Nusantara Sustainable Development Goals (SDGs) Voluntary Local Review Baseline
Acknowledgement

Nusantara Capital Authority (NCA) has collaborated with the Asian Development Bank (ADB) and the Australian Department of Foreign Affairs and Trade (DFAT) to prepare the Nusantara Sustainable Development Goals (SDGs) Baseline Report, as another milestone for Nusantara.

The Baseline Report lies a foundation for NCA to monitor and evaluate the achievement of SDGs throughout the development of Indonesia’s new capital towards the vision of Nusantara as a smart and sustainable forest city. This document has been developed through a participatory procedure involving intensive discussions with experts, academics, local and national NGOs, international organizations and communities.

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I welcome the publication of the preliminary findings of the Voluntary Local Review (VLR) of Indonesia’s new capital, Nusantara, and its launch at the 11th Asia-Pacific Forum on Sustainable Development. The progress achieved in assembling this report underscores our commitment to showcasing Nusantara’s strides toward becoming a model city that is smart, green, inclusive, resilient, and sustainable.

As we gear up to present this VLR at the High-Level Political Forum on Sustainable Development in 2024, the launch of preliminary findings marks a pivotal moment. This review represents not just a step toward Indonesia’s ambitious goals of building a sustainable city by 2045, but a leap in our journey to integrate Nusantara into the global effort to achieve the Sustainable Development Goals outlined in the 2030 Agenda.

The Nusantara VLR stands out as it adopts an innovative approach that not only highlights our city’s contributions to regional development but also showcases our proactive stance in the global sustainability arena. This systematic review, conducted at such an initial stage in Nusantara’s development, further underscores its uniqueness as it ensures that the city remains at the forefront of sustainable solutions and practices.

I extend heartfelt gratitude to our partners for their unwavering support in this endeavor. As we present these initial findings, I encourage stakeholders to provide their insights to refine this VLR further. Moreover, I hope the publication offers insights into the ongoing efforts in Nusantara, illustrating our collective journey towards a more sustainable global community.

**Bambang Susantono**
Chairman, Nusantara Capital Authority
In 2024, Indonesia will establish its new capital, Nusantara. Nusantara embodies the vision of a modern and sustainable Indonesia. Indonesia aspires to be a high-income country that sits among the seven largest economies in the world by its centenary anniversary in 2045.

The new capital symbolizes and facilitates this aspiration. It is envisaged to be a smart and sustainable forest city. Situated in Eastern Kalimantan, spread over 252,660 Ha of land consisting of three zones: (i) Core Government Area 6,671 Ha, (ii) Urban Area 56,159 Ha, and (iii) Development Expansion Area 196,501 Ha. The current entry point to Nusantara is through Balikpapan which is 2 hours by plane from Jakarta, followed by 2,5 hours by road (expected to reduce to 1 hour by August 2024).
1. Human development and technological advancement
   Cultivating world-class talents with strong academic and digital foundation.

2. Sustainable economic development
   Boosting East Kalimantan’s regional GDP up to 3 times by 2045 through economic diversification and transformation.

3. Equitable development
   Catalyzing eastern Indonesia’s regional GDP and strengthening overall domestic value chain.

4. Enhancing national resilience and governance
   Establishing new regulatory standards supported by investment and innovation.
Nusantara as a Smart and Sustainable Forest City

To achieve the goal to become a carbon-neutral city by 2045, till date Nusantara Capital Authority has prepared the following documents:

a. **Nusantara Net Zero Strategy/Regional and Locally Determined Contribution (RLDC)**, which outlines a roadmap and investment plan to climate mitigation and adaptation.

b. **Nusantara Smart Building and City Guidelines**, which details the terminology, background, elements, and technological approaches in smart buildings and city in the new capital.

c. **Nusantara SDGs Baseline**, which provides a foundation for NCA to conduct Voluntary Local Review (VLR) of SDGs achievement throughout the development of the new capital.

**Goal: Carbon-neutral**

65%

Tropical forest created through “reforestation”
Nusantara Capital Authority also embodies these following actions and instruments in city planning, development, and management:

- **“10-minute city” design**: A city ecosystem that supports active mobility (walking & cycling) and public transport users.

- **“Nature-based Solutions”**: A city ecosystem that minimizes the environmental impacts and mainstream the use of natural resources in city development.

- **Policy instruments**: An environment that enables innovations, ease of doing business, environment and social safeguards.

- **Collaboration with communities and civil societies** on forest protection by combining local wisdom (“cultural forest”), capacity building on future skills training, and international best practice (coding & solar mom, etc.).

**city by 2045**

75% Highly-controlled urban area to minimize carbon footprint and emission
Smart Building Ecosystem

Advanced Air Mobility: An urban air transport system for 5 persons

IoT-based Air Quality Monitoring and Control System

Autonomous, On-Demand Public Transport

AI-powered, fully digital One-Stop Services for Residents
A city fully powered by renewable energy, optimized by smart grids and meters

Centralized Utility Management using Smart Meter Systems

Autonomous Mobile Drones and Robots to support the city’s logistics system

Smart Urban Farming Ecosystem

Comprehensive Electric Vehicle Ecosystem

Advanced Commuter Information System

IMAGINING NUSANTARA IN 2045
Nusantara’s Development Phase and Progress

2022–2024
Transfer of priority government offices

2025–2029
Strengthen Nusantara’s core areas; Expand housing, office, and commercial zones

2030–2034
Scale up education, health sectors and high-tech sectors
IV

2035–2039
Complete construction of all major infrastructure, bolster three-city ecosystem (Nusantara, Balikpapan, Samarinda)

V

2040–2045
Consolidate Reputation as “The World Class City for All”

Population:
~1,911,000
A Voluntary Local Review (VLR) is a self-assessment conducted by local governments to track their progress towards achieving the 2030 Agenda and the Sustainable Development Goals (SDGs). Guided by the SDGs principles of inclusivity, the right to livable communities, and multi-stakeholder engagement, VLR serves as a critical first step in mobilizing action to address interconnected crises and drive sustainable urban development.

VLR can support Indonesia’s commitment to implement the SDGs which is confirmed by the Presidential Regulation No. 59 of 2017 concerning Implementation of the Sustainable Development Goals Achievement.

The Government of Indonesia and the United Nations have signed the UN Sustainable Development Cooperation Framework 2021-25 (UNSDCF). This seminal document articulates the UN’s collective actions to support Indonesia in preserving and accelerating the achievements of the Sustainable Development Goals (SDGs).

Through a multi-stakeholder consultation process, the UNSDCF is aligned with the Government’s National Medium-Term Development Plan (RPJMN 2020-2024) and has four strategic priorities: inclusive human development; economic transformation; green development, climate change and natural disasters; and innovation to accelerate the progress towards the SDGs.
As a newly-built area, the development of VLR Nusantara is unique and requires a different perspective. It will not only demonstrate Nusantara’s commitment to the SDGs in its development process, but also how to ensure that this commitment is implemented consistently.

Thus, the VLR will serve as a guide for the implementation of the SDGs in the Nusantara master plan. The Nusantara VLR SDGs Baseline describes the baseline conditions of the Eastern of Kalimantan on achieving SDGs target before Nusantara exists. The baseline can help the Nusantara Capital Authority (NCA) to understand current challenges in the region in achieving SDG’s while also allowing to monitor any changes, both positive and negative, in SDG achievement as Nusantara develops. It is expected that the development of the VLR will enhance local initiatives in the implementation of the SDGs.

The Nusantara VLR SDGs Baseline covers the early stage of VLR process, illustrated below. Steps 1-5 are included in this baseline study. Steps 6-7 shall be done independently by NCA.
The Nusantara SDGs Baseline has been prepared and presented according to the Five Pillars of the 2030 Agenda for Sustainable Development, namely People, Planet, Partnership, Prosperity, and Peace. These indicators are proposed to closely track, monitor, and evaluate by Nusantara Capital Authority (NCA) during the VLR process.

The baseline itself is measured by considering existing conditions in two district which comprises Nusantara area, namely: Penajam Paser Utara (PPU) and Kutai Kartanegara. The based shows that in areas the region is already performing well such as electrification ratio and birth registration. A summary of priority SDG focus for Nusantara is provided below. Besides an assessment of the existing performance on these SDG’s, initiatives to increase performance have been identified.

<table>
<thead>
<tr>
<th>Pillars</th>
<th>Priority SDGs for Nusantara</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>1. No poverty</td>
</tr>
<tr>
<td>Peace</td>
<td>16. Peace and justice for all people</td>
</tr>
<tr>
<td>Partnerships</td>
<td>10. Reduced inequalities</td>
</tr>
</tbody>
</table>
Indicator 1.4.1 Proportion of the population within households that have access to basic services.

This SDG indicator is valuable for measuring the level of accessibility of the population to basic services in Nusantara, ensuring government efforts in providing equitable basic services for the Nusantara’s population, and safeguarding the rights to access basic services.

Initiatives by NCA to further enhance performance on these indicators include:

a. Establishing and implementing a monitoring system for basic service access for the entire population.
b. Mobilize financing to ensure further expansion of access to basic services.

These initiatives are aimed at ensuring that all men and women, particularly the poor and vulnerable communities, have equal rights to access basic services.
Nusantara projects improving electrification ratios include:

a. Infrastructure development in the regions to establish basic electricity infrastructure.

b. Promotion of the development of clean, new, and renewable energy

c. Nusantara's Electricity System connecting to the Kalimantan Electricity System to partially fulfill electricity needs and address variations in power supply from local energy sources.

Indicator 7.1.1 Electrification ratio

This indicator is beneficial for improving efficiency, reliability, and flexibility in electricity provision as an indicator of the well-being of the community in Nusantara. The electrification ratio is the comparison between the number of households with access to electricity supply and the total number of households.

Electrification Ratio

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>91,98%</td>
<td>93,09%</td>
</tr>
<tr>
<td>90%</td>
<td>82,67%</td>
<td>83,14%</td>
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<tr>
<td>85%</td>
<td>86,64%</td>
<td>86,82%</td>
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<tr>
<td>80%</td>
<td></td>
<td></td>
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<tr>
<td>75%</td>
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</table>

- East Kalimantan Province
- Penajam Paser Utara Regency
- Kutai Kartanegara

Prosperity

East Kalimantan Province

Penajam Paser Utara Regency

Kutai Kartanegara

Nusantara Sustainable Development Goals (SDGs) Voluntary Local Review Baseline
Indicator 10.1.1 Reducing Intra and Inter Country Gaps

Nusantara may result in an increase in the Gini ratio due to the growing disparity between resident relocating to Nusantara with higher incomes and local residents with lower incomes. To mitigate this inequality, Nusantara City Authority will implement strategies to enhance income through:

a. Completion of mapping of local workforce.
b. Improvement of skills and education, and provision of skills and competency transfer to the surrounding communities.
c. Deployment of trained workforce in various Nusantara industries and activities.
d. Collaboration with local governments and private entities.
e. Enhancement of local potential such as tourism, flagship products, creative economic products, and cultural arts.

Gini Ratio in 2022

- East Kalimantan Province: 0.331
- Penajam Paser Utara Regency: 0.263
- Kutai Kartanegara: 0.283
- Kutai Kartanegara: 0.359
- Kutai Kartanegara: 0.274
- Kutai Kartanegara: 0.269

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Nusantara plans to:

- Operate Domestic Wastewater Treatment Plant 1 to ensure 100% treatment of domestic wastewater.
- Construct a Domestic Wastewater Pipe Network to serve Sub core government area with a length of 70.13 km.
- Fulfill the clean water needs of core government area from the water sources of Sepaku Semoi Dam (2,000 L/sec) and Sepaku Intake River (3,000 L/sec).
- Plan and implement the Nature Based Solutions reducing surface runoff, enhancing green and blue spaces, and constructing rainwater storage facilities.

Indicator 6.3.1. Proportion of safely treated wastewater
Indicator 6.3.2. Proportion of water bodies with good ambient water quality

The following indicators within SDG 6 are beneficial for monitoring changes in the water quality of rivers, lakes, and reservoirs/dams in the Nusantara over time, influenced by various activities that may contribute to pollution.

Surface Water Quality in Nusantara area (2023)

- 24% Good
- 24% Lightly polluted
- 52% Moderately polluted

Source: Nusantara Environmental Baseline Survey – 2023. Surface water quality measurements are conducted at 54 sampling points across 19 rivers throughout the entire Nusantara area.
Housing development is shifting towards vertical living with higher density, compact planning, and smart technology integration. This aims to:

a. **Maximize land use:** Living vertically creates more space compared to sprawling suburbs.

b. **Improve accessibility:** Compact communities ensure quick access to amenities and needs.

c. **Enhance comfort and sustainability:** Smart living technology combines convenience with eco-friendly solutions.

### Indicator 11.1.1. Access to decent and affordable housing

This indicator is useful for monitoring the increase in Nusantara households living in decent and affordable housing, in supporting the reduction of the population living in slums, squatter settlements or uninhabitable houses.

#### Percentage of Households with Access to Adequate and Affordable Housing

- **East Kalimantan Province:**
  - 2021: 70.70%
  - 2022: 73.18%
- **Penajam Paser Utara Regency:**
  - 2021: 57.81%
  - 2022: 62.14%
- **Kutai Kartanegara:**
  - 2021: 62.56%
  - 2022: 72.18%
**Indicator 16.9.1 Proportion of Children Under 5 Years whose Births are Recorded by a Civil Registration Agency**

The indicator is divided into two sub-indicators:

a. Ownership of a birth certificate for residents aged 0-17 years in the bottom 40% income group.

b. Ownership of birth certificates for residents aged 0-17 years.

The indicator is useful for measuring the fulfillment of access for groups of people in Nusantara to owning a birth certificates, guaranteeing legal recognition of children, and protecting their rights to access basic services, such as education, health, and social security. Data of this indicator recorded by civil registration in East Kalimantan, Penajam Paser Utara (PPU), and Kutai Kartanegara is already high (above 90%).

### Percentage of Birth Certificate Ownership in 2020

<table>
<thead>
<tr>
<th>Percentage</th>
<th>East Kalimantan Province</th>
<th>Penajam Paser Utara Regency</th>
<th>Kutai Kartanegara Regency</th>
</tr>
</thead>
<tbody>
<tr>
<td>90,50%</td>
<td>90,00%</td>
<td>90,10%</td>
<td></td>
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<tr>
<td>92,90%</td>
<td>94,00%</td>
<td>97,70%</td>
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<tr>
<td>98,20%</td>
<td>96,00%</td>
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<tr>
<td>100,00%</td>
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Indicator 17.8.1 Internet users’ ratio

In 2021, the percentage of internet users in the province of East Kalimantan reached 74.47%, making it one of the top 3 provinces with the highest percentage of internet users in Indonesia.

This indicator is useful for measuring the development of Nusantara from information technology adoption aspect. This indicator also aligns as Nusantara aims to become a center for Industry 4.0 and a smart city.

To develop Nusantara as a smart city, understanding community access to technology is crucial. Providing infrastructure, like fixed broadband and fiber optic networks, is a key government service, measured by coverage and household reach.

Nusantara as a Smart City will be achieved through:

a. Ensuring 100% internet access coverage for the population;

b. Introducing wireless internet networks in public areas;

c. Establishing an Integrated Operations Control Center as the central hub for collecting, storing, processing, and controlling relevant facilities within the city;

d. Making all government public services available in a digital system.
From the SDGs indicators that have been discussed in the Nusantara VLR SDGs Baseline, the following are the proposed SDGs indicators that need to be monitored further.

<table>
<thead>
<tr>
<th>SDGs Indicators</th>
<th>Nusantara contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1 Poverty level</td>
<td>Increasing the reduction in the national poverty rate by 2030</td>
</tr>
<tr>
<td>5.B.1 Mobile phone ratio</td>
<td>Increasing the population that uses mobile phones by 2030</td>
</tr>
<tr>
<td>6.1.1 Access to proper drinking water</td>
<td>Increasing access to proper drinking water by 2030</td>
</tr>
<tr>
<td>6.2.1 Access to hand washing</td>
<td>Increasing access to handwashing facilities by 2030</td>
</tr>
<tr>
<td>6.2.1 Access to proper sanitation</td>
<td>Increasing access to proper sanitation by 2030</td>
</tr>
<tr>
<td>7.1.1 Electrification ratio</td>
<td>Adding to the increase in electrification ratio by 2030</td>
</tr>
<tr>
<td>7.3.1 Primary energy intensity</td>
<td>Adding a reduction in energy intensity by 2030</td>
</tr>
<tr>
<td>7.1.2 (B) Household gas ratio</td>
<td>Adding an increase in the household gas ratio in 2030</td>
</tr>
<tr>
<td>8.1.1(A) Grdp per capita (2010)</td>
<td>Reducing the increase in gdp per capita by 2030</td>
</tr>
<tr>
<td>9.1.2(A) Number of airports</td>
<td>Increasing the number of airports by 2030</td>
</tr>
<tr>
<td>9.1.2(B) Number of crossing ports</td>
<td>Increasing the number of crossing ports by 2030</td>
</tr>
<tr>
<td>10.1.1 Gini ratio</td>
<td>Adding a gini ratio increase in 2030</td>
</tr>
<tr>
<td>11.1.1(A) Decent and affordable residential access</td>
<td>Improve access to affordable and decent housing in 2030</td>
</tr>
<tr>
<td>13.2.2(B) Carbon intensity</td>
<td>Adding reduction of carbon intensity by 2030</td>
</tr>
<tr>
<td>17.8.1 Internet user ratio</td>
<td>Increasing internet users by 2030</td>
</tr>
</tbody>
</table>
Nusantara’s Participation in Global Sustainability Campaigns

**CLIMATE CHANGE**


**SUSTAINABLE DEVELOPMENT GOALS VOLUNTARY LOCAL REVIEW**

Nusantara SDGs Baseline for VLR launched at the 11th Asia Pacific Forum on Sustainable Development in February 2024. Indonesia’s first VLR that is fully aligned with net-zero goal.

**BIODIVERSITY**

“Nusantara Nature Positive Plan” is the city’s commitment to ensure wildlife habitat’s existence and security. The document, to be published in March 2024, aligns with Kunming-Montreal Global Biodiversity Framework.

**ENVIRONMENT, SOCIAL, AND GOVERNANCE (ESG)**

An ESG committee is established to help align Nusantara’s planning and decision-making with ESG principles, enhancing the city’s sustainability and credibility. Indonesia’s first city with an ESG committee.
Please scan here for the digital version of Nusantara Sustainable Development Goals (SDGs) Baseline e-booklet and full report.