Jakarta
Voluntary Local Review

Building a Liveable and Sustainable Global City

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Jakarta
Voluntary Local Review 2024

Building a Liveable and Sustainable Global City

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“Building a Liveable and Sustainable Global City”

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Jakarta Car-free Day that be held every Sunday morning at Thamrin - Sudirman Road

Source: Mahendra Putra (Unsplash)

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Contents

Lapangan Banteng
Source: Rival Sitorus (Unsplash)

Dukuh Atas pedestrian crossing bridge
Source: Socrates Bangun (Pexels)

Glossary

Adiwiyata	An environmental program in Indonesia that aims to increase school environmental awareness
AI	Artificial Intelligence
AKBa	Under-five mortality rate
AKN	Neonatal Mortality Rate
AOI	Agricultural Orientation Indeks
APK	Gross Participation Rates
APM	Net Participation Rate Ratio
AQI	Air Quality Index
ASEAN	Association of Southeast Asian Nations
BA	Bustanul Athfal/Playgroup
B2SA	*Beragam, Bergizi Seimbang, dan Aman* (Varied, Nutritionally Balanced, and Safe)
B2W	Bike to Work
BPJS Kesehatan	*Badan Penyelenggara Jaminan Sosial Kesehatan* (National Health Insurance)
BRT	Bus Rapid Transit
BLU	*Badan Layanan Umum* (Public Service Agency)
BSF	Black Soldier Fly
BUMD	*Badan Usaha Milik Daerah* (Regional-Owned Enterprise)
CCTV	Closed-Circuit Television
CO2	Carbon Dioxide
COVID-19	Coronavirus Disease 2019
DPRD	*Dewan Perwakilan Rakyat Daerah* (Regional Legislative Council)
DLH	*Dinas Lingkungan Hidup* (Regional Environment Agency)
DTKJ	*Dewan Transportasi Kota Jakarta* (Jakarta City Transportation Council)
D4	Applied Bachelor
EVs	Electric Vehicles
EWS	Early Warning Systems
FGD	Focus Group Discussions
FIES	Food Insecurity Experience Scale
GBCI	Green Building Council Indonesia
GDP	Gross Domestic Product
GRDP	Gross Regional Domestic Product

GHG	Greenhouse Gas
GPS	Global Positioning System
HDPE	High-Density Polyethylene
HLAG-ST	High-Level Advisory Group on Sustainable Transport
ICT	Information and Communication Technology
IoT	Internet of Things
IPAK	*Indeks Perilaku Anti Korupsi* (Anti-Corruption Behavior Index)
ITDP	Institute for Transportation and Development Policy
Jabodetabek	Jakarta, Bogor, Depok, Tangerang, and Bekasi
JAKI	*Jakarta Kini*
JICA	Japan International Cooperation Agency
JSS	Jakarta Sewerage System
JPOI	Johannesburg Plan of Implementation
Kampung Iklim	A Program to address the climate vulnerability of the local communities by helping them to adapt and mitigate its effects
KBLBB	*Kendaraan Bermotor Listrik Berbasis Baterai* (Battery-Based Electric Motor Vehicle)
KEPGUB	*Keputusan Gubernur* (Governor Decree)
KLHS	*Kajian Lingkungan Hidup Strategis* (Strategic Environmental Assessment)
KPBDU	*Kerjasama Pemerintah Daerah dan Badan Usaha*
KPLDH	*Ketuk Pintu Layani Dengan Hati*
KRL	*Kereta Rel Listrik* (Commuter Line)
LRT	Light Rail Transit
LPG	Liquified Petroleum Gas
MCP	Mini Collection Points
MONAS	*Monumen Nasional* (National Monument)
MRT	Mass Rapid Transit
MSMEs	Micro, Small, and Medium Enterprises
mCPR	Modern Contraceptive Prevalence Rate
NCICD	National Capital Integrated Coastal Development
NGO	Non Government Organization
PAD	*Pendapatan Asli Daerah*
PAM JAYA	*Perusahaan Umum Daerah* (PERUMDA) *Air Minum Jaya*
PERTUNI	*Persatuan Tunanetra Indonesia*
PKK	*Pemberdayaan Kesejahteraan Keluarga* (Family Welfare Movement)
PLN	*Perusahaan Listrik Negara* (State Electricity Company)
PLTP	*Pembangkit Listrik Tenaga Panas Bumi* (Geothermal Power Plant)
PLTS	*Pembangkit Listrik Tenaga Surya* (Solar Power Plant)
PNB	People Near Bikeways
PPP	Purchasing Power Parity
PPH	*Pola Pangan Harapan* (Expected Food Pattern)
PUS	*Pasangan Usia Subur (*Couples of Childbearing Age*)*

PUSPA	*Pusat Pelayanan Keluarga*
RCIFunds	Resilient Community Impact Funds
R-CITIES	Resilient Cities Network
RPD	*Rencana Pembangunan Daerah* (Regional Development Plan)
RPTRA	*Ruang Publik Terpadu Ramah Anak* (Child-Friendly Integrated Public Space)
RSPV	Rooftop Solar Photovoltaic
RTH	*Ruang Terbuka Hijau* (Green Open Space)
RTRW	*Rencana Tata Ruang Wilayah* (Regional Spatial Planning)
RW	Rukun Warga (Neighbourhood Units)
RB	*Reformasi Birokrasi* (Beaucracy Reform)
SAKIP	*Sistem Akuntabilitas Kinerja Instansi Pemerintah* (Government Agency Performance Accountability System)
SDGs	Sustainable Development Goals
SD	*Sekolah Dasar* (Elementary Schools)
SMA	*Sekolah Menengah Atas* (Senior High School)
SMEs	Small and Medium-Sized Enterprises
SMP	*Sekolah Menengah Pertama* (Junior High School)
SMK	*Sekolah Menengah Kejuruan* (Vocational High School)
SLB/PLB	*Sekolah Luar Biasa/Pendidikan Luar Biasa* (Special School)
SJSN	*Sistem Jaminan Sosial Nasional* (National Social Security System)
SPAB	*Satuan Pendidikan Aman Bencana* (Disaster Safe Education Unit)
SPALD-T	*Sistem Pengelolaan Air Limbah Domestik Terpusat* (Centralised Domestic Wastewater Management System)
SPKLU	*Stasiun Pengisian Kendaraan Listrik Umum* (Public Electric Vehicle Charging Stations)
SWRO	Sea Water Reverse Osmosis
TOD	Transit-Oriented Development
TFR	Total Fertility rate
TPA	*Tempat Pembuangan Akhir* (Landfills)
TV	Television
UN	United Nations
USTDA	United States Trade and Development Agency
VAT	Value-Added Tax
VLR	Voluntary Local Review
WUS	*Wanita Usia Subur* (Women of Childbearing Age)
WASH	Water Sanitation and Hygiene
WTP	*Wajar Tanpa Pengecualian* (Unqualified Opinion)
YPAC	*Yayasan Penyandang Anak Cacat*

Executive summary

As the largest metropolitan centre in Indonesia, Jakarta is facing numerous urban challenges. The city's growing population, coupled with the impacts of climate change, demands innovative solutions to address the challenges and ensure sustainable development. Additionally, the ongoing relocation of Indonesia's capital to Nusantara presents both opportunities and challenges for Jakarta's role as the nation's primary business and financial hub. This potential shift poses significant challenges for Jakarta's future development and identity, affecting various aspects of its infrastructure, economy, and growth trajectory. However, amid this challenge lies the opportunity for Jakarta to enhance its focus on evolving into a global city.

In this context, the 2024 Jakarta Voluntary Local Review (VLR) acts as an instrument to align Jakarta's efforts in transforming into a global city and achieving SDG targets. The VLR is themed "Building a Liveable and Sustainable Global City", and centres on key aspects which characterise a global city, including liveability, environment, and accessibility. Each of these dimensions is critical to enhance the city's overall sustainability and to ensure a high quality of life for its residents.

In terms of liveability, Jakarta is committed to fostering a healthier and more vibrant urban environment. This includes improving the city's public space quality, ensuring access to basic services, implementing sustainable waste initiatives, and promoting better health services. These measures are aimed at fostering a community where residents can thrive and enjoy a higher standard of living. Environmental initiatives are also at the forefront of Jakarta's development agenda. The city is working to protect natural environments, develop climate-resilient infrastructure, enhance hazard awareness tools, and scale up renewable energy use. These efforts are essential for building a city that can withstand the pressures of rapid urbanisation and climate-related disasters, ensuring long-term sustainability and resilience. Jakarta also prioritises initiatives to improve the city's accessibility. By investing in public transportation infrastructure and implementing policies that prioritise sustainable mobility, Jakarta aims to tackle traffic congestion, lower emissions, and develop a more efficient and accessible transportation network.

As of 2023, Jakarta has made significant progress in achieving the targets set for every pillar of sustainable development. In terms of social aspect, there has been notable improvement in various indicators. The post-pandemic poverty rate has continued to decline since March 2021, along with the extreme poverty rate. However, the city's infant mortality rates saw an increase in recent years.

Economically, Jakarta has experienced positive growth in 2023, marked by increased workforce participation and decreased unemployment rates. Additionally, the city's realised budget demonstrates solid performance, characterised by strong revenue growth and expenditures in line with the established budget. In terms of energy, all Jakarta's residents have access to electricity, and almost all use gas for cooking. Nevertheless, the manufacturing and export sectors face challenges due to global economic slowdown and geopolitical tensions.

In environmental aspects, Jakarta has seen positive advancements towards achieving sustainability targets. Access to safe drinking water and proper sanitation has improved, which is vital for the well-being of Jakarta's residents. Land quality index has also shown improvement, reflecting commitment to sustainable resource management. Furthermore, there has been a reduction in annual greenhouse gas emissions, indicating progress towards climate change goals. In marine ecosystems, regulatory frameworks protecting the rights of small-scale fisheries have been established, ensuring the welfare of local fishermen and the sustainability of aquatic ecosystems.

On the law and governance pillar, Jakarta has also made positive progress. For instance, the conflict-related deaths per 100,000 population has decreased consistently over the past two years. Additionally, government agencies' compliance with public service standards has continued to improve in recent years.

The Jakarta Provincial Government has set 86 targets and 154 indicators to measure the achievement of the SDGs, as outlined in the Regional Action Plan for Sustainable Development Goals (SDGs) 2023-2026. Currently, only 64.2 percent (99 indicators) have available data. Of these, 68.7 percent have met the 2023 targets. However, 16.2 percent indicators need special attention as they have declined and failed to meet the targets, requiring acceleration to get back on track. By pillars, the best performance is seen in the law and governance pillar, with 78.6 percent of indicators achieved. Conversely, the economic pillar has the highest number of worsening indicators, accounting for 26.1 percent. Overall, the report indicates that the achievement of SDGs in Jakarta has been positive. All attained SDG targets need to be sustained, while areas that require improvement should be addressed and given further attention.

Aerial view of Bundaran HI
Source: ghary525 (Pixabay)

Foreword

Assalamu'alaikum Warahmatullahi Wabarakatuh

On behalf of the Jakarta Capital City Government and its people, I am honored to reaffirm Jakarta's commitment to achieve the Sustainable Development Goals (SDGs) by 2030. Jakarta consistently prioritises the principles of sustainability, recognizing the crucial role of the SDGs in ensuring residents well being and the sustainability of the city.

In 2021, Jakarta became the first city in Southeast Asia to receive the **Sustainable Transport Award.** The city also received the **Adipura Award** by the Indonesian Ministry of Environment and Forestry for its success in maintaining urban cleanliness and environmental management in the year 2023. These achievements underscore Jakarta's commitment to creating a cleaner, greener, and liveable urban environment, representing positive progress in building a more sustainable city.

As Indonesia relocates its capital to Nusantara, Jakarta is transitioning to become a prominent global economic and business centre. In view of this, the Jakarta Capital City Government has prepared the second Voluntary Local Review (VLR), focusing on the city's efforts to achieve the SDGs while becoming a sustainable global city. This report presents a thematic overview of Jakarta's initiatives and achievements in advancing sustainability across various sectors, particularly in key areas characteristic of a global city.

The preparation of the 2024 Jakarta VLR has been made possible through contributions from various stakeholders, both governmental and non-governmental. We extend our appreciation to all parties involved in crafting this report and for their active contributions to achieving the SDGs in Jakarta.

Through this VLR, Jakarta is ready to share its achievements and aspirations, and to work collaboratively towards a brighter, more sustainable future for Jakarta and its residents. May this report encourage synergy and optimal efforts in achieving the SDGs by 2030.

Jakarta's success for Indonesia.

Wassalamu'alaikum Warahmatullahi Wabarakatuh.

Heru Budi Hartono
Acting Governor of Jakarta

Message

As the Chairman of Jakarta Regional Development Planning Agency, I am pleased to present Jakarta's second Voluntary Local Review (VLR). This report offers a thematic overview of our endeavours and accomplishments in promoting sustainability within our city.

Cities are increasingly recognized as pivotal players in addressing global challenges through localised actions aligned with the Sustainable Development Goals (SDGs). These goals are interconnected, emphasising the need to address urban challenges alongside improvements in health, education, infrastructure, economic growth, and climate resilience.

Jakarta remains committed to creating an inclusive social, physical, and cultural environment that supports the health and well-being of its residents. As a city conscious of climate issues, Jakarta is actively adapting to and mitigating risks associated with climate change. Through practical solutions, we aim to address environmental challenges and have committed to reducing emissions by 30 percent by 2030 and achieving Net Zero Emission status by 2050. Additionally, as Jakarta evolves into a prominent global city, we prioritise the diversification of the public transport network to enhance safety, affordability, accessibility, and sustainability citywide.

Our report encapsulates progress and challenges across various aspects, from health to urban infrastructure. The report also highlights the collaborative efforts of numerous stakeholders dedicated to advancing sustainability in Jakarta and beyond. While acknowledging that challenges remain, the report underscores the significant progress Jakarta has made in pursuing its ambitious goals. It reflects our unwavering local commitment to addressing global challenges through collaboration and partnership, showcasing numerous initiatives aimed at advancing the SDGs within the city.

By contributing to this global conversation and demonstrating our collective capacity to achieve these goals, Jakarta reaffirms its role as an active participant in the global sustainability agenda. Together, we can continue to drive positive change and create a more sustainable future for our city and the world.

Atika Nur Rahmania

Chairman of
Jakarta Regional
Development Planning Agency

Welcome to

Jakarta

'Selamat Datang' monument at Bundaran HI

Source: Tom Fisk (Pexels)

Jakarta

660.98
km² land area

Administrative area

- 5 cities
- 1 regency
- 44 districts
- 267 subdistricts

Jakarta is the capital of Indonesia and serves as the country's cultural, political, and financial centre. Founded in the 16th century, Geographically, Jakarta is located on the northwest coast of Java, situated on a low and flat alluvial plain with an average altitude of +7 metres above sea level (BPS Jakarta, 2024). Jakarta is at the heart of the Jabodetabekpunjur agglomeration, which includes Jakarta, Bogor, Depok, Tangerang, Bekasi, Puncak, and Cianjur. This strategic positioning offers significant advantages and also presents challenges for the city's development. With almost 11 million residents, Jakarta is the sixth most populous province in Indonesia, which has a total population of 280.73 million. The city's population has grown rapidly in recent years due to both a high birth rate and immigration. This rapid population growth has placed increasing demands on the city's infrastructure and services, necessitating comprehensive urban planning and development strategies (Ministry of Home Affairs, 2024).

Economically, Jakarta is the powerhouse of Indonesia, contributing a significant portion of the national GDP. Key sectors driving the city's economy include finance, manufacturing, trade, and services. Jakarta is home to the Indonesia Stock Exchange, numerous multinational corporations, and a rapidly expanding startup scene (BPS Jakarta, 2024). The city's skyline is marked by high-rise buildings, modern shopping malls, and luxurious hotels, reflecting its status as one central hub for business and commerce in Southeast Asia. Despite its economic strength, Jakarta faces pressing challenges such as income inequality and urban poverty.

Culturally, Jakarta is a melting pot of Indonesia's diverse heritage. The city attracts people from across the archipelago, bringing a rich tapestry of languages, traditions, and cuisines. This cultural diversity is evident in Jakarta's vibrant festivals, varied culinary scene, and bustling markets. Notable cultural landmarks include the National Monument (Monas) and the Istiqlal Mosque, the largest mosque in Southeast Asia. Jakarta also hosts numerous museums, art galleries, and cultural events that celebrate both traditional and contemporary Indonesian art and culture

Water geography

32 km coastline to north

13 rivers **2** floodways

2 canals

Demography

10.68 million
population (2023)

Population by gender

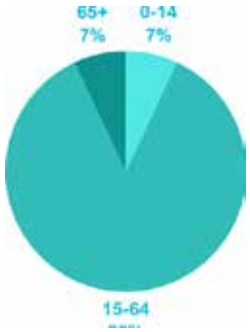
5.38 mio male	**5.30** mio female

Population density
17,153
person /km²

Av. population growth
0.09-0.12%

Projected population
11.24
million in **2045**

Ratio by age



Number of Businesses

Startups	Labor-force	Employed People	Inflation Rate (2023)
539	5.43mio	5.07mio	2.28 yoy

Economy

GRDP (2023)
3,442.98 trillion
(BPS Provinsi DKI Jakarta, 2024)

Economic Growth (2023)
4.96%

Per Capita GRDP
IDR 322.62 million

Contribution to Indonesia's Economy (2023)
16.77% (BPS, 2024)

Share of GRDP per Sector (2023)
- Wholesale & Retail trade 17.67%
- Manufacturing 11.87%
- Financial Services 11.09%
- Others 59.37%

GDI
95.24 (2023)

Provincial government budget

Annual Budget (2023)
IDR **83.78** trillion

Annual Revenue (2023)
IDR **27.03** trillion

Tax Revenue (2023)
IDR **12.72** trillion

Key statistics

Human Development Index
83.55 (2023)

Life Expectancy
73.65 years (2023)

Unemployment Rate
6.53% (2023)

Poverty Rate
4.44% (Mar 2023)

Number of Poor People
477,83k (Mar 2023)

Gender Development Index
95.24 (2023)

Key municipal responsibilities

Indonesia operates under a three-tiered system of government, consisting of the national, provincial, and local levels. Elections are conducted every five years for all three tiers. Jakarta, as the capital city, falls under the provincial jurisdiction and is further divided into five city administrations and one administrative regency, comprising a total of 44 districts and 267 sub-districts. The geographical area of Jakarta spans 7,660 square kilometres, including 660.98 square kilometres of landmass and 6,977 square kilometres of ocean, which includes 113 islands scattered across the Kepulauan Seribu (BPS Jakarta, 2024).

Within Jakarta, provincial responsibilities are divided among various departments and agencies. These entities oversee crucial aspects of the city management, including public health, education, traffic control, urban planning, and cultural affairs. Additionally, certain operations are entrusted to regional-owned enterprises, which focus on key areas such as transportation, water management, and cultural promotion. Through these departments, agencies and its regional-owned enterprises, the Provincial Government strives to ensure the efficient delivery of essential services and the sustainable development of the city.

The city's commitment to address diverse urban challenges is reflected in its multifaceted approach to governance and service provision. By decentralising responsibilities to local administrations and leveraging regional-owned enterprises, Jakarta addresses the evolving needs of its residents while promoting economic growth, social well-being, and environmental sustainability across the metropolitan area.

Jakarta's key challenges and opportunities

A growing population

Jakarta, the largest metropolitan centre in Indonesia, is home to over 10 million residents. This number does not include the millions of commuters who travel daily from surrounding areas such as Bogor, Depok, Tangerang, and Bekasi (Jabodetabek) mainly for work. The Jakarta metropolitan area, known as Jabodetabek, has a population exceeding 30 million people, making it the most populous region in Indonesia and the second-most populous urban area in the world after Tokyo. This rapid urbanisation, driven primarily by migration, presents significant challenges for the city.

One of the most pressing issues Jakarta faces due to its growing population is traffic congestion and urban sprawl. The increasing number of vehicles exacerbates congestion, leading to longer commute times, increased fuel consumption, and higher levels of air pollution. According to the TomTom Traffic Index 2023, Jakarta was ranked 30th in the world for traffic congestion. The average time spent travelling 10 kilometres in Jakarta was 23 minutes, with an average maximum speed of 21 kilometres per hour. Additionally, in August 2023, Jakarta was ranked as the city with the worst air quality globally, with an Air Quality Index (AQI) of 172, falling under the unhealthy category.

The transportation sector is a major contributor to air pollution in Jakarta, accounting for approximately 53 percent of the total greenhouse gas emissions in the city (Jakarta Environment Department, 2022). This places transportation as the largest contributor to the city's direct emissions. Direct emissions from transportation, including fuel combustion in vehicles, industrial processes, and commercial operations, make up a significant portion of the city's pollution levels, reaching about 29 percent. These emissions put immense pressure on air quality, resulting in tangible health impacts on Jakarta's residents.

Another significant challenge Jakarta faces due to its growing population is waste management. The city's landfill capacities are insufficient, unable to keep up with the solid waste production. Jakarta's landfill capacity in Bantar Gebang is around 6,000 tons per day, but the waste generated in Jakarta exceeds 7,000 tons daily. These challenges contribute to increased disease prevalence among the population and higher cases of stunting in both mothers and children due to pollution and inadequate sanitation.

Furthermore, Jakarta is facing the imminent threat of a water crisis. The city's rapid development, marked by a surge in skyscraper construction, has significantly increased the demand for groundwater, leaving Jakarta's water supply in a precarious situation. In 2023, the metropolis with a population of 10.68 million required roughly 33 m^3 per second of clean water, while the production capacity of PAM JAYA, the city's water utility, was only 21.1 m^3 per second. This resulted in a significant deficit of around 11.9 m^3 per second, highlighting the urgent need for sustainable water management solutions.

A changing climate

Jakarta is particularly vulnerable to the impacts of climate change, including sea level rise, floods, urban heat island, and food shortages. Sea level rise poses a significant threat to Jakarta due to its low-lying coastal location. As sea levels continue to rise, Jakarta faces an increased risk of flooding, particularly during high tides and storm surges. The sinking of the city, known as land subsidence, exacerbates the impact of rising sea levels. With approximately 40 percent of Jakarta land already below sea level (Climate Champions, 2022), the city's vulnerability to flooding has become a major concern.

Frequent floods have become a common occurrence in Jakarta, posing significant challenges to the city's infrastructure and residents. Urban areas are particularly vulnerable, with floods causing damage to homes, businesses, and public infrastructure. The city's urban heat island effect (Siswanto et al., 2023) further intensifies the impact of climate change. As the city's population and urbanisation increase, so does the heat absorbed and retained by buildings and pavement, leading to higher temperatures and increased energy consumption.

Moreover, climate change also poses a risk of food shortage in Jakarta. Rising temperatures, changes in rainfall patterns, and the loss of agricultural land to urban development threaten food security in the city. Without adequate measures to address these challenges, Jakarta's growing population faces the risk of food insecurity. By implementing strategies to mitigate the impact of climate change, Jakarta can work towards a more sustainable and resilient urban environment.

Indonesia's capital relocation

As Indonesia considers moving its capital city, Jakarta faces the imminent prospect of no longer serving as the nation's administrative centre. This potential shift poses significant challenges for Jakarta's future development and identity, affecting various aspects of its infrastructure, economy, and growth trajectory. However, amid this challenge lies the opportunity for Jakarta to enhance its focus on evolving into a global city.

Jakarta is already on the path towards becoming a global city. According to the Global Power City Index, Jakarta ranks 74th out of 156 cities globally in 2023. Additionally, Jakarta is also ranked 45th out of 48 cities based on the Global City Index of 2023, and holds the 131st position out of 173 cities according to the Global Liveability Index (GLI) 2023. The provincial government has also set a strategic framework to transform Jakarta into a global city, as outlined in Jakarta's Regional Development Plan (RPD) 2023-2026 and the Long-Term Regional Development Plan (RPJPD) 2005-2025. The plan focuses on key areas such as infrastructure enhancement, economic diversification, environmental sustainability, and social development, all of which are critical for elevating Jakarta's status as a globally competitive city.

The relocation of the capital could accelerate this process, providing Jakarta with the opportunity to further strengthen its position as a global city in the region. By shifting its focus from being the administrative hub to enhancing its global competitiveness, Jakarta can leverage this transition to attract international businesses, improve infrastructure, and elevate the quality of life for its residents, in the aim of solidifying its status as a prominent global city.

Sky view of Jakarta
Source: Tom Fisk (Pexels)

Jakarta's commitment to the UN 2030 agenda for sustainable development

Jakarta has demonstrated a strong commitment to the UN 2030 Agenda for Sustainable Development by actively engaging in the implementation of the Sustainable Development Goals (SDGs) at the local level. The city recognises the importance of balancing and integrating all dimensions of sustainability. This includes social, economic, environmental, and governance aspects to ensure comprehensive progress and inclusivity.

The commitment to the UN 2030 Agenda is evident in Jakarta's adoption of Governor Regulation No. 156 of 2018, which established the Local Action Plan for Sustainable Development Goals 2018-2022. This regulatory framework outlines specific targets and indicators relevant to Jakarta's unique context, providing a roadmap for achieving the SDGs within the city.

Moreover, Jakarta is currently in the process of formulating the Local Action Plan for Sustainable Development Goals for the period 2023-2026. This ongoing effort underscores the city's dedication to long-term sustainability and aligns closely with the Regional Development Plan (*Rencana Pembangunan Daerah*/ RPD) for 2023-2026, which prioritises key issues such as disaster resilience, economic inclusivity, and environmental sustainability.

To facilitate the implementation of the SDGs, Jakarta has established a Coordination Team for Achieving Sustainable Development, led by the Governor and supported by various government and non-government stakeholders. This team coordinates efforts across different sectors and ensures a holistic approach to SDG implementation, focusing on areas such as social development, economic growth, environmental protection, and good governance.

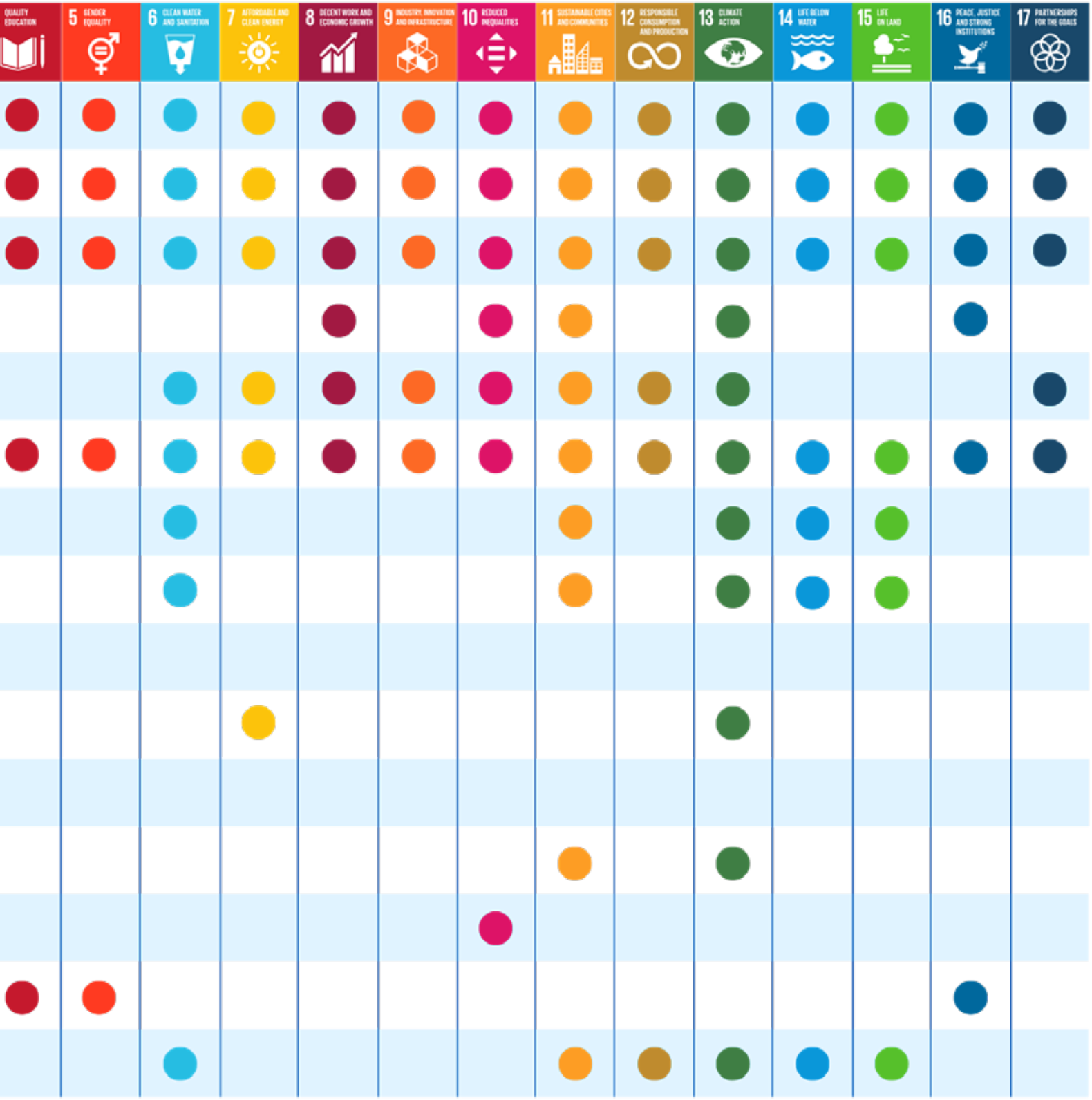
Furthermore, Jakarta regularly monitors and evaluates its progress towards the SDGs through comprehensive reporting mechanisms. This includes preparing monitoring reports every semester and annual achievement reports, as mandated by national regulations. By actively monitoring its performance, Jakarta can identify challenges, track progress, and adjust strategies as needed to ensure the effective realisation of the SDGs.

Jakarta is committed to the UN 2030 Agenda for Sustainable Development. This commitment is shown through its proactive approach in implementing the SDGs, alignment with national and regional development plans, and dedicated monitoring and evaluation. Through these efforts, Jakarta aims to contribute meaningfully to the global sustainability agenda and create a more inclusive and resilient city for its residents.

Alignment of the SDGs to Regional and National Frameworks

Jakarta has committed to implementing the SDGs at the local level, and this implementation is part of the city's efforts to achieve its development target. This work integrates the SDGs into the city's ordinary operations, and the 2030 Agenda thereby contributes to developing the city's sustainability. All of the city's operations have a responsibility to work towards the achievement of the SDGs.

	1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4
National Medium-term Development Plan 2020-2024	●	●	●	
Regional Long-term Development Plan 2005-2025	●	●	●	
Regional Development Plan 2023-2026	●	●	●	
Regional Development Work Plan 2023-2026	●		●	
Provincial Goals *(Cita Provinsi)*	●	●	●	
Strategic Environmental Study	●	●	●	
Spatial Planning Plan				
Spatial Design Plan				
Regional Energy General Plan 2023-2050				
Low Carbon Regional Development Plan				
Regional Action Plan for Food & Nutrition		●		
Regional Disaster Management Plan 2023-2027				
Regional Poverty Allevation Plan	●			
Regional Youth Development Action Plan 2020-2024				
Regional Environmental Management Performance Information Document				


QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS

Idea & structure

Jakarta, as the centre of economic, social, and political activities, plays a central role in achieving the Sustainable Development Goals (SDGs) in Indonesia. However, the city faces numerous challenges in its implementation. The city's growing population, coupled with the impacts of climate change, demands innovative solutions to ensure the city's sustainability development. Additionally, the upcoming relocation of Indonesia's capital to Nusantara presents both opportunities and challenges for Jakarta's future role as the nation's primary business and financial hub.

Within the framework of these challenges, the Voluntary Local Review (VLR) of Jakarta in 2024 chose the theme

"Building a Liveable and Sustainable Global City"

focusing on three aspects of global city, namely liveability, environment, and accessibility. The theme selection is based on the nexus between the key challenges and opportunities identified in 2023, and Jakarta's strategic issues of medium-term development in 2023-2026. The selected issues also align with the *Cita Provinsi* (Provincial Goals) of Jakarta, which includes accelerating traffic management, reducing stunting, improving environmental quality, enhancing urban infrastructure and basic services, as well as improving education and health quality.

National Monument
Source: Sulthan Auliya (Unsplash)

Liveability

- Improve the city's public space quality
- Ensure access to clean water and sanitation
- Implement sustainable waste reduction initiatives
- Enhance public health services

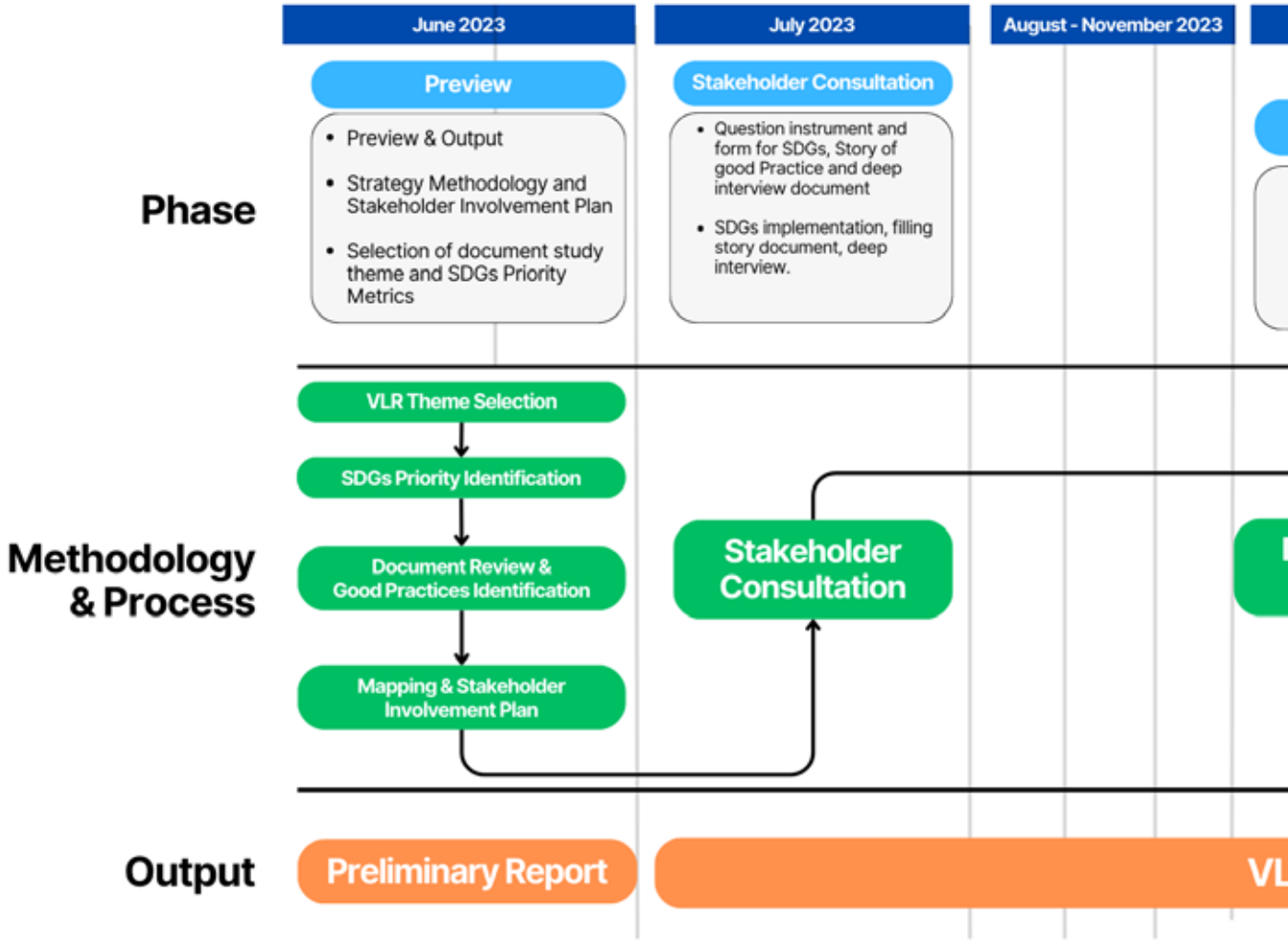
Environment

- Protect natural environment
- Develop climate-resilient infrastructure
- Enhance hazard awareness tools
- Scale up renewable energy use

Accessibility

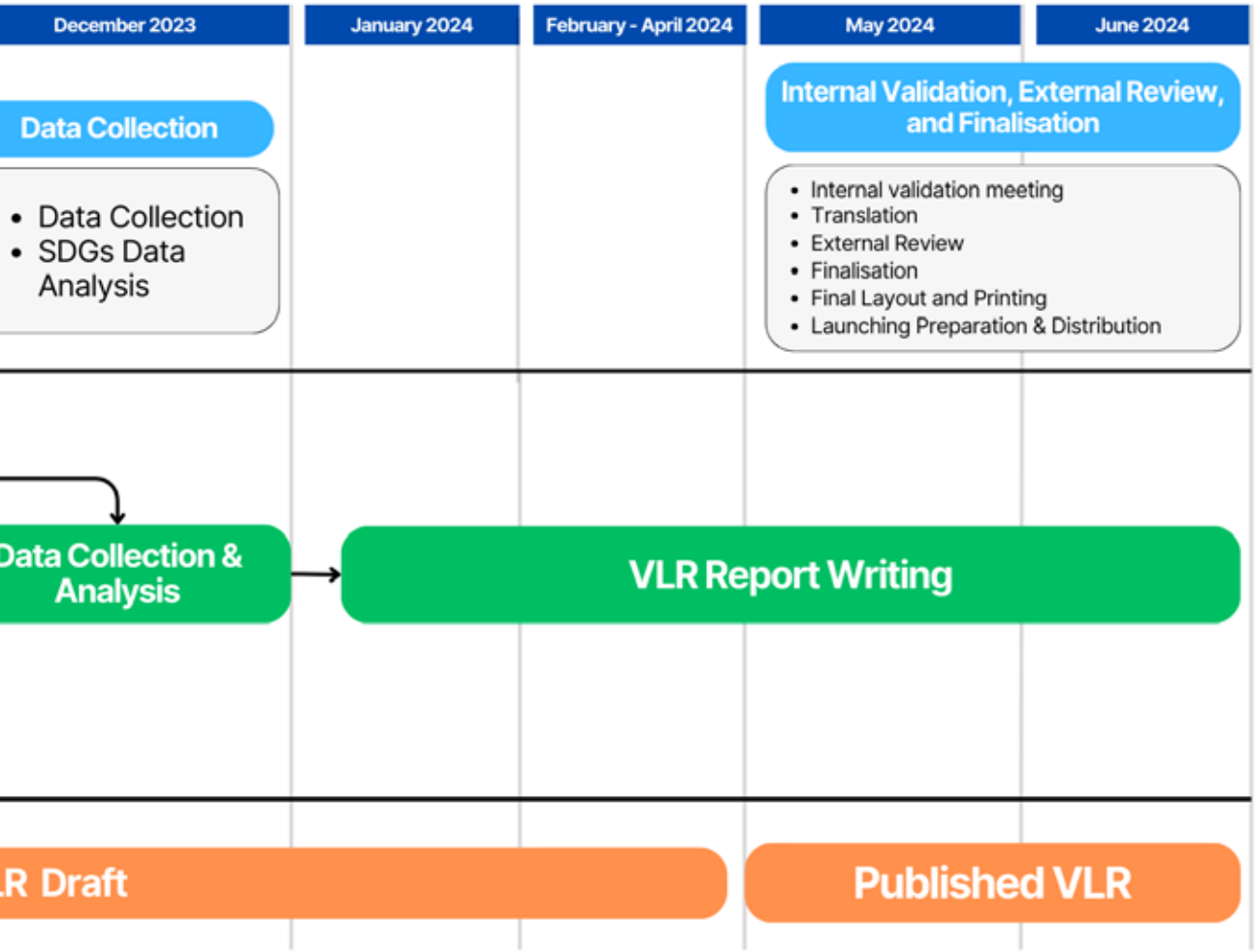
- Connect the city through integrated public transport
- Expand the variety of transport options
- Encourage sustainable and active travels
- Ensure inclusivity in transport facilities
- Build EV ecosystem
- Implement transit-oriented development

Methodology



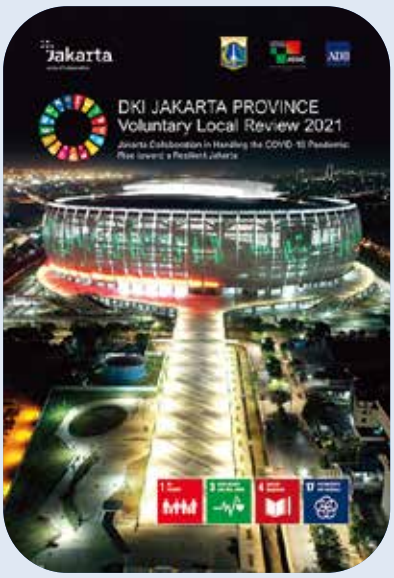
The process of writing this report involves several key steps. This includes the selection of the VLR theme, identification of selected issues, document review, and identification of initial best practices, mapping, and stakeholder engagement strategies. Additionally, the process involves the execution of stakeholder consultations through Focus Group Discussions (FGD) and interviews, as well as the collection and analysis of data.

The structure of this report adheres to the Global Guiding Elements for Voluntary Local Reviews (VLR) of SDGs Implementation published by the Department for Economic and Social Affairs, United Nations. This ensures a systematic and well-organised presentation of the information gathered during the process, facilitating a clear understanding of the strategic initiatives and policy implementations undertaken to advance sustainable development objectives in Jakarta. The adherence to established guidelines enhances the credibility and consistency of the VLR report in aligning with global standards for reporting on sustainable development efforts.



Jakarta VLR 2021

Jakarta previously developed the first VLR in 2021 with the theme **"Jakarta Collaboration in Handling the COVID-19 Pandemic: Rising Towards Resilient Jakarta"**. The VLR specifically reviewed the goals impacted by the COVID-19 pandemic, namely goals 1, 3, 4, and 17. The selection of these goals demonstrates the strong commitment of the Jakarta Provincial Government to respond to and manage the pandemic by involving non-governmental entities, including communities, to continue driving the achievement of SDGs despite the pandemic situation.



People strolling near *Banjir Kanal Timur*, East Jakarta
Source: Development Planning Data and Information Centre

Liveability

For Jakarta, liveability is essential for fostering a healthier and more vibrant city. The Jakarta Provincial Government continues to invest in initiatives to improve the city's public spaces, ensure access to clean water and sanitation, implement sustainable waste reduction initiatives, and enhance public health services. These efforts are crucial for creating a more sustainable and liveable city for Jakarta's residents.

Improve the city's public space quality

Stairway at Dukuh Atas
Source: Fadhila Nurhakim (Unsplash)

Jakarta, one of the most densely populated cities on the planet, faces significant challenges due to its limited public spaces. With over 10 million residents occupying just 660,98 km², the city has an average density of 16.157 citizens per km². This scarcity of space highlights the critical need for freely accessible public areas that offer places for recreation, social interaction, and physical activities, which are essential for the well-being of its citizens.

To address these challenges, Jakarta has initiated a major project to construct parks throughout the city, aiming to improve the quality of life for its residents. Governor Regulation Number 9 of 2022 mandates that 30 percent of Jakarta's total area be designated as Green Open Space (*Ruang Terbuka Hijau*/RTH) with 20 percent will be developed as public RTHs, and an additional 10 percent reserved for private RTHs. Currently, the total area of RTH in Jakarta constitutes only 5.2 percent of the province's total area. However, the Jakarta provincial authority has plans to develop 10 new city parks in 2024, which will complement the city's existing 54 parks.

As part of its climate actions, Jakarta is committed to increasing green open spaces from the current 10 percent to 30 percent by 2030. This effort includes the Green Open Space and Child-Friendly Integrated Public Spaces (*Ruang Publik Terpadu Ramah Anak*/ RPTRA) programme. A prime example of this initiative is the transformation of Kalijodo, previously Jakarta's largest red-light district, into a vibrant, child-friendly park featuring jogging tracks, bicycle lanes, a skate park, an amphitheatre, and outdoor fitness facilities.

The provincial government has also revitalised several other public parks, including Tebet Eco Park, Martha Christina Tiahahu Park, and Dukuh Atas Park, turning them into essential green spaces for community use. Notably, Martha Christina Tiahahu Park, located near Blok M MRT Station and Blok M Terminal, has been developed into a cultural and literacy hub, now known as *Taman Literasi*. It hosts a variety of activities, including book readings, workshops, and cultural performances, making it a popular destination for families and individuals.

Since 2022, Jakarta has established 54 new parks and planted more than 65,000 urban trees, particularly focusing on areas previously lacking green spaces. These new parks are designed to cater to all visitors , including children, the elderly, and individuals with disabilities. By providing pleasant areas to play and relax, these green spaces help cool and clean the air, mitigate flooding, and curb climate change. Overall, these initiatives can enhance the quality of life for Jakarta's residents, contributing significantly to the city's liveability and sustainability.

Tebet Eco-park

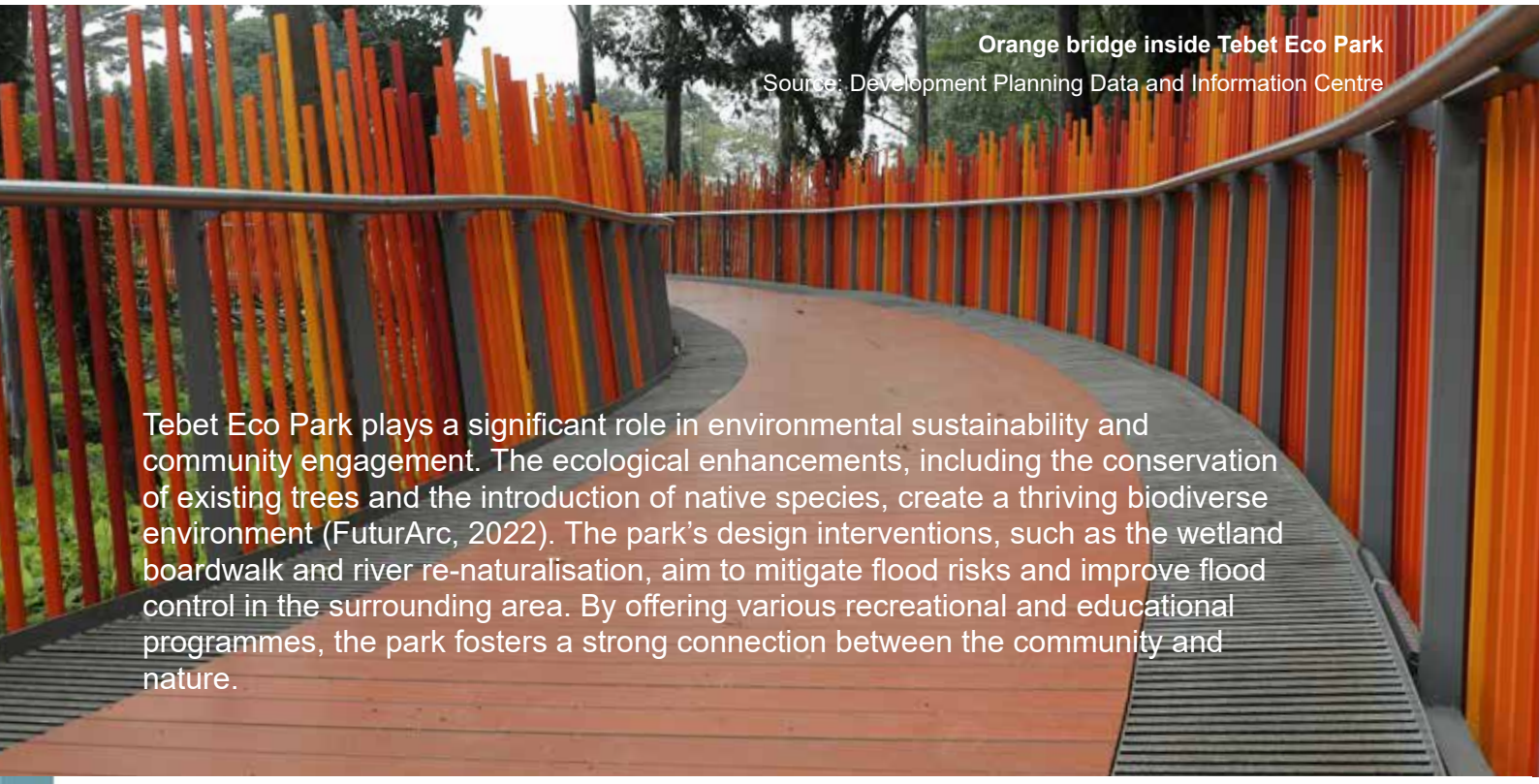
Source: Development Planning Data and Information Centre

BEST PRACTICE

Tebet Eco Park

Tebet Eco Park is a seven-hectare public park revitalisation project located in South Jakarta, Indonesia. The park was revitalised to enhance ecological and recreational functions, with a focus on sustainability and community engagement. This project introduced several key features aimed at improving the park's utility and environmental impact. Among these features are various thematic gardens, including a children's garden, community garden, and floral, fragrance, and foliage-themed areas (World Landscape Architecture, 2021). Additionally, a 200-metre-long wetland boardwalk was constructed to increase the hydraulic capacity of the existing canal, reduce flood risk, and promote ecological restoration. The park also features an infinity-shaped link bridge connecting the north and south sections, providing a barrier-free pedestrian path that enhances district-scale connectivity.

The revitalisation included the creation of a community lawn for exercise and gatherings, as well as educational and recreational spaces such as playgrounds, picnic areas, and amphitheatres. Over 1,500 existing trees were retained and replanted, while 400,000 new shrubs and 80 native species were added to foster a biodiverse environment (World Landscape Architecture, 2021). The park's river was re-naturalised to improve flood control and enhance ecological restoration. These interventions underscore the park's commitment to ecological enhancement and biodiversity.



Orange bridge inside Tebet Eco Park

Source: Development Planning Data and Information Centre

Tebet Eco Park plays a significant role in environmental sustainability and community engagement. The ecological enhancements, including the conservation of existing trees and the introduction of native species, create a thriving biodiverse environment (FuturArc, 2022). The park's design interventions, such as the wetland boardwalk and river re-naturalisation, aim to mitigate flood risks and improve flood control in the surrounding area. By offering various recreational and educational programmes, the park fosters a strong connection between the community and nature.

The Tebet Eco-park and new facilities

Source: Siura Studio

BEST PRACTICE

Child-friendly Integrated Public Space

(Ruang Publik Terpadu Ramah Anak /RPTRA)

Child-Friendly Integrated Public Space is a public space development initiative in Jakarta, Indonesia. This facility aims to enhance the city's liveability and sustainability by creating inclusive and community-driven public spaces that cater to the needs of children and the broader community.

Children playing in RPTRA Kenanga
Source: Jakarta Communication, Informatics, and Statistics Agency

The development of RPTRA involves a participative design approach, where citizens are actively engaged in determining the needs, design, and activities carried out in these public spaces. This approach fosters a sense of belonging among the community members, ensuring that the public spaces are used and maintained effectively.

The facilities offer various features such as public parks, social spaces, waste management, greening programmes, and health planning initiatives. These activities are designed to promote community participation, social cohesion, and environmental sustainability. The project also incorporates green infrastructure, such as green open spaces and groundwater absorption, to mitigate environmental issues like air pollution and flooding.

Playground facilities in RPTRA Kenanga
Source: Jakarta Communication, Informatics, and Statistics Agency

The RPTRA has been constructed in various locations in Jakarta, with RPTRA Kenanga in Central Jakarta being recognised as the best example of these public spaces (DPPAPP, 2023). The project's success is attributed to its community-driven approach, which ensures that the public spaces are designed and used by the community itself, rather than being simply constructed by the government.

Ensure access to clean water and sanitation

As Jakarta is facing the imminent threat of a water crisis, the provincial government takes stringent measures to curb groundwater use. With a surge in skyscraper construction altering the city's skyline, the demand for groundwater has surged, placing Jakarta's water supply in a precarious situation. In 2023, the metropolis with a population of 11.34 million required roughly 33 m^3 per second of clean water, while the production capacity of PAM JAYA, the city's water utility, was only 21.1 m^3 per second. This resulted in a significant deficit of around 11.9 m^3 per second, exacerbating the need for sustainable water management solutions.

The Jakarta Provincial Government has been proactive in addressing the city's water supply challenges. In August 2023, a significant shift in water management policies was introduced through Governor Regulation number 93 of 2021, which banned groundwater use in most circumstances within the city. This regulation specifically targets building owners, prohibiting them from extracting or utilising groundwater unless engaged in dewatering activities. The aim is to reduce the stress on Jakarta's strained groundwater resources, prioritise more sustainable alternatives, and mitigate the impacts of land subsidence caused by excessive groundwater extraction.

To support the ban on groundwater extraction, the Jakarta Provincial Government has outlined plans for alternative water supply solutions. These include improving the city's piped water distribution network, investing in desalination technologies, and promoting rainwater harvesting among residents and businesses. Local authorities have also emphasised the importance of community engagement in water conservation efforts. Educational campaigns and incentives for water-saving practices are being rolled out to raise awareness about the water crisis and encourage responsible water use.

PAM JAYA is responsible for providing clean water to Jakarta's residents. The government, through the Jakarta Water Resources Department and PAM JAYA, is committed to achieving 100 percent piped clean water coverage across Jakarta by 2030. Efforts include expanding the piped water network to urban residential areas and apartment complexes, given that a significant portion of the city's raw water supply is sourced from outside Jakarta.

A view from across the Ciliwung River near Setiabudi

Source: Ache Dipro (Unsplash)

PAM JAYA has undertaken various initiatives to improve clean water access and service quality. Projects include expanding the pipeline network, optimising production at water treatment installations, and introducing innovative technologies such as biofiltration at the Taman Kota water treatment plant. Additionally, water supply from other treatment plants like Pejompongan and Cilandak is being maximised. The installation of clean water connections at public facilities, such as Transjakarta bus stops, is another step toward ensuring better basic services for public transportation users, with more installations planned (PAM JAYA, 2024).

In terms of sanitation, the provincial government's actions are outlined in the Jakarta Regional Development Plan (*Rencana Pembangunan Daerah*/RPD) 2023-2026 and the Regional Spatial Plan 2030. The city aims to optimise sanitation management by expanding centralised wastewater management services in residential areas, business centres, industrial zones, and ports. This includes the development of the Jakarta Sewerage System, which involves constructing a wastewater pipeline network to manage domestic wastewater and prevent pollution of surface and groundwater bodies.

Moreover, the provincial government plans to enhance sanitation services outside the central zone through modular systems, increase the capacity of faecal sludge treatment plants, and build new treatment facilities. To conserve vulnerable water resources from domestic waste contamination, including faecal sludge, the city will gradually separate waste discharge systems and expand communal waste treatment systems. These comprehensive measures reflect Jakarta's commitment to improving access to clean water and sanitation, ensuring a sustainable future for its residents.

Water pump in SWRO Building
Source: Jakarta Water Resources Department

BEST PRACTICE

Sea Water Reverse Osmosis (SWRO) in Kepulauan Seribu

To address the need for clean water, the Jakarta Provincial Government has implemented Sea Water Reverse Osmosis (SWRO) technology in Kepulauan Seribu. The Jakarta Water Resources Department has constructed seven SWRO Water Treatment Plants (WTPs) across the islands. These plants are now operational and cater to the clean water needs of residents on eight inhabited islands, including Panggang Island, Pramuka Island, Payung Island, Kelapa Dua Island, Kelapa Island (serving Harapan Island), Lancang Island, and Tidung Island. This technology is particularly suitable for Kepulauan Seribu, which is surrounded by seawater and lacks freshwater sources. With SWRO technology, the residents can now access a reliable source of clean water for their daily needs.

Water pump tank in SWRO Building
Source: Jakarta Water Resources Department

Water tank in SWRO Kep. Seribu
Source: Jakarta Water Resources Department

SWRO Building
Source: Jakarta Water Resources Department

Before the implementation of SWRO, residents of the Kepulauan Seribu relied on groundwater and rainwater for their daily water needs. However, the high salt content in the groundwater rendered most of it brackish. Continuous use of brackish water often leads to health issues, such as stomach and skin diseases. The establishment of SWRO plants has significantly reduced the dependence on groundwater, which has been problematic due to environmental concerns like land subsidence.

The SWRO technology provides a sustainable solution to the water scarcity issues faced by the island residents. By converting seawater into clean, potable water, SWRO plants offer a dependable alternative to groundwater and rainwater. This advanced technology ensures a more consistent and safe water supply, which is crucial for the health and well-being of the island communities.

BEST PRACTICE

Jakarta Sewerage System (JSS) Development Programme

The Jakarta Sewerage System (JSS) is an infrastructure project aimed at enhancing access to clean water and sanitation in Jakarta. As part of the Jakarta Sewerage Development Programme (JSDP), the JSS is a national strategic initiative designed to develop a centralised domestic wastewater management system (Sistem Pengolahan Air Limbah Domestik Terpusat/SPALD-T) that meets environmental quality standards and improves public access to proper sanitation (E3S Web of Conferences, 2020). This project involves constructing a wastewater pipeline network to manage domestic wastewater, thereby preventing pollution of surface and groundwater bodies.

A key benefit of the JSS is its role in preventing water pollution. By directing wastewater from homes to treatment facilities through an extensive pipeline network, the project mitigates the risk of groundwater and surface water contamination, which poses significant threats to human health and well-being. This direct management of wastewater ensures that pollutants are treated before they can harm the environment, contributing to a cleaner and safer water supply for Jakarta's residents.

Two engineers
Source:

An engineer watching the CCTV camera at JSS facility
Source: Jakarta Water Resources Department

doing maintenance of JSS machine
Jakarta Water Resources Department

Inside of one of JSS machine
Source: Jakarta Water Resources Department

The JSS also emphasises the importance of public awareness regarding wastewater management. Through educational campaigns, the project encourages public participation in maintaining a clean environment, fostering a culture of sanitation and hygiene. This enhanced public awareness is crucial for the long-term success of the sanitation infrastructure, as it helps ensure that the community actively supports and adheres to proper wastewater management practices.

In terms of infrastructure, the JSS involves constructing underground pipeline networks and wastewater treatment plants, significantly improving Jakarta's sanitation facilities. This development reduces reliance on septic tanks and unlined pit latrines, which are often inadequately maintained and contribute to environmental pollution. By addressing these health risks and reducing the spread of waterborne diseases, the JSS contributes to a healthier environment and community, ultimately enhancing the quality of life for Jakarta's residents.

Implement sustainable waste reduction initiatives

Jakarta is facing substantial waste management challenges due to insufficient landfill capacities, unable to cope with the volume of solid waste produced. Currently, Jakarta relies on the Bantar Gebang landfill in Bekasi which has a capacity of approximately 6.000 tons per day. However, the waste generated in Jakarta exceeds its capacity, amounting to over 7.000 tons per day.

To cope with the challenges, Jakarta has implemented several policies and initiatives. A key focus is reducing waste production at the source. This includes banning plastic bags for shopping and promoting community-based waste management through mechanisms like waste banks and community-based waste sorting. The provincial government has enforced a ban on single-use plastic bags in shopping centres, modern shops, and traditional markets through Governor Regulation number 142 of 2019. Additionally, Jakarta has developed the Jakarta Recycle Centre (JRC) programme, which aims to shift from a linear waste management system to the circular one through community participation.

Public awareness and participation are vital components of Jakarta's waste management efforts. The provincial government has collaborated with businesses through the Jakarta Less Waste Initiative (JLWI) programme, requiring office buildings, hotels, malls, restaurants, and other commercial sites to lead in waste reduction practices. Furthermore, the provincial government initiated the *Jakarta Sadar Sampah* (Jakarta Waste Awareness) and *Bidang Pengelolaan Sampah Lingkup RW* (BPS RW)) programmes. The former aims to promote a new waste management paradigm under the motto "Reduce, Separate, and Recycle", while the latter focuses on waste reduction at the source through model neighbourhood units (*Rukun Warga*/RW), with 6 pilot residential areas currently involved and plans for expansion.

Transforming waste into new products is another significant initiative. The provincial government has initiated the Kalibaru Hub project to process green mussel waste from the Kalibaru area, northern Jakarta, into valuable products such as paving blocks, toilets, fertiliser, and souvenirs. The private sector is also contributing to this shift, with companies like Plastic Pay, Octopus, and Rekosistem recycling plastic waste into new products, and initiatives like Surplus repurposing edible food overstock.

In addition, composting organic waste is a crucial part of Jakarta's waste reduction programme, especially since 49.87 percent being organic including food, vegetables, and fruit residues. In Jakarta, composting is widely used as a method for converting organic waste into fertiliser. This process entails storing organic waste in composting bins, where it undergoes decomposition and transforms into nutrient-rich fertiliser. Additionally, Jakarta encourages the implementation of a new method for decomposing organic waste using Black Soldier Fly (BSF) larvae or maggots.

These initiatives reflect Jakarta's commitment to addressing its waste management challenges. The multifaceted approach, which involves both government and community participation, is crucial for overcoming the city's waste management issues and ensuring a cleaner, healthier environment for its residents.

BEST PRACTICE

Jakarta Recycle Centre (JRC)

JRC Building
Source: Jakarta Environment Department

The Jakarta Recycle Centre (JRC) is a waste management programme initiated by the Jakarta Environment Department to promote sustainable waste management practices in the city. The programme aims to reduce waste disposal in landfills and increase community participation in waste sorting and recycling. The programme has received support from international organisations like the Japan International Cooperation Agency (JICA) and the Osaki City Government, which have assisted in its development and implementation.

The JRC prioritises waste separation at the source, representing a new approach in waste management by involving multiple stakeholders to cultivate a culture of waste sorting among individuals. The programme includes the development of waste transportation and processing facilities, ensuring that waste is properly collected and processed and that the community has access to these services. The collected waste is transported to Reduce, Reuse, Recycle waste management site (*Tempat Pembuangan Sampah*/TPS 3R) Pesanggrahan for further processing. Inorganic waste is categorised by type and cleaned for recycling, while food scraps, grass, and leaves are composted into organic waste.

By sorting waste into organic and inorganic components, the JRC reduces the amount of waste sent to landfills, thereby decreasing the environmental impact of waste disposal. The programme promotes a circular economy by processing waste into reusable materials such as compost and recycled products, which can be utilised in various industries. This systematic approach not only addresses waste management issues but also contributes to environmental sustainability.

The JRC programme has been implemented in four residential areas, covering a total of 2,688 homes. These areas include Bukit Mas and Ozon in Bintaro, Taman Alfa Indah, and Bumi Pesanggrahan Mas, all located in South Jakarta. The success of the programme in these communities highlights the potential for expanding sustainable waste management practices throughout the city, fostering greater community involvement and environmental


Maggots being fed to grow

Rumah Maggot Kebersamaan banner


Activity inside Rumah Maggot Kebersamaan
Source: SDGs Jakarta

BEST PRACTICE

Rumah Maggot Kebersamaan

Rumah Maggot Kebersamaan is a community-managed initiative in Cilincing, North Jakarta, aimed at reducing organic waste within local communities. Operational since 2023, the programme involves 11 members and collects organic waste from households within *Rukun Warga* (RW) 3, Semper Barat subdistrict, which includes 17 *Rukun Tetangga* (RT) and a population of around 4,000, as well as from neighbouring RWs.

Additionally, it collaborates with nearby hospitals and restaurants to collect leftover food. The programme is supported by the Jakarta Environmental Agency (*Dinas Lingkungan Hidup*/DLH) and Environmental Implementation Unit of Cilincing to ensure smooth operations and success.

Rumah Maggot Kebersamaan processes approximately 50 kg of organic waste daily, resulting in a significant reduction of nearly one ton of waste per month. The maggots produced from this organic waste are incredibly versatile and serve various purposes. They are utilised as high-protein poultry feed and nutritious fish pellets, which are essential for local farmers and fish breeders.

By transforming organic waste into valuable resources, *Rumah Maggot Kebersamaan* promotes sustainable waste management practices and helps reduce the community's overall environmental footprint. This initiative not only addresses environmental issues but also creates economic opportunities and supports sustainable agricultural practices, aligning with broader goals of responsible production and consumption.

A woman putting plastic bottle into Plasticpay's machine

Source: JPNN.com

A Plasticpay's machine installed during IIMS event

Source: Naikmotor.com

BEST PRACTICE

Plasticpay

Plasticpay is a digital platform-based social movement that encourages the community to transform environmentally harmful plastic waste into beneficial and valuable resources. Plasticpay features a semi-reverse vending machine system to process plastic bottle waste from the public. People who collect plastic bottles through Plasticpay vending machines earn points that can be converted into electronic money via platforms such as GoPay, OVO, Dana, LinkAja, and InaCash. This innovative system incentivises the community to participate in recycling efforts by providing tangible rewards for their contributions.

Once the plastic bottles are collected, Plasticpay recycles them into environmentally friendly materials like fabric and dacron. In collaboration with Micro, Small, and Medium Enterprises (MSMEs), Plasticpay creates upcycled products from these recycled materials. This partnership not only promotes recycling but also supports local businesses, driving economic growth and sustainability within the community.

Plasticpay has expanded its services to facilitate the exchange of High-Density Polyethylene (HDPE) bottles through its Dropbox units, such as shampoo, soap, skincare, and lotion bottles. Currently, there are 183 Mini Collection Points (MCP) of Plasticpay spread across Jakarta, making it convenient for residents to participate in the recycling programme and contribute to environmental conservation efforts.

BEST PRACTICE

Surplus Indonesia

Surplus is a climate tech startup and social enterprise aimed at tackling food waste and loss in Indonesia. Founded in 2020, the company aims to reduce food waste by connecting food businesses, such as restaurants, cafes, and hotels, with consumers who can purchase surplus food at discounted prices. This innovative approach not only addresses food waste but also provides affordable food options to consumers.

Surplus has launched several initiatives to promote sustainable waste management in Jakarta and other regions. One key initiative is food rescue and prevention, which allows consumers to buy surplus food from restaurants and hotels at reduced prices, thus supporting sustainable consumption practices. Additionally, Surplus has collaborated with the Ministry of Tourism and Creative Economy of Indonesia to introduce Sustainable Food Tourism, a programme designed to reduce food waste and encourage eco-friendly practices within the tourism industry.

In its commitment to sustainability, Surplus has implemented a zero-waste approach within its business model, ensuring that all surplus food is either sold or donated, thereby minimising the amount of waste sent to landfills. This strategy not only mitigates food waste but also supports local communities and businesses by providing a reliable source of affordable food.

Surplus has rescued 100,000 tons of food, preventing an economic loss of up to Rp2.2 billion from food waste. Furthermore, the company has successfully avoided the emission of 3,500 tons of CO2 by ensuring that food does not end up in landfills (Surplus Indonesia, 2024). Through these efforts, Surplus plays a vital role in promoting sustainable waste management practices, supporting local businesses, and fostering a more environmentally conscious society in Jakarta and beyond.

Surplus Indonesia volunteers campaigning about food
Source: Surplus Indonesia

The green mussel industry is one of the primary seafood industries in Kalibaru
Source: Resilient Cities Network

BEST PRACTICE

Kalibaru Hub

The Kalibaru Hub is a transformative initiative in Jakarta that focuses on upcycling green mussel waste into environmentally friendly products. It is a collaborative effort between the Jakarta Provincial Government, the Resilient Cities Network (R-Cities), and the United Cities and Local Government Asia-Pacific (UCLG ASPAC). The hub aims to promote sustainable waste management practices and empower local small and medium-sized enterprises (SMEs) in the Kalibaru community, which is known for its green mussel industry.

The initiative involves processing shell waste through new business initiatives, strengthening organizational capacity and business skills for the community, and enhancing access to markets for recycled products. This project is part of the R-Cities' Resilient Community Impact Funds (RCIFunds), which targets community innovation and resilience projects.

The Kalibaru Hub plays a pivotal role in promoting sustainable waste management in Jakarta as it addresses significant waste generated by the labour-intensive green mussel production process. The community previously dumped this waste at sea, but the hub aims to change this practice by creating new economic opportunities and fostering local entrepreneurial growth.

Enhance public health

Neurology room in Tarakan Regional Public Hospital
Source: RSUD Tarakan

With a population exceeding 10 million, Jakarta is one of the world's largest urban areas and grapples with numerous challenges, including public health issues. The city has seen a rise in non-communicable diseases such as hypertension and diabetes. Additionally, malnutrition remains a critical problem. Despite efforts to control malnutrition, high rates of stunting persist, compounded by obesity in some segments of the population, indicating a dual burden of malnutrition

To address these challenges, Jakarta has implemented several policies and initiatives to promote public health. One of the primary focuses is on promotive and preventive health services. This includes monitoring and conducting regular food inspections. Additionally, there is a concerted effort to instil healthy behaviours from an early age and expand breastfeeding facilities in workplaces and public areas.

The city has an extensive network of healthcare facilities, including one Class A General Hospital, one Class A psychiatric hospital, 5 Class B hospitals, 4 Class C hospitals, 20 Class D hospitals, and 127 private hospitals. Jakarta also has 332 health centres (*Pusat Kesehatan Masyarakat/Puskesmas*), along with primary and specialist clinics, which provide accessible healthcare services, particularly for those in need of curative treatments.

In a bid to modernise its healthcare services, Jakarta has embraced the digitalisation of health services. The Jakarta's Department for Health Affairs has launched the JakSehat application as part of this initiative. The app aims to provide an integrated health platform that connects and empowers the entire health ecosystem, including the public and healthcare professionals, thus supporting individual health services, public health services, and administrative health support.

Collaboration and public engagement play a crucial role in Jakarta's healthcare strategy. The city fosters partnerships with private sectors, community groups, and international organisations to expand access to healthcare services and facilities. An example of such collaboration is the *"Upaya Kesehatan Masyarakat"* (UKM) programme, a community-based healthcare service that brings healthcare workers directly to residents' homes. This programme is initiated by the Jakarta's Department for Health Affairs and the Jakarta Family Welfare Movement (*Pemberdayaan Kesejahteraan Keluarga*/ PKK) in collaboration with several NGOs. It aims to provide free preventive, promotive, curative, and rehabilitative healthcare services for Jakarta's residents.

Additionally, addressing maternal and child health is a priority for Jakarta. Despite a stunting prevalence of 17.6 percent in Jakarta, lower than the national average of 21.5 percent and the World Health Organization's threshold of 20 percent, the city continues to tackle this issue intensively. The Jakarta Provincial Government is focused on reducing stunting through various initiatives, which includes enhancing the quality of healthcare services, utilising *Pos Pelayanan Terpadu* (integrated health posts), health clinics, and hospitals to provide nutritional counselling and growth monitoring for children. The government also ensures the provision of supplement tablets and promotes a diverse, balanced, and safe diet (*Beragam, Bergizi Seimbang, dan Aman*/B2SA). Moreover, the provincial government has initiated the *Jakarta Beraksi* programme to accelerate stunting reduction. It focuses on providing balanced nutritious food and support during the first thousand days of a child's life, demonstrating the city's commitment to addressing malnutrition through education and community engagement.

BEST PRACTICE

Jakarta Beraksi

Jakarta Beraksi is a programme initiated by the Jakarta Provincial Government to reduce stunting in the city. The programme focuses on addressing stunting through a multifaceted approach, including nutrition interventions, healthcare access, and community engagement. The programme aims to prevent stunting by ensuring adequate nutrition, particularly during the first 1000 days of life, and by promoting regular check-ups and immunizations at *Pos Pelayanan Terpadu (Posyandu)* centres.

A key component of *Jakarta Beraksi* is its emphasis on nutrition interventions. The programme ensures children receive a balanced diet rich in protein and essential vitamins, crucial for proper growth and development. By advocating for exclusive breastfeeding during the first six months and continued breastfeeding up to two years, the programme aims to provide the best start in life for infants, significantly reducing the risk of stunting.

The programme prioritises healthcare access to ensure early detection and prevention of stunting-related issues. Posyandu centres play a vital role in this effort by offering regular check-ups and immunisations to monitor and support child development. These centres are crucial for early intervention and for educating parents about the importance of maintaining their child's health through regular medical visits.

The *Jakarta Beraksi* also involves extensive community outreach and education to raise awareness about stunting and its prevention. It includes online consultation services through the *Pusat Pelayanan Keluarga* (PUSPA) centre, which offers support and guidance to families at risk of stunting. This multifaceted approach not only aims to reduce stunting rates but also to improve overall public health in Jakarta by ensuring children receive the necessary care and nutrition for healthy development.

Jakarta Beraksi Programme in Central Jakarta
Source: Central Jakarta City Government

Jakarta Beraksi Programme in Central Jakarta
Source: Central Jakarta City Government

Baznas employees giving food to a toddler
Source: Baznas

BEST PRACTICE

Upaya Kesehatan Masyarakat (UKM)

Upaya Kesehatan Masyarakat (UKM) is a health programme in Jakarta, Indonesia, launched by the Jakarta's Department for Health Affairs in collaboration with various non-governmental organisations (NGOs). The programme aims to provide accessible health services to the community, focusing on preventive and promotive measures, as well as curative and rehabilitative actions when necessary. It involves a team of medical professionals, including doctors, nurses, and midwives, who visit households to conduct health surveys, provide health education, and offer vaccinations, among other services.

The UKM team offers a wide range of services, including health check-ups, health education, vaccinations, and referrals to hospitals for more serious cases. Additionally, they assist in registering residents for the National Health Insurance (*BPJS Kesehatan)* if needed. By providing these services directly to residents, the programme ensures that even those in densely populated, low-income areas, such as slums and squatter settlements, receive the healthcare they need. These areas are often where health issues are more prevalent, making the programme's targeted approach crucial for improving public health.

The programme plays a crucial role in reducing stunting and enhancing overall public health in Jakarta. Its door-to-door approach allows for early detection and intervention of health issues, including stunting, which can be addressed through proper nutrition and healthcare. The programme's health education component raises awareness about the importance of health and hygiene, contributing to a reduction in stunting and other health problems. By providing comprehensive services directly to residents, the programme ensures that they receive the necessary care to address various health issues and improve their quality of life.

A doctor visiting an elder as one of UKM Programme
Source: Jakarta Provincial Government

BEST PRACTICE

Siapkan Generasi Anak Berprestasi (SIGAP)

The Tanoto Foundation, an independent philanthropic organisation committed to improving quality of life through education, has partnered with the Jakarta Provincial Government to implement the *"Siapkan Generasi Anak Berprestasi"* (SIGAP) programme in Jakarta. This initiative is designed to enhance parental skills in nurturing children aged 0-3 years and to improve the quality of early childhood education institutions across Jakarta.

The SIGAP initiative is carried out across four locations in three administrative cities: South Jakarta, East Jakarta, and West Jakarta. Specifically, the SIGAP 0-3 programme operates in three early childhood education units (*Pendidikan Anak Usia Dini*/PAUD) and one Child-Friendly Integrated Public Space (*Ruang Publik Terpadu Ramah Anak*/RPTRA), while the SIGAP 4-6 programme is conducted in three public kindergartens (*Taman Kanak-kanak*/TK) and one Toddler Family Development (*Bina Keluarga Balita*/BKB) PAUD (Tanoto Foundation, 2023).

The SIGAP initiative, led by the Tanoto Foundation, focuses on early childhood development and education to prepare future generations for quality life. The programme ensures that children grow and develop according to their age milestones, equipping them for primary education. Among the key initiatives is the Stunting Reduction Programme, which supports the Indonesian government's target to reduce stunting prevalence to below 20 percent by 2024. This programme enhances community understanding and knowledge about stunting and promotes behavioural changes in diet, parenting, and healthy living practices.

Belinda Tanoto teaching the kids
Source: Tanoto Foundation

Additionally, the SIGAP programme includes the *Rumah Anak* SIGAP (SIGAP Home for Children) initiative for children aged 0-3 years. This initiative aims to improve early childhood care through a dedicated centre that offers parenting and early learning services. For children aged 3-6 years, the *Sekolah Anak* SIGAP (SIGAP School for Children) programme aims to enhance access to and the quality of early childhood education. This is achieved through teacher training, capacity building for educational supervisors, and the provision of learning facilities.

The implementation of SIGAP in Jakarta, with a focus on both "*Rumah Anak* SIGAP" and "*Sekolah Anak* SIGAP," highlights the commitment to creating a sustainable, equitable, and high-quality educational environment for the city's youngest residents, laying a strong foundation for their future development.

Belinda Tanoto taking photo with SIGAP's staff and students
Source: Tanoto Foundation

Environment

For Jakarta, environmental resilience is crucial for fostering a more sustainable city. It focuses on how Jakarta can adapt to and mitigate risks associated with natural events such as floods, heat stress, and changes in the climate.

The efforts include preserving the natural environment, developing climate-resilient infrastructure, enhancing hazard awareness tools, and scaling up renewable energy use. These are part of Jakarta's journey towards becoming a sustainable global city.

Gelora Bung Karno Area
Source: Peni Brilianti (Unsplash)

Protect natural environment

Jakarta is facing escalating environmental challenges, including heightened air pollution, recurrent flooding, and intense heat. To address these challenges, Jakarta has embarked on a major initiative to develop urban parks and forests throughout the city. As part of its climate actions, Jakarta has committed to increasing green open spaces from 10 percent to 30 percent of the city's 660,98 km² by 2030. The city has issued regulations on tree management and protection, ensuring a more equal distribution of green spaces and effective tree-planting campaigns. This initiative has led to the establishment of 54 new parks and the planting of over 65,000 urban trees since 2022. These green spaces not only offer pleasant areas for recreation but also help cool and clean the air, mitigate flooding, and curb climate change.

In addition to urban greening efforts, Jakarta is implementing various activities to protect its natural environment in coastal sectors. These efforts include mangrove rehabilitation, environmental education, and ecotourism programmes. Mangrove planting along the coast in Northern Jakarta serves to protect the immediate environment and mitigate natural disasters such as floods. Mangroves also contribute to increasing green open spaces along Jakarta's coastal areas and enhancing biodiversity. This initiative not only aims to create a buffer against environmental hazards but also seeks to enrich the coastal ecosystem.

Aerial view of Jakarta
Source: Ivy Aralia Nizar (Unsplash)

Furthermore, Jakarta has been actively working on ocean biodiversity protection. PT Pembangunan Jaya Ancol, one of Jakarta's regional-owned enterprises, has initiated the Green Mussel restoration programme. This programme aims to restore the population of green mussels, which play a crucial role in maintaining marine ecosystem balance. Green mussels contribute to water filtration, enhancing water quality, and supporting the health of other marine species. By cultivating and reintroducing green mussels into Jakarta's coastal waters, the city helps preserve biodiversity and supports the livelihoods of local communities who depend on these resources.

SDGs Jakarta team involved in learning to make a green mussel filter

Source: SDGs Jakarta

BEST PRACTICE

Green Mussel Restoration Programme

The green mussel restoration programme in Jakarta, led by PT Pembangunan Jaya Ancol Tbk, aims to restore populations of Green Mussels (Perna viridis) to improve water quality in marine environments. This initiative involves educating the public about the ecological importance of green mussels and promoting their sustainable use. Green mussels, as natural filter feeders, play a crucial role in maintaining healthy marine ecosystems by filtering algae and nutrients from the water, thereby enhancing water clarity and quality.

In 2023, the programme saw significant engagement, with 1,171 volunteers utilizing 16,880 kg of green mussel shells to foster the growth of approximately 355,155 green mussels. These mussels are capable of filtering 71,030 liters of seawater per hour, thus significantly contributing to cleaner and healthier coastal waters. By drawing large volumes of water through their bodies, the mussels remove algae and nutrients, much like oyster reefs, which act as natural kidneys along the coastline.

355.1k

Live green mussels grown on the bottom of the Ancol sea

51.1mio

Seawater that is filtered every month naturally

1,171 volunteers

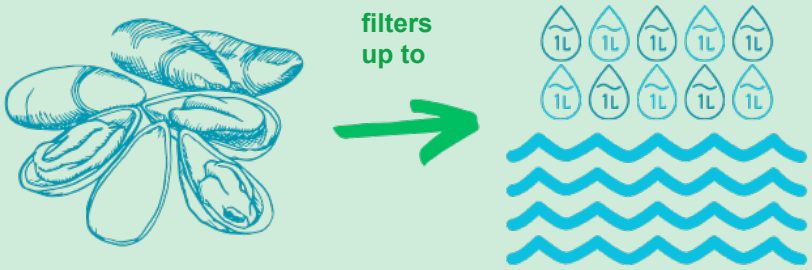
involved in this programme

4 awards

CECT Sustainability Awards: 1 award
Indonesia Green Awards: 3 awards

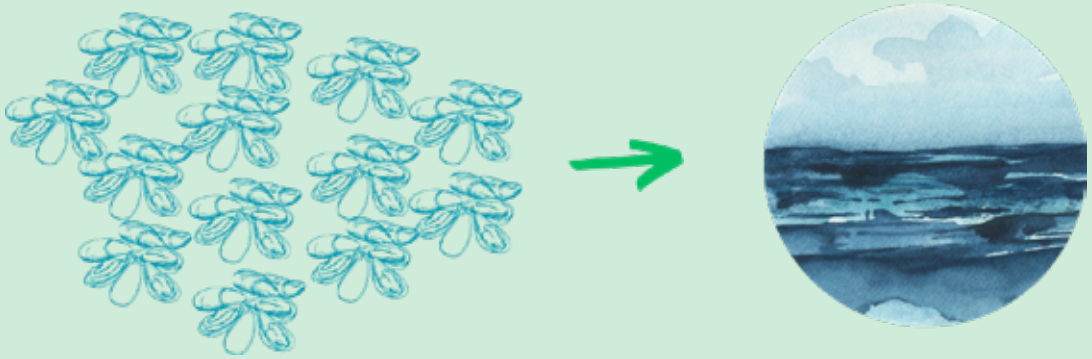
1 kg green mussel

10 litres seawater/ hour



458 ton green mussel

10 litres seawater/ hour



The process of making green mussel filter

Source: SDGs Jakarta

This approach not only restores mussel populations but also raises public awareness and involvement in marine conservation efforts. By enhancing public understanding and engagement, the programme fosters a sense of ownership and responsibility towards the environment among Jakarta's residents. This initiative highlights the broader impact on biodiversity and ecosystem health, demonstrating the benefits of combining community participation with sustainable environmental practices.

BEST PRACTICE

Bersih Berdaya Bestari

The “Bersih Berdaya Bestari” programme is a collaborative initiative between Transjakarta and CarbonEthics aimed at tackling environmental challenges in Jakarta, particularly climate change and air pollution. This campaign focuses on the conservation and planting of mangroves in the coastal areas of Harapan Island, Kepulauan Seribu. As the first Bus Rapid Transit service in Southeast Asia, Transjakarta plays a pivotal role in this environmental endeavour by utilising its extensive network to raise awareness and engage the public in mangrove conservation efforts.

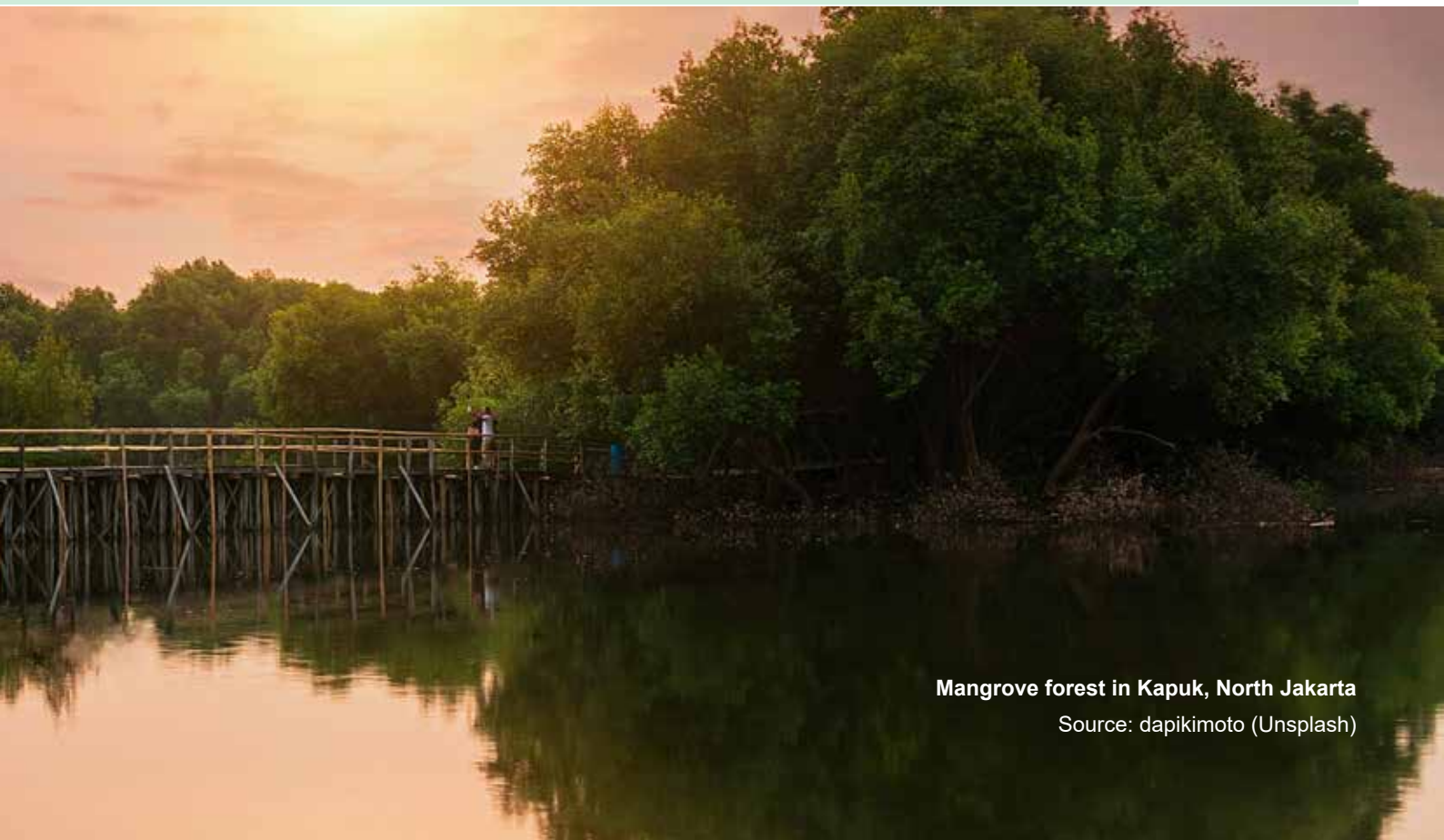
This partnership highlights the significance of public transport entities in driving environmental sustainability initiatives within urban settings (Carbon Ethics, 2023).

Mangrove ecosystems are crucial for mitigating air pollution and addressing climate change. They have a unique ability to absorb and store large amounts of carbon dioxide (CO2) in their biomass and surrounding soil, thus reducing greenhouse gas concentrations in the atmosphere. The preservation and expansion of mangrove forests help combat the rising temperatures and environmental degradation caused by climate change.

By implementing the **#BersihBerdayaBestari** campaign, Jakarta is taking significant steps toward improving air quality and promoting ecological balance, contributing to the overall health and well-being of its residents.

Moreover, mangrove ecosystems play an irreplaceable role in coastal protection and marine biodiversity conservation. Their robust root systems stabilise the soil and prevent coastal erosion, shielding coastal communities from the adverse effects of tidal waves and extreme weather events. Mangroves also serve as vital breeding grounds and habitats for a diverse array of marine life, including fish, birds, and other organisms. This biodiversity supports local fisheries and sustains the livelihoods of coastal residents, making mangrove conservation essential for both environmental and socio-economic reasons.

The **#BersihBerdayaBestari** programme not only aims to protect the environment but also empowers local communities. By involving local farmers and coastal residents in mangrove planting activities, the campaign provides them with climate-related skills and resources, enhancing their income and resilience against environmental changes. This inclusive approach ensures that the benefits of mangrove conservation are shared broadly, fostering a sense of community ownership and stewardship over the natural environment. Through these efforts, Jakarta is paving the way for a more sustainable and resilient future, demonstrating that urban development and environmental preservation can go hand in hand.

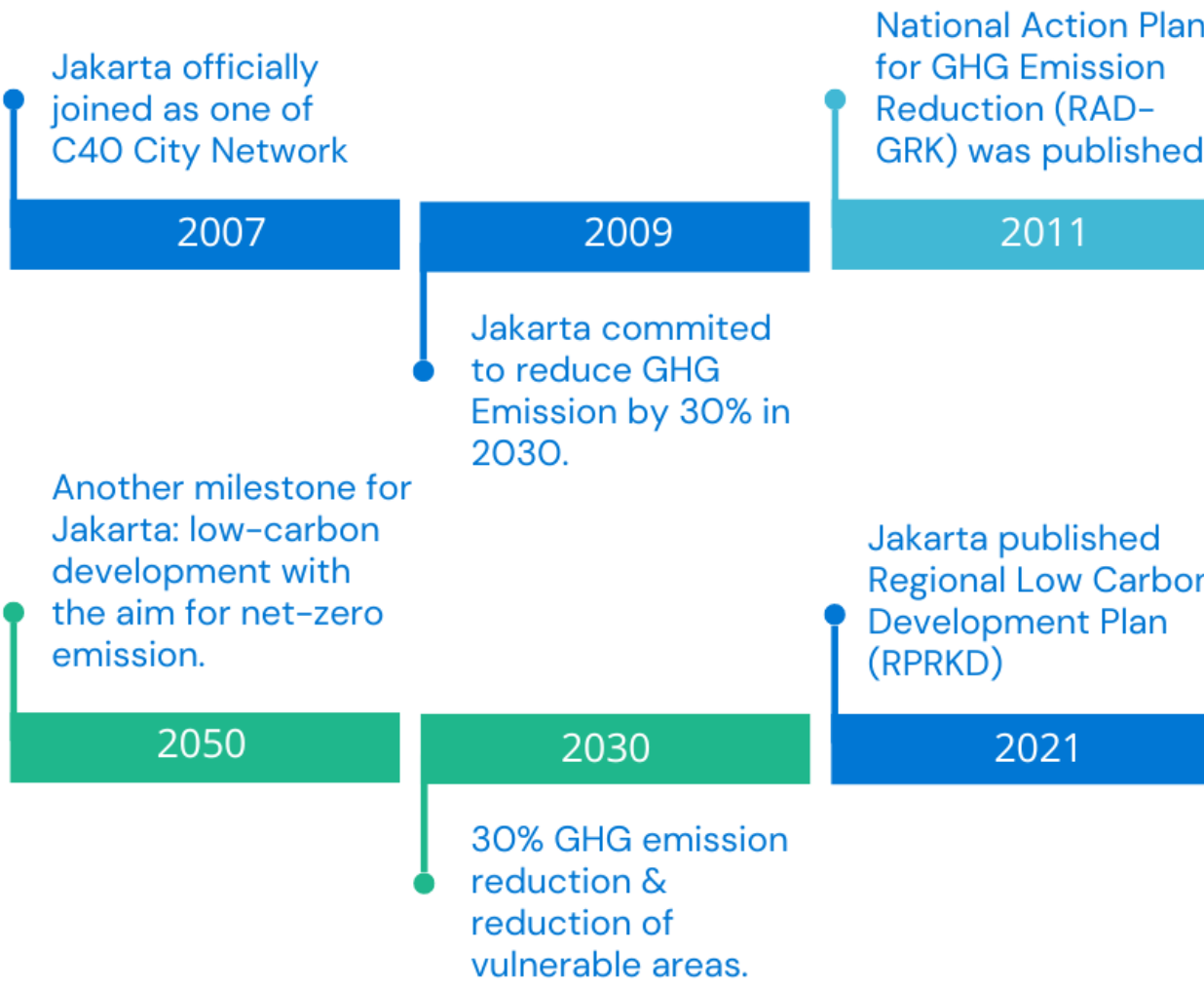


Mangrove forest in Kapuk, North Jakarta
Source: dapikimoto (Unsplash)

Develop climate-resilient infrastructure

Jakarta is highly vulnerable to climate-change-related disasters due to its geographical position and morphology. Located downstream, along the coast, and including small islands, the city faces significant potential impacts from climate change, including increased incidents of dengue fever, sea level rise, and frequent flooding. These issues are compounded by the fact that Jakarta is sinking. In 2022, measurements at 272 locations showed subsidence ranging from 0 to 10.9 cm (Muara Baru), with an average of 3.9 cm. This sinking is primarily caused by excessive groundwater extraction and the pressure exerterd by high-rise buildings.

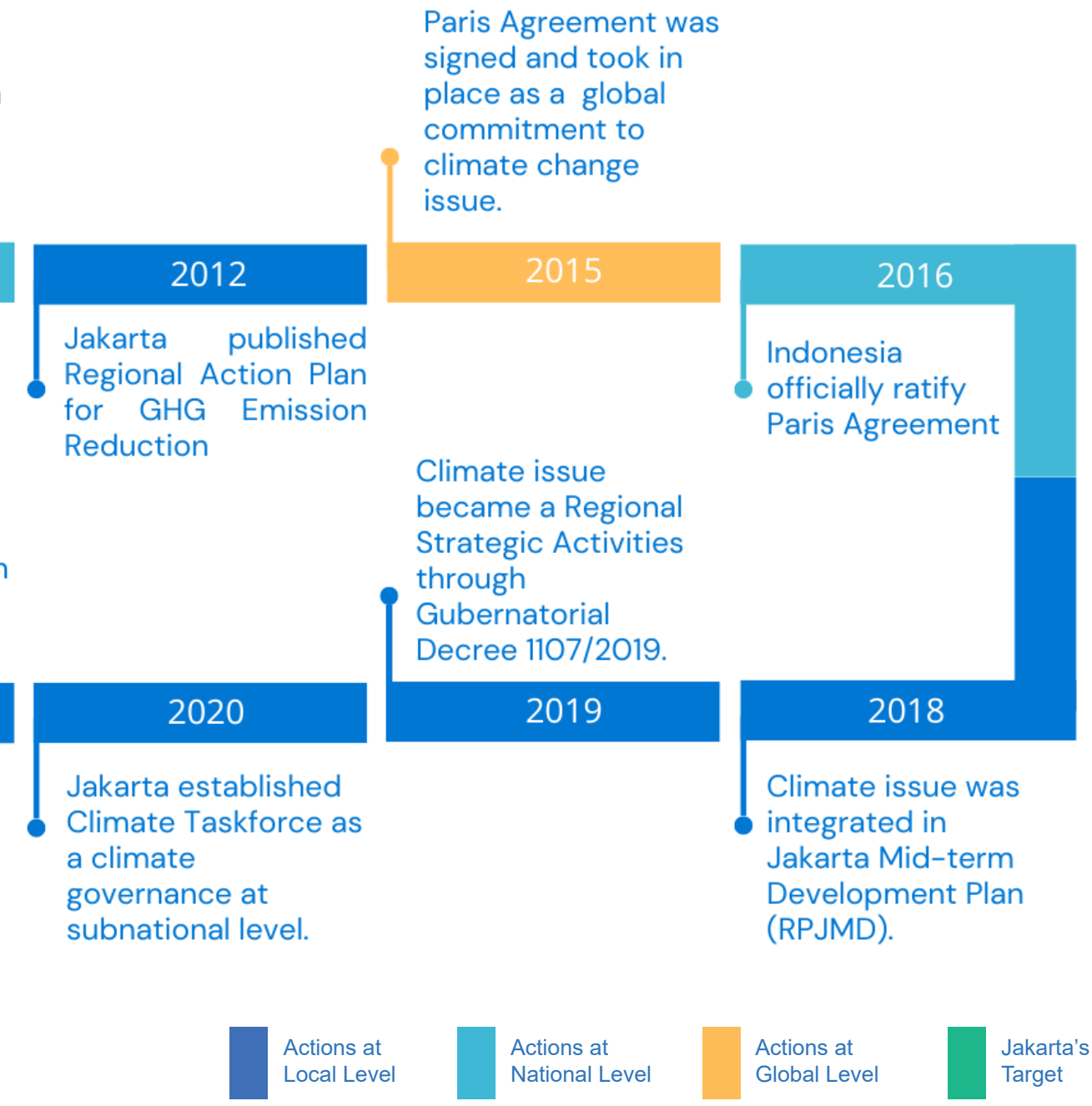
Jakarta's Journey to be a Climate Resilient City



Source: Jakarta Climate Resilient City: Best Practices Compilation (2021)

In response to these risks, Jakarta has developed several strategies and initiatives aimed at mitigating and adapting to climate change. One major project is the National Capital Integrated Coastal Development (NCICD). This initiative focuses on developing the coastal area of Jakarta through the construction of a giant sea wall and land reclamation in Jakarta Bay. The sea wall, extending 38,9 kilometres along the coast, will protect the city from tidal floods and land subsidence. The project also includes an airport, harbour, toll road, residential and industrial areas, waste treatment facilities, water reservoirs, and green spaces, all designed to act as a barrier against the sea.

Jakarta has also invested heavily in flood management infrastructure. The city has developed physical infrastructure supported by technical solutions, including pumps, reservoirs, ponds, and water gates. There are 580 stationary pumps across 202 locations within the city's five administrative regions, including truck-mounted, trailer-mounted, portable, and floating pumps. The city's 147 reservoirs play a crucial role in water retention and flood control, especially during the rainy season, and aid in groundwater absorption.



Artha Gading Polder
Source: Jakarta Water Resources Department

Moreover, Jakarta employs a polder system to control flooding. This system integrates drainage channels, retention ponds, and water pumps managed under a single administration. A notable initiative is the 942 Project, which involves the development of nine polders, four reservoirs, and enhancing the capacity of two rivers. Additionally, the Ciliwung Diversion Channel, or Sodetan Kali Ciliwung, features a 1.26-kilometer tunnel designed to divert part of the Ciliwung River's flow to the East Flood Canal, preventing flooding and serving as a water catchment area.

Jakarta has also implemented a flood alert information system, which includes the installation of CCTV cameras, rainfall and water level monitoring systems, GPS tracking for heavy equipment, dump trucks, and mobile pump trucks. This system enhances the city's ability to monitor and respond to flooding events effectively, providing real-time data for better management and mitigation efforts.

In addition to its flood management infrastructures, Jakarta has enacted a green building regulation to promote environmentally friendly construction practices and reduce the carbon footprint of buildings. Both government and private buildings are encouraged to adopt green building practices through Governor Regulation on Green Buildings. A notable initiative under this regulation is the introduction of Net Zero Carbon Schools in Jakarta. This project aims to reduce the city's carbon footprint while promoting sustainable education. The project involves the refurbishment and construction of public schools, integrating green building principles to prioritise energy efficiency, the utilisation of renewable energy, and the reduction of carbon emissions.

BEST PRACTICE

942 Project

The 942 Project is a comprehensive flood control initiative in Jakarta, aimed at mitigating the city's frequent flooding. A key component of the project is the construction and rehabilitation of nine polders. These polders, which are integrated flood management systems combining embankments, retention ponds, and pumps, are strategically located in areas such as Kelapa Gading, Pulomas, Muara Angke, Teluk Gong, Mangga Dua, Green Garden, Marunda, Kamal, and Tipala-Adhyaksa.

Another vital aspect of the 942 Project is the construction of four reservoirs or water retention areas in Pondok Ranggon, Embung Wirajasa, Brigif, and Lebak Bulus. These reservoirs are designed to alleviate the load on the city's drainage systems and significantly minimise the risk of flooding by providing additional capacity to store excess rainwater.

Artha Gading Polder

Kampung Ambon

Brigif Jagakarsa Reservoir

Brigif Jagakarsa Reservoir as one part of 942 Project

Source: Jakarta Water Resources Department

The project also focuses on the revitalisation of two river systems, the Muara Bahari - Kali Besar and Ciliwung - Pasar Baru waterways. This revitalisation effort involves increasing the capacity of these rivers to handle greater water flow, thereby reducing the likelihood of flooding in the surrounding areas and improving overall water management. In addition to these measures, the 942 Project includes the construction of vertical drainage systems. These systems are intended to enhance groundwater quality, augment raw water sources, and reduce the burden on existing drainage channels.

The 942 Project plays a significant role in managing and preventing floods in Jakarta. By integrating polder systems, reservoirs, river revitalisation, and vertical drainage, the project offers a multi-faceted approach to flood control. This comprehensive strategy not only mitigates the immediate impact of flooding but also contributes to the long-term resilience of Jakarta's urban infrastructure against climate change and environmental challenges.
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Pondok Ranggon Reservoir
Source: Jakarta Water Resources Department

BEST PRACTICE

Net Zero Carbon School

The introduction of Net Zero Carbon Schools in Jakarta marks a notable initiative aimed at reducing the city's carbon footprint while promoting sustainable education. This programme involves the refurbishment and construction of public schools in Jakarta, integrating green building principles to prioritise energy efficiency, renewable energy utilisation, and carbon emission reduction.

Beyond environmental benefits, these schools serve as educational tools, fostering awareness and understanding of sustainability among students and the wider community.

These Net Zero Carbon Schools are designed with a focus on passive strategies to optimise natural ventilation, solar radiation utilisation, and lighting. By minimising reliance on air-conditioning and artificial lighting, these buildings achieve significant energy savings while creating a healthier and more comfortable learning environment for students.

The incorporation of features that maximise natural light and ventilation enhances the overall sustainability and functionality of these educational facilities.

One of net zero carbon schools, 96 Public High School
Source: SMAN 96 Jakarta

The implementation of Net Zero Carbon Schools in Jakarta is the result of collaborative efforts between the Jakarta Provincial Government and the Green Building Council Indonesia (GBCI). The GBCI has played a crucial role in developing guidelines for Net Zero Healthy Schools, which were officially presented to the Jakarta Education Agency in January 2021. These guidelines underscore the importance of natural ventilation, solar radiation utilisation, and energy-efficient systems in the design and construction of schools, aligning with the overarching goal of promoting sustainability within the education sector.

Enhance hazard awareness tools

Frequent flooding has been a critical challenge for Jakarta, prompting the city to implement several initiatives to provide early warning systems and utilise technology for controlling floods. Jakarta's early warning systems (EWS) are crucial non-structural measures aimed at minimising flood-related losses. Traditionally, these systems involved community efforts, such as residents near rivers taking turns to monitor water levels and sounding alarms using traditional instruments. Today, Jakarta's EWS include a range of modern tools like television and radio broadcasts, mobile phone text messages, water level sirens, and bicycles equipped with speakers to deliver warning messages. Additionally, flood information boards are strategically placed in vulnerable areas to keep residents informed.

The Jakarta Regional Disaster Management Agency has introduced many early warning devices for floods and related weather conditions. The city owns three categories of early warning devices: disaster warning systems, automatic weather systems, and automatic water level recorders. These disaster warning systems are primarily intended to help people living on the riverbanks by alerting communities when the water level nears the danger mark.

To enhance flood management efficiency, Jakarta has adopted advanced technologies like the Internet of Things (IoT) and artificial intelligence (AI). The Jakarta Smart City initiative, in collaboration with the Jakarta Water Resource Agency, has developed a flood control system leveraging these technologies. This system helps predict potential floods, optimise flood management activities during flood events, and raise public awareness. It also provides real-time flood monitoring data through various sensors that measure rainfall, water flow, water levels, temperature, and vibrations installed at critical locations.

The monitoring and flood prediction data help the government make data-based decisions and optimise response mechanisms during floods. In the long term, installing these IoT sensors will generate a time series of data, making flood prediction and monitoring more precise and scientific. This, in turn, will enhance the efficiency and impact of government policies and actions. This innovation has been recognised with an e-science prize from the World Summit on the Information Society Forum 2022 and an IDC Smart City Asia Pacific Award 2022 for Public Safety.

Jakarta residents can find out about flood locations from the JakPantau feature in the JAKI application and access various flood information in Jakarta through the official website **www.pantaubanjir.jakarta.go.id.** These tools ensure that residents stay informed about the latest flood information, enabling them to take timely and appropriate actions.

Workers monitoring the flood control system

Source: Jakarta Smart City

BEST PRACTICE

Knowledge Management for Flood Control System

Jakarta's Flood Control System, developed by Jakarta Smart City in collaboration with the Jakarta Water Resource Agency, has gained international recognition, winning the ITU WSIS Prizes 2022 in the e-Science category and the IDC Smart City Asia Pacific Awards 2022 for Public Safety. This innovative system leverages the Internet of Things (IoT) and Artificial Intelligence (AI) to significantly enhance flood management in Jakarta.

The system features real-time monitoring and prediction capabilities through sensors installed at various critical locations, such as pump houses and sluice gates. These sensors monitor parameters like water level, rainfall, and vibrations, integrating this data with historical records to generate real-time information on weather conditions and flood likelihood. This comprehensive data analysis enables the generation of potential solutions for managing floods, providing policymakers with valuable insights to make informed decisions and optimise response mechanisms during flood events. The use of such advanced technologies enhances the efficiency and impact of government policies and actions related to flood management.

The Jakarta Flood Control System also plays a crucial role in raising awareness and engaging the community. By providing information on flood forecasting, early warning systems, and safe evacuation procedures, the system helps foster trust and ownership among local residents, encouraging proactive measures against flood risks. The international awards and recognition received by this system underscore its innovative approach and potential to serve as a model for other cities facing similar challenges.

Scale up renewable energy use

To accelerate the adoption of renewable energy in Jakarta, the provincial government has initiated several key initiatives. These include increasing the share of renewable energy in the energy mix to reduce greenhouse gas emissions. The city is actively promoting the use of solar energy, with a target of implementing around 32,5 MW of solar power plants in Jakarta by 2030.

Throughout 2023, the provincial government has installed solar photovoltaic systems (*Pembangkit Listrik Tenaga Surya*/PLTS) on 20 government-owned buildings with a combined capacity of 803,29 kWp. As of 2023, Jakarta boasts 450 power plants with a combined capacity reaching 28.13 MW. These endeavours underscore a steadfast commitment to adopting renewable energy sources, aiming to reduce reliance on fossil fuels and reduce greenhouse gas emissions.

Jakarta is also focusing on improving energy efficiency in various sectors, including buildings and transportation. This includes the introduction of Jakarta's Net Zero Carbon Schools, which marks a notable initiative aimed at reducing the city's carbon footprint while promoting sustainable education. The programme involves the refurbishment and construction of public schools in Jakarta, integrating green building principles to prioritise energy efficiency, renewable energy utilisation, and carbon emission reduction. Furthermore, in the transportation sector, PT. MRT Jakarta has implemented strategic measures to minimise its carbon footprint. This initiative focuses on optimising energy efficiency, particularly within supporting facilities and operational activities, underscoring the organisation's commitment to sustainable and environmentally conscious practices (UN ESCAP, 2021).

The provincial government is working closely with private sector companies and international organisations to secure technical and financial assistance, as well as to leverage expertise and resources for the development of renewable energy projects. One notable collaboration involves partnering with the World Bank to conduct feasibility studies on the deployment of rooftop solar photovoltaic (RSPV) systems across government buildings and residential areas. This joint effort aims to explore the feasibility and potential impact of RSPV installations, thereby paving the way for increased adoption of renewable energy solutions within Jakarta. Additionally, Jakarta is collaborating with the Resilient Cities Network (RCN) to evaluate the city's energy resilience profile. The study will help enhance Jakarta's capacity to withstand and adapt to energy-related challenges.

Jakarta is also promoting public awareness and participation in the use of renewable energy through education and community engagement initiatives, aiming to create a culture of sustainability and energy independence. One notable example is the collaboration between the provincial government and *Institut Hijau Indonesia*, which organised a visit to SDN 08 Ragunan to conduct a socialisation session on the importance of renewable energy. Through this outreach effort, the fundamental understanding of students regarding global warming is enhanced, and initiatives to address climate change issues are encouraged within their capacity as students.

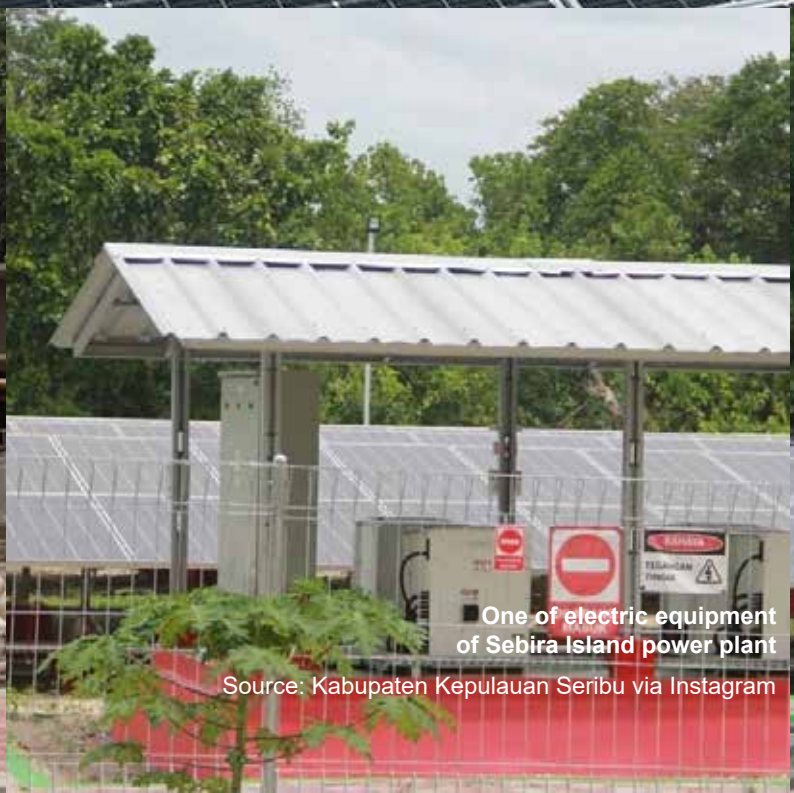
Workers perform maintenance work on solar panels that provide partial electrical power to Istiqlal Mosque in Jakarta

Source: Alamy

A work

Name sign of Sebira Island power plant

Source: Kabupaten Kepulauan Seribu via Instagram



One of electric equipment of Sebira Island power plant

Source: Kabupaten Kepulauan Seribu via Instagram

er cleaning the solar panels at Sebira Island solar power plant
Source: Antara Foto

Solar panels in Sebira Island power plant
Source: Kabupaten Kepulauan Seribu via Instagram

BEST PRACTICE

PLTS Sebira

Sebira Solar Power Plant *(Pembangkit Listrik Tenaga Surya/PLTS)* is a hybrid solar power plant located on Pulau Sebira, an island in the Kepulauan Seribu region of Jakarta, Indonesia. It has a capacity of 400 kiloWatt peak (KWp) and is expected to generate 1,600 kWp of energy per day.

This project marks a significant milestone in the development of renewable energy in Jakarta, particularly in the Kepulauan Seribu region, which is known for its remote islands. The plant's operation aims to provide reliable and environmentally friendly electricity to the residents of Pulau Sebira, who number around 165 families. The PLTS Sebira is also notable for being the largest hybrid solar power plant in Jakarta, making it a significant achievement in the region's transition to cleaner energy sources.

The project is a collaborative effort between the Jakarta Provincial Government and the State Electricity Company (*Perusahaan Listrik Negara*/PLN), with the goal of increasing the use of green energy in the region. The plant's operation is expected to provide electricity to the residents of Sebira Island, thereby supporting local economic activities and enhancing the overall quality of life within the community.

BEST PRACTICE

Birukan Atap, Birukan Langit

PT MRT Jakarta has outlined a nine-step transition toward 25 percent renewable energy for the period 2021-2025. As part of Jakarta's efforts to realise net-zero emissions by 2050, MRT Jakarta has strategically outlined measures to reduce its carbon footprint. The initiative focuses on optimising energy efficiency, particularly in supporting facilities and activities. This showcases the company's commitment to sustainable and environmentally conscious practices.

In a positive sign for environmental stewardship, MRT Jakarta has demonstrated its dedication to renewable energy. A significant milestone was reached in 2022 when 10 percent (5,000 MWh) of the electricity consumed by MRT Jakarta came from renewable sources. This achievement was officially recognised with the issuance of a Renewable Energy Certificate by APX Inc., highlighting MRT Jakarta as the first regional state-owned enterprise to offer proof of electricity sourcing from the Geothermal Power Plant (PLTP) in Kamojang.

Beyond energy consumption, MRT Jakarta has embraced sustainable practices in waste management. Collaborating with Rekosistem, waste from the Blok M BCA Station has seen a 99.7 percent recycling rate for 31.5 tons of inorganic waste deposited by the community. This commitment to waste reduction and recycling aligns with the broader sustainability goals of MRT Jakarta (MRT Jakarta, 2023).

MRTs at Lebak Bulus Depot
Source: Army Virmansyah (Unsplash)

The company's forward-looking approach includes plans for solar power generation. Initiatives such as the "*Birukan Atap, Birukan Langit"* (Bluing the Roof, Bluing the Sky) project, launched in 2021, demonstrate MRT Jakarta's commitment to studying and implementing renewable energy solutions. In 2022, studies were conducted for the development of rooftop solar power at stations and infrastructure within designated transit development zones. Supported by a grant from the United States Trade and Development Agency (USTDA), these efforts aim to produce real recommendations by 2024, with the ultimate goal of ensuring that 25 percent of the MRT Jakarta system is powered by renewable energy by 2025 (MRT Jakarta, 2024).

One of the key strategies employed by MRT Jakarta is optimising energy efficiency throughout its operations. This includes implementing measures to reduce energy consumption and enhance the overall efficiency of its systems and facilities. By maximising energy efficiency, MRT Jakarta aims to minimise its environmental impact and contribute to a more sustainable transportation system.

BEST PRACTICE

Solar-Powered Charging Station

In a move to embrace sustainable energy practices and contribute to the reduction of greenhouse gas emissions, PT MRT Jakarta has implemented a significant initiative by introducing three Solar Charging Stations in the Transit-Oriented Development (TOD) area of Dukuh Atas. These stations serve as innovative hubs where residents can conveniently charge low-power electronic devices, such as mobile phones, laptops, and tablets, using solar energy. This initiative aligns with the broader global effort to transition towards more sustainable energy sources and reduce the carbon footprint associated with traditional charging methods.

The Solar Charging Stations represent a practical step towards creating an eco-friendly urban environment in Jakarta. By harnessing solar power to charge electronic devices, the initiative addresses both the growing demand for electronic connectivity and the need to adopt cleaner energy alternatives. The strategic placement of these charging stations near key transit points, including the entrances of Dukuh Atas MRT Station, Sudirman Station, and BNI City Airport Train Station, ensures accessibility and convenience for residents who rely on public transportation.

Solar-powered Charging Station at Dukuh Atas
Source: MRT Jakarta

Beyond the immediate benefits of providing green energy solutions, these Solar Charging Stations also contribute to building a sustainable and resilient urban infrastructure. Jakarta's commitment to incorporating such environmentally conscious features within its transit-oriented development reflects a broader vision for creating smart and eco-friendly cities. As urban areas continue to grow, initiatives like these play a crucial role in fostering a sustainable lifestyle and encouraging the adoption of clean energy practices among the public.

This initiative represents a proactive response to the global call for sustainable urban development and sets an example for other cities seeking innovative solutions to reduce their ecological impact. The Solar Charging Stations not only offer practical benefits for residents but also symbolise Jakarta's dedication to creating a cleaner, more sustainable future for its citizens.

Sunset at Sudirman Road

Source: Kristian Tandjung (Unsplash)

Transjakarta Electric Bus
Source: Pradamas Gifarry (Unsplash)

Accessibility

For Jakarta, accessibility is a part of what makes the city liveable. The provincial government continues to invest in public transport to provide safer, more affordable, accessible, and sustainable public transport options across the city. As Jakarta continues to emerge as a global city, it is important to support the diversification of the city's public transport network.

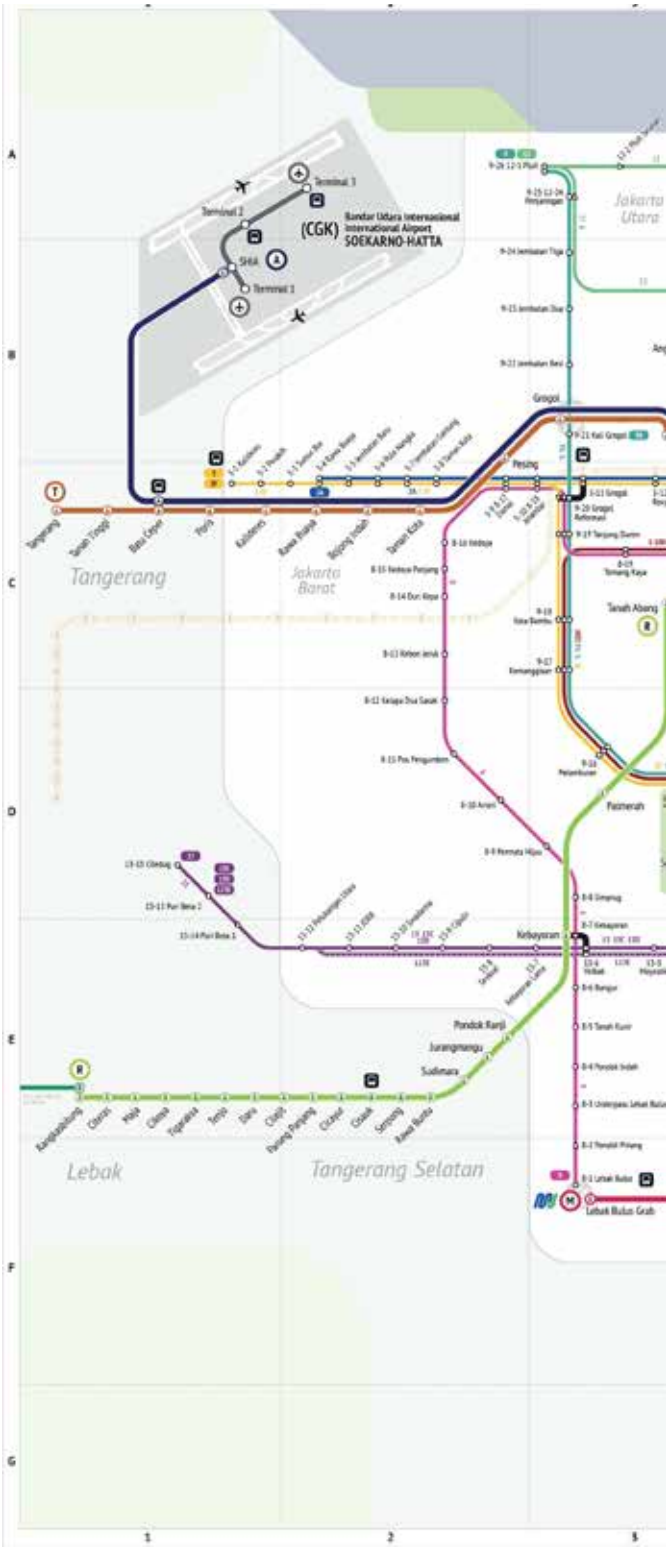
To enhance the city's accessibility, Jakarta employs various strategies, including integrated public transport, diverse transport options, improved pedestrian and cycling infrastructure, inclusive transport facilities, and Transit-Oriented Development.

Connect the city through integrated public transports

Jakarta has long faced challenges with traffic congestion and inadequate public transportation. To tackle these issues, the city has initiated a project to integrate its public transport system. This initiative aims to create a seamless network that connects various modes of transportation, making commuting more efficient and reducing reliance on private vehicles. The city plan involves integrating buses, trains, and other public transit options to ensure smoother transfers and better accessibility across the city.

Jakarta has implemented technological solutions to support its integrated transport system. The city has introduced the JakLingko card, a unified payment method that can be used across various modes of public transport, including TransJakarta buses, the MRT, and the commuter trains. This smart card simplifies the payment process for passengers and encourages the use of public transport by making it more convenient. Furthermore, real-time information systems have been deployed to provide passengers with up-to-date schedules and transit options, further enhancing the efficiency of the network.

The integration initiative underscores Jakarta's commitment to providing a seamless and cost-effective transportation experience, encouraging the use of multiple public transportation modes for enhanced mobility in the city. The decision to integrate fares aligns with the city's vision of promoting sustainable and efficient urban transportation for its residents.



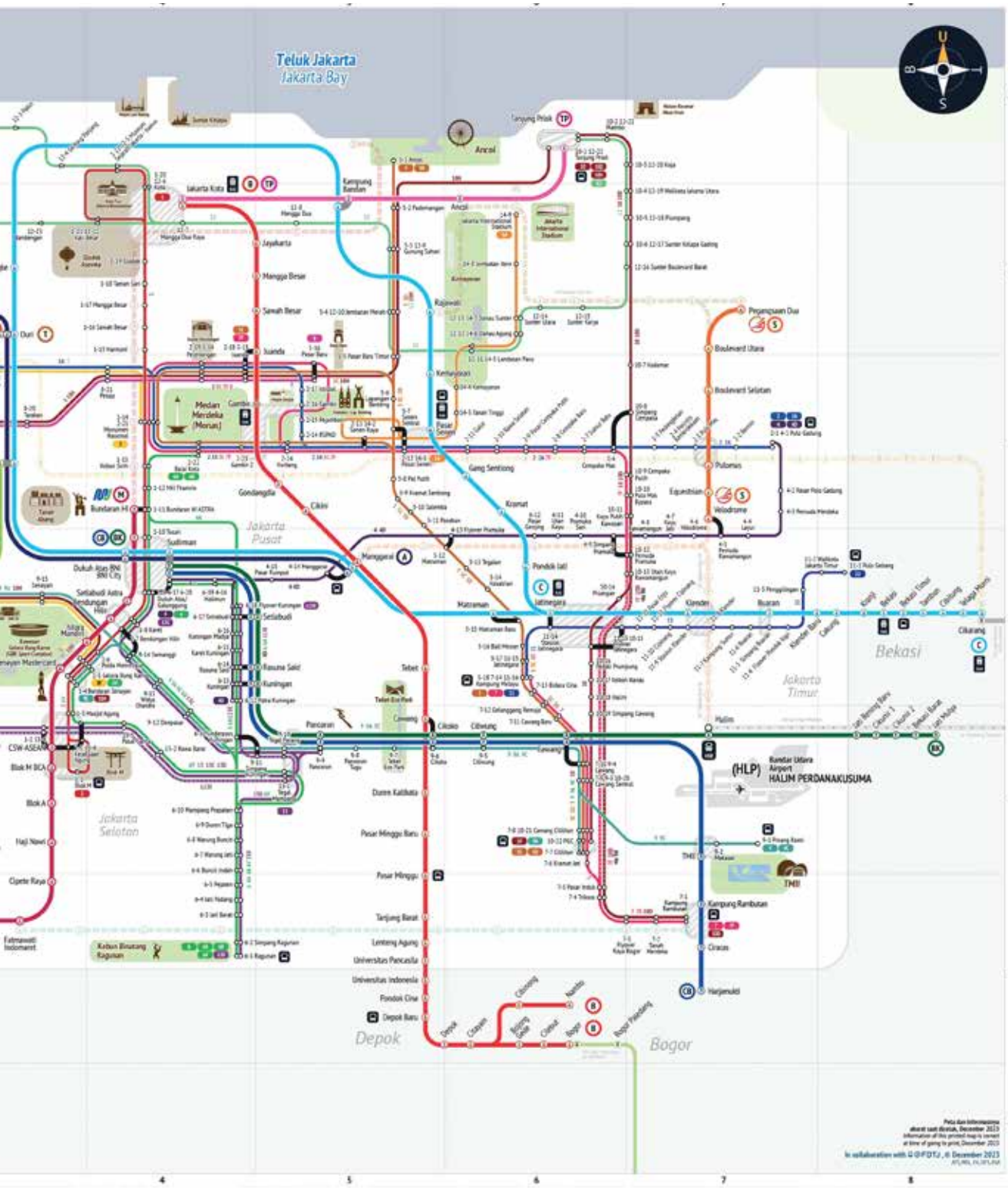
In **2023,**

15
intermoda integration hub

4,750
integrated public transport vehicle

Jakarta Public Transportation Integration Map

Source: Transport for Jakarta



BEST PRACTICE

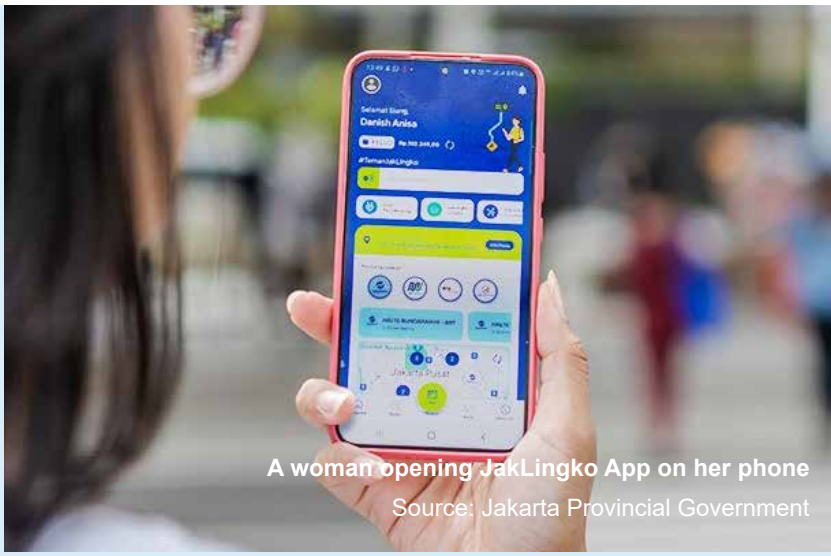
JakLingko

JakLingko represents an integrated transportation system in Jakarta, Indonesia, covering routes, management, and payment methods. This comprehensive system seamlessly incorporates various modes of public transportation, including MRT, LRT, Railink, KAI Commuter, Transjakarta, and Mikrotrans. The name “Jak Lingko” combines “Jak,” denoting Jakarta, with “Lingko,” symbolising a network or integration.

The Jakarta Provincial Government introduced the Jaklingko programme to the public through Governor Decree (*Keputusan Gubernur/Kepgub*) No. 733 of 2022, which standardises fare structures for mass public transportation services. A significant aspect of this gubernatorial decision is the implementation of an integration fare set at Rp 10,000, effective from August 11, 2022.

This Integration Fare is applicable when utilising multiple types of public transportation in Jakarta, including MRT Jakarta, LRT Jakarta, and Transjakarta, allowing passengers to traverse different modes at an affordable fare by reducing half the price from the total normal fare. This provision comes into effect when utilising more than one type of mass public transportation, such as a combination of MRT Jakarta, LRT Jakarta, and Transjakarta.

JakLingko card used to pay Transjakarta fares
Source: Jakarta Smart City



A woman opening JakLingko App on her phone
Source: Jakarta Provincial Government

This innovation, serving as a pull strategy, can be accessed through the JakLingko Application—an integrated ticketing system that allows passengers to use a single ticket for various modes of public transportation. Additionally, the JakLingko Application is supported by ride-hailing provider to facilitate first-mile and last-mile connectivity, helping passengers travel from their homes to the nearest bus stops or stations and then to their final destinations. The implementation of Mobility as a Service (MaaS) by PT JakLingko Indonesia is a pioneering effort in Indonesia, with Jakarta serving as a pilot project for the electrification and integration of public transportation payment systems (EIPTJ).

Another key feature of JakLingko is the JakLingko Indonesia Card, a payment card that facilitates transactions across different transportation services and additional amenities. Users can register for the JLI Card through the JakLingko application, and the card is easily tapped on designated readers at transportation gates for a seamless payment experience. This card serves as a unified solution for commuters, streamlining payments and enhancing the overall transportation experience.

JakLingko’s emphasis on integration underscores Jakarta’s commitment to providing a unified and efficient transportation system for Jakarta residents. By integrating major transportation modes through JakLingko, this system can simplify the commuting process, making it more convenient and accessible for the public.

A woman showing GoRide Transit feature in GoJek
Source: Gojek Indonesia

BEST PRACTICE

GoRide Transit

Gojek, the Indonesian ride-hailing company, has introduced GoRide Transit, marking a significant expansion in its service coverage. This new feature allows users to plan and book multimodal trips seamlessly, integrating GoRide (ride-hailing motorcycle) services to reach train stations, commuting by train, and completing the last leg of the trip with GoRide.

Previously known as GoTransit, primarily a platform for booking train tickets and providing multimodal route suggestions, the introduction of GoRide Transit now provides Gojek users with an end-to-end transportation solution. This integrated approach enables users to potentially save up to 27 percent per trip on average and reduce travel time by around 15 percent (Gojek, 2023), showcasing Gojek's commitment to enhancing user experiences and providing efficient transportation solutions.

GoRide Transit reflects Gojek's strategic move to address the evolving needs of its user base, offering more comprehensive and cost-effective travel options. By streamlining the booking process for both ride-hailing motorcycles and trains, Gojek aims to deliver a seamless and efficient travel experience for users. This development aligns with Gojek's broader strategy to become a one-stop platform for various transportation needs, strengthening its position in the competitive ride-hailing and mobility services market.

A mother and her son walking through JPM Dukuh Atas

Source: Jakarta Communication, Informatics, and Statistics Department

A woman buying food at one of food stall

JPM Dukuh Atas bridge

Source: Jakarta Communication, Inf

BEST PRACTICE

JPM Dukuh Atas

To enhance connectivity, the Jakarta Provincial Government has developed infrastructure both above ground and underground. Among the elevated connectivity structures are the Multifunctional Pedestrian Bridge (*Jembatan Penyeberangan Multiguna*/JPM) in Dukuh Atas, the Crosswalk (CSW), and the Multifunctional Pedestrian Bridge in Lebak Bulus.

in JPM Dukuh Atas
Source: MRT Jakarta

JPM Dukuh Atas bridge
Source: Jakarta Communication, Informatics, and Statistics Department

Food stall in JPM Dukuh Atas
Source: MRT Jakarta

to enter Dukuh Atas LRT Station
ormatics, and Statistics Department

Source: Jakarta Communication, Informatics, and Statistics Department

The JPM Dukuh Atas is an inclusive public space that offers various facilities to enhance pedestrian comfort and strengthen intermodal connectivity, providing a place for visitors to enjoy Jakarta's attractions. JPM Dukuh Atas serves not only as an efficient transit point but also connects more efficient travel patterns for those using various modes of transportation such as the Commuter Line, MRT, LRT, Airport Train, and TransJakarta. Spanning approximately 235 metres, the JPM in Dukuh Atas is constructed using creative financing that does not rely on regional or national budget funds.

The JPM in Dukuh Atas creates new possibilities for smoother and more efficient daily travel, positively impacting city traffic and the environment. This connectivity not only streamlines the transfer process between different modes of transportation but also promotes sustainable mobility and reduces reliance on private vehicles. Additionally, by incorporating amenities such as seating areas, rest zones, and bicycle parking facilities, the JPM in Dukuh Atas encourages active transportation methods and provides a welcoming environment for pedestrians and commuters alike.

Expand the variety of transport options

Expanding the variety of transport options in Jakarta is essential for creating a comprehensive and efficient public transportation system that meets the diverse needs of its residents. One of the key components of this effort is the Bus Rapid Transit (BRT) system, known as Transjakarta. Since its early implementation in 2004, Transjakarta has evolved into a vital mode of transportation, covering the expansive Jabodetabek metropolitan area, which includes Jakarta, Bogor, Depok, Tangerang, and Bekasi. With a network spanning 537,5 kilometres, 230 shelters, and 7627 bus stops, Transjakarta provides integrated and congestion-free public transportation management, offering various services from Regular Non-BRT to Mikrotrans services.

In addition, KRL Commuter Line, a commuter rail network serves as the backbone of public transportation in the Greater Jakarta area, connecting Jakarta with its surrounding satellite cities. With its extensive coverage and operational efficiency, the KRL Commuter Line offers commuters a convenient and reliable mode of transportation, contributing significantly to urban mobility within the region. The commuter rail system boasts an average daily ridership of more than 870.00 passengers on weekdays, reflecting its popularity and effectiveness.

Additionally, Jakarta has invested in modern rail-based transportation systems such as the Mass Rapid Transit (MRT), Light Rail Transit (LRT) Jakarta and LRT Jabodebek. LRT Jakarta, managed by PT Jakarta Propertindo, operates along a 5.8-kilometer track with six stations, providing an integrated solution for urban transportation in the capital city. Similarly, LRT Jabodebek serves as an integral part of the transportation network, connecting Jakarta with neighbouring cities like Bogor, Depok, and Bekasi. With extensive coverage and advanced features such as cashless payment systems, these rail-based systems offer commuters efficient and comfortable travel options.

Moreover, Jakarta has enhanced connectivity both within the city and beyond. This is exemplified by initiatives such as the high-speed train Whoosh, linking Jakarta to Bandung, and the Railink Airport Train, offering direct access to Soekarno-Hatta Airport. Furthermore, first-mile and last-mile transportation services, such as Mikrotrans, *Ojek*, Taxis, and Bajaj, play a crucial role in providing seamless connectivity within the city. By expanding the variety of transport options and investing in modern and sustainable infrastructure, Jakarta aims to create a more accessible, efficient, and inclusive transportation system that supports the city's growth and development as a global metropolis.

MRT train passing through near Lebak Bulus
Source: Kristian Tandjung (Unsplash)

BEST PRACTICE

Transjakarta

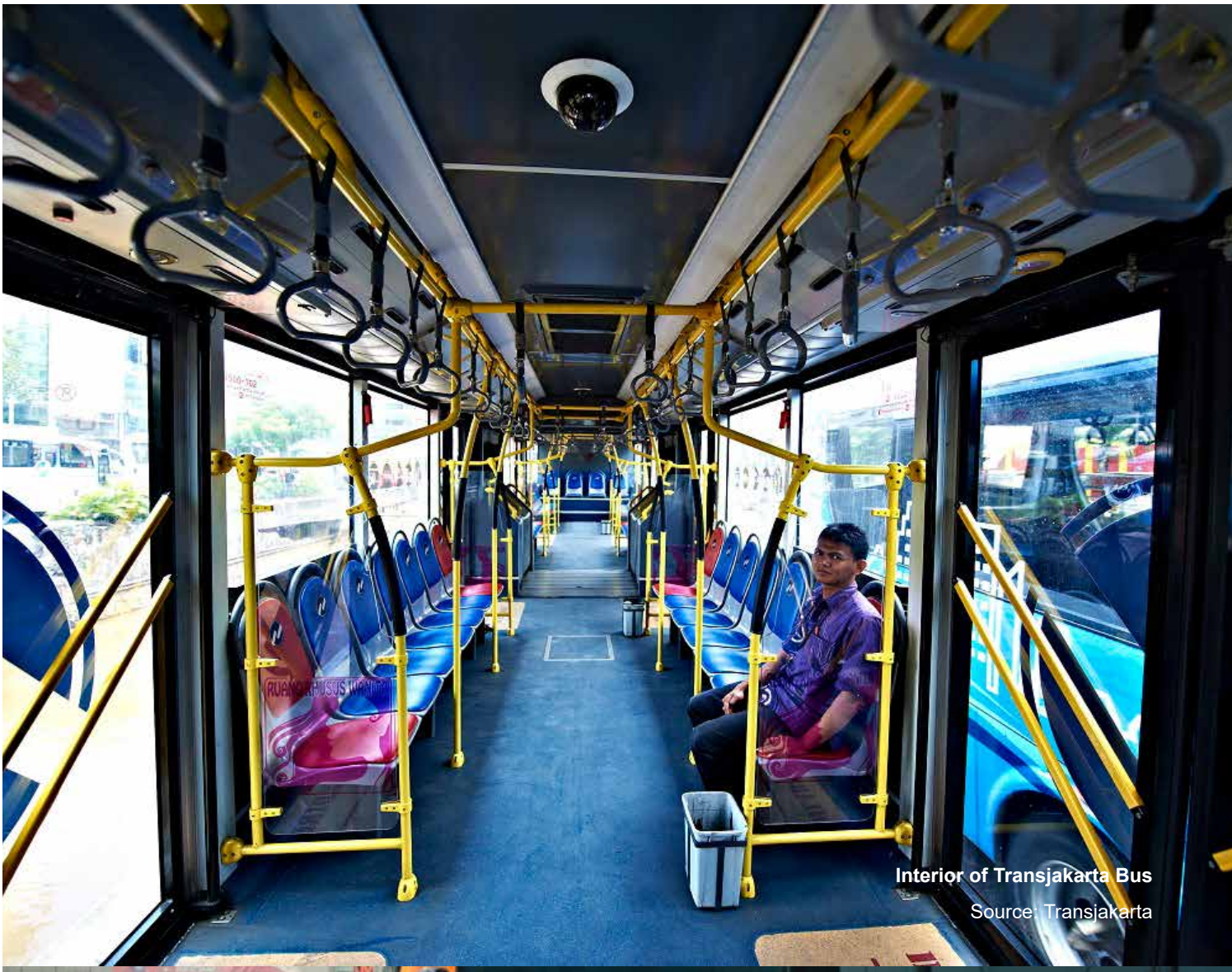
Transjakarta is the bus rapid transit (BRT) system in Jakarta, Indonesia, which plays a crucial role in connecting the city. With the network spanning 537.5 km, Transjakarta is the longest BRT in the world. The Transjakarta system integrates BRT lines operating in dedicated bus lanes with designated stations, as well as non-BRT routes that run on city streets and in BRT corridors, making stops at BRT stations.

The system has also been integrated with other modes of transportation, including feeder buses, Mikrotrans, and tourist buses, to provide a comprehensive public transportation network. This integration has contributed to a significant increase in ridership, with Transjakarta serving over 700,000 people daily and carrying a total of 273.4 million passengers in 2023.

Transjakarta has a prominent role in Jakarta's public transportation network, connecting commuters across the city with the most routes and efficient travel options. Despite the presence of other rapid transportation systems like KRL Commuter Line, LRT, and MRT, Transjakarta remains a vital part of the city's transportation infrastructure.

Transjakarta is also at the forefront of implementing Transportation 4.0, a plan aimed at optimising the public transportation system through the use of technology and sustainable practices. This includes the introduction of electric buses, wayfinding systems, and Tap-in Bus (TOB) ticketing systems to enhance the user experience and reduce environmental impact.

A Transjakarta bus
Source: Transjakarta



Interior of Transjakarta Bus

Source: Transjakarta

Passengers boarding to Transjakarta Bus

Source: Rangga Cahya (Unsplash)

BEST PRACTICE

Mikrotrans

Mikrotrans is a type of local bus service in Jakarta, which is part of the city's public transportation system. It serves as a feeder service, connecting various transportation modes including Transjakarta, MRT Jakarta, and other public transport services. Mikrotrans buses are equipped with modern facilities such as air conditioning, GPS, CCTV cameras, and sliding doors to ensure a comfortable and safe journey for passengers.

The fare for Mikrotrans is Rp0, and passengers must use an electronic payment card to board the bus. This system is part of the integrated payment system implemented by JakLingko, allowing passengers to use a single card for multiple modes of transportation seamlessly. This streamlined payment method aims to enhance the convenience and efficiency of Jakarta's public transportation network.

Mikrotrans began operations on January 15, 2018, initially serving three routes: JAK.02 Kampung Melayu - Duren Sawit, JAK.05 Semper - Rorotan, and JAK.06 Kampung Rambutan - Pondok Gede. As of May 2024, Mikrotrans had expanded to operate on 94 routes, covering various parts of the city. The service sees an average of 491,701 passengers on weekdays and 325,792 passengers on weekends, highlighting its significant role in Jakarta's daily transportation needs.

Mikrotrans

Source: Transjakarta

BEST PRACTICE

LRT Jakarta

Jakarta is making strides towards achieving Net Zero Emissions by 2050 through its sustainability initiatives. The Jakarta Provincial Government, through one of its regional-owned enterprises, Jakarta Propertindo (Jakpro), is actively promoting a shift from private to public transportation by enhancing integrated public transit and infrastructure. The Light Rapid Transit (LRT) system in Jakarta exemplifies this effort by offering efficient, reliable, and high-quality public transportation options, aimed at fostering new commuter behaviours and facilitating a substantial reduction in carbon emissions.

The LRT system is designed to be affordable, accessible, comfortable, and secure for passengers, supporting the city's goal of creating a low-carbon environment. To ensure convenience and seamless travel, Jakpro is focusing on integrating all LRT Jakarta stations with interconnected routes, unified payment systems, and transit facilities that connect with other public transportation services. This comprehensive approach encourages greater public transportation usage and contributes to the attainment of SDGs.

LRT Jakarta stands out for its ability to navigate tight urban spaces, making it suitable for densely populated cities with existing infrastructure. It offers significant capacity while requiring lower capital expenditures compared to heavier train systems. Additionally, while currently operational on a 5.8-kilometer route, the LRT Jakarta depot is designed to support an extensive 110-kilometre network, demonstrating its potential to accommodate long-distance travel. These features highlight the LRT's potential to mitigate traffic congestion and environmental challenges, positioning it as one key player in Jakarta's sustainable transportation in the future.

A LRT train entering the station
Source: Fadhila Nurhakim (Unsplash)

A LRT train stop at Kelapa Gading station
Source: LRT Jakarta

Encourage sustainable and active travel

Jakarta has made significant progress in encouraging and developing cycling infrastructure as part of its broader urban mobility strategy. Recognising the need to reduce traffic congestion and improve air quality, the city has invested in creating protected cycling lanes. As of early 2023, Jakarta has built 301.07 kilometres of bike lanes, some bordered by concrete planters and stick cones. The city also has a comprehensive bike lane development plan extending until 2030, aiming to further enhance its cycling network.

Efforts to improve cycling infrastructure in Jakarta are driven by the need to address environmental and traffic congestion issues. With high levels of air pollution and greenhouse gas emissions primarily from motorcycles, the city sees cycling as a viable alternative for short trips. A study by People Near Bikeways (PNB) by Institute for Transportation and Development Policy (ITDP) Indonesia highlighted that in 2022, the bike lanes are connected to 165 Transjakarta stops, 19 KRL stations, 12 MRT Jakarta stations, 3 LRT Jabodebek stations, and 2 LRT Jakarta stations (ITDP, 2023). This extensive network also serves 726 schools in Jakarta, including 103,009 primary school students (SD), 58,592 junior high school students (SMP), and 29,886 high school students (SMA).

Despite these efforts, the journey towards a cycling-friendly Jakarta faces challenges. Political and public contention has hindered the permanent establishment of many cycling lanes. The removal of protective barriers like stick cones has decreased the length of safeguarded lanes, making cyclists vulnerable. Nevertheless, the persistent use of these lanes by hundreds of cyclists per hour in various areas indicates a strong public demand for better and safer infrastructure. Enhanced protection measures, such as concrete curbs, are essential to ensure cyclist safety and encourage more people to adopt cycling.

In recent years, Jakarta has also made significant improvements to pedestrian facilities in various parts of the city. These upgrades have primarily targeted Transit-Oriented Development areas to support the high levels of mobility in these regions. The city's pedestrian infrastructure aims to create safe, comfortable, and suitable environments for all users, regardless of age or ability. As of 2022, pedestrian spaces in Jakarta cover an area of 545,073.65 square metres.

Jakarta's efforts to improve both cycling and pedestrian infrastructure underscore the city's commitment to encouraging active travel. By investing in protected bike lanes and enhancing pedestrian facilities, Jakarta aims to create a more sustainable, healthier, and less congested urban environment. The city's ongoing initiatives reflect a strong dedication to promoting active travel as a key component of its urban mobility strategy.

BEST PRACTICE

Bike to Work

Bike to Work (B2W) is a community of cycling enthusiasts who commute to work using bicycles. The community was officially declared in August 2005 at the Jakarta City Hall, with approximately 750 cyclists from various groups in attendance. Bike to Work Indonesia has established five programmes to promote cycling and empower both cyclists and the broader community. These programmes include advocacy, education, social initiatives, campaigns, and collaborations with Micro, Small, and Medium Enterprises (MSMEs).

Through these programmes, Bike to Work Indonesia aims to educate the public on proper and safe cycling practices. They also advocate for cyclists' rights, negotiating with the government to implement cyclist-friendly policies and supporting cyclists who are victims of traffic accidents. Additionally, Bike to Work Indonesia fosters collaboration with MSMEs by providing sales channels in community hubs like Rumah Sepeda Indonesia, cafes, and local shops.

Bike to Work Indonesia Community
Source: Bike to Work

Riding Bike near Semanggi
Source: Randy Atantya (Unsplash)

BEST PRACTICE

Koalisi Pejalan Kaki

Koalisi Pejalan Kaki (Coalition of Pedestrians) is a community organisation established in 2011 that advocates for the rights of pedestrians in Jakarta, Indonesia. Led by young activists, the organisation seeks to promote pedestrian safety and accessibility by pushing for better infrastructure and facilities for walkers. Their efforts focus on raising awareness about the importance of pedestrian-friendly urban planning and urging the government to implement policies that support active travel.

Koalisi Pejalan Kaki Members campaign to increase awareness of walking for commute

Source: Koalisi Pejalan Kaki

One of the primary roles of the community is to advocate for pedestrian rights, with a particular focus on vulnerable groups such as women, children, and senior citizens. The organisation emphasises the necessity of proper sidewalks, crosswalks, and traffic signs to reduce road fatalities and improve overall pedestrian safety. By highlighting these needs, they aim to ensure that all pedestrians have safe and accessible routes for walking throughout Jakarta.

Infrastructure development is another key initiative of *Koalisi Pejalan Kaki*. The community advocates for the construction of decent sidewalks, pedestrian bridges, and other supporting facilities to enhance the walking experience in the city. They also encourage the government to upgrade the standards of existing sidewalks to better serve the needs of pedestrians and to promote a more walkable urban environment.

This community leverages social media platforms to raise awareness about pedestrian rights and engage the public in reporting violations on the streets. This approach helps to monitor and improve pedestrian conditions by involving the community directly in the advocacy process. Additionally, the organisation collaborates with other groups, such as Bike to Work, to promote active travel and walking culture in Jakarta. By encouraging people to incorporate walking into their daily routines, they highlight the benefits of walking for both health and the local economy.

Ensure inclusivity in transport facilities

Jakarta's rapid urbanisation has significantly increased the mobility needs of its residents, making public transportation crucial for social inclusion. Ensuring accessible and inclusive transport systems allows individuals from diverse backgrounds and abilities to participate in society, thereby contributing to economic productivity and overall well-being.

Women, children, elderly, and people with disabilities are primary users of public transportation in Jakarta. According to ITDP research from 2021, 49 percent of Mikrotrans (Transjakarta's microbus) passengers were elderly. Recognising the diverse needs of its population, Jakarta has undertaken several initiatives to ensure its transport systems are inclusive and accessible to all users, regardless of gender, race, ability, or age.

A disable man waiting the arrival of an MRT train in Bundaran HI station

Source: MRT Jakarta

A disable women being helped enter the MRT train
Source: MRT Jakarta

One significant effort is the development of special transport facilities for vulnerable groups. Jakarta has introduced special school buses for students with disabilities, equipped with features such as textile flooring for visually impaired students, CCTV, and hydraulic systems to lift wheelchairs. These buses operate on five routes daily, covering areas with special needs schools and high concentrations of students with disabilities. Additionally, Transjakarta has implemented various accessibility features, including elevators at stations and low-entry buses designed to be wheelchair accessible, serving smaller inner-city lanes and peripheral areas.

To further enhance accessibility, special transport signage for visually and hearing-impaired users has been developed. Transjakarta, in collaboration with ITDP and The Indonesian Association of the Blind and Low Vision (*Persatuan Tuna Netra Indonesia*/PERTUNI), is piloting the use of Braille-lined handrails in 13 bus stations. These stations were chosen based on user demand, and the initiative includes tactile guidelines and braille route maps to facilitate navigation for visually impaired users. Disability-friendly paths to bus stops have also been implemented to improve access for people with disabilities.

Jakarta has also addressed the needs of female commuters by improving the safety and accessibility of public transportation for women and children. Transjakarta buses and electric commuter line (KRL) trains have introduced women-only services. Transjakarta operates a fleet of 20 special buses for women, spread across the Jakarta corridor, to provide a safer and more comfortable environment for female commuters. Similarly, KRL trains have special wagons for women located at the front and end of the train. Transjakarta also offers priority customer pins for pregnant women to ensure their comfort and safety while using public transportation.

The development of transport facilities and policies also involves the participation of the public, including vulnerable groups, ensuring that policies and plans cater to their needs. The city has the Jakarta Metropolitan Transportation Discussion Forum (*Forum Diskusi Transportasi Jakarta*/FDTJ) organisation that focuses on providing a discussion platform around mobility. Jakarta also has the Jakarta City Transportation Council (*Dewan Transportasi Kota Jakarta*/DTKJ), an independent regional body that acts as a consultation forum between the public and local government. DTKJ advises local leaders on transportation issues, with members drawn from diverse societal sectors, including academia, transportation experts, transport business owners, transportation service users, police, the Department for Transportation, and NGOs in the transportation sector.

BEST PRACTICE

Disability-friendly school buses

The Jakarta Provincial Government, through the Jakarta Transportation Department, launched the first five units of school buses specially designed for students with disabilities in January 2024. These buses aim to facilitate the commute for disabled students, making it easier and safer for them to travel to school. This initiative reflects the government's commitment to improving accessibility and inclusivity in public transportation.

The buses are equipped with special facilities to accommodate the needs of students with disabilities, particularly wheelchair users and visually impaired students. Each bus provides space for 7 passengers with wheelchairs, 10 seating places, and room for 19 standing passengers (Jakarta Smart City, 2024). Additionally, the buses are fitted with Closed Circuit Television (CCTV) for enhanced security, tactile flooring to assist visually impaired students, and a hydraulic platform system to lift wheelchairs into the bus. These features ensure that the buses are both functional and comfortable for all passengers.

Operating on five routes daily, the buses cover key locations of Special Needs Schools (Sekolah Luar Biasa) and cater to the number of students requiring bus access. The routes include Rorotan-Marunda, Plumpang-Kemayoran, Kalideres-YPAC Jakarta, Muara Baru-YPAC Jakarta, and Lubang Buaya-YPAC Jakarta. By providing reliable and accessible transportation, Jakarta's special school buses help ensure that students with disabilities can attend school with greater ease and independence.

Helping the kid to get off from disability-friendly school bus

Source: Jakarta Smart City

Build EV ecosystem

Despite EVs currently holding less than 1 percent of total penetration in Indonesia, the groundwork for a significant shift is being laid. The Indonesian government has set targets, including banning the sale of fossil fuel motorcycles by 2040 and cars by 2050, while also offering incentives for upfront purchase prices and non-monetary benefits such as exemptions from the odd-even traffic rule for EVs. Moreover, the government has introduced several incentives to encourage EV adoption nationwide, encompassing Value-Added Tax (VAT) incentives, extended VAT incentives, removal of Luxury Tax, discounted electricity rates, and import duty and sales tax incentives.

Indonesia's electric vehicle (EV) ecosystem is experiencing rapid growth. According to data from the Coordinating Ministry for Maritime and Investment Affairs, EV sales reached 10,327 units in 2022, and increased to 17,051 units in 2023, accounting for approximately 2 percent of the market. Jakarta, as the capital city, stands at the forefront of Indonesia's EV development, with a range of initiatives and investments geared towards bolstering the EV industry.

Currently, Jakarta supports the electrification of private vehicles with 258 charging stations (*Stasiun Pengisian Kendaraan Listrik Umum*/SPKLU), with plans to expand further. In addition to private vehicle electrification efforts, Jakarta has been focusing on improving public transportation availability. As of 2023, around 100 electric buses are in operation, with plans to transform more than 10,000 fleets by 2030. This transformation aligns with the Provincial Government's support for the Government of Indonesia's Battery Electric Vehicle Acceleration Programme for Road Transportation.

Private corporations are actively participating in this transition. Companies like Gojek aim for a complete fleet transition to EVs by 2030, Grab plans to deploy 26,000 EVs in Indonesia by 2025, and Bluebird has already initiated its EV armada, now operating over 200 electric taxis. Medco Power Indonesia has also joined in, launching an electric vehicle ecosystem in Jakarta, installing charging stations, and integrating electric vehicles into its operational needs.

BEST PRACTICE

Transjakarta Electric Bus

Jakarta is advancing its commitment to sustainable urban mobility and reducing carbon emissions through the electrification of its public transport. The provincial government has set an ambitious target to transition the entire Transjakarta fleet to 100 percent electric buses by 2030. Currently, the fleet predominantly relies on conventional fuel, primarily solar. The electrification process involves converting these conventional buses into electric ones, with the goal of electrifying 50 percent of the fleet by 2027 and achieving full electrification by 2030.

Transjakarta, the city's bus rapid transit system, has already made significant strides in this direction by introducing electric buses into its fleet. As of 2023, there are 100 electric buses in operation, with plans to increase this number to 200 by the end of 2024. These electric buses are deployed across various regions of Jakarta, providing cleaner and more sustainable public transportation options for residents and contributing to the reduction of the city's carbon footprint.

To meet the electrification targets, a comprehensive implementation roadmap has been developed for both Bus Rapid Transit (BRT) and non-BRT categories. Additionally, a specific roadmap focusing on MikroTrans, which consists of smaller public transport vehicles, has also been formulated. This strategic planning ensures a holistic approach to integrating electric vehicles across all forms of public transport in Jakarta, facilitating a smoother transition and broader impact.

Transjakarta electric bus roaming the Sudirman

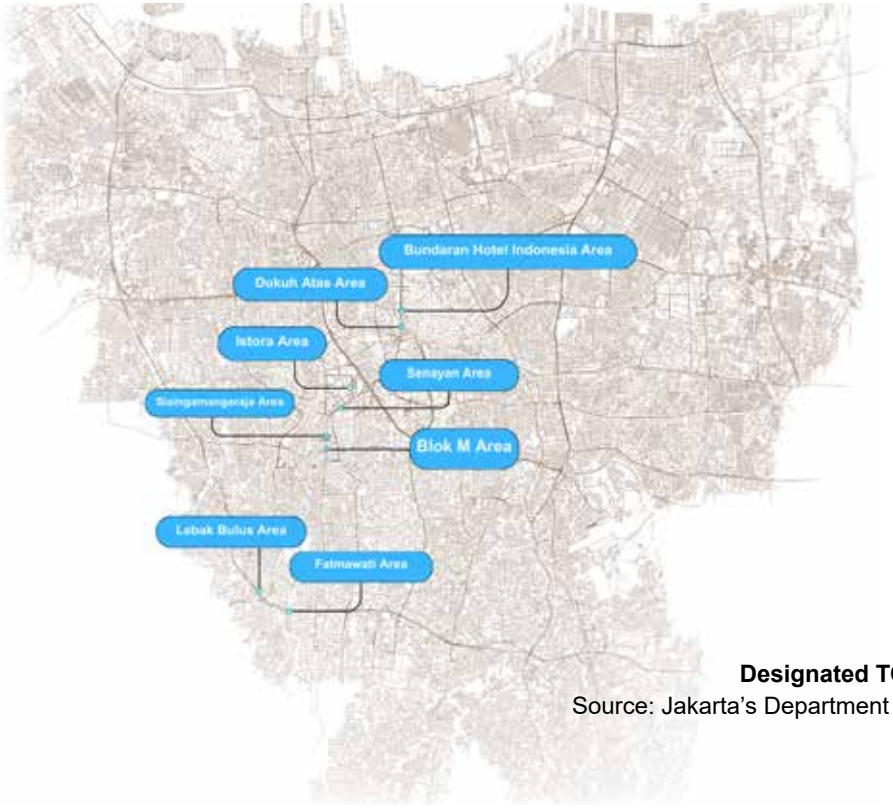
Source: Transjakarta

Implement transit-oriented development

Jakarta, with a population exceeding 10 million, has long struggled with severe traffic congestion. According to the TomTom Traffic Index 2023, Jakarta ranks as the 30th most congested city in the world. To tackle this issue, the Jakarta Provincial Government is shifting its development paradigm from car-oriented development to transit-oriented development (TOD). This approach focuses on building around transit hubs and integrating various transportation modes with mixed land use to create more efficient urban spaces.

The TOD initiative aims to ensure that residential areas, commercial centres, service hubs, offices, open spaces, public areas, and other community services are easily accessible by walking, cycling, or using public transport. By positioning transit stops and hubs close to these amenities, Jakarta aims to facilitate seamless connectivity and reduce dependency on private vehicles. This strategy is designed to make everyday commutes more convenient and sustainable.

Jakarta's commitment to TOD began with the development of its first MRT line in 2015, with Dukuh Atas becoming the first area to be developed as a Transit Oriented Development. Since then, the city has continued to expand its TOD areas, focusing on creating pedestrian-friendly, sustainable urban environments. These efforts are intended to improve the overall quality of life for both residents and visitors, making the city more liveable and accessible



Designated TOD Area in Jakarta
Source: Jakarta's Department for Spatial Planning and Land Affairs

TOD Dukuh Atas

Direction Sign to Dukuh

Duku

BEST PRACTICE

TOD Dukuh Atas

Dukuh Atas is the first area that has been developed as a transit-oriented development in Jakarta. It integrates multiple modes of transportation, including the Mass-Rapid Transit (MRT), Transjakarta, Airport Rail Link, and Commuter Line. Moreover, Dukuh Atas offers a range of supporting facilities for urban activities, including river parks, transit plazas, park bridges, civic plazas, and urban parks.

Atas LRT Station

Direction Sign to Sudirman Commuter Line Station

A woman waiting online transport

uh Atas connecting passageway

View of TOD Dukuh Atas Passageway

Source: Jakarta Communication, Informatics, and Statistics Department

In terms of land use planning, the office, trade, and services zone dominate Dukuh Atas, reflecting the area's strategic location in alignment with the Sudirman-Thamrin corridor, Jakarta's primary economic and business hub. Other prominent zones include medium-high housing and mixed housing. The mixed zone, combining office, trade, and residential functions, enhances the diversity and vibrancy of the area.

Residential land use is significant in Dukuh Atas, indicating its crucial role in the area's development. This dominance aligns with the existing land use patterns, particularly influenced by the area's strategic location. The high accessibility and connected transportation infrastructure make Dukuh Atas a strategic location for development, complementing its role as a commercial centre.

BEST PRACTICE

TOD Blok M

The Blok M area in Kebayoran Baru, South Jakarta, has been designated as one of the Transit Oriented Development (TOD) sites in the Jakarta region. Covering 113.7 hectares, which includes the Blok M and Sisingamangaraja areas in the Kebayoran Baru District, this area is strategically situated at the intersection of several transportation nodes. These include the Blok M and ASEAN MRT stations and the Blok M Bus Terminal, making it an ideal location for TOD development.

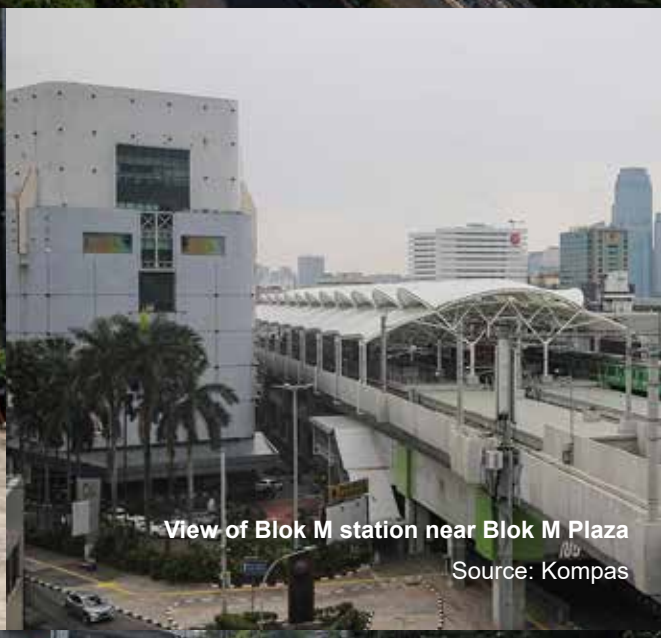
TOD Blok M aims to provide convenient, safe, and pedestrian-friendly access for commuters, cyclists, and public transport users. To encourage public transport usage, transportation hubs are interconnected by integration facilities, such as the CSW-ASEAN interchange, which integrates the Jakarta MRT station with Transjakarta bus stops. These integration facilities simplify public transportation usage and mode transfers for the community.

Moreover, TOD Blok M connects public transportation modes with various economic facilities. Residents can engage in various activities with the availability of office spaces, commercial areas, open spaces, and other public facilities. The MRT station is directly linked to Blok M Plaza, providing convenience for visitors to switch transportation modes. In addition, TOD Blok M also offers easy access to shopping centres, restaurants, and entertainment venues, making it a bustling hub for both residents and visitors. The connection to the MRT station further enhances the area's accessibility, making it a prime location for commercial activities and social gatherings.

Furthermore, TOD B also provides accessible public spaces, including the rejuvenation of parks. Martha Christina Tiahahu Park, located strategically near Blok M MRT Station and Blok M Terminal, has been developed as a cultural and literacy development hub, now known as *Taman Literasi* (Literacy Park). The park also offers various activities such as book readings, workshops, and cultural performances, making it a popular destination for families and individuals. Therefore, the development of Blok M as a TOD site represents a step towards a more accessible and resilient city that prioritises the well-being of its residents and the

Aerial view of TOD Blok M
Source: MRT Jakarta

Martha Christina Tiahahu Literacy Park
Source: Kompas

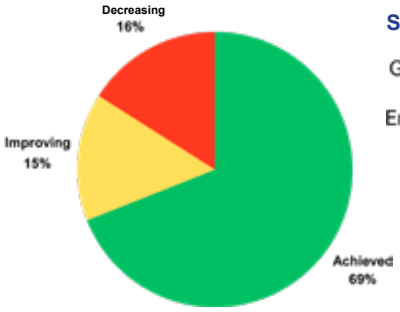


View of Blok M station near Blok M Plaza
Source: Kompas

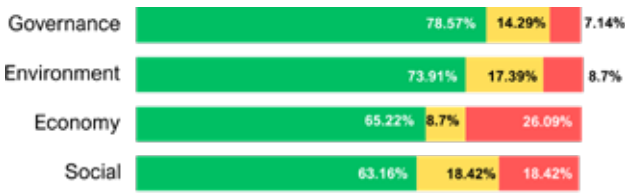
Stairs at Martha Christina Tiahahu Literacy Park
Source: Tempo

Jakarta SDGs Performance

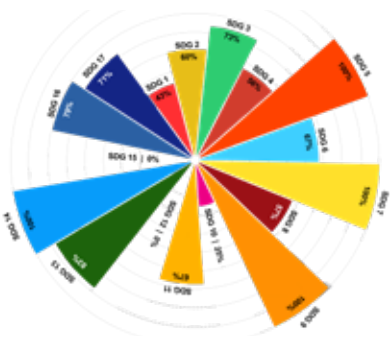
Achieved Target by SDGs



Status of SDG Target by Pillars



Achieved Target by SDGs



Status of SDG Target by Goals

Status of SDG Target by Indicators

SDGs Performance by Indicator (2023)

SDG - 1 NO POVERTY

CODE	INDICATOR	VALUE	STATUS
1.1.1*	Extreme poverty rate (PPP$1.9 per day)	N/A	●
1.2.1*	Percentage of population living below the national poverty line, by gender and age group.	4.44 (Mar)	↗
1.2.2*	Percentage of men, women and children of all ages, living in poverty in various dimensions, according to national definitions.		
	1. Basic Immunisation: Percentage of basic immunisation in the population aged 12 - 23 months, deprivation occurs if there are residents aged 12-23 years who do not receive basic immunisation	N/A	●
	2. Nutrition: Prevalence of Undernourishment (level of malnutrition), deprivation occurs if there are household members who are malnourished	2.57	↗
	3. Morbidity Indicator: percentage of population experiencing health problems	N/A	●
	5. School participation: Percentage of school age children 7-18 years who do not/have not attended school, deprivation occurs if there are school age children 7-18 years who do not/have not attended school	N/A	●
	6. Electricity: Percentage of households whose main source of lighting is not electricity, deprivation occurs without electricity	0	↑
	7. Drinking water: Percentage of households without access to clean drinking water, deprivation occurs if households do not have access to clean drinking water or clean water that can be obtained no more than 30 minutes walk from home.	N/A	●
	8. Sanitation: The percentage of households that do not have a proper toilet, deprivation occurs if households do not have a proper toilet or use a shared toilet	5.47	↓
	9. Floors: The percentage of households with the largest floor type is dirt or the floor area per capita is less than 8 m², deprivation occurs if the house has dirt floors, sand or floors mixed with livestock manure or the floor area per capita is less than 8m².	N/A	●
	10. Cooking fuel: Percentage of households with cooking fuel using 3kg LPG, deprivation occurs if cooking uses 3kg Liquefied Petroleum Gas (LPG)	N/A	●
	11. Assets: Percentage of households that do not have productive assets, deprivation occurs if the household does not have a bicycle or motorbike, livestock, land, TV, gas cylinder, refrigerator, gold, car.	N/A	●
	12. Birth certificate: The percentage of the population aged 0-17 years who do not have a birth certificate, deprivation occurs if there are household members aged 0-17 years who do not have a birth certificate.	0.05	↑
	14. Employment: Percentage of households with working household members, deprivation occurs if no household member works or all household members work less than 20 hours a week.	N/A	●

SDG 1 - NO POVERTY

CODE	INDICATOR	VALUE	STATUS
1.3.1*	Proportion of the population receiving social protection programs, according to gender, for the categories of children with special needs, unemployed, elderly, people with disabilities, pregnant/giving birth mothers, victims of work accidents, poor and vulnerable groups.	98.56	↑
1.3.1.(a)	Proportion of health insurance participants through National Social Security System (SJSN) in the Health Sector.	2,334.31	↑
1.3.1.(b)	Proportion of Social Security Program participants in the employment sector.		
	Formal	168.92	↑
	Informal	66.66	↑
1.4.1*	Proportion of population/households with access to basic services.		
	1. Percentage of population with access to drinking water services	99.42	↗
	2. Percentage of population with access to sanitation services	93.5	↓
	4. Percentage of population with access to basic health facilities	N/A	●
1.4.2*	Proportion of the adult population who have land rights based on legal documents and who have land rights based on gender and type of ownership.		
	1. Proportion of households with owned houses	N/A	●
	2. Proportion of households with rental/rental housing	N/A	●
1.5.1*	Number of dead, missing and affected by disasters per 100,000 people.		
	1. Number of deaths	97	↓
	2. Number of missing victims	N/A	●
	3. Number of victims affected by the disaster	10,467	↓
1.5.2*	Total direct economic losses due to disasters on Gross Regional Domestic Product (GRDP)	N/A	●
1.5.3*	Plan and implement a national disaster risk reduction strategy in line with the Sendai Framework for Disaster Risk Reduction 2015–2030		
	1. Plan	N/A	●
	2. Implementation	N/A	●
1.5.4*	The proportion of local governments that adopt and implement regional disaster risk reduction strategies that are aligned with the national disaster risk reduction strategy	N/A	●

SDG - 2 ZERO HUNGER

CODE	INDICATOR	VALUE	STATUS
2.1.1*	Prevalence of Inadequate Food Consumption (Prevalence of Undernourishment).	2.57	↗
2.1.2*	Prevalence of people with moderate or severe food insecurity, based on the Food Insecurity Experience Scale (FIES)	3.36	↑
2.2.1*	Prevalence of stunting (very short stature) in children under five years old/toddlers	17.6	↓
2.2.2*	Prevalence of wasting (weight/height) of children aged less than 5 years based on type	N/A	●
2.2.2.(a)	The quality of food consumption indicated by the Harapan Food Pattern (PPH) score.	92,7	↑
2.2.3*	Prevalence of anemia in pregnant women aged 15-49 years.	5.4	↑
2.3.1*	Production volume per worker according to crop farming/animal husbandry/fishery/forestry businesses	N/A	●
2.3.1.(a)	Agricultural added value per worker according to crop farming/animal husbandry/fishery/forestry business class.	N/A	●
2.3.2*	Average income of small-scale agricultural producers, by subsector.	N/A	●
2.5.1*	The amount of plant and animal genetic resources for food and agriculture stored in conservation facilities, either medium or long term.	N/A	●
2.a.1*	Agricultural orientation index (IOP) for government expenditure.	N/A	●
2.c.1*	Food price anomaly indicator.	N/A	●

SDG - 3 GOOD HEALTH AND WELL BEING

CODE	INDICATOR	VALUE	STATUS
3.1.1*	Maternal Mortality Rate (MMR) / Number of Maternal Death Cases	43.56	↑
3.1.2*	Proportion of ever-married women aged 15-49 years whose last birth was in a health facility.	98.15	↑
3.2.1*	Under-five mortality rate (AKBa) per 1000 live births.	3.11	↓
3.2.2*	Neonatal Mortality Rate (AKN) per 1,000 live births.	2.6	↓
3.3.3.(a)	Number of districts/cities that have achieved malaria elimination	6	↑
3.3.4*	Hepatitis B incidence per 100,000 population.	1,263	↓
3.3.5.(a)	Number of districts/cities with Leprosy Elimination.	5	↑
3.4.1.(a)	Percentage of smoking of population aged 10-18 years.	N/A	●
3.4.1.(b)	Prevalence of high blood pressure.	N/A	●
3.4.1.(c)	Prevalence of obesity in the population aged ≥18 years.	N/A	●
3.5.1.(a)	Number of drug abusers who receive medical rehabilitation services	296	↓
3.7.1*	Modern contraceptive prevalence rate (mCPR)	60.2	↑
	Percentage of family planning needs that are not met (Unmet Need)	11.7	↑
3.7.2*	Birth rate for teenagers aged 15-19 years per 1000 women in the same age group	5,4	↑
3.7.2.(a)	Total Fertility rate (TFR) per women of childbearing age (WUS) aged 15-49 years	1.84	↑
3.8.2.(a)	National health insurance coverage (JKN).	98.56	↑
3.b.1*	Complete basic immunisation for children aged 12-23 months	65.76	↑
3.b.3*	Proportion of health facilities with sustainably available and affordable essential medicine packages.	100	↑
3.c.1*	Density and distribution of health workers		
	Percentage of health centres with types of health workers according to standards	100	↑
	Percentage of district/city hospitals that have 4 basic specialist doctors and 3 other specialist doctors	100	↑

SDG - 4 QUALITY EDUCATION

CODE	INDICATOR	VALUE	STATUS
4.1.1(a)	Proportion of children and adolescents: (a) in class 5 who achieve at least the minimum skill level in:		
	(i) reading	90.21	↑
	(ii) mathematics	79.8	↑
	Proportion of children and adolescents: (b) in class 8 who achieve at least the minimum skill level in:		
	(i) reading	88.7	↑
	(ii) mathematics	84.16	↑
	Proportion of children and adolescents: (c) at the age of 15 who achieve at least a minimum skill level in:		
	(i) reading	87.18	↑
	(ii) mathematics	80.25	↑
	(iii) sciences	N/A	●
4.1.2*	Level of education completion at elementary/equivalent, middle school/equivalent, and high school/equivalent levels		
	(a) Percentage of students who have completed elementary school/equivalent education	100	↑
	(b) Percentage of students who have completed junior high school/equivalent education	100	↑
	(c) Percentage of students who have completed high school/equivalent education	100	↑
4.1.2.(a)	Number of children not attending school:		
	Elementary school/equivalent	N/A	●
	Junior High School/equivalent	5.54	↑
	Senior High school/equivalent	12.06	↗
4.2.1*	Proportion of children aged 24-59 months who are developing well in health, learning and psychosocial areas, by gender	N/A	●
4.2.2*	Level of participation in organised learning (one year before elementary school age), by gender	83.93	↓
4.3.1*	Adolescent and adult participation rates in formal and non-formal education and training in the last 12 months, by gender.		
	(1) aged 15-24 years	N/A	●
	(2) aged 15-59 years	N/A	●
4.3.1.(a)	Gross Participation Rate (APK) for Higher Education (Perguruan Tinggi/PT)	40.05	↑

SDG 4 - QUALITY EDUCATION

CODE	INDICATOR	VALUE	STATUS
4.4.1.(a)	Proportion of youth (aged 15-24 years) and adults (aged 15-59 years) with information and communication technology (ICT) skills		
	(1) aged 15-24 years	N/A	●
	(2) aged 15-59 years	N/A	●
4.5.1*	Net Participation Rate Ratio (APM) at the elementary school/equivalent level, and (ii) Gross Participation Rate Ratio (APK) at the Junior High School/equivalent, Senior High School/Vocational High School/equivalent, and university level for (a) women/men, (b) rural/urban, (c) lowest/top quintile, (d) disabled/no disability		
	Net participation rate ratio at the elementary school (male/female)	99.32	↓
	(i.c) Net participation rate ratio at the elementary school (lowest quintile/ highest quintile)	N/A	●
	(i.d) Net participation rate ratio at the elementary school (disabilities/non-disabilities)	N/A	●
	(ii) Female/Male Gross Participation Rate Rasio (APK) Ratio at the level of:		
	Junior High School/Equivalent	95.78	↗
	Senior High School/Vocational High School/equivalent	77.4	↓
	(ii) Lowest Quintile / Highest Quintile APK ratio at the level of:		
	Junior High School/Equivalent	N/A	●
	Senior High School/Vocational High School/Equivalent	N/A	●
	(ii) Disability/non-disability APK Ratio at the level of:		
	Junior High School/Equivalent	N/A	●
	Senior High School/Vocational High School/equivalent	N/A	●
4.6.1.(a)	Percentage of literacy rate of population aged ≥15 years	99.91	↑
4.a.1*	Proportion of schools with access to: (a) electricity (b) internet for teaching purposes, (c) computers for teaching purposes, (d) adequate drinking water, (e) basic sanitation facilities per gender, (f) hand washing facilities (consisting of water, sanitation and hygiene for all (WASH)		
	Proportion of schools with access to: (a) electricity		
	(1) Elementary School	100	↑
	(2) Junior High school	100	↑
	(3) Senior High School/Vocational High School	100	↑
	(4) Special School (Sekolah Luar Biasa/SLB)	100	↑
	Proportion of schools with access to: (b) internet for teaching purposes		

SDG 4 - QUALITY EDUCATION

CODE	INDICATOR	VALUE	STATUS
	(1) Elementary School	96.82	↓
	(2) Junior High School	95.53	↓
	(3) Senior High School	95.58	↓
	(4) Vocational High School	96.62	↓
	Proportion of schools with access to: (c) computers for teaching purposes		
	(1) Elementary School	92.56	↑
	(2) Junior High School	97.39	↑
	(3) Senior High School/Vocational High School	97.46	↑
	(4) Special School (SLB)	78.65	↑
	Proportion of schools with access to: (d) adequate drinking water		
	(1) Elementary School	N/A	●
	(2) Junior High School	N/A	●
	(3) Senior High School/Vocational High School	N/A	●
	(4) Special School (SLB)	N/A	●
	Proportion of schools with access to: (e) basic sanitation facilities per gender		
	(1) Elementary School	73.7	↑
	(2) Junior High School	76.93	↑
	(3) Senior High School/Vocational High School	73.3	↑
	(4) Special School (SLB)	41.57	↓
	Proportion of schools with access to: (f) handwashing facilities (consisting of water, sanitation and hygiene for all (WASH)		
	(1) Elementary School	N/A	●
	(2) Junior High School	N/A	●
	(3) Senior High School/Vocational High School	N/A	●
	(4) Special School (SLB)	N/A	●
4.a.1.(a)	Percentage of students who experienced bullying in the last 12 months.	N/A	●
4.c.1	Percentage of teachers who meet qualifications according to national standards according to education level		
	Percentage of teachers at (i) Kindergarten, (ii) Elementary School/equivalent, (iii) Junior High School/equivalent, (iv) Senior High School/Vocational High School/equivalent, and (v) Special School who have teaching certificates		

SDG 4 - QUALITY EDUCATION

CODE	INDICATOR	VALUE	STATUS
	(i) Kindergarten	16.88	↑
	(ii) Elementary School	39.54	↗
	(iii) Junior High School	47.79	↗
	(iv) Senior High School	47.5	↑
	(v) Vocational High School	38.99	↗
	(vi) Special School (SLB)	44.02	↓
	The percentage of teachers at (i) Kindergarten, (ii) Elementary/equivalent, (iii) junior high school/equivalent, (iv) senior high school/vocational high schoolequivalent, and (v) special school who meet S1/D4 academic qualifications in accordance with standards set by the Ministry of Education and Culture		
	(i) Kindergarten	54.18	↓
	(ii) Elementary School	93.46	↓
	(iii) Junior High School	95.72	↓
	(iv) Senior High School	96.75	↓
	(v) Vocational School	94.26	↓
	(vi) Special School (SLB)	90.89	↓

SDG - 5 GENDER EQUALITY

CODE	INDICATOR	VALUE	STATUS
5.3.1	Proportion of women aged 20-24 years who were married or living together before the age of 18 years.	2.12	↑
5.5.1	(b) Proportion of legislative seats and government positions held by women in regional governments elected through elections (regional legislative council, governor/deputy governor, mayor/deputy mayor)		
	Regional Legislative Council (Dewan Perwakilan Rakyat Daerah/DPRD)	N/A	●
5.5.2*	(a) Proportion of women in managerial positions in government		
	Mayor and Deputy Mayor	0	●
	Echelon I	0	●
	Echelon II	27.08	↑
	(b) Proportion of women holding managerial positions in public or private companies	N/A	●
5.6.1*	(1) Proportion of women of reproductive age 15-49 years who make their own decisions regarding sexual relations, use of contraception and health services (all women of childbearing age/WUS)	N/A	●
	(2) Proportion of married women of reproductive age 15-49 years who make their own decisions regarding sexual relations, use of contraception and health services (only couples of childbearing age/PUS)	N/A	●
5.6.2*	Regulations that guarantee equal access for women and men to obtain services, information and education related to sexual and reproductive health.	N/A	●
5.a.1*	(1) The proportion of agricultural residents who have rights to agricultural land;	N/A	●
	(2) Proportion of female agricultural residents as owners or who have rights to agricultural land, according to type of ownership.	N/A	●
5.b.1*	Proportion of individuals who control/own a mobile phone.	82.47	↑

SDG - 6 CLEAN WATER & SANITATION

CODE	INDICATOR	VALUE	STATUS
6.1.1*	Percentage of households using safely managed drinking water services.	66.73	↑
6.2.1*	Percentage of households using safely managed sanitation services, including hand washing facilities with water and soap		
	a. Percentage of households that have hand washing facilities with soap and water	N/A	●
	b. Percentage of households that have access to adequate sanitation	93.5	↗
	c. Percentage of households that still practice open defecation in the open	0.13	↑
	Percentage of households that have access to SPALD-T (Centralised Domestic Wastewater Management System)	23.1	↑
	e. Proportion of households served by centralized wastewater management system.	3.06	↓
6.6.1*	Changes in the level of quality and quantity of water resources in aquatic ecosystems over time: Land Quality Index	27.17	↑

SDG - 7 AFFORDABLE AND CLEAN ENERGY

CODE	INDICATOR	VALUE	STATUS
7.1.1*	Electrification ratio (%)	100	↑
7.1.1.(a)	Per capita electricity consumption (kWh)	3,432	↑
7.1.2.(b)	Household gas usage ratio (%)	N/A	●

SDG - 8 DECENT WORK AND ECONOMIC GROWTH

CODE	INDICATOR	VALUE	STATUS
8.1.1*	GDP growth rate per C7capita (%)	5.04	↑
8.1.1.(a)	GDP per capita (Rp)	322,620,000	↑
8.2.1*	GDP growth rate per worker/Real GDP growth rate per employed person per year (%)	0.88	↓
8.3.1*	Proportion of informal employment, by sector and gender (%)	36.23	↑
	Men	N/A	●
	Women	N/A	●
	Agriculture	N/A	●
	Manufacture	N/A	●
	Services	N/A	●
8.5.1*	Average hourly wage of workers (Rp/hour)	N/A	●
8.5.2*	Open unemployment rate by gender and age group (%)	6.53	↑
	Men	7.76	↓
	Women	4.55	↑
	Ages 15-24	N/A	●
	Age 25+	N/A	●
8.5.2.(a)*	Percentage of underemployment (%)	2.96	↓
8.6.1*	Percentage of young people (15-24) who are not in education, employment or training (NEET).	N/A	●
8.7.1.(a)	Percentage and number of children aged 10-17 years, who work, differentiated by gender and age group (%)	N/A	●
	Man	N/A	●
	Woman	N/A	●
	Ages 10-24	N/A	●
	Ages 13-14	N/A	●
	Ages 15-17	N/A	●
8.9.1.(b)	Number of visits by domestic tourists (people)	32,391,067	↓
8.10.1*	Number of ATMs per 100,000 adult population (units)	N/A	●
8.10.2*	Number of bank offices per 100,000 adult population (units)	N/A	●

SDG - 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

CODE	INDICATOR	VALUE	STATUS
9.1.2*	Number of passengers and goods based on transportation mode		
	Number of Passengers (people):		
	i. passenger vehicles (road based)	1,126,868,455	↑
	ii. train (rail-based)	370,908,535	↑
	iii. aircraft	N/A	●
	iv. Ship	1,350,865	↑
	Quantity of transported goods (kg):		
	i. train	N/A	●
	ii. aircraft	N/A	●
	iii. ship	N/A	●
9.1.2.(a)	Number of airports (units)	1	↑
9.1.2.(b)	Number of crossing ports	N/A	●
9.1.2.(c)	Number of strategic ports	1	↑
9.2.1*	Proportion of added value of the manufacturing industry sector to GRDP (%)	N/A	●
9.2.1.(a)	Manufacturing industry GRDP growth rate (%)	N/A	●

SDG - 10 REDUCED INEQUALITIES

CODE	INDICATOR	VALUE	STATUS
10.1.1*	Gini Ratio	0.431 (Mar)	↓
10.1.1.(a)	Percentage of population living below the national poverty line (%)	4.44 (Mar)	↗
10.2.1*	Proportion of population living below 50 percent of median income, by gender and people with disabilities (%)	N/A	●
	Men	N/A	●
	Women	N/A	●
	People with disabilities	N/A	●
10.3.1.(b)	Number of reports handled for violations of human rights in the last 12 months	N/A	●
10.3.1.(c)	Number of reports handled regarding violations of women's human rights, especially violence against women, within a certain year or the last 12 months (cases)	N/A	●
10.3.1.(d)	The number of discriminatory policies in the past 12 months, based on the prohibition of discrimination under international human rights law	N/A	●
10.4.1.(b)	Proportion of social security program participants in the employment sector (%)		
	Formal	168.92	↑
	Informal	66.66	↑

SDG - 11 SUSTAINABLE CITIES AND COMMUNITIES

CODE	INDICATOR	VALUE	STATUS
11.1.1.(a)	Percentage of households that have access to adequate and affordable housing.	38.8	↗
11.2.1.(a)	The proportion of the population that has convenient access to public transportation	88.8	↑
11.2.1. (b)	Percentage of population served by public transportation	18.86	↑
11.4.1.(a)	Total per capita expenditure intended for preservation, protection and conservation of all cultural and natural heritage (non-PPP)	229.86	↗
11.5.1*	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	N/A	●
	2. Number of victims lost as a result of being directly affected by the disaster per 100,000 person	N/A	●
	3. Number of injured victims directly affected by the disaster per 100,000 person	N/A	●
	4. Number of victims displaced as a result of being directly affected by the disaster per 100,000 person	N/A	●
11.5.2.(a)	The proportion of direct economic losses due to disasters relative to GDP	N/A	●
11.6.1.(a)	Percentage of urban households served by waste management	99.61	↑
11.6.2.(a)	Annual average of fine particulate matter 10 (PM10)	59.24	↓
*	Annual average of fine particulate matter 2.5 (PM2.5)	36.64	↑
11.6.2.(b)	Air quality index	68.46	↑
11.7.1.(a)	Proportion of urban open space for all	N/A	●
	The area of green open space managed is within the scope of provincial authority	1641.73	↑
11.a.1.(a)	Proportion of population living in areas with Regional Spatial Planning (Rencana Tata Ruang Wilayah/RTRW) that have been integrated with Strategic Environment Assesstment (Kajian Lingkungan Hidup Strategis/KLHS)	100	↑
11.b.2*	Percentage of local governments that adopt and implement regional disaster management strategies that are in line with the national disaster management plan/strategy	N/A	●
11.c.1.(a)	Percentage of regions that have sustainable and resilient building regulations using local materials	100	↑

SDG - 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

CODE	INDICATOR	VALUE	STATUS
12.3.1.(a)	Percentage of food waste	N/A	●
12.4.1.(a)	Percentage of reduction and elimination of mercury from a baseline of 50 tons of mercury use		
	Percentage reduction in mercury emissions and mercury releases	N/A	●
	Percentage of removal of mercury-containing medical devices	N/A	●
12.5.1.(a)	Recycled waste as the proportion of waste generated	N/A	●
	Total waste reduction	27.12	↑
12.8.1.(a)	Number of formal education units and institutions/communities that care about and have an environmental culture	613	↗

SDG - 13 CLIMATE ACTION

CODE	INDICATOR	VALUE	STATUS
13.1.2 *	Plan and implement a national disaster risk reduction strategy in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	2	↓
13.1.3*	Percentage of local governments that adopt and implement regional disaster risk reduction strategies that are aligned with national disaster risk reduction strategies	100	↑
13.2.1*	Implementation of greenhouse gas (GHG) inventory, as well as monitoring, reporting and verification of GHG emissions reported in the Biennial Update Report (BUR) and National Communications documents	1	↑
13.2.2*	Total greenhouse gas (GHG) emissions per year	63,074	↑
13.2.2.(a)	Potential Reduction in Greenhouse Gas Emissions (GHG)	25.40	↑
13.3.1.(a)	Number of formal education units and institutions/communities that care about and have an environmental culture		
	i. Number of Adiwiyata School participants	192	↑
	ii. Number of climate villages (Program Kampung Iklim/Proklim)	197	↑
	iii. Number of Disaster Safe Education Unit (Satuan Pendidikan Aman Bencana/SPAB) participants	1,000	↑
	Number of participants in Disaster Safe Education Unit (SPAB)	2,000	↑

SDG - 14 LIFE BELOW WATER

CODE	INDICATOR	VALUE	STATUS
14.5.1*	The total area of marine conservation areas	107,496	↑
14.6.1.(a)	Percentage of business actor compliance in fishery sector	82	↑
14.b.1*	Availability of a legal/regulatory/policy/institutional framework that recognizes and protects access rights for small-scale fisheries	Available	↑
14.b.1.(b)	Number of protected fishermen	5,383	↑

SDG - 15 LIFE ON LAND

CODE	INDICATOR	VALUE	STATUS
15.1.1*	Forest area as a proportion of total land area	N/A	●

SDG - 16 PEACE, JUSTICE, AND STRONG INSTITUTION

CODE	INDICATOR	VALUE	STATUS
16.1.2.(a)	Deaths due to conflict per 100,000 population	0.046	↑
16.1.4*	The proportion of residents who feel safe walking alone in the area where they live	N/A	●
16.2.1.(b)	The prevalence of children aged 13-17 years who have experienced violence throughout their lives	N/A	●
16.2.2*	Number of victims of human trafficking per 100,000 population according to sex, age group and type of exploitation	N/A	●
16.3.1.(a)	Proportion of victims of violence in the last 12 months who reported it to the police	N/A	●
16.3.1.(b)	Percentage of poor people who receive litigation and non-litigation legal assistance		
	Litigation	749	●
	Nonlitigation	702	●
16.5.1.(a)	Anti-Corruption Behavior Index (*Indeks Perilaku Anti Korupsi*/IPAK)	76.96	↑
16.6.1*	The proportion of major government expenditures to the approved budget	92.55	↑
16.6.1.(a)	Unqualified Opinion (*Wajar Tanpa Pengecualian*/WTP)	WTP	↑
16.6.1.(b)	Percentage of government agencies with a Government Agency Performance Accountability System (*Sistem Akuntabilitas Kinerja Instansi Pemerintah*/SAKIP)	81.06 (A)	↗
16.6.1.(c)	Percentage of government agencies with a Bureaucratic Reform Index (*Reformasi Birokrasi*/RB) ≥ B	82.47 (A-)	↑
16.6.2.(a)	Number of government agencies with a good level of public service compliance.	89.06	↑
16.7.1.(b)	Percentage of women's representation in decision making in executive institutions (Echelon I and II)	26.5	↑
16.7.2.(a)	Democratic Institutions Capacity Index	N/A	●
16.7.2.(b)	Aspects of Freedom Index	N/A	●
16.7.2.(c)	Equality Index	N/A	●
16.8.1.(a)	Number of memberships and contributions in international forums and organisations	5	↑
16.9.1*	Proportion of children under 5 years whose births are recorded by civil registration institutions, by age	99.99	↑
16.9.1.(b)	Percentage of children who have a birth certificate	99.99	↑

SDG 16 - PEACE, JUSTICE, AND STRONG INSTITUTIONS

CODE	INDICATOR	VALUE	STATUS
16.10.1.(a)	Freedom from violence for journalists and media crew	71.73	↓
16.10.1.(b)	Number of complaints handled regarding violations of women's human rights, especially violence against women.	N/A	●
16.10.2.(a)	Number of public bodies with informative qualifications	33 Institutions	↑
16.10.2.(b)	Number of resolutions of public information disputes through mediation and/or non-litigation adjudication.	32	↗
16.b.1.(a)	The number of discriminatory policies in the past 12 months is based on the prohibition of discrimination under international human rights law	0	↑

SDG - 17 PARTNERSHIP FOR THE GOALS

CODE	INDICATOR	VALUE	STATUS
17.1.1*	Regional Income as a proportion of GRDP according to its source		
	Total Original Regional Income (Pendapatan Asli Daerah/PAD) (Rp Billion)	49,139.93	↗
	i. Total regional tax revenue	43,517.64	↗
	ii. Total regional levy revenue	454.69	↗
	iii. Return of separated regional wealth management	545.87	↑
	iv. Other legitimate local revenue	4,621.72	↗
	vi. Proportion of PAD to GRDP (%)	1.43	↓
17.1.1.(a)	Ratio of tax revenue to GRDP (%)	1.26	↑
17.1.2*	Proportion of regional budget funded by PAD (%)	73.99	↑
17.11.1.(a)	Growth in exports of non-oil and gas products (%)	-4.00	↓
17.17.1.(a)	Number of Public-Private Partnership (PPP) project plan list documents (Kerjasama Pemerintah Daerah dan Badan Usaha/KPDBU) published each year.	1	↑
17.17.1.(b)	Number of projects offered to be implemented under the KPDBU scheme.	1	●
17.17.1.(c)	Total of KPDBU project investment value based on planning, preparation and transaction stages (Rp billion)	>500	↑
17.19.2.(a)	Implementation of the population and housing census	N/A	●
17.19.2 (b)	Availability of registration data related to births and deaths (Vital Statistics Register)	1	↑

Source: Jakarta SDGs Secretariat

People crossing on the zebra cross near Bundaran HI

Source: Fauzan (Unsplash)

Summary of Strength, Challenges, and Strategy

STRENGTHS & CHALLENGES

+ The post-pandemic poverty rate in Jakarta has continued to decline since March 2021, along with the extreme poverty rate.

- Poverty rates in certain areas of Jakarta, such as Kepulauan Seribu, remain high.

STRENGTHS/POLICY

- Reduce the financial burden on the poor by providing subsidies and social aid, including the Jakarta Smart Card (KJP) Plus, Jakarta Superior Student Card (KJMU), Jakarta Children's Card, Jakarta Elderly Card (KLJ), Jakarta Disability Card (KPDJ), and Worker's Card Jakarta (KPJ).
- Conduct regular data updates and strengthen monitoring and evaluation services to enhance targeted social protection.
- Increase the productivity and income of the poor through job training and entrepreneurship development.
- Expand access to basic services and improve connectivity between regions by structuring integrated residential areas (CAP/CIP), organising villages and communities, providing simple rental flats (*Rumah Susun Sederhana Sewa*/Rusunawa), establishing water kiosks, providing access to special drinking water, offering drinking water subsidies, septic tank subsidies, and promoting Community Based Total Sanitation (*Sanitasi Total Berbasis Masyarakat*/STBM).

STRENGTHS & CHALLENGES

+ Stunting prevalence in Jakarta has decreased in recent years, now the second lowest nationally.

+ Excess weight and obesity are growing health problems, particularly in certain groups.

- Stunting remains high in some areas, particularly in Kepulauan Seribu.

STRATEGY/POLICY

- Reduce stunting rates by distributing vitamin tablets to schools to increase blood (*Tablet Tambah Darah*/TTD) levels.
- Improve access to information, data, and services related to stunting through the Jakarta Beraksi website and dashboard.
- Provide assistance during the first thousand days of children's lives by distributing nutritious food throughout Jakarta.
- Enhance cross-sector collaboration, including with non-governmental institutions, to prevent stunting from an early age.

STRENGTHS & CHALLENGES

+ Maternal mortality continues to decline accompanied by an increase in adequate health facilities.

+ The number of women assisted by healthcare workers during childbirth in Jakarta is higher than the national average.

- There has been a decreasing trend in achievement over the past 3 years in Jakarta, although it remains above 95%.

STRATEGY/POLICY

- Provide easily accessible health services to the community, emphasising preventive and promotive measures alongside curative and rehabilitative measures as necessary.

- Conduct health checks for drivers, including blood pressure, blood sugar, respiratory alcohol, and urine amphetamine, at three stations, two ports, and seven road transport terminals.

- Establish a smoke-free area in RW 06, Kayu Manis Village, Matraman District, East Jakarta, demonstrating a commitment to maintaining respiratory health and the environment.

STRENGTHS & CHALLENGES

+ The gross participation rate (APK) of higher education in Jakarta is above the national average.

- The percentage of teachers meeting academic qualifications according to Indonesia's Ministry of Education, Culture, Research, and Technology (Kemendikbud) standards remains low.

- The school participation rate in Jakarta declined across almost all educational levels in 2021-2022, except for higher education, primarily due to COVID-19, which led many children to prefer homeschooling or non-formal education.

STRATEGY/POLICY

- Implement the 12-Year Compulsory Education Programme.

- Provide educational assistance through KJP Plus, KJMU, BPMS, and KAJ.

- Enhance educator competence through two main initiatives: the Jaklat application for Teacher Professional Development System and training organised by the Centre for Training and Development of Educators (P4).

- Improve access and quality of education at all levels by providing operational cost assistance programmes for both public and private PAUD schools, ensuring equitable access to PAUD services in the community.

- Optimise the education system in Jakarta through community schools.

- Collaborate with NGOs to provide assistance to marginalised children at risk of dropping out of school, aiming to motivate them to complete basic education through tutoring programmes.

STRENGTHS & CHALLENGES

+ Jakarta's gender disparity index is lower than the national average.

- The representation of women in senior positions and decision-making roles within the Jakarta Provincial Government remains low.

STRATEGY/POLICY

- Provide facilities that ensure safety and comfort for women in public spaces, including special breastfeeding rooms, women-only buses, and services for complaints and consultations on violence against women and children.
- Abolish harmful practices such as child marriage, early and forced marriage, and female circumcision.
- Encourage women's participation in political institutions.

STRENGTHS & CHALLENGES

+ Sanitation access in Jakarta is 12% better than the national average.

- Residents of Jakarta still rely on groundwater source due to shortage of water supply in the area.

STRATEGY/POLICY

- Increase drinking water capacity by constructing communal drinking water treatment plants.
- Enhance coordination and cooperation with the central government to improve access to drinking water through regional drinking water treatment system development.
- Develop urban wastewater infrastructure to improve centralised domestic wastewater treatment systems using environmentally friendly technology and enhance wastewater connections in residential areas.
- Establish local waste processing systems for residential areas not served by centralised systems.
- Increase storage volume and capacity by building reservoirs, lakes, flood control and conservation embankments, and polder systems in highland and lowland areas guided by the Nature Based Solutions (NBS) concept.
- Manage river watersheds using the NBS concept through naturalisation and river restoration efforts.
- Provide urban drainage systems and their accessories.
- Integrate drainage systems with NBS infrastructure and vice versa.
- Enhance drainage system capacity through operation, maintenance, and dredging.

STRENGTHS & CHALLENGES

+ The electrification ratio in Jakarta has reached 100 percent since 2018, and the ratio of household gas usage in Jakarta has consistently increased since 2019.

- The limitations of local government authority in the energy sector, and the minimal budget allocation by local governments for the energy sector.

STRATEGY/POLICY

- Continue the construction of Solar Power Plants.
- Process waste into Refuse Derived Fuel as alternative energy sources to coal.
- Expand the electrification of public transportation.
- Use electric vehicles in the Provincial Government's operational vehicles armada.

STRENGTHS & CHALLENGES

+ Number of people employed increases, along with the decrease in the city's employment rate.

- The global economic slowdown, ongoing geopolitical tensions, and continued central bank interest rate hikes, potentially impact Jakarta economic growth.

STRATEGY/POLICY

- Organise programmes and activities to promote local products.
- Encourage MSME sector participation through the Jakarta Entrepreneurship Programme, offering access to facilitation programmes and capital.
- Support tourism and creative economy by certifying tourism workers, providing training, and promoting Jakarta tourism.
- Provide job training facilities for various skills including English language, computer operations, culinary arts, accounting, refrigeration engineering, electrical engineering, fashion design, and graphic design.
- Offer specific training for people with disabilities.
- Increase the use of domestic products, particularly by supporting MSMEs.

STRENGTHS & CHALLENGES

+ Manufacturing industries remain significantly contributes to the city's economy,

- A decrease in export volume due to declining global demand, influenced by the slowdown in global economic growth and ongoing geopolitical tensions.

STRATEGY/POLICY

- Inaugurate the operation of the Jakarta-Bogor-Depok-Bekasi (Jabodebek) Light Rapid Transit (LRT).
- Continuing the construction of LRT Jakarta Phase 1B, with the Velodrome-Manggarai route at Velodrome Station.
- Carry out construction of MRT Phase 2A.
- Build JPM Dukuh Atas.
- Hold various activities promoting regional innovation, like Jakarta Innovation Days.

STRENGTHS & CHALLENGES

+ The post-pandemic poverty rate in Jakarta has continued to decline since March 2021.

- The Gini ratio of Jakarta has consistently increased over the past three years and is higher than the national average, indicating a growing level of inequality in Jakarta. The poverty depth index and poverty severity index in Jakarta have also increased.

STRATEGY/POLICY

- Validate and update integrated social welfare data.
- Match data on all social aids (*bantuan sosial/bansos*) with various comparative data sources, such as Targeting for the Acceleration of Elimination of Extreme Poverty (*Pensasaran Percepatan Penghapusan Kemiskinan Ekstrem*/ P3KE) data from the Coordinating Ministry for Human Development and Culture, and *Carik Jakarta* data from the Department for Empowerment, Child Protection, and Population Control.
- Reduce the financial burden on the poor by consistently distributing social assistance and subsidies.
- Implement interventions focused on increasing community productivity

STRENGTHS & CHALLENGES

+ By 2023, the majority of Jakarta's population had convenient access to public transportation, with the proportion exceeding 80 percent.

- The proportion of asbestos roofs that do not meet health standards in Jakarta remains high, at 52.10 percent in 2022.

- The number of houses needed by Jakarta's residents exceeds the total built-up housing available.

STRATEGY/POLICY

- Enhance the quality of residential areas through urban planning.
- Collaborate with communities in the Community Action Plan (CAP) and Collaborative Implementation Programme (CIP).
- Construct low-cost apartments (Rusunawa).
- Facilitate low-income communities to own decent housing through the Zero Percent Down Payment programme.
- Implement Air Pollution Control Strategies.
- Improve air quality monitoring systems.
- Control compliance with emission standards from both mobile and stationary sources.

STRENGTHS & CHALLENGES

+ The quantity of waste reduction has seen a notable increase over recent years.

- The city's landfill capacities are insufficient, unable to keep up with the solid waste production.

STRATEGY/POLICY

- Provide comprehensive regulations regarding waste management in Jakarta.
- Establish an up-to-date data and information system for waste management.
- Enhance law enforcement against violators of waste management regulations in Jakarta.
- Manage waste at the neighbourhood level.
- Implement waste reduction and segregation campaigns in households and communities.
- Increase efforts to reduce plastic waste.
- Implement food waste reduction campaigns.
- Construct Integrated Waste Management Facilities (TPS3R).
- Construct Waste Processing and Disposal Facilities (FPSA) in Jakarta.
- Establish recycling centres.

STRENGTHS & CHALLENGES

+ An inventory of greenhouse gas (GHG) emissions has been conducted, along with monitoring, reporting, and verification of GHG emissions.

- The use of private transportation utilising gasoline remains high, despite the rise in public transport usage.

STRATEGY/POLICY

Adaptation measures:

- Manage coastal and small island areas.
- Develop climate-resilient infrastructure.
- Train for disaster preparedness.
- Develop early warning systems.
- Clean waterways and rivers regularly.
- Create biopores and infiltration wells.
- Maintain green open spaces.
- Implement clean water-saving solutions.
- Increase public awareness of climate-related diseases.

Mitigation measures:

- Implement energy efficiency measures.
- Expand the use of renewable energy.
- Utilise environmentally friendly fuels.
- Shift to public transportation.
- Promote pedestrian and cyclist safety.
- Expand efforts to reduce greenhouse gas emissions.
- Reduce waste at the source.
- Optimise wastewater treatment.
- Develop waste management solutions.
- Adopt environmentally friendly energy for industries.
- Engage in climate change diplomacy.

STRENGTHS & CHALLENGES

+ Compliance among marine fisheries businesses with regulations has increased, helping to prevent IUU Fishing.

- The pollution level in Jakarta Bay, especially in terms of nitrate and phosphate parameters, exceeded the quality standards in 2023, based on observations at the Cengkareng Drain estuary, East Flood Canal (*Banjir Kanal Timur*/BKT) estuary, and Gembong estuary.

STRATEGY/POLICY

- Rehabilitate coral reefs and seagrass beds.
- Plant mangroves.
- Provide community development in coastal areas.
- Conduct patrols to monitor the utilisation of marine resources and fisheries.
- Take enforcement actions against violators of resource utilisation.
- Encourage the adoption of environmentally friendly aquaculture and fishing technologies.

STRENGTHS & CHALLENGES

+ 5.2 percent of the targeted 30 percent total area of green open spaces has been realised in Jakarta.

- The majority of land in Jakarta is dominated by built-up areas, with most owned by private entities.

STRATEGY/POLICY

- Increase the quantity and quality of green open spaces throughout Jakarta's area.
- Repurpose spaces and areas with potential for green open spaces.
- Develop green open spaces with non-green open areas as integrated zones.
- Preserve areas suitable for food agriculture.
- Implement innovative methods for providing cultivated green open

STRENGTHS & CHALLENGES

+ The achievement percentage of Government Agencies with a Bureaucratic Reform Index ≥ B continues to rise, reaching a score of 81.06 and earning an A rating.

+ The percentage of children with birth certificates has reached 99.99 percent.

- The press freedom index has shown a decline in recent years.

STRATEGY/POLICY

- Provide a responsive security application through the JakAman app.
- Raise awareness on corruption prevention among civil servants and the community.
- Conduct socialisation on preventing juvenile delinquency and anticipating gang violence in schools, along with forming anti-juvenile delinquency task forces.

STRENGTHS & CHALLENGES

+ The realised local government budget demonstrates solid performance, characterised by strong revenue growth and expenditures in line with the established budget.

- Global economic slowdown and geopolitical tensions may impact Jakarta's exports.

STRATEGY/POLICY

- Digitalise the regional tax collection services, update data through fiscal cadastre, and improve regional tax subject and object data.
- Conduct taxpayer audits using potential data and regional tax intelligence, enforce laws in collecting receivables, and refine regional tax receivable data.
- Collect motor vehicle tax for water vehicles and implement electronic advertising tax management integrated with the regional tax system.
- Host the 2023 Meeting of Governors and Mayors of ASEAN Capitals (MGMAC) and ASEAN Mayors Forum (AMF).
- Participate in the COP28 Local Climate Action Summit conference in Dubai in December 2023.

A view of Sudirman Road
Source: Rival Sitorus (Unsplash)

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