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ASIA CLEAN BLUE SKIES PROGRAM | KNOWLEDGE SHARING EVENT
STRATEGIES FOR IMPLEMENTATION OF LOW EMISSION ZONES IN ASIA



Low Emission Zone in Jakarta

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The Issues in Jakarta

TRANSPORTATION

1. Traffic Congestion

30th

Traffic Index's
World Ranking

Source: Tomtom (2023)



23 min
30 s

Average travel Time
per 10 km



53%

Congestion
Level

2. Inadequate Public Transport - Low Public Transport Users

18,86%
Public Transport



81,14%
Private Vehicle



Source: Dishub DKI Jakarta (2023)

3. Poor Public Transportation Integration



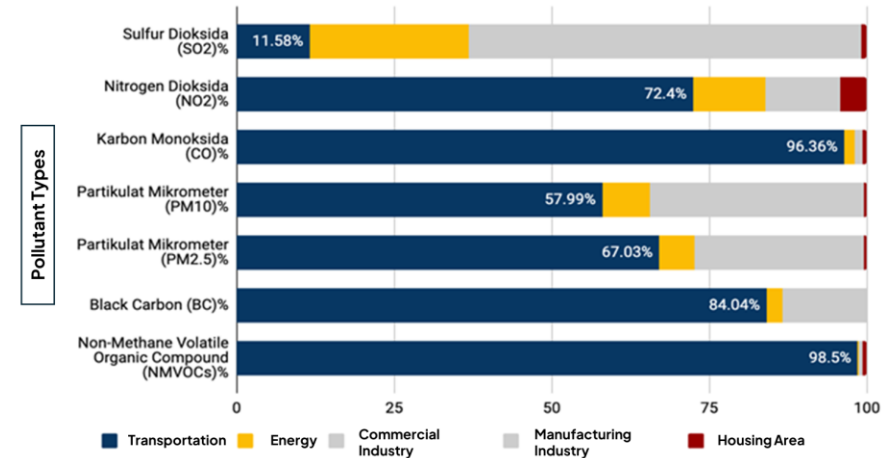
Chaotic conditions in
train station areas

ENVIRONMENTAL

Pollution

- ❖ The **Transportation Sector** is the main source of the largest air pollution in Jakarta.

The contributors to air pollution in Jakarta by sector



Source: DLH
DKI Jakarta
(2020)

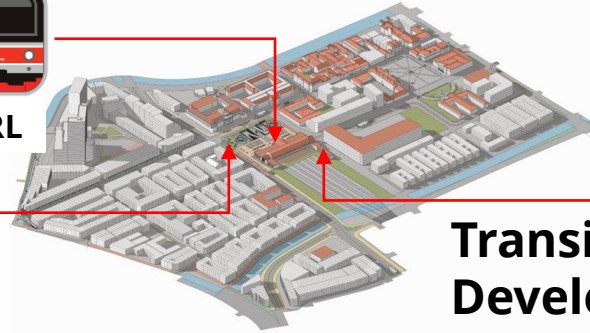
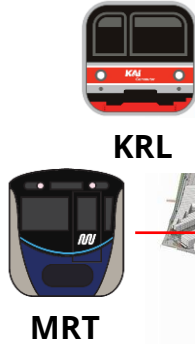
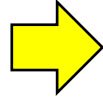
- ❖ **Motorcycles** contribute 44.5%, and **cars** contribute 14.2%
- ❖ The **air quality** of Jakarta stood at **156 US AQI** and **1st rank as the most polluted city in the world** on August 10, 2023 (iqair.com).



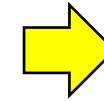
New Paradigm Transportation Policy



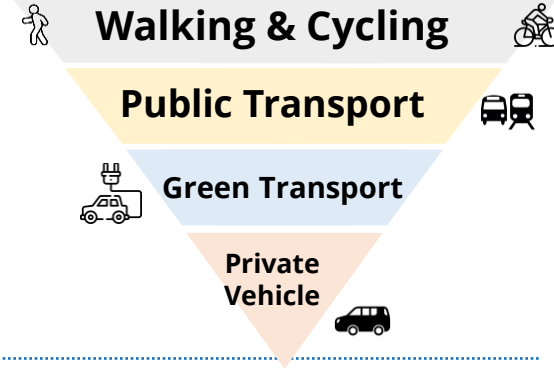
Car-Oriented Development



Transit-Oriented Development



TRANSPORT PRIORITY



PUSH & PULL STRATEGY

Push:

- Odd-Even Policy
- Traffic Management: ATCS, One-way system, U-Turn closure
- Parking Management (Incentive/Disincentive)
- Electronic Road Pricing (plan)

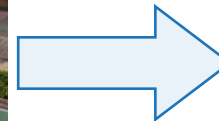
Low Emissions Zone (LEZ)

Pull:

- Development of Public Transportation:** MRT, LRT, BRT, Seaport
- Improvement in Alternative Modes:** Cycling Improvements, Pedestrian Improvements, NMT, Bike Sharing, Transit Improvement, and Complete Streets
- Planning- Integrated Land Use and Transport:** Transit Oriented Development (TOD)
- Travel Behavior Change Programs:** Transit, Walk and Cycling Encouragement
- Park and Ride near Public Transport**

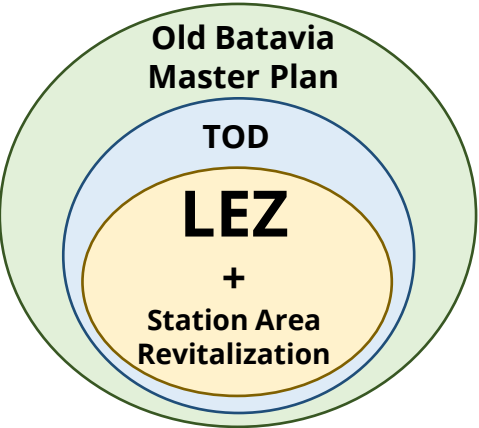
PUBLIC TRANSPORT ELECTRIFICATION

2023: 100 electric bus units of Transjakarta have been operated



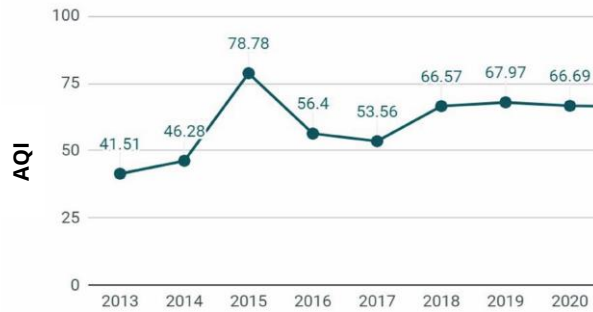
Target for 2030: 100% electrification for all Transjakarta bus units

History LEZ in Jakarta



KOTA TUA JAKARTA

Kota Tua Jakarta (Old Batavia) is a heritage site as a tourism destination



Source: DLH DKI Jakarta (2021)

TEBET ECO PARK

To provide a third place for Jakartans and enlarging the green area → Green Space-Park → **Tebet Eco park**



In 2022, the Jakarta Government revitalized a park in Tebet, South Jakarta into Tebet Eco Park, covering an area of **7.3 hectares**.



The existence of Tebet Eco Park has led to **congestion and crowded** due to **illegal parking spaces** and **street vendors**



The implementation of the LEZ is carried out as an effort to address traffic congestion in the Tebet Eco Park area

Legal basis:

Governor's Decree number 576 year 2023 - Air Pollution Control Strategy

Since 2018, the increase in Air Quality Index (AQI) has not been significant and has even experienced a decline over the past three years



The implementation of the **LEZ** in **Kota Tua** area primarily aims to preserve the **ancient historical buildings** in the area

Legal basis:

- Governor Regulation number 36 year 2014 – Old Batavia Master Plan
- Governor's Instructions number 66 year 2019 – Vehicle Emission Test
- Governor's Decree number 576 year 2023 – Air Pollution Control Strategy

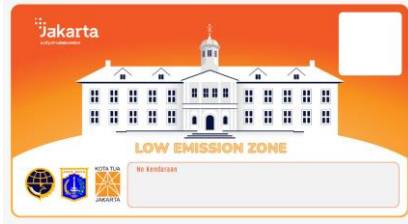
LEZ Implementation in Kota Tua

- The LEZ Area: ±1,72 km road segment (covering 4 ha of 334 ha Kota Tua Area)
- Trial: 18 – 23 December 2020
- Official Start: 8 February 2021

How we Implement LEZ



All Day Access Sticker



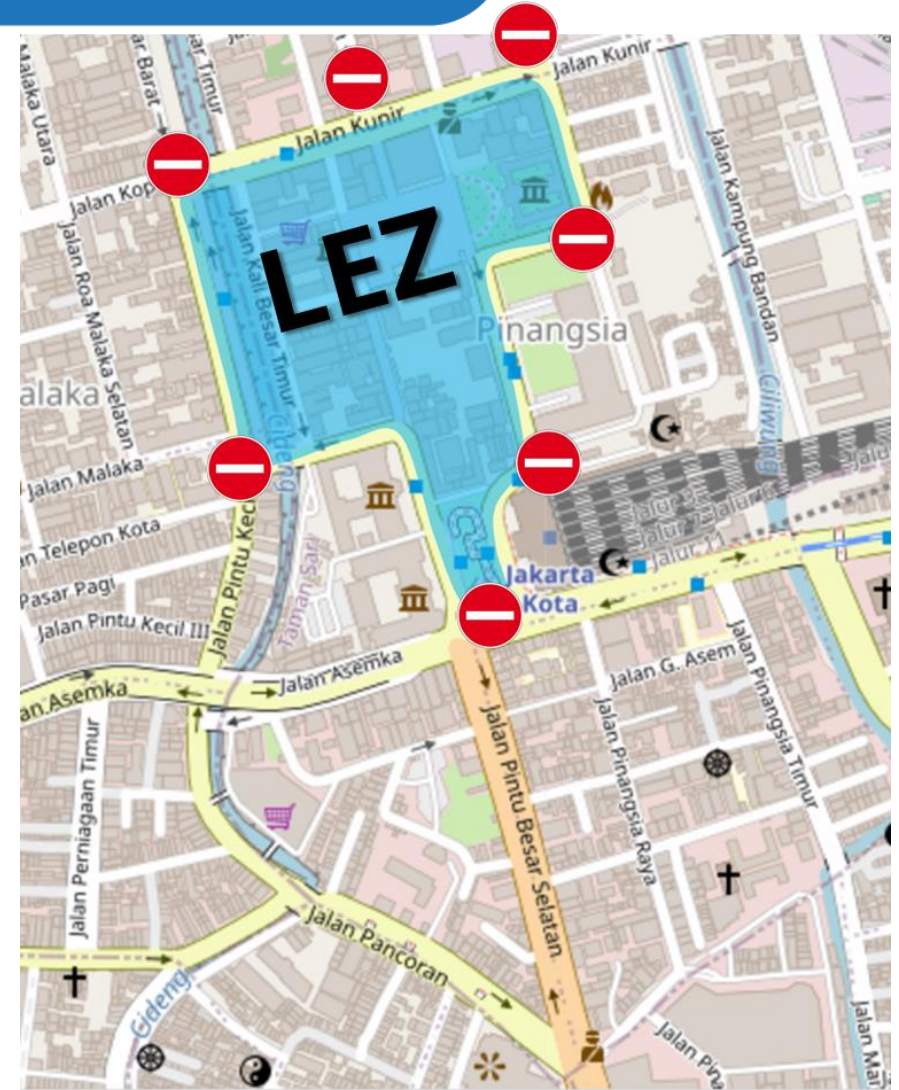
Limited Access Sticker
(06:00-08:00 & 16:00-18:00)



2. Plotting Officers to stand by for monitoring at the LEZ Area

1. Blocking 6 road segments for motorized vehicles, except for Public Transport and resident and tenant vehicles which has passed the Emission Test marked with a sticker.

3. Coordinating with Google to Change Map Option in LEZ area



Infrastructure Revitalization for Supporting Lez in Kota Tua



Changing Road into Transit Plaza



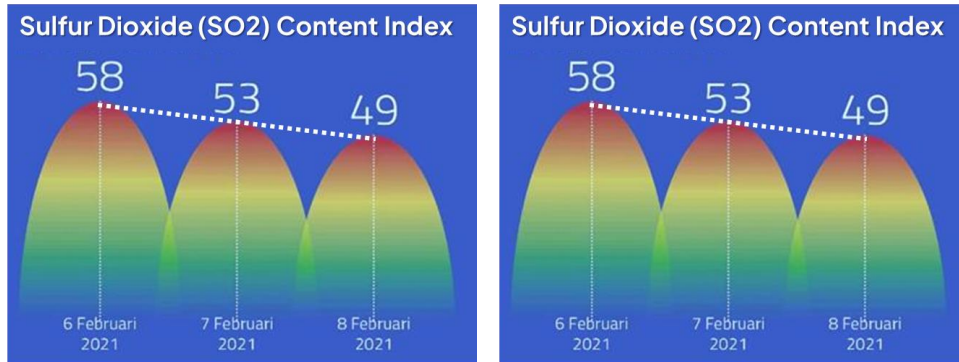
Changing Road into Pedestrian Area



Bike Lane Development

Evaluation of Lez in Kota Tua

Air Quality



Source: DLH DKI Jakarta (2021)

Traffic Performance

Intersection Points	Before Implementation			After Implementation		
	Trafficjam	Delay	LOS	Trafficjam	Delay	LOS
Simpang Jembatan Batu-Pintu Besar	52,04	118,34	LOS F	51,04	116,95	LOS F
Kali Besar Barat-Malaka	71,39	1,53	LOS A	68,78	0,44	LOS A
Gedong Panjang-Kopi	38,32	68,42	LOS F	37,97	66,78	LOS F
Kopi-Roa Malaka Selatan	172,39	63,25	LOS F	169,31	61,04	LOS F
Kali Besar Barat-Kunir	79,48	90,44	LOS F	77,05	89,32	LOS F
Kunir-Kemukus	243,52	199,31	LOS F	240,01	190,62	LOS F
Tiang Bendera-Roa Malaka Utara	185,32	34,46	LOS D	183,82	32,57	LOS D
Kali Besar Timur-Nelayan Timur	229,24	37,22	LOS E	227,25	35,88	LOS E
Cengkeh-Nelayan Timur	70,24	46,31	LOS E	68,5	45,58	LOS E

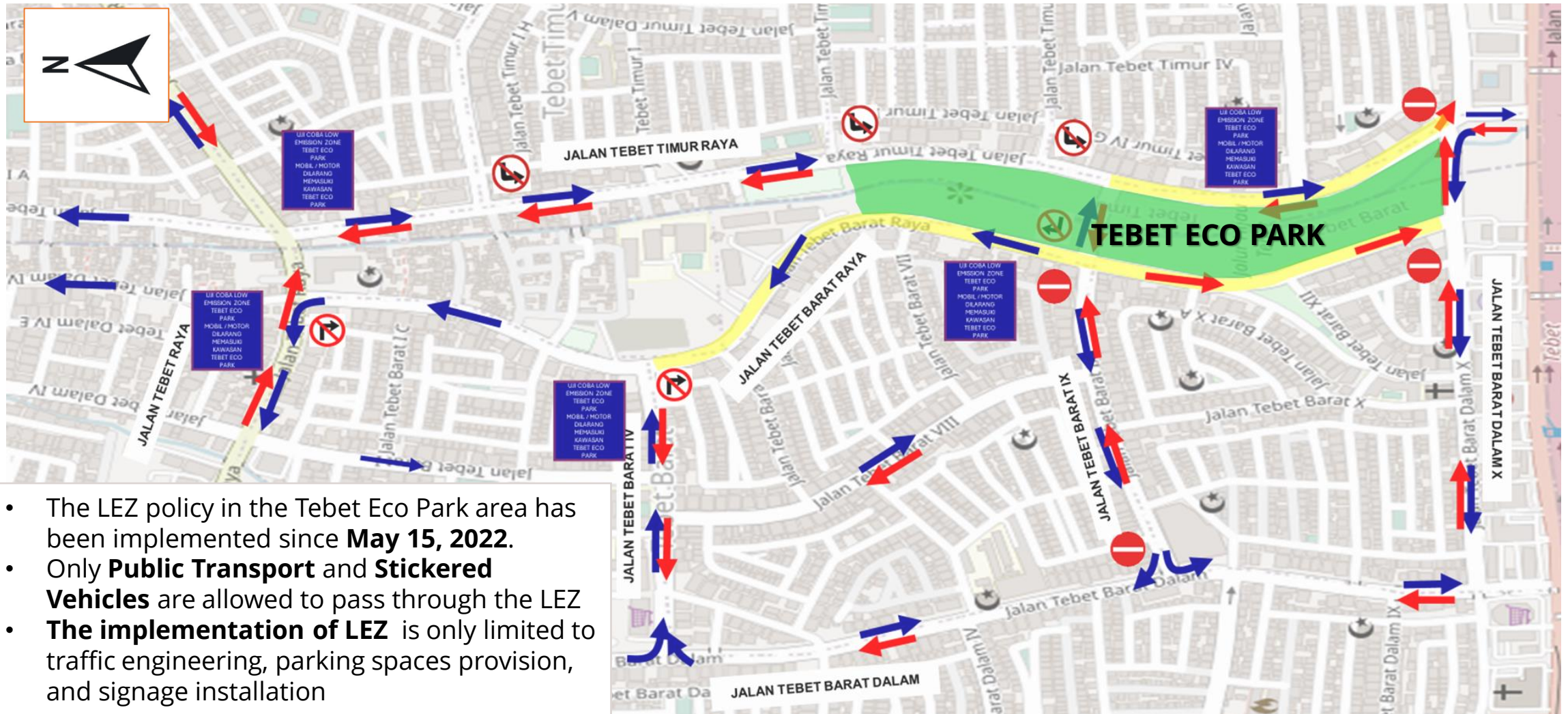
Source: ITDP (June 2022)

The Challenges

- Land Use:** Apart from heritage buildings, some buildings are utilized as a logistic center
- Narrow Street:** Blocking 6 road segments is still insufficient because there is still access through alleys/narrow streets to the LEZ
- Lack of Law Enforcement**
- Not yet finished for revitalization in the area:** Revitalization is not only needed around the station area but also needs to be expanded to the riverbanks
- Lack of Parking Area for The Bus:** Parking spaces are needed for Tourism Buses arriving from inter-city and inter-provincial
- The Development of Mass Rapid Transit till Kota Tua - Under Construction**
- Traffic move to other segments road**

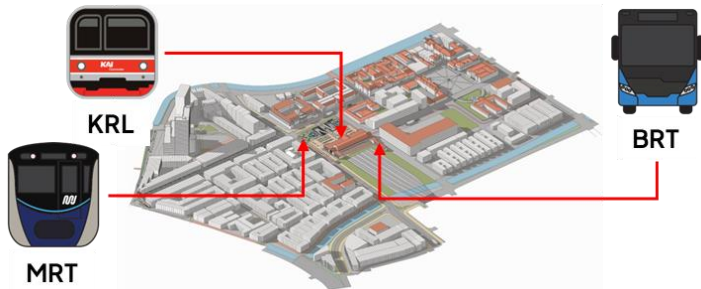
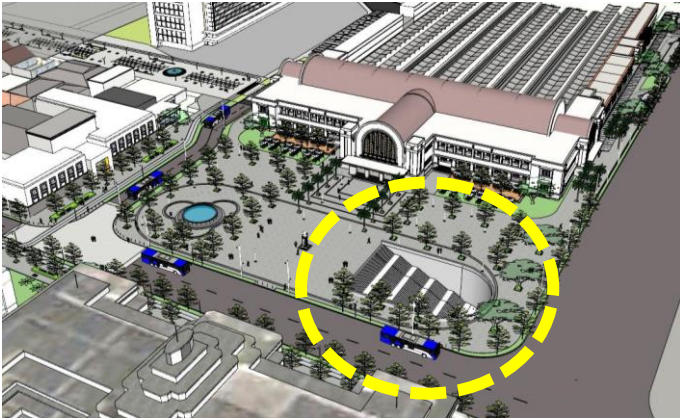


LEZ Implementation in Tebet Eco Park



- The LEZ policy in the Tebet Eco Park area has been implemented since **May 15, 2022**.
- Only **Public Transport** and **Stickered Vehicles** are allowed to pass through the LEZ
- **The implementation of LEZ** is only limited to traffic engineering, parking spaces provision, and signage installation

What's Next



- ❑ 2024: LEZ Standard/Parameters + The Roadmap of LEZ
- ❑ 2025: Legal basis for The LEZ
- ❑ Expanding Kota Tua Revitalization Area and re-arrange the land used → **extensification LEZ Kota Tua**
- ❑ 2029 Mass Rapid Transit (MRT) will be operated until Kota Tua for better integration and adding public transport mode alternatives
- ❑ Transit-Oriented Development (TOD) in 24 locations, including Glodok-Kota Tua Area
- ❑ Combining LEZ + Others Push/Pull Policy

Thank You



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