



MINISTRY OF
TRANSPORTATION



TRANSPORTATION
POLICY AGENCY

National EV Policies & Regulations

By

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Policy Center for Traffic, Road, and Urban Transportation

Jakarta, 19 January 2023



OUTLINE

A. Legal Basis

B. Current Situation

C. Ministry Response

D. Recommendation



Regulation

Concerning

UU No. 22 Th. 2009

Traffic and Road Transport

Perpres No. 55 Th. 2019

Acceleration of the Battery-Based Motor Vehicle Program

Inpres No 7 Th. 2022

The Use of Battery Electric Vehicle as Individual Official Operational Vehicle and/or Central or Local Government Official Operational Vehicle

PP No. 55 Th. 2012

Vehicle

PM No. 33 Th 2018

Motorized Vehicle Type Testing

PM No. 30 Th 2020

Amendment to the Regulation of the Minister of Transportation PM Number 33 of 2018 Concerning Type Testing Motor vehicle

PM No. 23 Th 2021

Second Amendment to the Regulation of the Minister of Transportation PM Number 33 of 2018 Concerning Type Testing Motor vehicle

PM No. 44 Th 2020

Testing the Physical Type of Motorized Vehicles with Electric Motors

PM No. 86 Th 2020

Amendments to the Regulation of the Minister of Transportation Number PM 44 of 2020 concerning Testing of Physical Types of Motorized Vehicles with Motors Using Electric Motors

PM No. 65 Th. 2020

Conversion of Electric Motorcycles into Battery-Based Electric Motorcycles

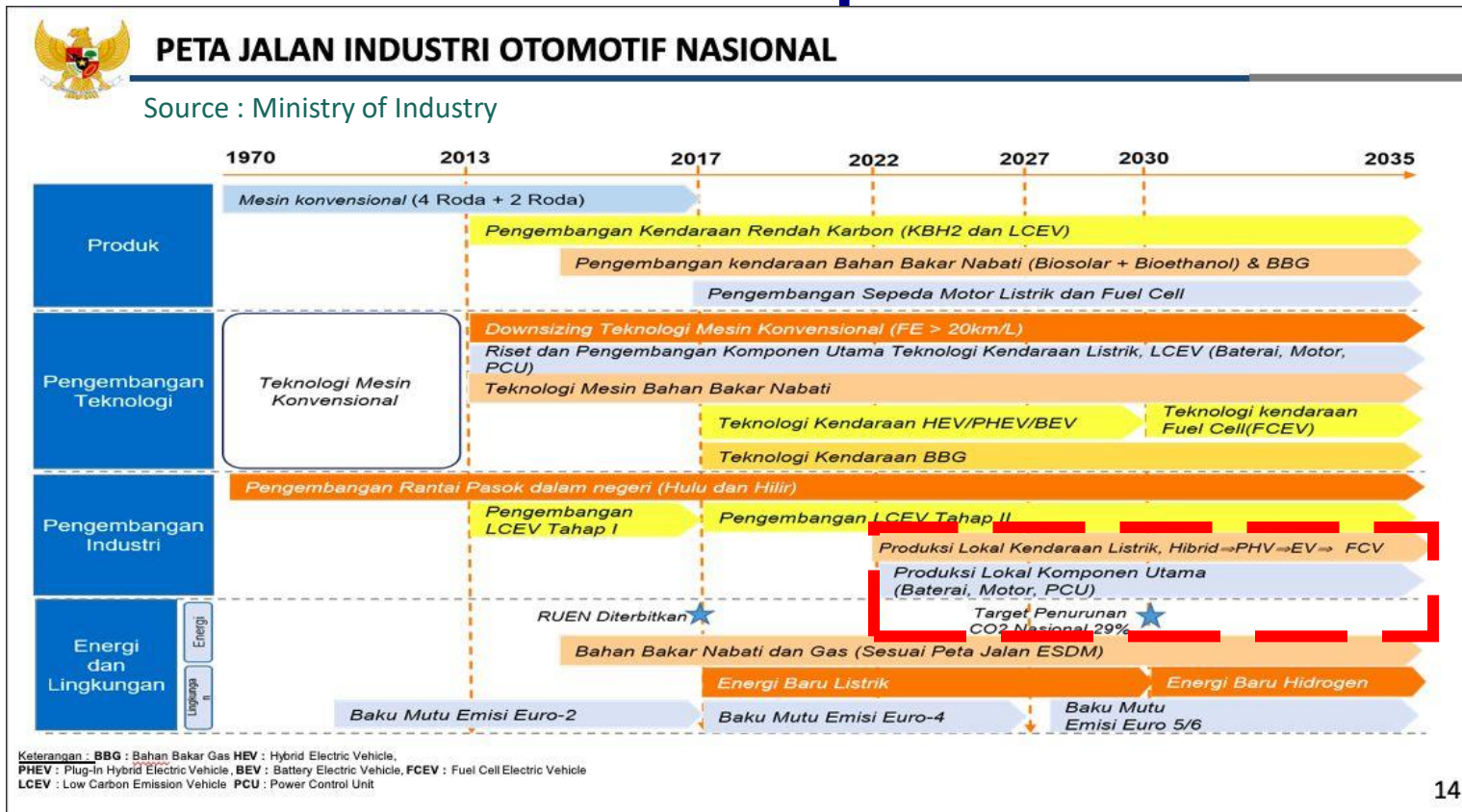
PM No. 87 Th 2020

Physical Type Testing of Battery-Based Electric Motorized Vehicles

PM No. 19 Th 2021

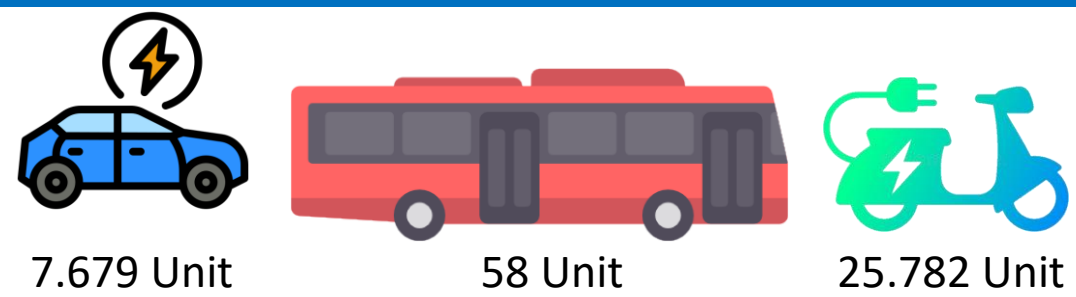
Periodic Testing of Motorized Vehicles

Current Situation - National Road Map

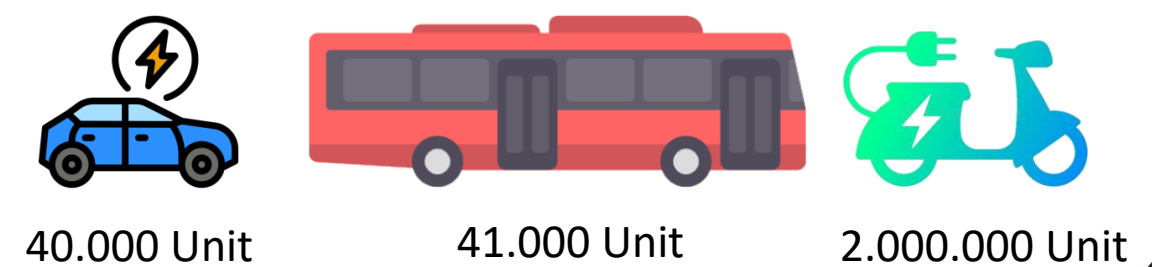


14

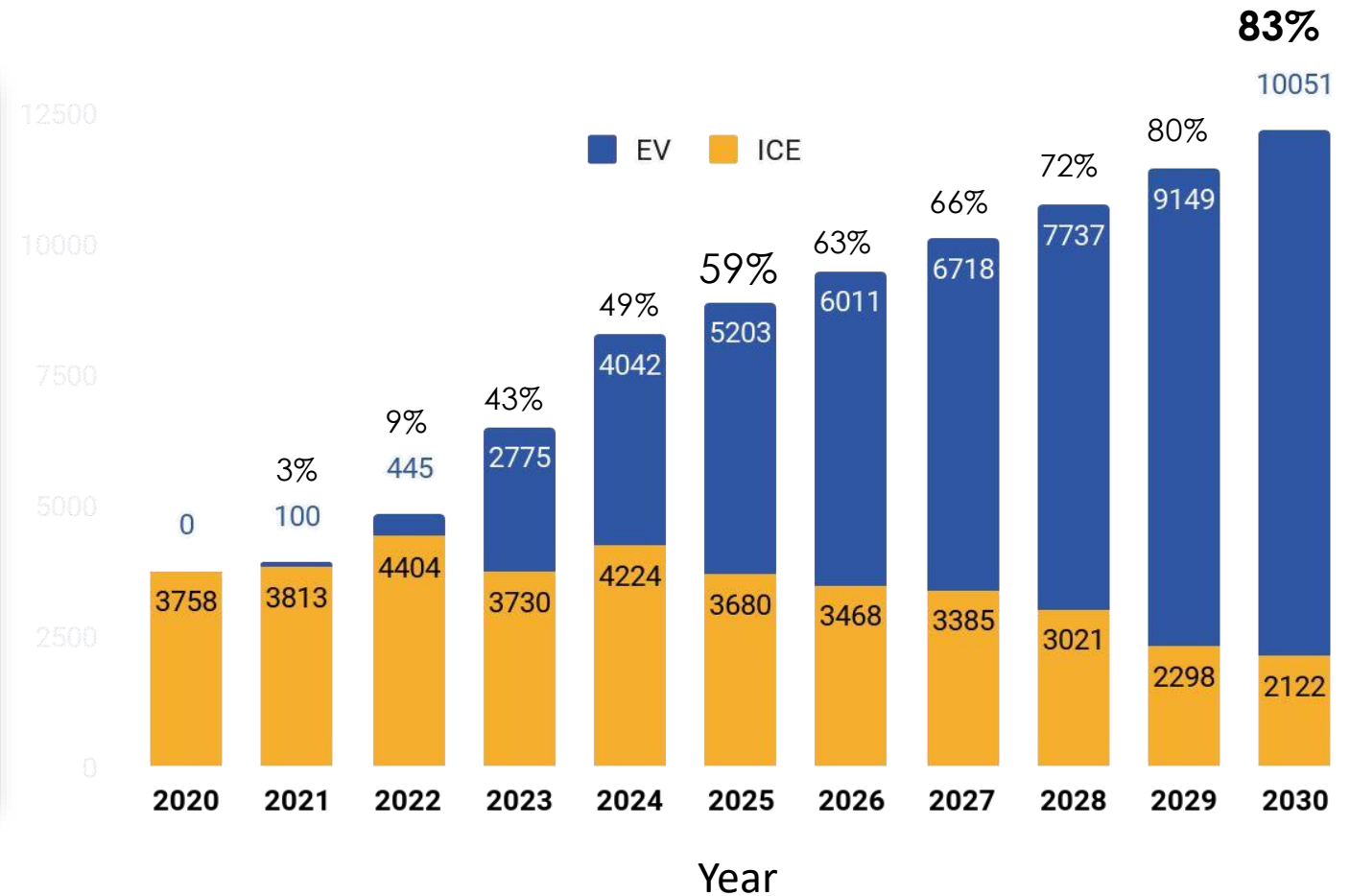
Electric Vehicle number until 20 November 2022:
(data from Ministry of Energy and Resources)



Target of Electric Vehicle in 2025



TRANSJAKARTA EV Bus Road Map Transjakarta EV Fleet Proportion 2020-2030



Note :

EV : *Electric Vehicle*

ICE : *Internal Combustion Engine*

Source : RJPP PT. TransJakarta, 2020

Current Situation - Existing EVs in Indonesia

EV BUS



- Single Bus 12 meter
- Brand : BYD Type K9
- Dimension : (12 x 2,5 x 3,4) m



- Single bus 12 meter
- Brand : MAB Type MD12E
- Dimension : (12 x 2,5 x 3,4) m



- Medium Bus 7 meter
- Brand : BYD Type C6
- Dimension : (7 x 2,1 x 3) m

EV TAXI



- Operator : PT. Blue Bird Tbk
- Brand : BYD e6.
- Quantity : 25 unit



- Operator : PT. Silver Bird
- Brand : TESLA Model X
- Quantity : 5 unit

Current Situation – Challenges



High Congestion




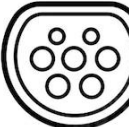








Tropical Climate



Floods

Nonuniformity chargers

	N.America	Japan	EU and the rest of markets	China	All Markets except EU
AC	 <p>J1772 (Type 1)</p>	 <p>J1772 (Type 1)</p>	 <p>Mennekes (Type 2)</p>	 <p>GB/T</p>	
DC	 <p>CCS1</p>	 <p>CHAdeMO</p>	 <p>CCS2</p>	 <p>GB/T</p>	 <p>Tesla</p>

Source: www.evexpert.eu

Current Situation - Safety Concern

Fire from EV are harder to put out which might be caused from several events:



System overheating



System malfunctions



Vehicle crash



Ministry Response - Updated Regulations

TECHNICAL PERIODIC AND ROADWORTHINESS TESTING FOR ELECTRIC VEHICLE TRANSPORTATION MINISTER REGULATION NO. 19 OF 2021 CONCERNING VEHICLE

N	INSPECTION	DESCRIPTION	
		CONVENTIONAL VEHICLE	ELECTRIC VEHICLE
A.	TECHNICAL REQUIREMENTS		
1.	Arrangement, equipment, dimension, casing, and vehicle technical design according to the function and vehicle weight.	Available	Available Electric motor, battery cell, battery charger system and equipment, control system and battery management system.
B.	ROADWORTHINESS		
1.	Exhaust gas emission	Available	N.A
2.	Main headlamp intensity and aberration	Available	Available
3.	Horn loudness level test	Available	Available
4.	Vehicle brake test	Available	Available
5.	Handbrake test	Available	Available
6.	Side slip test	Available	Available
7.	Speedometer display accuracy	Available	Available
8.	Tire tread and groove	Available	Available
9.	Tint test	Available	Available



KEMENTERIAN PERHUBUNGAN BADAN KEBIJAKAN TRANSPORTASI

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Jakarta 10110 | Fax. : (021) 34833061, 4833065 | Web-site: https://baketrans.dephub.go.id

Nomor : UM.006/14/2021/027/2022
Klasifikasi : Biasa
Lampiran : -
Hal : Laporan Perumusan Kebijakan Kendaraan Listrik
Jakarta, 31 Oktober 2022

Yth. Menteri Perhubungan Republik Indonesia

Dengan hormat, menindaklanjuti arahan dan penugasan Bapak Menteri Perhubungan kepada Badan Kebijakan Transportasi (BKT) terkait 11 (sebelas) isu strategis yang salah satunya adalah tentang Upaya Percepatan Implementasi Kebijakan Penggunaan Kendaraan Bermotor Listrik Berbasis Baterai (KBLBB), dapat kami sampaikan bahwa BKT telah membentuk Kelompok Kerja (Pokja) yang bertugas untuk menangani isu kendaraan listrik. Tim pokja telah melakukan pendalaman serta analisis terhadap data dan informasi yang diperoleh dari hasil studi literatur, webinar dan FGD yang melibatkan berbagai stakeholder terkait yang berasal dari Kementerian/Lembaga, Akademisi Perguruan Tinggi, Praktisi, Pelaku Usaha dan Perusahaan di sektor transportasi serta dengan pendampingan oleh tenaga ahli. Dalam pelaksanaan perolehan data dan informasi tim pokja juga melakukan tinjauan lapangan ke unit pelaksana uji tipe dan uji berkala untuk mengetahui kondisi existing pelaksanaan uji kendaraan listrik, yang dalam hal ini dimaksudkan untuk mendapatkan gambaran sejauh mana kesiapan kapasitas uji kelaikan jalan dalam perwujudan aspek keselamatan bagi penerapan kendaraan listrik ke depan terutama bagi kendaraan angkutan umum.

Dari hasil analisis kebijakan yang telah dilakukan oleh BKT terhadap data dan informasi yang berhasil diperoleh sampai saat ini, dapat kami sampaikan hal-hal sebagai berikut:

1. Pemerintah telah menerbitkan Perpres Nomor 55 Tahun 2019 tentang Percepatan Penggunaan Kendaraan Listrik dan Inpres No.7 Tahun 2022 tentang Penggunaan Kendaraan Bermotor Listrik Berbasis Baterai (*Battery Electric Vehicle*) sebagai Kendaraan Dinas Operasional dan/atau Kendaraan Perorangan Dinas Instansi Pemerintah Pusat dan Pemerintah Daerah. Kementerian Perhubungan sebagai salah satu Kementerian/Lembaga yang mendapatkan kewenangan dan tugas untuk mewujudkan percepatan penggunaan kendaraan listrik telah menerbitkan 5 kebijakan/peraturan sebagai berikut:
 - a. Permenhub No.44 Tahun 2020 tentang Pengujian Tipe Fisik Kendaraan Bermotor dengan Motor Penggerak Menggunakan Motor Listrik;
 - b. Permenhub No.45 Tahun 2020 tentang Kendaraan Tertentu dengan Menggunakan Penggerak Motor Listrik;

4. Pemerintah perlu segera melakukan percepatan dalam pemenuhan ketersediaan infrastruktur pengisian listrik dan pengaturan tarif tenaga listrik untuk KBLBB;
5. Terhadap aspek keselamatan dalam proses uji kelaikan jalan baik uji tipe maupun uji berkala (untuk kendaraan wajib uji) perlu segera dilakukan kesiapan baik sarana, prasarana, prosedur dan SDM untuk memastikan terpenuh kapasitas layanan dan standar uji, yang dalam hal ini perlu ditargetkan pada tahun 2025 target kesiapan ini sudah dapat tercapai;
6. Perlu segera dirumuskan dan ditetapkan kebijakan (pusat maupun daerah) untuk mendorong peningkatan penggunaan kendaraan angkutan umum yang berbasis kendaraan listrik;
7. Perlu dirumuskan suatu kebijakan mitigasi resiko penggunaan kendaraan listrik terkait dengan dampak apabila terjadi kecelakaan lalu lintas yang melibatkan kendaraan listrik;
8. Mendorong masyarakat untuk mengkonversi kendaraan berbasis BBM (Bahan Bakar Minyak) ke kendaraan listrik dengan sosialisasi dan edukasi serta disegerakan pemberian insentif baik fiskal maupun non fiskal. Hal ini dapat menjadi salah satu cara untuk mempercepat program elektrifikasi kendaraan bermotor nasional;
9. Perlu ditingkatkan *social engineering* (rekayasa sosial) melalui sosialisasi penggunaan kendaraan listrik dan keselamatan penggunaannya secara lebih intensif.

Demikian laporan ini kami sampaikan dan selanjutnya kami akan menyampaikan laporan secara progresif dengan melihat dinamika yang ada di lapangan, mohon arahan lebih lanjut dan atas perhatian Bapak Menteri Perhubungan kami ucapkan terima kasih.



Dr. Geza Hasek Suardika, M.Sc.
NIP. 8030717 198903 1 002

Tembusan:

1. Sekretaris Jenderal Kemenhub ;
2. Inspektur Jenderal Kemenhub;
3. Direktur Jenderal Perhubungan Darat;
4. Direktur Jenderal Perhubungan Laut;
5. Direktur Jenderal Perhubungan Udara;
6. Direktur Jenderal Perkeretaapian;
7. Kepala Badan Pengelola Transportasi Jabodetabek;
8. Sekretaris Badan Kebijakan Transportasi;
9. Ketua Komite Nasional Keselamatan Transportasi.

Some of the Recommendation Regarding EV's standards:

1. Accelerate the implementation of the use of electric vehicles by building a broadly reliable electric vehicle ecosystem which includes infrastructure, industry, investment, financing, marketing, and regulations which need to be fulfilled synergistically and collaboratively with careful planning and high commitment from all related stakeholders;
2. The government needs to accelerate immediately in fulfilling the availability of charging station infrastructure and electricity tariff determination for EV;
3. Regarding the safety aspects in the roadworthiness test process; type test and periodic test (for vehicles required to be tested), it is necessary to immediately prepare the facilities, infrastructure, procedures and human resources to ensure the fulfillment of service capacity and test standards, which in this case is targeted to be achieved by 2025;
4. Risk mitigation policy shall be formulated the in the use of electric vehicles related to the impact in the event of a traffic accident involving electric vehicles.

Ministry Response - International Engagement



TRANSPORTATION POLICY AGENCY
MINISTRY OF TRANSPORTATION

ICCT correspondence

Agency's Response



THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION
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communications@theicct.org
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Washington DC, 5 December 2022

Re: Invitation to Review Briefing Paper

To: Eddy Gunawan ATD, MEngSc
Head of the Center for Traffic, Transport and Urban Transport Policy
Transport Policy Agency, Ministry of Transport

Dear Bapak Eddy,

The International Council on Clean Transportation (ICCT) is a non-profit research organization that promotes best practices and comprehensive solutions to improve vehicle emissions and efficiency, increase fuel quality, and curtail emissions of local air pollutants and greenhouse gases (GHG) from international goods movement.

The ICCT is preparing a briefing paper titled "Policy Roadmap for Accelerating Public Transit Bus Electrification in Indonesia". The purpose of this briefing paper is to provide a high-level policy roadmap for the Government of Indonesia to accelerate the adoption of battery electric transit buses in Indonesian cities. We begin by reviewing institutions and policies relevant to electric urban buses in Indonesia, the state of electric bus adoption in the country, before benchmarking Indonesia against the most robust policies in the world to identify areas of improvement and strengthening. We draw on policies adopted by global leaders that have successfully introduced electric buses to their transit fleets.

Transport Policy Agency is one of the key institutions that provides Indonesian government with analysis and recommendations on transportation policies. Therefore, we would like to invite electric vehicle working group team (or tim POKJA kendaraan listrik) as one of the reviewer for this briefing paper. Please find the attached draft of the briefing paper, it would be great if you could get back to use by Monday, 19th December 2022.

If you have questions or clarifications, please do not hesitate to contact Mr. Adhi Triatmojo at a.triatmojo@theicct.org or through phone/whatsapp +62 896 8587 4431. We look forward to your comments and feedback. Thank you very much for your time and consideration.

Sincerely Yours,



Dr. Francisco Posada
Southeast Asia Region Lead
The International Council on Clean Transportation

-Copy to the Head of the Transportation Policy Agency (tembusan ke Kepala Badan Kebijakan Transportasi)



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Our Ref : Jakarta, 25 December 2022

Subject : RE: Invitation to Review Briefing Paper

Dr. Francisco Posada
Southeast Asia Region Lead
The International Council on Clean Transportation

Dear Dr. Posada,

In response to your letter on Invitation to Review Briefing Paper on 5th December 2022, Center for Traffic, Transport and Urban Transport Policy would like to express our appreciation on your invitation.

As you have mentioned on your previous letter, Transport Policy Agency provides analysis and recommendations on transportation policies. The latest development, President Joko Widodo has instructed the Ministry of Transportation to prioritize mass urban public transportation. Therefore, the policy topic that you have brought are very much in line with our newest agenda.

We have read your policy brief draft and found many beneficial policies that align with the agency's policies and could be implemented in Indonesia. We also briefly analyzed some points that might be added as feedbacks:

1. On Table 1, we would like to suggest adding three more institutions:

Institution	Scope	Role
Ministry of National Development Planning	Integration	- Ensuring the policies are align with national development plan - Policies oversight
National Research and Innovation Agency	Vehicle Transportation system	- Ensuring electric bus technology can be develop internally - Research about transportation system that is best implemented in Indonesia
Ministry of Trade	Private sector relation	- Organizing possible business related to private operator that will be using electric bus

2. On page 12, regarding phase-out target policy we recognize that you suggest no tolerance for any ICE buses no matter how efficient they are. We think there should be a clear limitation where emissions from the

vehicle would deem unacceptable. Our argument is that electric vehicle also uses energy generated from the power plant which mainly powered by fossil fuel. If ever emissions from ICE vehicle could outperform emissions from the power plant, we should consider the use of said ICE vehicles.

- On page 20, regarding industrial policies, we would like to suggest about foreign investment to better help protect national industries and hasten growth of EV market.
- One of our main responsibilities in Ministry of Transport is to ensure transport safety, we would like to emphasize the importance of safety policies and human competence as it will indirectly involve in accelerating electric bus implementation. It will hasten approval process (lalu lintas) and boost public confidence in electric buses.

We are open for further discussion regarding our feedbacks should you need more assistance.

We are pleased for the opportunity to have been asked as reviewer for your policy brief. We look forward to keeping working with you in the future. Should there be any occasion arises for our institution to collaborate further, please don't hesitate to contact us.

Thank you

Yours sincerely

Eddy Gunawan, A.TD., M. Eng.SC.

Head of Center for Traffic, Transport and Urban Transport Policy
Ministry of Transportation of the Republic of Indonesia

Recommendation - The need for Sustainable Ecosystem



TRANSPORTATION POLICY AGENCY
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Source: GIIAS, Kemenkomarves

Recommendation - Inter Government Policy



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Integration



- Growing the national EV industry
- Providing access to national industry
- Creating investment convenience
- Proposing fiscal policy for the import of raw materials for EV Industry
- Postponement/abolition/reduction of EV tax
- Change in Manufactured Local Content Level (TKDN) formula



- Technology mastery
- R&D (Basic - Prototype)
- R&D (Facilities)
- Patent
- Industrial design



- Allocating budget for the R&D of EV
- Abolition of tax import for production engine and materials for production engine for EV
- Formulating incentives for the company investing in EV
- Tax reduction for EV
- Giving more incentives for green automotive industry



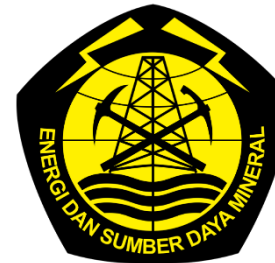
- Reduction in vehicle type and function-testing fee
- Implementation on Indonesia National Standard (SNI) as the roadworthiness requirement
- Change in regulation and method in type and function testing which burdening EV
- Policy alignments to the work of the domestic industry



KEMENTERIAN KOORDINATOR BIDANG
KEMARITIMAN DAN INVESTASI

2025

- 2.1m Electric Motorbike
- 2.2k EV/Hybrid
- Stopping the fossil fuel import
- Coordinating the achievement of Presidential Regulation no. 22 of 2017 concerning RUEN in the field of stopping the import of fuel (2025) and Presidential Regulation No. 55 of 2019



- Socialization and public education about electric vehicles so that the goals of Presidential Regulation No. 22 of 2017 can be achieved
- Energy resilience
- Energy security



- Preparation of investment in the electric vehicle industry and supporting facilities through State-owned Enterprise (BUMN) under its coordination
- BUMN as the Integrator of EV



- Protect the market of Electric Vehicle in Indonesia

Recommendation



Build a broadly reliable electric vehicle **ecosystem** which includes infrastructure, industry, investment, financing, marketing, and regulations which need to be fulfilled synergistically and collaboratively with careful planning and high commitment from all related stakeholders

Prepare facilities, infrastructure, procedures, mitigation and human resources to ensure the fulfillment of service capacity and test standards which ultimately create a safer operation for EV in Indonesia

EV that will be operated in Indonesia should adhere to standards that incorporated both natural and actual conditions in Indonesia so that the users could be benefited with the advantageous technology of EV



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THANK YOU



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