge of monitoring, evaluating, and reporting in the BEV industry and manufacturing sector (CMMIA, 2020b). According to CMMIA Regulation No. 10 of 2020, Assistant Deputy for Maritime

Industry and Transportation under the Deputy for Infrastructure and Transportation Coordination is the person in charge for the BEV acceleration program. Meanwhile, according to CMMIA Regulation No. 2 of 2020, the Manufacturing Industry and Electric Vehicles Division is in charge of BEV acceleration under the Assistant Deputy for Maritime Industry and Transportation.

Directly related stakeholders: CMEA, MoF, MoI, MoT, MEMR, MT, MoEF, MoHA, BRIN, POLRI

1.1.1.2 Coordinating Ministry for Economic Affairs (CMEA)

CMEA is responsible for carrying out coordination, formulation, and supervision of policies in the field of economic sector (CMEA, 2020). As a coordinating ministry, CMEA has the responsibility to coordinate with ten ministries including Ministry of Finance (MoF), Ministry of Public Works and Housing (MPWH), Ministry of Labour (MoL), Ministry of Environment and Forestry (MoEF), Ministry of Industry (MoI), Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (MAASP), Ministry of Trade (MT), Ministry of State-Owned Enterprises (MSOE), Ministry of Agriculture (MoA), Ministry of Cooperatives Small and Medium Enterprises (MCSME), and other agencies deemed necessary. CMEA is part of the BEV acceleration program task force and plays a role in developing national economic and fiscal policy, including the transport sector, as well as providing economic policies for urban transport proposed by different ministries.

Directly related stakeholders: CMMIA, MoF, MPWH, MoL, MoEF, MoI, MAASP, MT, MSOE, MoA, MCSME

1.1.1.3 Ministry of Finance (MoF)

MoF is responsible for the governance and regulation in the field of finance, such as budgeting, non-tax state revenues, taxes, customs and excise, state treasury, state assets, financial balance, and management of state finances and risks, as well as recommendations for fiscal policy and financial sector (MoF, 2018). Within the ride-hailing landscape in Indonesia, MoF helps collect national taxes such as import duty, VAT, and luxury goods tax. MoF is part of the BEV acceleration program task force and plays a role in preparing state budgeting, as well as providing fiscal incentive facilities for BEV import duties and BEV registration.

Directly related stakeholders: CMMIA, MoI, Ride-hailing drivers

1.1.1.4 Ministry of Industry (MoI)

MoI is responsible for the governance and regulation in the field of industry (MoI, 2021). As part of the BEV acceleration program task force, the Directorate General of Metal, Machinery, Transportation, and Electronics Industries help formulate and supervise policy implementation regarding the BEV materials and the import duty incentives for the spare parts industry. The policies that have been issued include MoI Regulation No. 27 of 2020 on Specifications, Roadmap, and Guidelines to Calculate Local Content Level (TKDN) for BEV, and MoI Regulation No. 28 of 2020 on Completely Knocked Down and Incomplete Knocked Down BEV.

Directly related stakeholders: CMMIA, Battery and Charging Infrastructure OEMs, Vehicle OEMs, National Certification Agency

1.1.1.5 Ministry of Trade (MT)

MT is responsible for carrying out coordination, formulation, and supervision of policies in the field of trade affairs, such as development and standardization of domestic trade activities and goods (MT, 2020). As part of the BEV acceleration program task force, MT is responsible for ensuring the use of local domestic components based on the issued policy, MT Regulation No. 100 of 2020 on Import Requirements for Used Lithium Batteries as Raw Material for Lithium Battery Industries to Support the Acceleration of BEV Industry.

Directly related stakeholders: CMMIA, IBC, Battery and Charging Infrastructure OEMs, Vehicle OEMs

1.1.1.6 Ministry of Energy and Mineral Resources (MEMR)

MEMR is responsible for the governance and regulation in the field of energy and mineral resources in Indonesia, such as oil and gas, electricity, minerals and coal, new energy, renewable energy, energy conservation, and geology (MEMR, 2021). As part of the BEV acceleration program task force, the Directorate General of Electricity is responsible to develop energy planning and supply, including for the transport sector, handles charging infrastructure, pricing and business models, also formulates national policy to support charging infrastructure provision as issued in MEMR Regulation No. 13 of 2020 on the Provision of Electric Charging Infrastructure for BEV.

Directly related stakeholders: CMMIA, Battery and Charging Infrastructure OEMs, PLN, Pertamina

1.1.1.7 Ministry of Transportation (MoT)

MoT is responsible for the governance and regulation of transportation in Indonesia. MoT has several functions including formulation and supervision, as well as increasing accessibility, connectivity, and capacity of transportation facilities and infrastructure in Indonesia (MoT, 2021). Within the ride-hailing landscape in Indonesia, MoT helps formulate the national policy to support ride-hailing services such as MoT Regulation No. 12 of 2019 on the Safety Protection for Users of Motorcycle Used for Public Interest, also MoT Decree No. 348 of 2019 on the Service Fees Calculation Guidelines of Motorcycle Used for Public Interest.

Under the Directorate General of Land Transportation, they also take part in the BEV acceleration program task force and are responsible for public transport electrification, formulate BEV acceleration road map, manage public transport infrastructure operation such as charging station and develop BEV testing facilities, as well as formulate national transport policy to support BEV adoption. The policies that have been issued include MoT Regulation No. 44 of 2020 on Physical Testing for BEV; MoT Regulation No. 45 of 2020 on Certain Vehicles with Electric Motor Drive; MoT

Regulation No. 65 of 2020 on the Conversion of Motorcycle with Fuel Motor Drive into a Battery-based Electric Motorcycle; MoT Regulation No. 87 of 2020 on Physical Type Testing of BEV.

Under the Greater Jakarta Transport Authority (BPTJ), they play a role in developing, managing, and improving integrated transportation services in the greater Jakarta area which includes Jakarta, Bogor, Depok, Tangerang, and Bekasi (MoT, 2018). Related to ride-hailing, BPTJ has tested ride-hailing shelters in several MRT stations such as Dukuh Atas Station and Lebak Bulus Station. It was done to support the MoT Regulation No. 12 of 2019, especially article 8a and 8b which mentions that drivers must stop, park, pick up, drop off passengers in a safe place that does not interfere with traffic, and the ride-hailing company must provide ride-hailing shelter.

Directly related stakeholders: CMMIA, CMEA, Jakarta Transport Agency, Battery and Charging Infrastructure OEMs, Vehicle OEMs, Ride-hailing operators

1.1.1.8 Ministry of Environment and Forestry (MoEF)

MoEF is responsible for the governance and regulation in the field of environment and forestry, such as forest and environmental management, waste and hazardous materials management, controlling pollution and climate change, environmental partnerships and law enforcement. As part of the BEV acceleration program task force, the Directorate General for Solid Waste, Hazardous Waste, and Hazardous Substance Management helps prepare the national policy for pollution control and environmental impact management of the transport sector regarding lithium battery recycling emission-quality standards. The policy that has been issued is MoEF Regulation No. 12 of 2021 on Lithium Battery Recycling Emission-Quality Standards.

Directly related stakeholders: CMMIA, Jakarta Environmental Agency

1.1.1.9 Ministry of Home Affairs (MoHA)

MoHA is responsible for the governance and regulation in the field of home affairs, such as regional financial policy guidelines, government affairs and regional development, regional finance, as well as population and civil registration (MoHA, 2021). Within the ride-hailing landscape, MoHA helps provide facilities for road tax (PKB) and purchase tax (BBNKB). As part of the BEV acceleration program task force, MoHA plays a role in regulating development programs at the sub-national level (provincial, city, and regency) including for local transport. The policies that have been issued are MoHA Regulation No. 56 of 2020 on the Basic Calculation of PKB and BBNKB, and MoHA Circular Letter No. 024/4833SJ on the BEV for Road Transportation Program Acceleration.

Directly related stakeholders: CMMIA, Jakarta Financial Management Agency (BPKD)

1.1.1.10 Ministry of Communications and Informatics (MoCI)

MoCI is responsible for the governance and regulation of communications and informatics in Indonesia, such as information management, public communication, postal and information

technology application management and administration. Within the ride-hailing landscape in Indonesia, MoCI has established the MoCI Regulation No. 5 of 2020 on the Registration Requirements of Private Electronic System Operators (ESO), which requires business entities such as ride-hailing operators to be registered as ESO to operate and develop their internet-based platform/applications.

Directly related stakeholders: Ride-hailing operators

1.1.1.11 Ministry of State-Owned Enterprises (MSOE)

MSOE is responsible for the governance and regulation in the State Owned Enterprises (SOE) sector, such as strategic business initiatives, creating sustainable growth, business development, and increasing the capacity of SOE business infrastructure. Related to the BEV acceleration program, MSOE takes part in managing the national transport infrastructure and operation of public transport services through several state-owned companies such as IBC (Indonesia Battery Corporation), PLN (State Utility Company), and LEN Industry by providing electricity distribution and charging infrastructure. They could also give mandate to Pertamina on planning the addition of charging infrastructure to its petrol station, also state-owned banks by providing loans to fund the program and other financial support.

Directly related stakeholders: IBC, LEN Industri, State-owned banks

1.1.1.12 Ministry of Public Works and Housing (MPWH)

MPWH has the responsibility to carry out government affairs in the field of public works and housing, such as water resources management, road management, drinking water supply system, domestic wastewater management, drainage management, waste management, building structuring, residential areas development, strategic facilities development, public works and housing financing, as well as construction services. Related to the BEV acceleration program, MPWH helps prepare policy for the development of the national road and bridges network, as well as assessment of green building which includes the availability of charging stations. The policy that has been issued regarding electrification is the MPWH Regulation No. 21 of 2021 on the Green Building Performance Assessment.

1.1.1.13 National Research and Innovation Agency (BRIN)

BRIN is responsible for carrying out research, development, assessment and application, as well as integrated inventions and innovations (President of the Republic of Indonesia, 2019). BRIN was originally attached to the Ministry of Research and Technology, but it was separated in April 2021 and became a new non-ministerial government agency directly supervised by the President. As part of the BEV acceleration program task force, BRIN plays a role in research on the development of electric vehicles and the development of local products as the main components used for batteries, controllers, electric motors, as well as the development of battery swap technology.

Directly related stakeholders: CMMIA, Pertamina, PLN, Academic and Research Institutions

1.1.1.14 Indonesian National Police (POLRI)

POLRI has the responsibility to maintain public order and security, law enforcement, protection, and community service (National Government of Indonesia, 2002). Within the ride-hailing landscape, POLRI plays a role in providing facilities for issuing Motorcycles Certificates. Related to the BEV acceleration program, they also monitor free-to-pass odd-even lanes and car-free-day lanes as incentives to BEV users.

Directly related stakeholders: CMMIA, Jakarta Transport Agency, Ride-hailing drivers

1.1.1.15 National Certification Agency (BSN)

BSN has the responsibility to carry out government affairs in the field of national standardization, as well as facilitating stakeholders in developing and maintaining Indonesian National Standard (SNI), also providing standard information, both SNI and international standards. Related to the BEV acceleration program, BSN plays a role in developing national standards BEV's supporting components, including plug-in types and batteries.

Directly related stakeholders: Mol, Battery and Charging Infrastructure OEMs

1.1.1.16 Bank Indonesia (BI)

BI, as the central bank of Indonesia, has the responsibility to establish and implement monetary policy, regulate and maintain the payment system, regulate and supervise banks. Within the ride-hailing landscape, BI allows banks to provide MSME loans to corporate partners through the company. For instance, banks can provide motorcycle purchase credit to ride-hailing drivers through the ride-hailing operators. Related to the BEV acceleration program, BI has a role in providing down payment exemption for electric vehicle loans which is stated in BI Regulation No. 23/2/PBI/2021 on the Third Amendment of BI Regulation No. 20/8/2018 on Loan to Value (LTV) Ratio for Property Loans, Financing to Value (FTV) Ratio for Property Financing, and Down Payment for Motor Vehicle Loans or Financing.

Directly related stakeholders: State-owned banks, Private financing companies

1.1.1.17 Financial Services Authority (OJK)

OJK has the responsibility of regulating and supervising financial services in the sector of banking, capital market, and non-bank financial industry (IKNB). Based on the OJK Press Release 62/DHMS/IX/2020, OJK supports the BEV acceleration program by providing fiscal incentives such as providing funds for BEV purchase, upstream industries development (battery, charging station, and component industry), and BEV infrastructure production. They also provide credit quality assessment for BEV purchase and upstream industries. In addition, BEV purchase credit and

upstream industries credit for individuals or MSMEs may be subject to a risk weight of 75% in the calculation of Risk-Weighted Assets (ATMR).

Directly related stakeholders: IBC, Battery and Charging Infrastructure OEMs, Vehicle OEMs, Ride-hailing operators, Ride-hailing drivers

1.1.1.18 National Public Procurement Agency (LKPP)

LKPP has the responsibility to carry out government affairs in the field of government procurement of goods or services, such as procurement of business entities as part of the cooperation between the government and business entities (LKPP, 2021). Related to the BEV acceleration program, LKPP plays a role in providing e-catalogues of product availability for electric vehicles and their infrastructure manufacturers or service providers. E-catalogue helps facilitate the procurement and purchase of electric vehicles by various government agencies.

1.1.2. Local

As previously mentioned before, this section will focus on the Jakarta Provincial Government. This was done due to Jakarta being the centre of activity of Greater Jakarta area and due to the fact that the majority of current ride-hailing drivers are operating in Jakarta based on the project's previous field survey.

1.1.2.1 Jakarta Transport Agency

The Jakarta Transport Agency has the responsibility to formulate local level policies, guidelines, and technical standards, as well as monitor and evaluate the implementation of land, railway, water and sea transportation. They also carried out calculations of transportation fares, supervision of the road transport route network, implementation of provision, safety measures, and maintenance for transport infrastructure and facilities. Within the ride-hailing landscape, Jakarta Transport Agency is responsible to conduct quality testing and inspection of motorized vehicles for public transport including for ride-hailing purposes. The transportation department for each administrative city in Jakarta is also responsible for controlling ride-hailing fleets that cause traffic congestion. Related to the BEV acceleration program, Jakarta Transport Agency could potentially take part as a regulator that mandates ride-hailing electrification in DKI Jakarta, as well as formulates local-level non-fiscal incentives such as Low Emission Zone.

Directly related stakeholders: MoT, POLRI, BP BUMD, BPKD, Jakarta Highways Agency, Ride-hailing operators, Jakarta Environmental Agency

1.1.2.2 Jakarta Communication and Information Agency

Jakarta Communication and Information Agency has the responsibility to carry out public information management and communication, regional data centre, as well as electronic-based

government application and information security services. They also conduct outreach on Government policies related to ride-hailing and BEV.

1.1.2.3 Jakarta Environmental Agency

Jakarta Environmental Agency has the responsibility to carry out formulation and implementation of policies, guidelines, and technical standards in the field of environmental protection and management, monitoring natural resources and GHG emissions, prevention and mitigation of waste, pollution, and other environmental damage, also supervising the provision of environmental permits, laws and regulations. Within the ride-hailing landscape, the Jakarta Environmental Agency is responsible for conducting emissions tests. In November 2020, they collaborated with Gojek to hold free emissions tests for ride-hailing drivers. Related to the BEV acceleration program, Jakarta Environmental Agency could potentially play a role in battery waste treatment.

Directly related stakeholders: MoEF, Jakarta Transportation Agency, Ride-hailing drivers

1.1.2.4 Jakarta Highways Agency (Dinas Bina Marga)

Jakarta Highways Agency has the responsibility to carry out planning, construction, maintenance, and monitoring of roads, bridges, road building, and road equipment. Within the ride-hailing landscape, the Road Infrastructure and Utility Networks Planning Section plays a role in preparing vehicle parking rules, including ride-hailing parking, as well as providing ride-hailing pick-up point or shelter.

Directly related stakeholders: Jakarta Transport Agency, Ride-hailing drivers

1.1.2.5 Jakarta Planning Agency (Bappeda)

Jakarta Planning Agency has the responsibility to carry out the formulation of policies, guidelines, and technical standards for regional development planning, research and development, preparation of spatial planning documents, as well as coordinating and controlling the implementation of national development planning and budgeting policies. Related to the BEV acceleration program, Jakarta Planning Agency plays a role in formulating local-level policies which include building codes to accommodate charging infrastructure.

Directly related stakeholders: Battery and Charging Infrastructure Agency

1.1.2.6 Jakarta Financial Management Agency (BPKD)

Jakarta Financial Management Agency has the responsibility to carry out financial support functions in the financial management sub-sector. Related to the BEV acceleration program, Jakarta Financial Management Agency plays a role in formulating local-level policies which include fiscal incentives, also preparing local budgeting for road and public transport infrastructure.

Directly related stakeholders: Jakarta Transport Agency, Ride-hailing drivers

1.1.2.7 Development Agency of Regional-Owned Enterprises (BP BUMD)

Development Agency of Regional-Owned Enterprises has the responsibility to carry out financial support functions in the development of Regional-Owned Enterprises (ROE) sub-sector including coordination and supervision of policies related to strategic business development, creating sustainable growth, and increasing the capacity of ROE business infrastructure. Related to the BEV acceleration program, the Development Agency of ROE takes part in supporting local governments to become pioneers in using BEVs for operational vehicles within the scope of their respective agencies. In addition, one of the ROE in Jakarta, PT TransJakarta, has conducted operational trials for electric buses and is planning to expand its electric bus fleet.

Directly related stakeholders: Jakarta Transport Agency

1.1.2.8 Human Settlements, Spatial Planning, and Land Agency (DCKTRP)

DCKTRP has the responsibility to carry out planning and evaluation of urban space, control of urban space utilization, administration of buildings, and technical development of local government buildings and land planning. Within the ride-hailing landscape, DCKTRP coordinate with private institutions and other local agencies such as Dinas Bina Marga, Transport Agency, BPKD takes part in preparing typology and schemes for providing and managing ride-hailing shelter facilities (Ruang Waktu and Urban+ Institute, 2019).

Directly related stakeholders: Ride-hailing operators

1.1.2.9 Procurement of Goods and Services Agency (BPPBJ)

BPPBJ has the responsibility to carry out formulation, facilitation, and implementation of policies, guidelines, and technical standards for the procurement of goods and services. Related to the BEV acceleration program, BPPBJ takes part in the procurement of electric vehicles for government operational vehicles and public transportation.

1.2. Business Entities

This section will elaborate further on the role of business entities that are currently related, or potentially related, to the current ride hailing service provision and BEV acceleration program in Indonesia. Those companies will be divided into two categories, which are state-owned and private-owned companies.

1.2.1. State-Owned Companies

1.2.1.1 Indonesia Battery Corporation (IBC)

IBC is a company established by the government involving four state-owned enterprises in the mining and energy sector consisting of MIND ID, Antam, PLN, and Pertamina. The purpose of IBC is to develop the electric vehicle battery industry ecosystem from upstream to downstream, including infrastructure for charging stations and battery recycling. MIND ID and Antam, as a national mining company, play an essential role in providing nickel supply as the raw material for the cathode, where the cathode is the main component of the battery. PLN (State Utility Company), as a national electricity generation and distribution company, plays an essential role in providing charging infrastructure, packaged battery cells, energy storage systems (ESS) batteries, ensuring grid stability, providing grid installation incentives and determining electricity tariff and incentives for charging facilities. Pertamina, as a national oil and gas distribution company, plays an essential role in planning the addition of charging infrastructure to its petrol station, providing precursors and cathodes, battery cells for packaging, energy storage systems (ESS) battery, and charging for BEV.

Directly related stakeholders: MT, MEMR, BRIN, Financial Services Authority, National Certification Agency, LEN Industri, Battery and Charging Infrastructure OEMs, Electric companies, Ride-hailing drivers

1.2.1.2 LEN Industri

LEN Industri is a state-owned company involved in technology-based business with core strengths are in design and engineering, product development, manufacturing, testing and commissioning, construction and installation, operation and maintenance. Their business line includes the defence electronics industry, transportation systems, renewable energy, Information & Communication Technology (ICT), and navigation systems. Related to the BEV acceleration program, LEN Industri plays a role in developing and manufacturing electric vehicle charging stations with the help of PLN in providing electric supply.

Directly related stakeholders: MSOE, PLN

1.2.1.3 State-Owned Banks

State-owned banks consist of Bank Rakyat Indonesia (BRI), Bank Mandiri, Bank Nasional Indonesia (BNI), Bank Tabungan Negara (BTN), and Bank Syariah Indonesia. Within the ride-hailing landscape, BRI and Bank Mandiri provide small business credit services for ride-hailing drivers. Related to the BEV acceleration program, Bank Mandiri is the only one who has a direct role in providing financial support in the development of the BEV ecosystem, both in terms of investment, financing, transaction and cash management, treasury solutions, and trade solutions (Meilanova, 2021). Apart from their main business as a bank, those state-owned banks also have their own subsidiaries. BRI Insurance, the subsidiary of BRI, provides credit scheme support for

electric vehicle purchase called Greensurance. Other subsidiaries, such as Mandiri Tunas Finance from Bank Mandiri and BNI Multifinance from BNI, are also involved in the BEV acceleration program by creating a zero percent down payment policy for electric vehicle purchase (Priyanto, 2020).

Directly related stakeholders: MSOE, Bank Indonesia, Vehicle OEMs, OJK, Ride-hailing drivers

1.2.1.4 Academics and Research Institutions

Academics and research institutions such as the Agency for the Assessment and Application of Technology (BPPT), Indonesian Institute of Science (LIPI), and universities also play a role in conducting research and development on BEV capabilities, such as developing electric motorcycle innovations, batteries for fast chargers, and charging station technology.

Directly related stakeholders: BRIN

1.2.2. Private-Owned Companies

1.2.2.1 Ride-hailing operators

Ride-hailing operators such as Gojek and Grab play a role in managing ride-hailing drivers and are the implementer of the fleet electrification plan. Currently, Gojek aims to accelerate the adoption of EVs and transition to 100% EVs by 2030. They have conducted on-the-road electric two-wheelers and four-wheelers trials in collaboration with the electric vehicle value chain including Astra Honda Motor, Gesits, Viar, Toyota, Mitsubishi, NIU, Pertamina, and PLN (State Utility Company). They also have carried out a feasibility study for the development of charging and battery swap infrastructure (Gojek, 2021). Meanwhile, Grab has also launched the Electric Vehicle Ecosystem Roadmap in December 2019 as an effort to support the BEV acceleration program (Ainurrofiq, 2020), followed by the launch of the GrabCar Elektrik service at Soekarno-Hatta International Airport. Grab also has collaborated with Hyundai, Kymco, Viar, and Selis to provide ride-hailing fleets consisting of electric cars, motorcycles, bicycles, and scooters (Musthofid, 2020).

Directly related stakeholders: MoT, MoCI, Financial Services Authority, Jakarta Transport Agency, Electric companies, Ride-hailing drivers, Non-F&B Business Owner and Restaurant Partner

1.2.2.2 Vehicle OEMs

Vehicle OEMs such as Viar, Selis, Gesits are all investing in the production of electric motorcycles in the Indonesian e-mobility sector. The electric motorcycles are available for commercial sale or through ride-hailing fleet rental in cooperation with ride-hailing operators. Other ICE vehicle manufacturers such as Honda recently announced a big push for electrification, pledging that it would be 100% electric by 2040 (Toll, 2021) and Yamaha Motor (2021), through their Yamaha Motor Group Environmental Plan 2050, will pursue electrification and expand the line-up of battery-powered electric vehicles.

Directly related stakeholders: MoT, Mol, MT, Financial Services Authority, Battery and Charging Infrastructure OEMs, State-owned banks, Private financing companies

1.2.2.3 Battery and Charging Infrastructure OEMs

Battery OEMs such as PT International Chemical Industry that produces ABC batteries play a role as battery cell manufacturers to meet the needs of the electric car industry. Charging infrastructure OEMs such as Oyika and Ezyfast play a role in providing charging infrastructure or battery swap for electric motorcycles. For now, the only compatible battery to be swapped at Oyika and Ezyfast's battery swap station is the swappable battery used by Viar and Selis motorcycles. Oyika and Ezyfast are planning to scale up the battery compatibility with other electric motorcycle vehicle OEMs.

Directly related stakeholders: MoT, Mol, MEMR, MT, Bappeda, PLN, National Certification Agency, Financial Services Authority, Vehicle OEMs, Ride-hailing drivers

1.2.2.4 Gasoline Companies

Gasoline companies would likely be one of the parties to be negatively affected by the increasing number of EV, as demand for gasoline would be reduced. Therefore, some companies already have their own plan to follow the EV trend and initiate their own charging infrastructures development. Shell, one of the gasoline companies operating in Indonesia, is currently testing the Shell Recharge which is a general electric vehicle charging station (SPKLU) at Shell Pluit Selatan 1 in North Jakarta and Shell Antasari 1 in South Jakarta, using electricity supply from PLN (State Utility Company). Teaming up with PT AKR Corporindo, British Petroleum (BP) also committed to providing EV charging stations to support the electric vehicle ecosystem in Indonesia.

Directly related stakeholders: PLN, Ride-hailing drivers

1.2.2.5 Private Financing Companies

Private financing companies, such as Adira Finance, BCA Kredit Sepeda Motor (KSM), and CIMB Niaga Syariah, coordinate with vehicle OEMs (Selis, Viar, and Gesits) in providing credit schemes to support electric vehicles purchases. Some of them have also provided zero percent down payment facilities for electric motorcycle purchases.

Directly related stakeholders: Bank Indonesia, Vehicle OEMs, Ride-hailing drivers

1.2.2.6 Electric Companies

Private electric generating companies, such as Medco Energy, coordinate with PLN (State Utility Company) and ride-hailing operators to develop electric vehicle charging stations across the country, with a focus on Jakarta and Bali. In Bali, they have launched a platform for charging infrastructure by partnering with local government, OEMs, and charging infrastructure developers in order to create a new pilot ecosystem, with the ultimate aim of scaling to other cities.

Directly related stakeholders: PLN, Ride-hailing operators

1.2.2.7 Indonesia Shopping Centre Association (APPBI)

APPBI is a non-profit organization consisting of Indonesian mall owners and management. In the BEV acceleration program, APPBI is ready to participate and be involved in building electric vehicle charging infrastructure in shopping centres. They feel that the presence of charging infrastructure would be attractive for customers as it is deemed as one of the additional services to shopping centres' visitors (Mola, 2018).

1.3. End Users

Finally, the role of end users will play on the current ride hailing service provision and BEV acceleration program will be elaborated in this section. Those end users include citizens, ride-hailing drivers, and Non-F&B business owners or restaurant partners.

1.3.1. Personal Use

1.3.1.1 Citizens

Within the ride-hailing landscape, citizens play a role as ride-hailing service consumers. They mostly use the services for different purposes such as passenger transportation or food and instant goods delivery. Lots of citizens use ride-hailing services because it is flexible, accessible, time-saving, and often offers trip discounts and promos resulting in cheap fare. Related to the BEV acceleration program, citizens are the trend-setter and the main target of various financial service facilities for electric vehicles purchase and sales.

Directly related stakeholders: Ride-hailing drivers, Ride-hailing operators, Non-F&B Business Owner and Restaurant Partner

1.3.2. Commercial Use

1.3.2.1 Ride-Hailing Drivers

Ride-hailing drivers are one of the main actors involved in the ride-hailing electrification effort. In the current ride-hailing business model, drivers need to provide the vehicle themselves, thus the final decision of shifting into electric vehicles lies on the hand of ride-hailing drivers. Moreover, current electric 2W are generally deemed to be more expensive than conventional 2W. Although it comes with various price points, an electric 2W generally costs 1.25 - 3 times the cost of conventional 2W with similar performances (Ainurrofiq, 2020). This might become a problem as drivers generally come from lower groups of income, which makes them have less purchasing power than the general public. Therefore, this stakeholder mapping analysis was done to map potential business model that would encourage electric 2W adoption among ride hailing drivers.

Directly related stakeholders: Citizens, Ride-hailing operators, Vehicle OEMs, State-Owned Banks, Private Financing Companies, Gasoline Companies, Charging Infrastructure Providers, PLN, Pertamina, IBC, MoF, Jakarta Provincial Government, Jakarta Environmental Agency

1.3.2.2 Non-F&B Business Owner and Restaurant Partner

Within the ride-hailing landscape, non-food and beverage (F&B) business owners and restaurant partners are the users of ride-hailing services for commercial purposes. Lots of non-F&B business owners use ride-hailing services to ship or deliver goods/parcels to customers. It is mostly part of an e-commerce instant delivery service. Meanwhile, restaurants join the merchant partner program to reach more potential customers and get easy food delivery service. Restaurant partners can control customer orders and payments from one integrated system and create their own promos to increase sales. The profit-sharing applied in Grab is restaurant keeps 70%, delivery partner keeps 25%, and Grab keeps 5% (Grab, 2020b). Meanwhile, in Gojek, merchants are charged a 20% + IDR 1,000 commission fee (Iskandar, 2021).

Directly related stakeholders: Ride-hailing drivers, Ride-hailing operators, Citizens

2. Relationship Diagram between Stakeholders

This section will summarise the relationship between each stakeholder through stakeholder analysis and a mapping diagram.

2.1. Stakeholder Analysis

The first step before making a mapping diagram is to do a stakeholder analysis by assessing to what extent the interests and influences from each stakeholder stated in the first section have in the BEV acceleration program and ride-hailing landscape. Stakeholder interests are assessed based on the qualitative measure by looking at the main roles and functions of each stakeholder, complemented by assessing whether the stakeholder has an interest or concern when there is a BEV acceleration plan or other electrification projects. On their interests towards ride-hailing service, it could be assessed by looking at whether the stakeholder had an interest or concern when ride-hailing services began to emerge. If yes, then the stakeholders will be classified as having high interest. Otherwise, they will be classified as having low interest.

Meanwhile, stakeholder influences are assessed based on hierarchical position and scoring system that is calculated by estimating the number of linkages between stakeholders. If one has a high enough position to give power and influence to the subordinates with the addition of having at least five linkages with others, then the stakeholder will be classified as having a high influence. Otherwise, it will be classified as having a low influence. The stakeholder will then be classified into four categories, which are 1) stakeholders with low interest and low influence, 2) stakeholders with low interest and high influence, 3) stakeholders with high interest and low influence, and 4) stakeholders with high interest and high influence. The stakeholder analysis result is shown below.

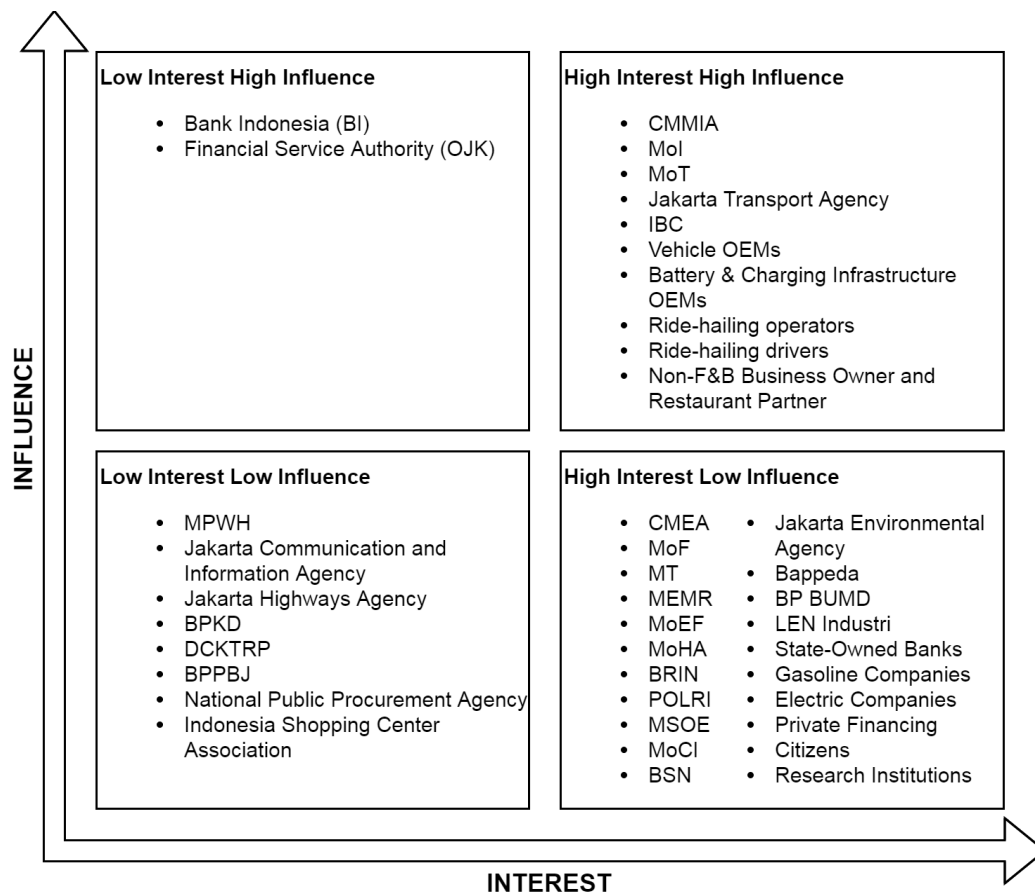


Figure 1 Stakeholder Analysis

2.2. Stakeholder Mapping Diagram

The result of stakeholder analysis above will be used to make a mapping diagram. Out of four stakeholder categories classified before, only the stakeholders in the low interest low influence categories that will not be used as part of the mapping diagram below. In the bigger picture, those stakeholders only have a few roles and do not have enough interest and concern to initiate supportive action regarding the BEV acceleration program or in the ride-hailing landscape.

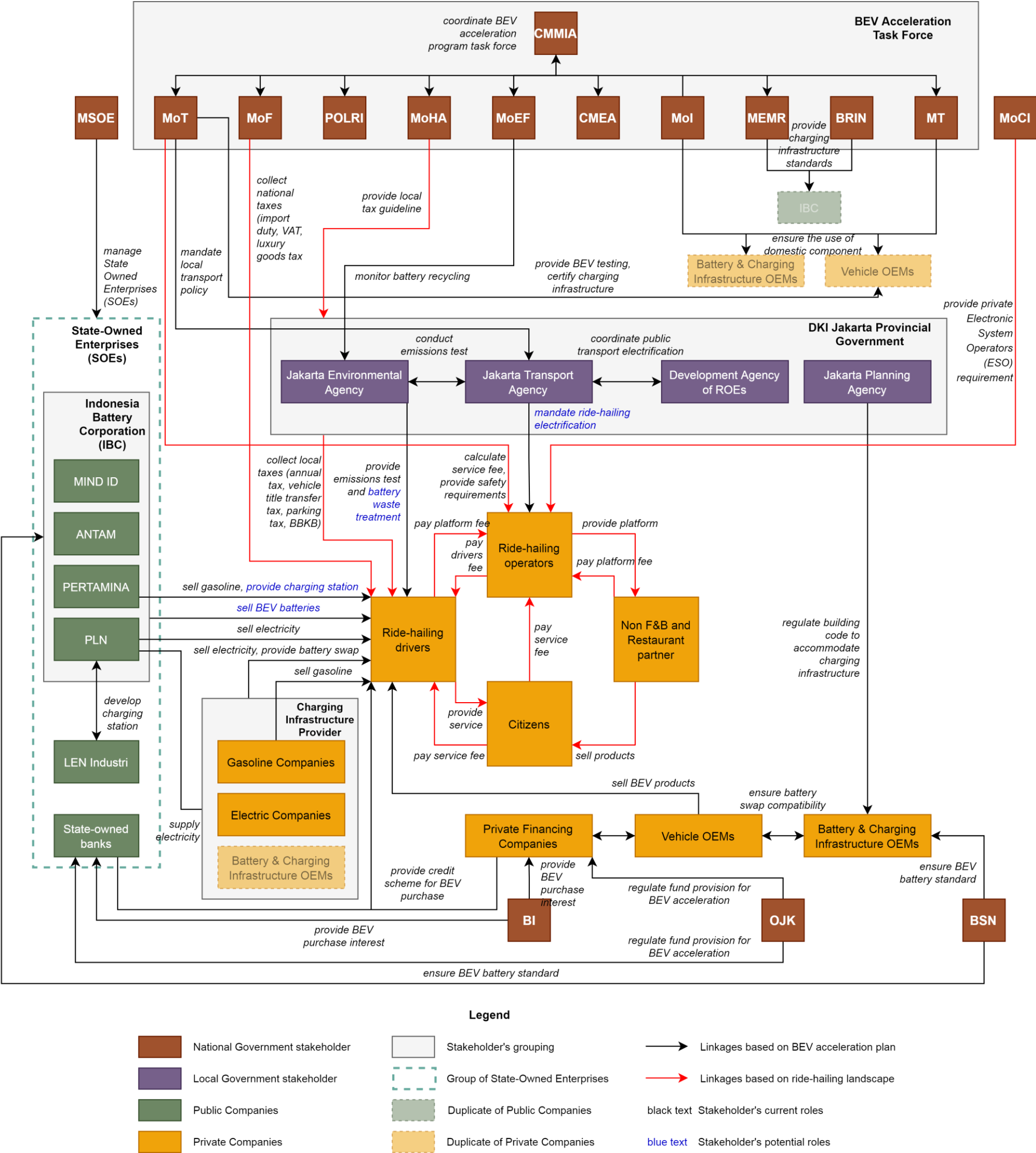


Figure 2 Stakeholder Mapping Diagram

3. References

Ainurrofiq, U. 2020. Kolaborasi Mewujudkan Ekosistem Kendaraan Listrik untuk Masa Depan. *Grab*.

Coordinating Ministry for Economic Affairs (CMEA). 2020. Peraturan Menteri Koordinator Bidang Perekonomian Nomor 9 Tahun 2020 tentang Organisasi dan Tata Kerja Kementerian Koordinator Bidang Perekonomian. *Coordinating Ministry of Economic Affairs Republic of Indonesia*. Available from: <https://peraturan.bpk.go.id/Home/Details/152211/permenko-perekonomian-no-9-tahun-2020>

Coordinating Ministry for Maritime and Investment Affairs (CMMIA). 2020a. Peraturan Menteri Koordinator Bidang Kemaritiman dan Investasi Nomor 10 Tahun 2020 tentang Organisasi dan Tata Kerja Kementerian Koordinator Bidang Kemaritiman dan Investasi. *Coordinating Ministry for Maritime and Investment Affairs Republic of Indonesia*. Available from: <https://jdih.maritim.go.id/cfind/source/files/permenko/2020/2020pmmarves010.pdf>

Coordinating Ministry for Maritime and Investment Affairs (CMMIA). 2020b. Peraturan Menteri Koordinator Bidang Kemaritiman dan Investasi Nomor 8 Tahun 2020 tentang Tata Kerja Tim Koordinasi Percepatan Program Kendaraan Bermotor Listrik Berbasis Baterai (Battery Electric Vehicle) untuk Transportasi Jalan dan Kelompok Kerja. *Coordinating Ministry for Maritime and Investment Affairs Republic of Indonesia*. Available from: <https://jdih.maritim.go.id/cfind/source/files/permenko/2020/2020pmmarves008.pdf>

Gojek. 2021. Sustainability Report 2020. *Gojek*. [Online]. [Accessed on May 2021]. Available from: https://lelogama.go-jek.com/Gojek_Sustainability_Report_30-04-2021.pdf

Grab. 2020. #AskGrab: Where does the merchant commission go?. *Grab*. [Online]. 17 April 2020. [Accessed on September 2021]. Available from: <https://www.grab.com/sg/blog/askgrab-where-does-the-merchant-commission-go/>

Iskandar. 2021. Skema Komisi GoFood Jadi 20 Persen + Rp 1.000, Ini Penjelasan Lengkap Gojek. *Liputan 6*. [Online]. 18 March 2021. [Accessed on September 2021]. Available from: <https://www.liputan6.com/tekno/read/4509958/skema-komisi-gofood-jadi-20-persen-rp-1000-ini-penjelasan-lengkap-gojek>

LKPP. 2021. Peraturan Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah Nomor 1 Tahun 2021 tentang Organisasi dan Tata Kerja Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah. *National Public Procurement Agency (LKPP)*. Available from: <https://jdih.lkpp.go.id/regulation/peraturan-lkpp/peraturan-lkpp-nomor-1-tahun-2021>

Meilanova, D. 2021. Bank Mandiri (BMRI) Siap Dukung Pembiayaan Proyek Jumbo Baterai Listrik. *Bisnis*. [Online]. 25 June 2021. [Accessed on September 2021]. Available from:

<https://finansial.bisnis.com/read/20210625/90/1409995/bank-mandiri-bmri-siap-dukung-pembiayaan-proyek-jumbo-baterai-listrik>

Ministry of Energy and Mineral Resources (MEMR). 2021. Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 15 Tahun 2021 tentang Organisasi dan Tata Kerja Kementerian Energi dan Sumber Daya Mineral. *Ministry of Energy and Mineral Resources Republic of Indonesia*. Available from: <https://jdih.esdm.go.id/index.php/web/result/2159/detail>

Ministry of Finance (MoF). 2018. Peraturan Menteri Keuangan Nomor 217/PMK.01/2018 Tentang Organisasi Dan Tata Kerja Kementerian Keuangan. *Ministry of Finance Republic of Indonesia*. Available from: <https://jdih.kemenkeu.go.id/FullText/2018/217~PMK.01~2018Per.pdf>

Ministry of Home Affairs (MoHA). 2021. Peraturan Menteri Dalam Negeri Nomor 13 Tahun 2021 Tentang Organisasi Dan Tata Kerja Kementerian Dalam Negeri. *Ministry of Home Affairs Republic of Indonesia*. Available from: <https://paralegal.id/peraturan/peraturan-menteri-dalam-negeri-nomor-13-tahun-2021/>

Ministry of Industry (MoI). 2021. Peraturan Menteri Perindustrian Nomor 7 Tahun 2021 tentang Organisasi dan Tata Kerja Kementerian Perindustrian. *Ministry of Industry Republic of Indonesia*. Available from: <https://peraturan.bpk.go.id/Home/Details/166919/permenperin-no-7-tahun-2021>

Ministry of Trade (MT). 2020. Peraturan Menteri Perdagangan Nomor 80 Tahun 2020 tentang Organisasi dan Tata Kerja Kementerian Perdagangan. *Ministry of Trade Republic of Indonesia*. Available from: <https://peraturan.bpk.go.id/Home/Details/160355/permendag-no-80-tahun-2020>

Ministry of Transportation (MoT). 2021. Peraturan Menteri Perhubungan Nomor 67 Tahun 2021 tentang Organisasi dan Tata Kerja Kementerian Perhubungan. *Ministry of Transportation Republic of Indonesia*. Available from: https://jdih.dephub.go.id/index.php/produk_hukum/view/VUUwZ05qY2dWR0ZvZFc0Z01qQXINUT09

Ministry of Transportation (MoT). 2018. Peraturan Menteri Perhubungan Nomor 110 Tahun 2018 tentang Organisasi dan Tata Kerja Badan Pengelola Transportasi Jakarta, Bogor, Depok, Tangerang, dan Bekasi. *Ministry of Transportation Republic of Indonesia*. Available from: https://jdih.dephub.go.id/assets/uudocs/permen/2018/PM_110_TAHUN_2018.pdf

Mola, T. 2018. Pusat Perbelanjaan Siap Bangun SPLU Mobil Listrik. *Bisnis*. [Online]. 12 August 2018. [Accessed on September 2021]. Available from: <https://otomotif.bisnis.com/read/20180812/275/827217/pusat-perbelanjaan-siap-bangun-splu-mobil-listrik>

Musthofid. 2020. Grab strengthens Indonesia's EV ecosystem. *Jakarta Post*. [Online]. 30 November 2020. [Accessed on September 2021]. Available from: <https://www.thejakartapost.com/life/2020/11/30/grab-strengthens-indonesias-ev-ecosystem.html>

National Government of Indonesia. 2002. Undang-undang Nomor 2 tahun 2002 tentang Kepolisian Negara Republik Indonesia. *National Government of Indonesia*. Available from:

https://www3.bkpm.go.id/images/uploads/prosedur_investasi/file_upload/UU_2_2002.pdf

OJK. 2020. Siaran Press 62/DHMS/IX/2020 Insentif OJK untuk Dukung Program Kendaraan Bermotor Ramah Lingkungan. *Financial Services Authority (OJK)*. Available from:

<https://www.ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Insentif-OJK-untuk-Dukung-Program-Kendaraan-Bermotor-Ramah-Lingkungan-.aspx>

President of the Republic of Indonesia. 2019. Peraturan Presiden Nomor 74 Tahun 2019 tentang Badan Riset dan Inovasi Nasional. *President of the Republic of Indonesia*. Available from:

<https://peraturan.bpk.go.id/Home/Details/122785/perpres-no-74-tahun-2019>

Priyanto, W. 2020. Mandiri Tunas Finance Siap Biayai Mobil listrik dengan DP Nol Persen. *Tempo*. [Online]. 16 September 2020. [Accessed on September 2021]. Available from:

<https://otomotif.tempo.co/read/1386835/mandiri-tunas-finance-siap-biayai-mobil-listrik-dengan-dp-nol-persen>

Ruang Waktu and Urban+ Institute. 2019. Ojek Online Shelter Provision and Management Practical Guideline. *Ruang Waktu and Urban+ Institute*. Available from: <https://ruang-waktu.com/wp-content/uploads/2019/11/ojol-shelter-guide-2019.pdf>

Toll, M. 2021. Honda Announces Four Electric Motorcycles to Debut in Next Years. *Electrek*. [Online]. 26 April 2021. [Accessed on September 2021]. Available from:

<https://electrek.co/2021/04/26/honda-announces-four-electric-motorcycles-to-debut-in-next-few-years/>

Yamaha Motor. 2021. Yamaha Motor Group Environmental Plan 2050. *Yamaha Motor*. Available from: https://global.yamaha-motor.com/about/csr/the_environment/plan-2050/

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