



“MULTIPLE PATHWAY TO REDUCE CO₂ EMISSION IN AUTOMOTIVE SECTOR”

JAKARTA, 17 NOVEMBER 2021

**DIREKTUR INDUSTRI MARITIM ALAT TRANSPORTASI DAN ALAT PERTAHANAN
DIREKTORAT JENDERAL ILMATE**



OUTLINE

01

Overview of The Indonesia's Motor Vehicle Industry

02

Low Carbon Emission Vehicle (LCEV) Program



1. Overview of The Indonesia's Motor Vehicle Industry



OVERVIEW OF MOTOR VEHICLE INDUSTRY IN INDONESIA



Number of
Manufactures

Production
(unit)

Production
Capacity

Direct Labor

Investment
(up to 2020)

Car Ownership
Ratio

21 companies

2019: 1,28 Mio
2020: 0,69 Mio

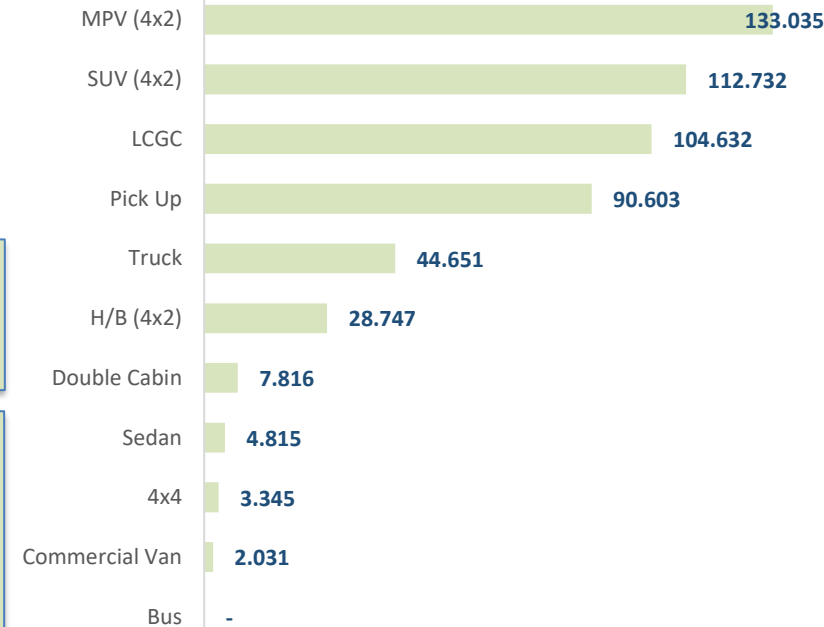
2,35 Mio
units/year

38,39
thousand
people

IDR. 71,35
trillion

99 units/
1000 people

Market 2020 (unit)



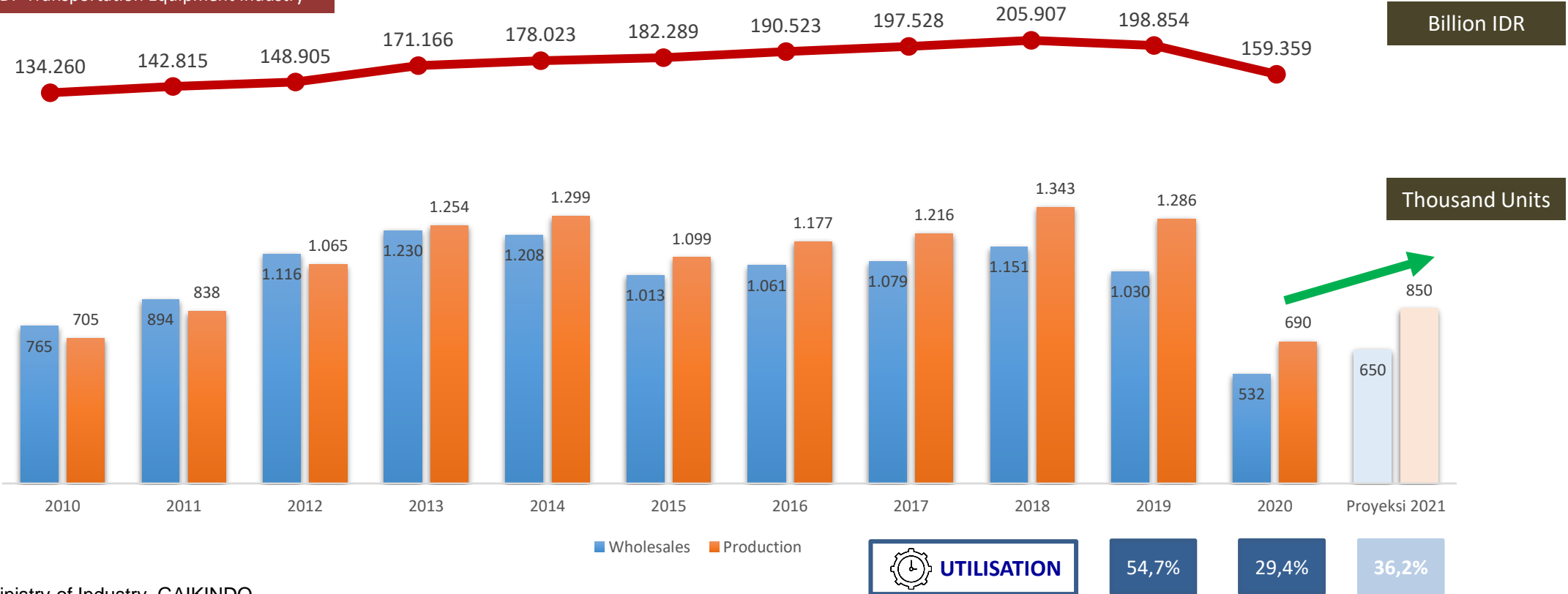
Source: Ministry of Industry, GAIKINDO

- Indonesia is the largest motor vehicle market in ASEAN
- Indonesia Car ownership ratio is relatively low indicates the automotive industry has great potential for future growth
- Motor vehicle sales in Indonesia are dominated by MPV, SUV (Low and Medium), and LCGC segments with OTR price ranges below IDR 300 million



PRODUCTION AND WHOLESALAS OF MOTOR VEHICLE

GDP Transportation Equipment Industry



Source: Ministry of Industry, GAIKINDO

1. In order to accelerate automotive industry recovery, government implemented incentive of luxury tax borne by government for passenger car with engine capacity up to 2.500 cc which have local content level more than 60%
2. Production of motor vehicle in 2021 is targeted more than 850 thousand units with 6,8% increase in utilization

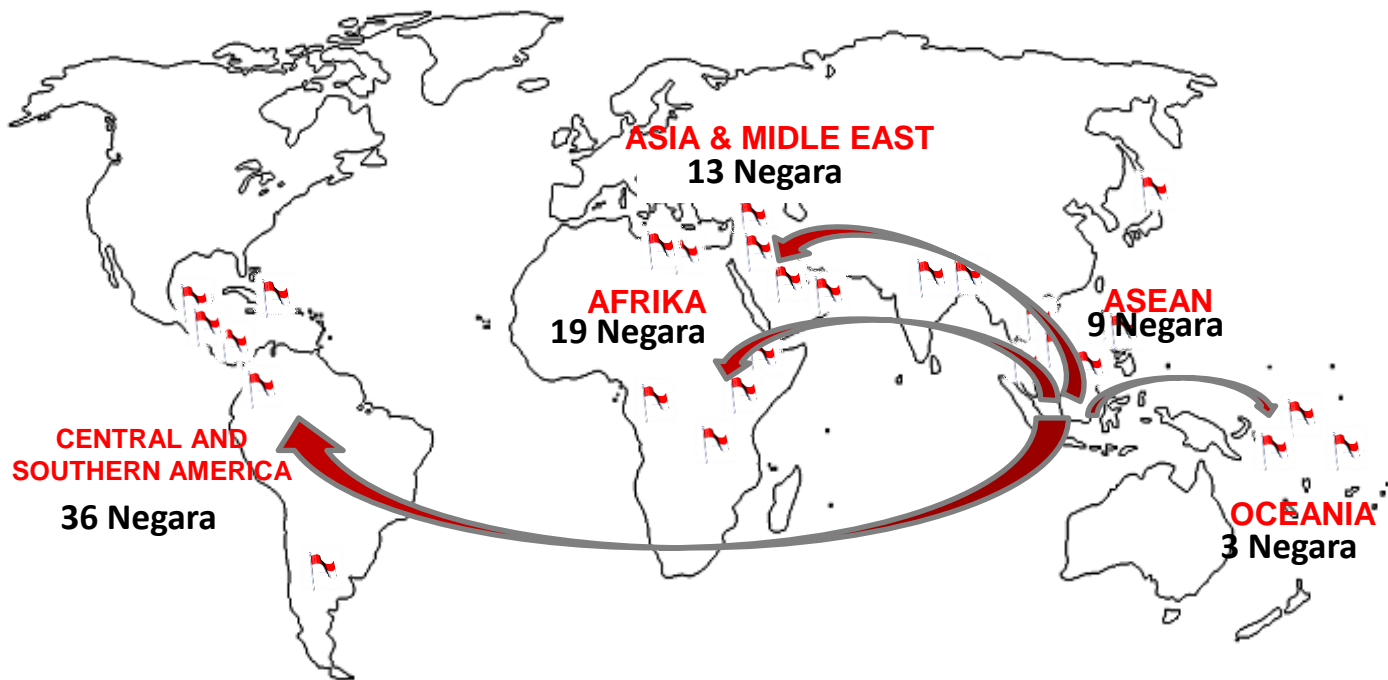


EXPORT OF MOTOR VEHICLE FROM INDONESIA TO MORE THAN 80 COUNTRIES



List of Exporter

Export Performance



No	ITEM	2019	2020	s/d Sept 21
1	Completely Build Up/ CBU	332.023 units	232.175 units	207.411 units
		USD 3,98 billion	USD 2,79 billion	USD 2,51 billion
s2	Completely Knock Down / CKD	511.425 sets	53.032 sets	75.028 sets
		USD 91,29 million	82,47 million	USD 64,11 million
3	Component	79,3 Mio pcs	61,2 Mio pcs	65,01 Mio pcs
		USD 1,71 billion	USD 1,52 billion	USD 1,45 billion

Source: Ministry of Industry, GAIKINDO

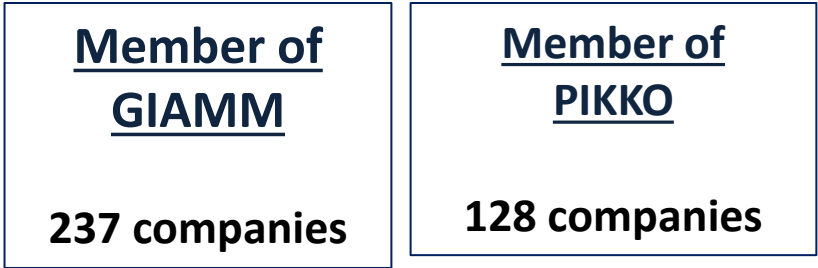
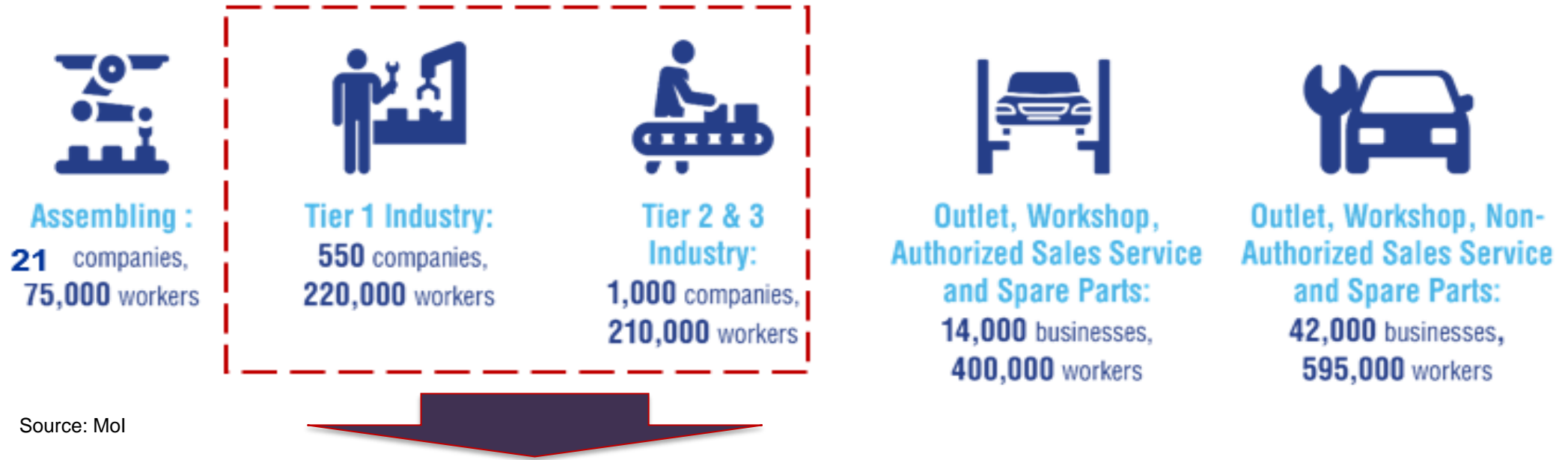
CBU EXPORT TARGET OF 1 MILLION UNITS IN 2025

- **CENTRAL AND SOUTH AMERICA:** Antigua, Aruba, Argentina, Barbados, Columbia, Costa Rika, Dominica, Ecuador, El Salvador, Grenada, C. Cayman, Guyana, Honduras, Jamaica, Mexico, Paraguay, St. Kitts, ST. Lucia, ST. Maarten, ST Vincent, Suriname, Tahiti, Trinidad, and other Caribbean countries
- **AFRICA:** Angola, Djibouti, Ethiopia, Gabon, Kenya, Libya, Madagascar, Maroko, Mauritius, Mesir, Mozambique, Nigeria, Rwanda, Sudan, Syria, Tunisia, Zambia, Zimbabwe, Seychelles
- **ASIA & MIDDLE EAST:** Bahrain, Bangladesh, Iraq, Japan, Lebanon, Oman, Pakistan, Saudi Arabia, Srilangka, Syria, Yamen, Qatar
- **ASEAN:** Brunei, Cambodia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam
- **OCEANIA:** Bermuda, Fiji, Papua Nugini,



STRUCTURE OF THE INDONESIA'S AUTOMOTIVE INDUSTRY

Indonesia have around 1.550 component industries (Tier 1,2,&3) and more than 1,5 million people working along the automotive industry value chain



GIAMM: Gabungan Industri Alat – Alat Mobil dan Motor
PIKKO: Perkumpulan Industri Kecil dan Menengah Komponen Otomotif

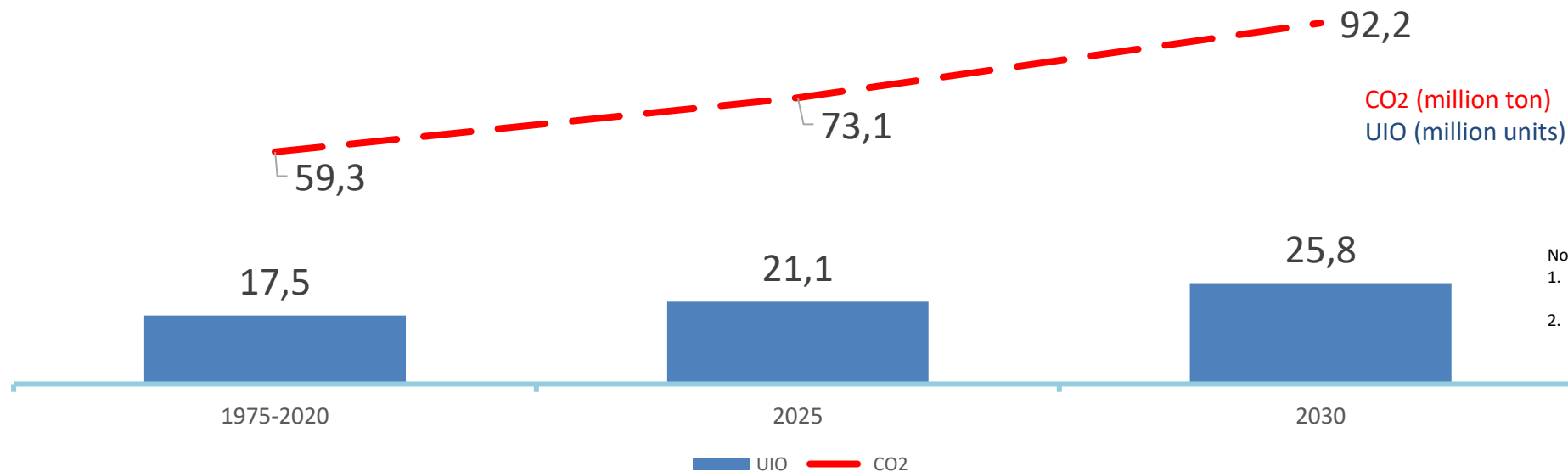


2. Low Carbon Emission Vehicle (LCEV) Program



INDONESIA'S MOTOR VEHICLE PROJECTION AND TECHNOLOGY INTERVENTION

UIO & CO2 Emission



Note:

1. Sales growth in 2021 by 50% (impact of PPnBM DTP stimulus), CAGR in 2022-2030 at 5.5%
2. CO2 emissions are calculated from vehicle type (LCGC, Sedan, MPV, SUV, Pick Up, Bus, and Truck) and cylinder capacity (cc)

Automotive technology innovations to reduce CO2 emission

Technology	CO2 Reduction	Add. Price	Challenges	
xEV	HEV	49%	LOW	-
	PHEV	74%	HIGH	High initial investment for vehicle and charging station
	BEV	100%	HIGH	High initial investment for vehicle and charging station
	FCEV	100%	HIGH	High initial investment for vehicle hydrogen station
CNG Vehicle	20-30%	LOW	CNG specification, CNG station	
Flexy Engine Vehicle (Biofuel)	100% (carbon neutral)	LOW	Biofuel specification	

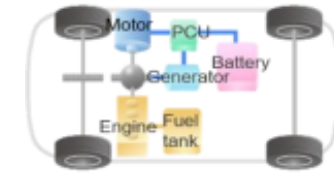


LOW CARBON EMISSION VEHICLE (LCEV) PROGRAM

Government Regulation No 73 of 2019 Jo No 74/2021 on Luxury Tax of Motor Vehicle

Segment	Govt Reg 74/2021	
	Scheme 1	Scheme 2
BEV	0%	0%
PHEV	5%	8%
Full-Hybrid	6%	10%
Full-Hybrid	7%	11%
Full-Hybrid	8%	12%
Mild-Hybrid	8%	12%
Mild-Hybrid	10%	13%
Mild-Hybrid	12%	14%
LCGC/KBH2	3%	
Flexy Engine Vehicle	8%	

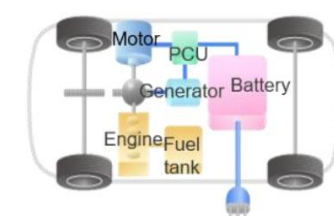
HEV



Hybrid Electric Vehicle (HEV)

- Propulsion : ICE and Electric Motor
- Energy Source: Fossil Fuel and Electricity
- Storage : Fuel Tank, Battery (small capacity)

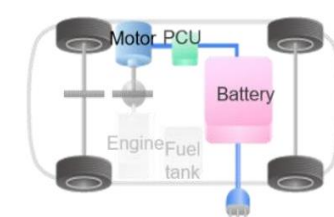
PHEV



Plug-in Hybrid Electric Vehicle (HEV)

- Propulsion : ICE and Electric Motor
- Energy Source: Fossil Fuel and Electricity
- Storage : Fuel Tank, Battery (medium capacity), rechargeable from external source (charging station)

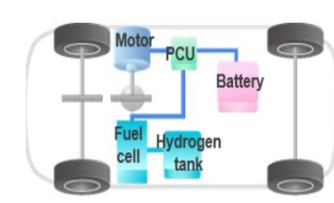
BEV



Battery Electric Vehicle (BEV)

- Propulsion: Electric Motor
- Energy Source: Electricity
- Storage : Battery (medium/big capacity), rechargeable from external source (charging station)

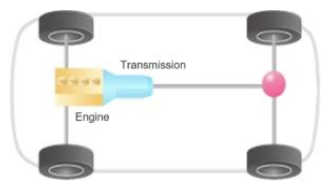
FCEV



Fuel Cell Electric Vehicle (FCEV)

- Propulsion : ICE and Electric Motor
- Energy Source: Hydrogen (Converted to electrical energy by fuel cell)
- Storage : Hydrogen Tank, Battery

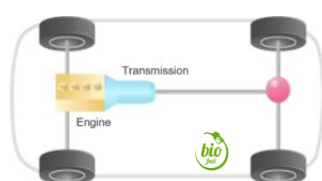
LCGC



Low Cost Green Car (LCGC)

- Propulsion : ICE
- Energy Source: Fossil Fuel
- Storage : Fuel Tank

FLEXY ENGINE



Flexy Engine Vehicle

- Propulsion : ICE
- Energy Source: Biofuel 100%
- Storage : Fuel Tank



BEV ECOSYSTEM

Quantitative Targets



2025

400.000

5 Mio barrel/
1,4 Mio ton CO2

2030

600.000

7,5 Mio Barrel/
2,7 Mio Ton CO2

2035

1.000.000

12,5 Mio Barrel/
4,6 Mio ton CO2



2025

1,76 Mio

2,2 Mio Barrel/
0,8 Mio ton CO2

2030

2,45 Mio

3 Mio barrel/
1,1 Mio ton CO2

2035

3,22 Mio

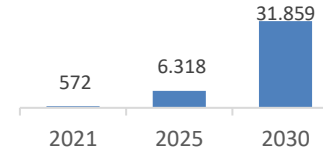
4 Mio barrel/
1,4 Mio ton CO2

- 3 Companies (Electric Bus) with capacity: 1.680 units/year,
- 1 Company (Electric Car) with capacity: 1.000 unit/year
- 22 Companies (Electric Motorcycle) with capacity: 1,04 million units/year



Manufacturers

Charging Station (unit)



EV ECOSYSTEM



Pilot Projects

4 Wheels

- Blue Bird Group with BYD and Tesla
- Grab Indonesia with Hyundai IONIQ
- Transjakarta with BYD (Bakrie Auto parts)
- EV Smart Mobility (Toyota with ITDC Bali)

2 Wheels

- Demonstration project of electric vehicle and mobile battery sharing (2019 -2021)
- Grab Indonesia with Kymco (Smart Motor Indonesia)
- Gojek with Gesit (WIKA) and Viar (Triangle Motorindo)

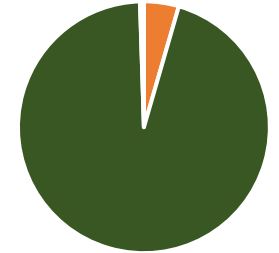


Battery Manufacturers

- PT. International Chemical Industry Prod. Capacity: 256 MWh/Year
- Indonesia Battery Corporation (IBC) Prod. Capacity: 33 GWh/Year

BEV REGISTRATION 2015 – Juli 2021 (UNITS)

- Roda 4 atau lebih (950)
- Roda 2 (5538)
- Roda 3 (29)



Incentives

Consumers

- 0% of Luxury Tax
- Regional Tax of 10% maximum from the basic imposition
- Minimum down payment of 0%
- Low interest rates
- Discount for electric power capacity upgrade
- Special vehicle number plates

Manufacturers

- Tax Holiday
- Mini Tax Holiday
- Tax Allowance
- Import Duty Exemption
- Government Borne Import Duty
- Super Tax Deduction for RD&D activities



**Kementerian
Perindustrian**
REPUBLIK INDONESIA

**Terima
kasih!**

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