BIODIVERSITY & ENVIRONMENT MANAGEMENT REPORT

PT Wijaya Karya Beton Tbk

ESG

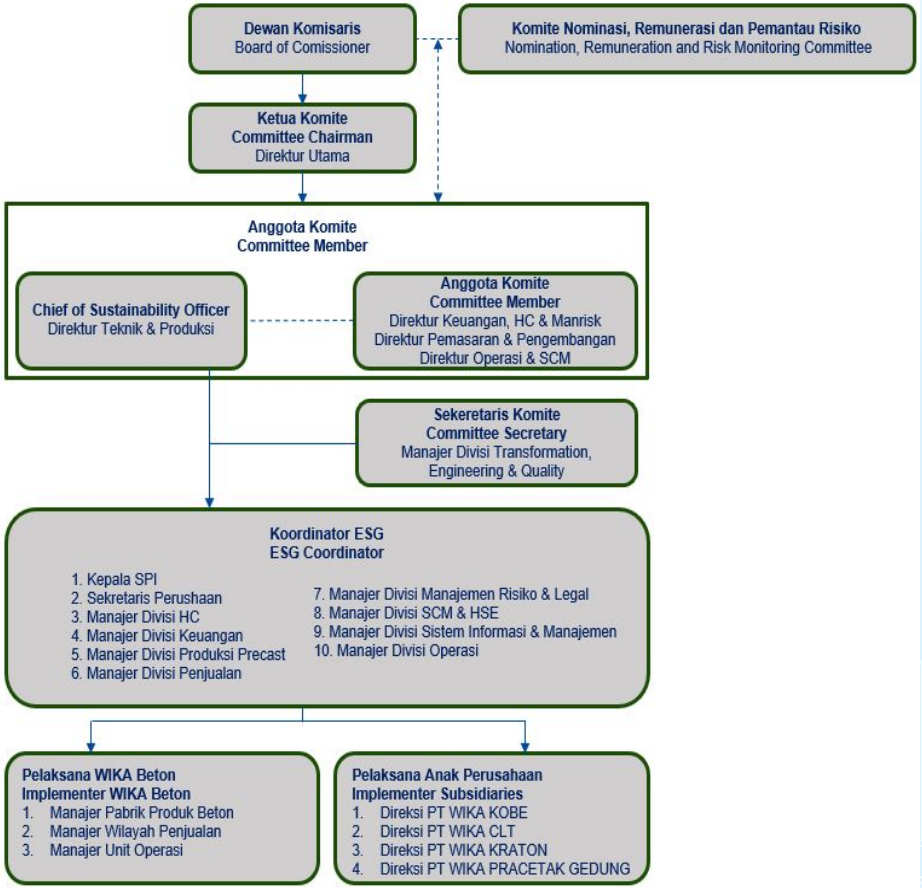
INTRODUCTION

WIKA Beton recognizes biodiversity as a critical foundation for maintaining ecosystem balance and long-term sustainability. As a company in the construction and materials industry, WIKA Beton is aware that its operations—from raw material sourcing to production and distribution—can generate both direct and indirect impacts on the environment. In response, **the Company is committed to reducing ecological pressure by integrating sustainable business practices across its value chain and strengthening collaboration with relevant stakeholders, including government, civil society, and local communities.**

WIKA Beton acknowledges that biodiversity is essential for maintaining resilient ecosystems and ensuring long-term environmental sustainability. As part of its contribution and commitment to responsible and sustainable business practices, **the Company strives to understand, manage, and minimize the ecological impacts of its operations.** Through targeted initiatives, risk assessments, and collaborations with stakeholders, WIKA Beton aims to contribute positively to biodiversity conservation while ensuring that its activities remain aligned with broader sustainability goals.

Although **WIKA Beton does not operate in areas categorized as biodiversity crisis zones**, the Company understands that safeguarding biodiversity remains essential wherever it operates. Also WIKA Beton has commitment for not sourcing the construction materials from protected areas and using materials from illegal area. This awareness is reflected in various biodiversity-related initiatives that **aim to protect habitats, support the conservation of key species, and enhance the resilience of surrounding ecosystems as part of WIKA Beton's broader sustainability agenda.**

GOVERNANCE



WIKA Beton is committed to advancing sustainable governance as part of its efforts to strengthen Good Corporate Governance (GCG) and support the Company's transformation into an efficient, sustainable, innovative, and stakeholder-focused construction and engineering enterprise. To support this commitment, the Board of Directors has established ESG Committee through a Directors' Decree (SK.01.01/WB-0A.0075/2025) with a defined term of office. The Committee has a strategic role in embedding sustainability principles into WIKA Beton's corporate strategy, business processes, and project implementation.

The President Director is assigned as the Committee Chairman, while the Director of Technical and Marketing serves as the executive lead and Chief of Sustainability Officer that providing strategic guidance and oversight of the implementation and performance of sustainability initiatives. Furthermore, the other three director namely Director of Financial, Human Capital, & Risk Management, Director of Marketing & Development, and Director of Operation & Supply Chain Management serve as committee member. Managers from most operational divisions are designated as ESG Coordinators. The biodiversity aspect is handled by Corporate Secretary through its CSR team for action plan such as planting & releasing and Division of Risk Management & Legal for the risk management

STRATEGY

WIKA Beton identifies **nature-related dependencies, impacts, risks, and opportunities** across selected operational sites and project locations through a priority materiality risk assessment aligned with the **Taskforce on Nature-related Financial Disclosures (TNFD)** with the **LEAP (Locate, Evaluate, Assess, and Prepare)** approach and supported by science-based methodologies. As a company operating in the construction materials sector, particularly in concrete production, this assessment focuses on factory locations and surrounding areas where operational activities may interact with natural ecosystems. Priority locations are determined using defined location-screening criteria to ensure a targeted and risk-based approach. WIKA Beton recognizes its reliance on natural resources and the potential impacts of its factory operations on surrounding ecosystems. Through a priority materiality risk assessment, the Company evaluates nature-related dependencies, impacts, risks, and opportunities across selected operational and project locations.

INTEGRATING BIODIVERSITY RISK IN ENTERPRISE RISK MANAGEMENT

WIKA Beton has integrated biodiversity-related risks into its Enterprise Risk Management (ERM) framework and also Risk Register to ensure that potential biodiversity and environmental impacts are systematically identified, monitored, and managed across all operations in alignment with ISO 31000:2018 Risk Management.

By embedding biodiversity considerations into the Company's overall risk management structure, WIKA Beton **strengthens its ability to anticipate ecological risks, align mitigation measures with corporate decision-making, and enhance long-term environmental resilience** as part of its sustainable business strategy.

WIKA Beton's Enterprise Risk Management for Biodiversity Risk

Area	Potential Impact	Potential Biodiversity Risk	Biodiversity Enhancement Programs
The areas surrounding the facilities that may be affected by the company's activities, although not directly part of its operations, and are assessed based on their environmental characteristics.	Erosion and sedimentation in water bodies caused by construction activities	Potential for sedimentation in water bodies surrounding the operational area and a decline in aquatic habitat quality	Clownfish fingerling release program Mangrove planting program Coral reef transplantation
	Increased dust levels from production processes	Deterioration of air quality in the surrounding environment	Tree planting program
	The need to contribute to the protection of species	Decline in wildlife population around the operational area	Bekantan conservation program Mangrove habitat area restoration Endemic tree planting Sea turtle release program

OPERATIONAL SITES

No	Operational Sites - Factory	Area (Hectares)
1	North Sumatera	5.0186
2	Lampung	10.2031
3	South Lampung	34.3465
4	Bogor	13.2727
5	Subang	6.4775
6	Karawang	60.4609
7	Majalengka	10.4
8	Boyolali	4.1744
9	Pasuruan	14.4521
10	Makassar	15.4101
Total		174.2159

Locate

WIKA Beton's operations are spread across Indonesia, supported by factories that generate revenue. These 10 operational sites, covering a total area of 174.22 hectares, have undergone a Biodiversity Risk Assessment using the WWF Risk Filter. This assessment is part of WIKA Beton's commitment to minimizing environmental impacts and managing biodiversity risks across its operations. By conducting this assessment, the company ensures that its activities are aligned with sustainability goals, helping to protect local ecosystems and promote responsible resource management in the areas where it operates.

STAKEHOLDER ENGAGEMENT ON BIODIVERSITY CONSERVATION

Collaboration with various stakeholders is crucial for effective environmental and biodiversity conservation. By working together with local communities, government agencies, NGOs, and other businesses, we can pool resources, share expertise, and implement more impactful solutions. Such partnerships ensure a more holistic approach to conservation, addressing the complex and interconnected challenges of environmental sustainability and biodiversity preservation.

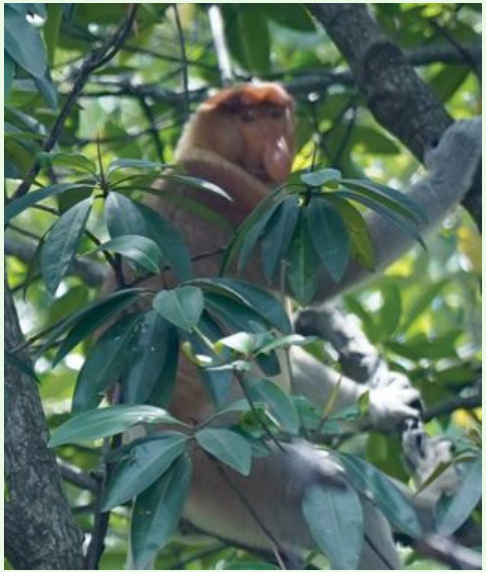
WIKA Beton collaborates with various stakeholders, including government agencies such as the Provincial Government of Jakarta, the Thousand Islands Administrative Government, the Indonesian National Police, the Indonesian National Military (TNI), the Ministry of Transportation, the Maritime Security Agency, the Public Order Agency (Satpol PP), the Jakarta Health Office, the Regional Health Crisis and Emergency Center, and the Indonesian Red Cross through a Cross-Sectoral Mangrove Tree Planting initiative in Pari Island, Thousand Islands, Jakarta, in 2025. In addition, WIKA Beton, together with WIKA Group, which includes other WIKA entities, organizes a simultaneous tree planting activity.

STAKEHOLDER ENGAGEMENT ON BIODIVERSITY CONSERVATION

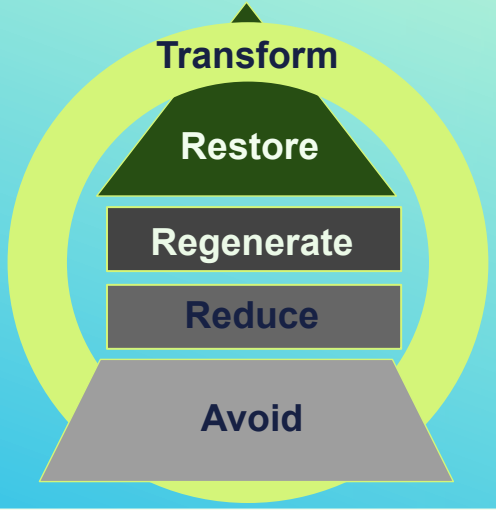
WIKA Beton contributes to the conservation of flora and fauna in conservation areas by avoiding direct disturbance to protected habitats and supporting species protection. One key focus is the proboscis monkey (*Nasalis larvatus*), an endangered (EN) primate according to the IUCN and also endemic to Kalimantan.

This species is also protected according to the Regulation of the Minister of Environment and Forestry No. 106/2018 regarding Types of Protected Plants and Animals. To help preserve the proboscis monkey and maintain its mangrove habitat, WIKA Beton has partnered with the Indonesian Bekantan Foundation (Yayasan Sahabat Bekantan Indonesia) since 2012.

In 2025, WIKA Beton visited and collaborated with Indonesian Bekantan Foundation, the East Kalimantan Natural Resources Conservation Agency (BKSDA Kalimantan Timur), and Balikpapan Environmental Office (Dinas Lingkungan Hidup Balikpapan/DLH) regarding preliminary insights on proboscis monkey conservation measures and the identification of biodiversity in the Kariangau area. Furthermore, WIKA Beton collaborates with Fairatmos, a technology-based carbon monitoring platform, to measure carbon sequestration potential in the Kariangau area, East Kalimantan.



MITIGATION HIERARCHY



WIKA Beton applies the Mitigation Hierarchy as a core approach to managing biodiversity and environmental impacts, prioritizing actions to avoid, minimize, restore, and, where necessary, compensate for residual effects. Through this structured framework, **the company ensures that every project is planned and executed with a focus on reducing ecological disturbance and supporting long-term ecosystem resilience.** Here are the key components of the Mitigation Hierarchy that WIKA Beton applies to effectively manage and reduce its biodiversity impacts

- **Avoid:**
  - Not sourcing materials from protected areas such as conservation area
  - Avoiding water extraction from water-stressed areas
- **Reduce:**
  - Reducing dust to the environment particularly air using dust collector
  - Reducing noise pollution through alternative inner-borring system for piling method
  - Managing waste water before release
  - Environmentally friendly material such as using Fly ash, nickel slag and cement PCC
- **Regenerate:**
  - Expanding mangrove by Planting 500 mangrove seedlings for improving the ecological function and resilience of the ecosystem to support proboscis monkey
  - Releasing a total of 1,000 clownfish into designated marine habitats to restore ecological balance, enhance biodiversity, and control algae
  - Modular products manufactured reef cube that are installed underwater can serve as substrates for coral growth and shelter for fish.
  - Sabodam that maintain soil stability, reduces erosion risks, and directs debris flow to stay within river channels
  - Concrete porous that allows rainwater and runoff to infiltrate into the ground to maintain groundwater
- **Restore:**
  - Planting a total of 481 trees including endemic trees and 500 mangrove seedlings across regions
  - Transplanting a total of 100 coral reefs
  - Releasing a total of 1,000 clownfish and 21 sea turtle
- **Transformation:**
  - Circular economy on waste management through recycling fly ash as concrete materials
  - Circular economy on waste management that turns waste into fertilizer
  - Collaboration with Fairatmos which implement technology-based carbon monitoring platform to measure carbon sequestration potential for forest protection scheme
  - Collaboration with stakeholders such as government, NGO, and other SOE for conservation

CLOWNFISH RELEASE

As part of its commitment to marine biodiversity conservation, WIKA Beton carried out a clownfish fingerling release program, releasing a total of 1,000 clownfish into designated marine habitats. This initiative aims to support the replenishment of local fish populations, preserve coral reef ecosystems, and raise awareness of the importance of protecting marine species.

Moreover, the release of clownfish aims to support the rebuilding of herbivorous reef fish populations. This effort aims to control algae growth then restore ecological balance by reintroducing the species to the marine ecosystem, enhancing nutrient cycling and food webs.

Through this program the company contributes to sustaining the balance of marine ecosystems while aligning with national marine conservation goals and Sustainable Development Goals (SDG) 14: Life Below Water.

SEA TURTLE RELEASE

WIKA Beton demonstrated its commitment to marine biodiversity conservation through the release of 20 sea turtle hatchlings (*Chelonia mydas*) and one adult sea turtle at Minang Rua Beach, Bakauheni, Lampung. This initiative reflects the Company's proactive efforts to support the protection of this marine species and the preservation of coastal ecosystems, while reinforcing its broader environmental commitments.

Through such conservation actions, WIKA Beton seeks to contribute to ecosystem resilience, raise awareness of marine biodiversity protection, and support sustainable environmental management in areas surrounding its operations.

The Company supports the preservation of marine ecosystem balance while aligning its efforts with national marine conservation objectives and the Sustainable Development Goals (SDG) 14: Life Below Water.

MANGROVE PLANTING

Mangroves play a vital role in protecting coastal ecosystems by stabilizing shorelines, reducing erosion, and providing habitat for marine life. They also act as crucial carbon sinks, helping to mitigate climate change. In line with its biodiversity and environmental commitment, WIKA Beton plays an active role in environmental conservation through the Sinergi Berkelanjutan Pulau Pari Program, a long-term initiative focused on restoring and preserving coastal ecosystems. One of the key activities under this program is the planting of mangroves, which help protect shorelines from abrasion and enhance its biodiversity. In 2024, a total of 500 mangrove seedlings were planted, contributing to the overall goal of increasing green cover and stabilizing coastal areas. Looking ahead, WIKA Beton plans to plant an additional 500 seedlings for the next year, further expanding the impact of this important environmental effort that align with Sustainable Development Goals (SDG) 13: Climate Action and 14: Life Below Water.

TREE PLANTING

Trees play a crucial role in maintaining ecosystem balance, including carbon absorption, improving air quality, and providing habitat for various species. Additionally, trees help reduce soil erosion and preserve biodiversity. As part of its commitment to environmental conservation, WIKA Beton actively participates in tree planting initiatives across various regions. In 2024, WIKA Beton planted 481 trees in locations such as Medan, Lampung, Bogor, and Makassar, focusing on high carbon-absorbing trees and fruit-bearing trees. Furthermore, WIKA Beton collaborated with WIKA Group to plant 6,400 trees simultaneously across several operational areas, that consisted of various species namely mahogany, trembesi, mango, and mangrove trees. This initiative supports climate change mitigation efforts and enhances local ecosystems that align with Sustainable Development Goals (SDG) 13: Climate Action and 15: Life on Land.

13 CLIMATE ACTION

15 LIFE ON LAND

WIKA BETON SUSTAINABLE PRODUCT

One of WIKA Beton strategy in Biodiversity :

Works to preserve biodiversity by minimizing ecological disruption and supporting conservation efforts.

Aligned with our vision “to become a trusted and sustainable global company providing solutions in the concrete industry,” WIKA Beton continues to integrate technological innovation with environmental responsibility. Through this program, WIKA Beton contributes to national initiatives focused on:

- restoring Indonesia’s coastal ecosystems,
- supporting marine and coral reef conservation, and
- supporting environmental terrestrial sustainability.

Despite being a company in the concrete industry, WIKA Beton is committed to developing products that have a positive impact on the environment. Through its innovative solutions, such as the hollow concrete cubes for marine ecosystem restoration, WIKA Beton minimizes ecological disruption while supporting biodiversity and conservation efforts. This strategy reflects the company's dedication to sustainability and its role in contributing to a healthier planet.

The implementation of WIKA Beton’s Sustainable Products align with our Biodiversity Commitment (E6) as well as SDG 9, SDG 13, and SDG 14

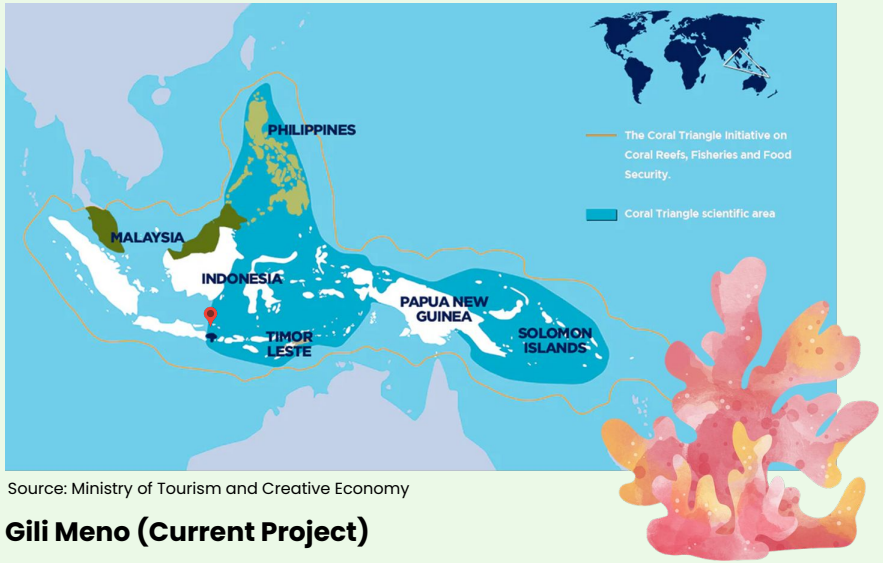
WIKA BETON SUSTAINABLE PRODUCT : REEFCUBE

As a tangible expression of our commitment to marine conservation, WIKA Beton produces and distributes Hollow Concrete Reef Cubes in Gili Meno, North Lombok.

This innovation serving as an artificial reef that provides shelter for fish, supports coral growth, and boosts marine biodiversity. This solution, successfully implemented in Gili Meno, is part of WIKA Beton's commitment to environmental sustainability through eco-friendly construction.

Key Functions of Reefcubes on Biodiversity and Environment

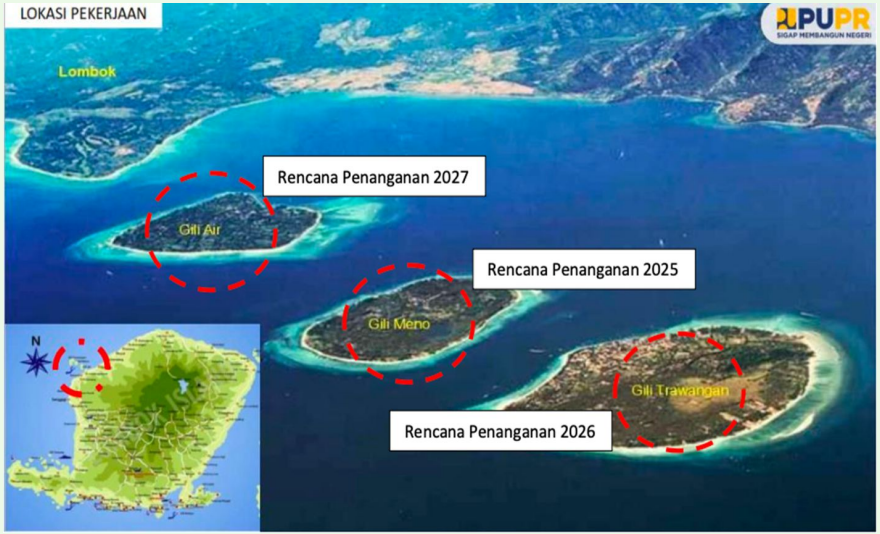
- Artificial Habitat: Provides space for marine life like fish.
- Coral Growth Acceleration: Offers calcium substrates for faster coral formation.
- Biodiversity Enhancement: Supports marine ecosystem restoration.
- Economic and Social Benefits: Boosts fishery yields, supports marine tourism, and creates income opportunities for coastal communities.



Source: Ministry of Tourism and Creative Economy

Gili Meno (Current Project)

The eastern part of Gili Meno has experienced shoreline retreat of up to 2.1 meters per year. Between 2011 and 2021, the coastline shifted by approximately 20–25 meters. Coastal infrastructure such as local access roads has been damaged, and trees along the shoreline have been destroyed due to severe erosion.



Source: River Basin Organization I (BBWS) Mataram, National Marine Protected Area Center Kupang (BKKPN), Ministry of Marine Affairs and Fisheries

Possible Development of Reefcube

The implementation of this unit in Gili Meno is considered a strategic move, supported by favorable water conditions for reef rehabilitation, the need for ecosystem restoration, marine tourism potential, and community involvement. The placement of the modules adheres to international standards, including optimal depth, stable seabed, and water conditions that are conducive to coral reef life.

The success of the initial launch in Gili Meno lays the groundwork for expanding the project to other coastal regions of Indonesia, such as Gili Trawangan and Gili Air, to further foster innovation and solidify WIKA Beton's position as a pioneer of sustainable concrete solutions in the construction industry.

Gili Trawangan (Next Project)

The northern part of Gili Trawangan has experienced shoreline retreat of up to 4 meters per year. From 2011 to 2021, the coastline shifted by approximately 30–45 meters. Property development in the northern area, along with hard coastal infrastructure, has contributed to significant changes in the shoreline.

Gili Air (Next Project)

The southern part of Gili Air has experienced shoreline retreat of up to 2 meters per year. Between 2011 and 2021, the coastline shifted by approximately 15–25 meters. In 2011, the southern beach area was still a sandy tourist spot, but this area has since disappeared due to coastal erosion.

WIKA BETON SUSTAINABLE PRODUCT : SABODAM

A sabodam is a type of dam structure designed to capture and control flood sediment and direct debris flow along the river's course. This helps regulate flow speed and sediment discharge, preventing damage to surrounding areas and ensuring cleaner water on downstream.

This project was first initiated by the government, Ministry of Public Works as part of its efforts toward flood mitigation and sediment control in the Huntap area for communities that was affected by the Palu disaster in Tondo. In 2023, WIKA Beton received an order for 1,080 units of modular precast sabo-dam product.

WIKA BETON SUSTAINABLE PRODUCT : CONCRETE POROUS

Rapid urban development, especially in parks and roads with conventional concrete, has created environmental issues, such as increased impermeable surfaces that prevent rainwater absorption. This causes higher runoff, leading to waterlogging or flooding. In response, WIKA Beton has developed porous concrete technology, providing key environmental benefits.

Porous concrete is a specialized type of concrete with high porosity, designed as a surface layer that allows rainwater and runoff to infiltrate into the ground. This plays an important role in enhancing urban resilience against surface flooding and maintaining groundwater balance.

Porous concrete is composed of key materials such as Portland cement, aggregates, water, and specific admixtures. One of its distinguishing characteristics is the use of coarse aggregates with little to no fine aggregates, which provides its unique permeability properties.

WIKA BETON SUSTAINABLE PRODUCT : INFILTRATION WELL

In 2022, WIKA Beton developed a precast concrete product for **infiltration wells**, manufactured in a segmental form. This product uses porous concrete, allowing higher water absorption capacity. One of the raw materials used to produce these infiltration wells is fly ash, a waste product generated from coal combustion. Utilizing fly ash as a concrete mix ingredient is economically beneficial because it makes use of waste that would otherwise be discarded.

The use of this product helps prevent flooding, reduce stormwater runoff to drainage channels, minimize erosion, and protect coastal areas by mitigating seawater intrusion. It also helps prevent land subsidence and reduces groundwater contamination levels. It also help prevent land subsidence and reduce groundwater pollution.

BBLT Type
Normal Concrete

BBPT Type
Porous Concrete

BIODIVERSITY RISK ASSESSMENT

Taskforce on Nature-related Financial Disclosures

Locate | Evaluate | Assess | Prepare

WWF Risk Filter Suite

Biodiversity Risk Filter

WIKA Beton recognizes the importance of biodiversity conservation as an integral part of its sustainable business practices, even though a comprehensive, company-wide biodiversity risk assessment has not yet been carried out. At this stage, **the Company identifies and assesses biodiversity-related risks through a location-based approach, focusing on areas around its facilities that may be affected by operational activities**, at entire value chain (own operations, upstream, downstream) at operational sites including Adjacent Areas to Own Operations that are not directly under the Company's control. The biodiversity-related risks has been integrated into its Enterprise Risk Management (ERM) framework and also Risk Register as it is aligned with the ISO 31000:2018 Risk Management and ISO 26000:2010 Corporate Social Responsibility with one of its core subjects "The Environment".

WIKA Beton prepares its biodiversity risk and impact assessment in alignment and reference to the **Taskforce on Nature-related Financial Disclosures (TNFD)** framework, structured around the four pillars of **Governance, Strategy, Risk & Impact Management, and Metrics & Targets**, and applies the **Locate, Evaluate, Assess, and Prepare (LEAP)** approach in its implementation. With **WWF Risk Filter**, which provides an indicative evaluation of potential risks based on available spatial and shows for Dependency-Related Biodiversity Risk and Impact-Related Biodiversity Risks. Through the WWF Biodiversity Risk Filter the company is able to prioritize direct impacts and dependencies on biodiversity based on the Construction Materials industry sector of WIKA Beton. This biodiversity risk assessments are conducted across all projects to identify potential environmental risks and to determine appropriate management and mitigation strategies. These assessments are embedded in WIKA Beton's environmental planning processes and are intended to anticipate biodiversity impacts within project areas.

Nonetheless, WIKA Beton remains aware of potential biodiversity-related risks that may arise from its activities, **including indirect impacts such as soil erosion, sedimentation of nearby water bodies, as well as noise and dust that could affect surrounding communities and ecosystems.** The Company views this awareness as a foundation for strengthening its biodiversity management in the future through more robust assessments and targeted mitigation measures.

DEPENDENCY-RELATED & IMPACT-RELATED BIODIVERSITY RISKS

Evaluate

WIKA Beton used the **WWF Risk Filter to carried out the biodiversity risk assessment** as an **Evaluate approach** in reference to **LEAP** approach from **TNFD** Framework, which provides an indicative evaluation of potential risks based on available spatial and environmental data.

The following **summarizes the risk assessment** outcomes for construction materials conducted **using the WWF Risk Filter Suite methodology** both for Dependency-Related Biodiversity Risk and Impact-Related Biodiversity Risks.

The results were subsequently overlaid onto the geographic footprint of WIKA Beton's operational locations for detailed risk mapping.

Natural Capital Dependency-Related Biodiversity Risks

Indicator	Level	Potential Impact	Mitigation Action Plan
Water Availability	5	Increased production cost	Water treatment plan
Distance to Market	4	Increased fuel consumption & logistics cost	Prefer suppliers closer to plant locations
Limited Wild Flora & Fauna Availability	2	Increased vulnerability to erosion/runoff and biodiversity loss	Habitat restoration in unused land
Water Condition	3	Contamination of drainage or irrigation channels	Strengthen wastewater treatment
Air Condition	4	Health/safety issues for workers	Air quality monitoring system
Landslides	4	Damage to access roads & transport delays	Strengthen drainage & erosion control around access roads
Wildfire Hazard	4	Supply chain interruption	Emergency response
Extreme Heat	4	Increased curing water demand	Curing using water recycle
Tropical Cyclones	4	Destruction in plant areas	Early-warning SOP & emergency plan
Media Scrutiny	4	Reputational risk related to environmental issues	Transparent environmental reporting

DEPENDENCY-RELATED & IMPACT-RELATED BIODIVERSITY RISKS

Natural Capital Impact-Related Biodiversity Risks

Direct Dependency - Impact | 1: Very Low | 2: Low | 3: Medium | 4: High | 5: Very High

Indicator	Level	Potential Impact	Mitigation Action Plan
Land, Freshwater and Sea Use Change	2	Loss of vegetation and wildlife	Support through reef cube for sea conservation and tree or mangrove planting
Forest Canopy Loss	4	Reduced ecological buffer around supply routes	Environmental screening in vendor selection
Invasives	4	Reduced biodiversity stability	Bekantan conservation program
Pollution	4	Health/safety issues for workers	Air quality monitoring system, dust collector
Protected/Conserved Areas	4	Community & regulatory pressure	Avoid material extraction from protected/conserved area
Key Biodiversity Areas	4	Reputational risk if operations affect high-value habitats	Avoid material extraction from protected/conserved area
Other Important Delineated Areas	4	Increased conflict with local communities	Community engagement programs
Ecosystem Condition	4	Flooding	Improve soil cover, drainage, and vegetation
Range Rarity	4	Loss of rare/locally adapted flora or fauna	Preserve native vegetation corridors
Indigenous Peoples (IPs); Local Communities (LCs) Lands and Territories	4	Social conflict or operational resistance	Strengthen community relation programs
Resource Scarcity: Food - Water - Air	4	Reduced operational days due to environmental constraints	Water efficiency & recycling

Biodiversity Risk Assessment

WWF Risk Filter Suite

Biodiversity Risk Filter

Assess

WIKA Beton conducted a biodiversity risk screening using **the WWF Biodiversity Risk Filter,** a globally recognized tool that evaluates nature-related risks based on geospatial, ecological, and socioeconomic datasets. This assessment provides an indicative view of potential biodiversity exposure across the Company's operational footprint. The results show that all **assessed sites exhibit both physical and reputational biodiversity risks,** reflecting a combination of ecological sensitivity, community expectations, and environmental pressures surrounding the facilities. In general, the sites fall within the **medium to high risk range**, primarily driven by dependencies on freshwater availability, land stability, and natural regulating services, as well as exposure to pollution-related impacts, habitat pressures, and climatic stressors. These insights highlight the need for continued environmental management efforts, proactive mitigation planning, and the integration of biodiversity considerations into WIKA Beton's risk governance framework.

1. PROVISIONING SERVICES RISK

Provisioning Services represent risks related to the availability of natural inputs such as water, soil stability, flora/fauna, and other natural materials. In WIKA Beton, the current risk level is **Medium across all 10 operational sites**.
This indicates that the Company operates in areas where essential natural inputs—particularly water availability and land/soil stability—are generally sufficient, but not without pressure. A Medium score shows that resource availability is adequate for current operations, yet vulnerable to moderate environmental or seasonal fluctuations that may escalate into operational constraints if not managed properly.

POTENTIAL RISK IDENTIFIED:

1. Periodic limitations in water availability that may affect production processes
2. Variability in raw water quality that may influence operational efficiency
3. Soil condition changes that may affect structural stability around operational areas

2. REGULATING & SUPPORTING SERVICES

Regulating & Supporting Services represent risks related to soil condition, water condition, air condition, ecosystem health, and pollination. All **10 WIKA Beton sites** fall under the **Medium** category.
This indicates that the ecosystems surrounding each site still provide basic regulating functions, but environmental quality—such as soil permeability, air cleanliness, and water quality—shows signs of moderate stress. These conditions may affect drainage efficiency, dust dispersion, and IPAL load if environmental conditions further deteriorate.

***POTENTIAL RISK IDENTIFIED*:**

1. Soil erosion causing sediment discharge into natural drains or rivers.
2. Water quality deterioration increasing IPAL load and treatment frequency
3. Dust accumulation affecting local vegetation and community health.
4. Reduced natural infiltration increasing surface runoff and localized flooding.
5. Air quality decline triggering potential regulatory tightening.

3. Regulating Services – Mitigating

Regulating Services – Mitigating reflect natural hazard buffering (landslides, wildfire, pests/diseases, extreme heat, storms). WWF data shows **8 sites in Medium–High** and **2 sites in Low** in Bogor and Majalengka.

This indicates uneven exposure across operations: most sites face moderate hazard-related pressures, such as heat stress or slope instability, while a smaller number of sites benefit from lower natural hazard intensity. This variability suggests that site-specific hazard readiness is required.

POTENTIAL RISK IDENTIFIED:

1. Slope failures around access roads or raw material storage yards
2. Heat stress increasing fuel consumption and shortening equipment life.
3. Stormwater overflow causing discharge of untreated water.
4. Cyclone or high-wind events damaging stockpile coverings or roofs.
5. Pest/disease outbreaks affecting vegetation buffers or stability of green areas.

4. Cultural Services

Cultural Services relate to landscape attractiveness and the cultural/social value of an area. WWF assigns **Medium** to all **10 WIKA Beton sites** (default where data is missing).
This indicates that although WIKA Beton's operations are not tied to tourism, they are located in landscapes where environmental quality influences community perception. Medium exposure means the presence of moderate sensitivity to visual and environmental conditions around facilities.

POTENTIAL RISK IDENTIFIED:

1. Negative public perception due to visible dust, debris, or unmanaged landscapes
2. Community complaints related to loss of greenery or visual obstruction.
3. Pressure from local stakeholders to maintain ecological aesthetics.

5. Pressure on Biodiversity

Pressures on Biodiversity include land-use change, deforestation, invasives, and pollution. WWF data shows:

3 sites = Very High | 5 sites = High | 2 sites = Medium

This indicates that a significant portion of WIKA Beton's sites are located in areas where ecological pressures are pronounced. High to Very High exposure suggests elevated environmental stress—either due to pollution intensity, land-use patterns, or existing ecosystem degradation—requiring priority mitigation.

POTENTIAL RISK IDENTIFIED:

1. Sedimentation affecting rivers or community drainage.
2. Emission of cement dust impacting flora/fauna and nearby households.
3. Runoff containing fine particulates affecting water ecosystems.
4. Fragmentation of small habitats located near plant boundaries.
5. Higher risk of NGO or community scrutiny.

Based on the assessment according the WWF Risk Filter, results on Pressure on Biodiversity, three operational sites namely North Sumatera (5.0186 Hectares), Lampung (10.2031 Hectares), and South Lampung (34.3465 Hectares) with total area 495.682 hectares which were identified as having a very high level of risk. In response, WIKA Beton is committed to preserving biodiversity in and around its operational areas, not only in areas with very high risk but also in all operational areas through implementation of hierarchy mitigation such as planting. 2 sites medium in Bogor and Pasuruan, the other 5 sites are in high.

6. Environmental Factors

Environmental Factors represent climate stress, environmental degradation, and natural sensitivity. WWF assigns:

1 sites = High | 3 sites = Medium | 6 sites = Low

This indicates considerable variation among sites, with some located in environmentally sensitive regions prone to climatic extremes or natural degradation, while others operate in less pressured environments. Theo only high status for environmental factors is in Lampung.

POTENTIAL RISK IDENTIFIED:

1. Flood events causing cross-contamination of stormwater and process water.
2. High temperature accelerating concrete curing inconsistently.
3. Erosion or soil weakening affecting heavy equipment movement.

7. Socioeconomic Factors

Socioeconomic Factors include Indigenous lands, local community vulnerability, resource scarcity, inequality, and social expectations. All **10 sites** fall under **Medium**.

This indicates that every WIKA Beton site operates in areas where socioeconomic conditions play a moderate role in shaping community expectations and stakeholder sensitivity to environmental issues.

POTENTIAL RISK IDENTIFIED:

1. **Increased community complaints regarding dust, vibration, noise, and truck traffic.**
2. **Perception of unfair resource competition (e.g., groundwater use).**
3. **Potential delays in permit extensions due to social concerns.**

8. Reputational Factors

Additional Reputational Factors include media scrutiny, political oversight, internationally important biodiversity sites, and preparedness. **9 sites** are rated **Medium** while **1 sites** is rated **High** which is in Boyolali. This indicates that WIKA Beton operates in contexts where reputational exposure exists at a moderate level—environmental performance is visible to stakeholders, though not under acute high-risk scrutiny.

POTENTIAL RISK IDENTIFIED:

1. Public relations crises linked to environmental incidents.
2. Increased frequency of environmental audits and regulatory inspections.
3. Stakeholder distrust if environmental commitments are not demonstrated.

ASSESSMENT IMPACT ON BIODIVERSITY RISKS

Operational Site	Dependency			Impact		Biodiversity	
	Provisioning Services	Regulating & Supporting Services	Natural Disaster	Pressures on Biodiversity	Environmental Factors	Key Biodiversity Area*	Protected Area*
South Lampung	3.3	2,2	2.9	4.3	2.5	1	5
Lampung	3.4	2,3	2.9	4.3	3.5	2	5
Bogor	3.3	2,5	2.5	3.4	3.5	6	15
Majalengka	3.4	2,3	2.5	3.8	2.5	5	1
Subang	3.4	2,4	2.9	3.8	2.5	6	1
Karawang	3.3	2,4	2.9	4.1	2.5	9	0
Pasuruan	3.3	2,4	2.9	3.3	2.5	5	3
North Sumatera	3.2	2,4	2.9	4.4	3.5	3	10
Makassar	3.1	2,3	3.3	4.0	2.5	6	2
Boyolali	3.4	2,3	2.9	3.7	2.5	4	3

Direct Dependency - Impact 1,0 - 1,8: Very Low | 1,8 - 2,6: Low | 2,6 - 3,4: Medium | 3,4 - 4,2: High | 4,2 - 5,0: Very High |

Assess

The assessment indicates a high level of dependency on natural resources, as well as exposure to physical risks which are known as natural disaster such as landslides, extreme heat, and tropical cyclones that can trigger storms and flooding Analyses were conducted across 10 operational sites to identify pressure on biodiversity then conservation and/or protected areas located within 50 km radius of each site, taking into account the Company's potential influence on biodiversity. Based on this analysis, nature-related dependency and impact risks were identified for each operational location.

***Number of KBA(Key Biodiversity Area) & protected areas such as National Park, Nature Reserve, Wildlife Sanctuary, Great Forest park, etc. within 50 km of sites**

WIKA BETON COMMITMENT IN BIODIVERSITY CONSERVATION

Based on the assessment results regarding Pressure on Biodiversity according to WWF Risk Filter, three operational sites North Sumatera, Lampung, and South Lampung were identified as having a very high level of risk. In response, WIKA Beton is committed to preserving biodiversity around its operational areas by implementing the mitigation hierarchy, including initiatives start from rehabilitate or restore such as tree and mangrove planting, as well as fish release programs to support ecosystem recovery. WIKA Beton is committed to biodiversity conservation not only in operational areas identified as high risk, but across all of its operational sites. In addition, WIKA Beton conducts annual planting of endemic tree species within its factory areas as part of its ongoing commitment to biodiversity conservation and ecosystem enhancement.

As part of this commitment, WIKA Beton has designated company-owned land in Kariangau as a biodiversity conservation area. This land is specifically allocated for conservation purposes, demonstrating the Company's tangible efforts and long-term commitment to biodiversity protection and environmental sustainability. The Kariangau area is characterized by lowland forest and mangrove ecosystems that support high ecological value. The area serves as habitat for the proboscis monkey (*Nasalis larvatus*), which is classified as Endangered (EN) under the IUCN Red List. Recognizing the ecological importance of this habitat, WIKA Beton intends to contribute to ecosystem rehabilitation in Kariangau to support the conservation of the proboscis monkey as an endemic species and to enhance the resilience of its natural habitat. Besides, WIKA Beton has released sea turtle hatchlings (*Chelonia mydas*) into the sea in Lampung as part of its commitment to protecting marine biodiversity.

METRICS & TARGET

WIKA Beton monitors and measures its biodiversity performance through defined metrics and targets aligned with its conservation initiatives. Key indicators include the number of trees and mangroves planted, areas designated for biodiversity conservation, and the implementation of species protection activities such as fish and sea turtle releases. These metrics support the evaluation of program effectiveness and guide continuous improvement in WIKA Beton's biodiversity management efforts. In South Lampung, the location was prioritized because the biodiversity risk assessment identified a very high level of pressure on biodiversity and the area represents an important coastal and marine ecosystem while in Kariangau is a lowland forest and mangrove ecosystem that serves as a critical habitat for the proboscis monkey (Nasalis larvatus), an endemic and Endangered species.

Biodiversity Conservation Action	2024 (Current)	2025 (Target)
Tree Planting	481	500
Mangrove Planting	500	550
Fish Release	1,000	1,100
Sea Turtle Release	21	25
Coral Reef Transplantation	1,000	1,100

WIKA BETON'S BIODIVERSITY MANAGEMENT PLAN

WIKA Beton implements a targeted Biodiversity Management Plan in South Lampung and Kariangau as part of its response to biodiversity risks identified through the WWF Risk Filter assessment. In these locations, where biodiversity pressure has been assessed as high, the Company applies the mitigation hierarchy with a focus on rehabilitation and restoration measures. Key initiatives include tree planting and mangrove planting to restore degraded terrestrial and coastal ecosystems, as well as fish release programs to support aquatic ecosystem recovery. Moreover, WIKA Beton conducts annual planting of endemic tree species within its factory areas.

In Kariangau, WIKA Beton has designated company-owned land as a biodiversity conservation area to protect lowland forest and mangrove ecosystems that serve as habitat for the proboscis monkey (*Nasalis larvatus*), an Endangered (EN) species under the IUCN Red List. Conservation efforts in this area are directed toward habitat rehabilitation particularly mangrove planting to strengthen ecosystem resilience and support the long-term conservation of this endemic species.

In South Lampung, WIKA Beton complements its terrestrial and coastal initiatives by releasing sea turtle hatchlings (*Chelonia mydas*) and clownfish into the sea also mangrove planting, demonstrating its commitment to marine biodiversity protection besides tree planting for terrestrial ecosystem rehabilitation. Collectively, these actions reflect WIKA Beton's integrated approach to biodiversity conservation across both terrestrial and marine ecosystems.

WIKA BETON'S BIODIVERSITY MANAGEMENT PLAN

WIKA Beton's Biodiversity Management Plan highlighting targeted conservation actions implemented in priority locations namely South Lampung and Kariangau to address biodiversity risks and support ecosystem protection, restoration, and long-term sustainability. However, the conservation efforts is not only implemented in particular area but also to all operational sites of WIKA Beton.

Area	Key Management Plan in Biodiversity Conservation						
	Tree Planting	Mangrove Planting	Fish Release	Sea Turtle Release	Coral Reef Transplantation	Habitat Protection	Details
South Lampung (10.2031 Ha)	✓	✓	✓	✓	✓	✓	Conduct tree and mangrove planting including releasing sea turtle (Chelonia mydas) and clownfish
Kariangau (26 Ha)	✓	✓				✓	Protecting the proboscis monkey (*Nasalis larvatus*)

BIODIVERSITY CONSERVATION IN SOUTH LAMPUNG

One of the specific locations assessed in WIKA Beton's biodiversity risk evaluation is in South Lampung with area of 34.3465 hectares. This area is dominated by mangrove vegetation formed along sediment-filled coastal zones. Mangrove vegetation grows in areas which is influenced by tidal activity. The site supports newly developing mangrove ecosystems, indicated by small trunk diameters (under 10 cm) and low canopy height (below 2 meters). Dominant species such as *Rhizophora* sp. and *Avicennia* sp. as true mangrove species play a key role in stabilizing coastal substrates and providing habitat for various fauna. Additional species identified including *Thespesia populnea*, *Excoecaria agallocha*, and *Leucaena leucocephala* reflect a mixed composition typical of modified coastal habitats.

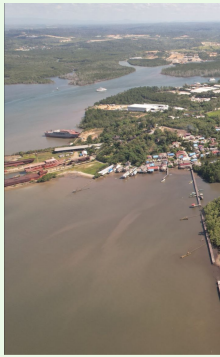
Therefore, based on the biodiversity exploration conducted in South Lampung, all plant species identified in the area are classified as Least Concern (LC) according to the IUCN Red List. Findings from this assessment confirm that the area is not a critical habitat but still requires careful management due to its ecological importance in shoreline protection, erosion control, and early-stage mangrove regeneration. Due to the presence of mangrove and coastal ecosystems as well as lowland forests around its operational sites, WIKA Beton places a strong focus on biodiversity planning and conservation efforts in these surrounding areas through tree and mangrove planting then releasing sea turtle and fish.

Plant Species	No. of individual	IUCN Status
Leucaena leucocephala	20	CD
Acacia auriculiformis	2	LC
Terminalia catappa	1	LC
Thespesia populnea	4	LC
Rhizophora sp	50	LC
Avicennia alba	4	LC
Excoecaria agallocha	5	LC

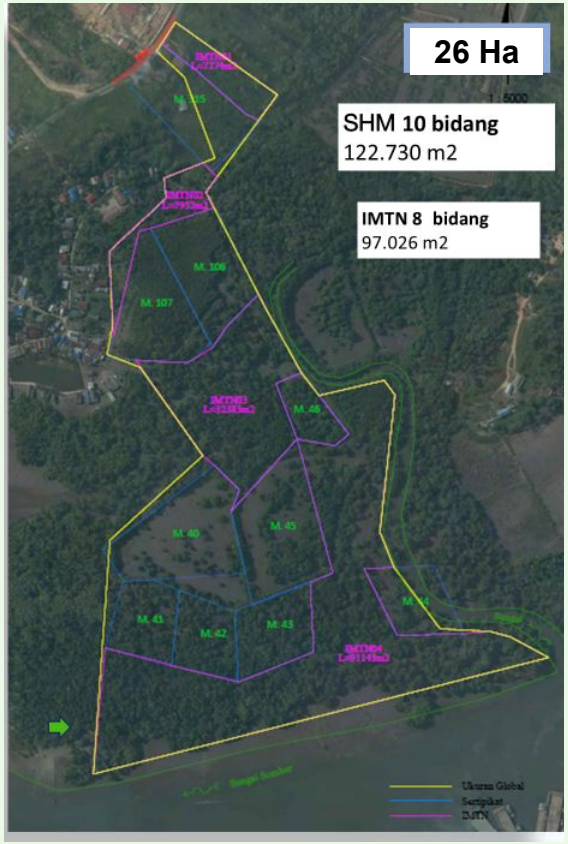
DESIGNATED AREA FOR WIKA BETON BIODIVERSITY CONSERVATION IN KARIANGAU

WIKA Beton collaborates with Fairatmos through a technology-based carbon monitoring platform, to assess and quantify the carbon sequestration potential of vegetation in the Kariangau area. The Kariangau area is a forested land which comprised of several ecosystem namely mangrove and lowland forest that is possessed by WIKA Beton as its conservation and offset area. The data generated from this initiative provides a robust basis for developing more targeted and effective sustainability strategies, strengthens the Company's efforts to reduce its carbon footprint, and supports the broader transition toward a green economy.

The carbon project between WIKA Beton and Fairatmos, which covers a 26-hectare project area is estimated to generate approximately 88–152 tCO_2e in carbon credit potential per year, reflecting the significant contribution of this landscape to climate change mitigation. Findings from this assessment indicate that the Kariangau area constitutes a critical habitat, as evidenced by increasing human–wildlife interactions such as proboscis monkeys and long-tailed macaques routinely entering residential areas in search of food which signals degradation of their natural habitat and highlights the urgent need for strengthened conservation and habitat restoration efforts.



KARIANGAU CONSERVATION AREA



Location :

Kariangau Village,

West Balikpapan Sub-District,

Balikpapan City,

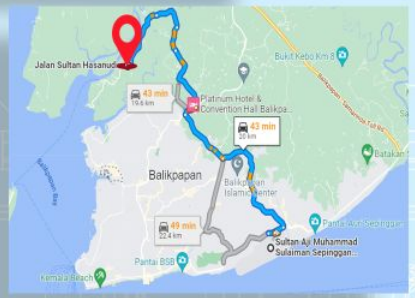
East Kalimantan Province

43 Minutes

Sepinggan Airport to Kariangau Location

30 Minutes

Balikpapan City to Kariangau Location



BIODIVERSITY IN KARIANGAU

Proboscis monkeys (*Nasalis larvatus*) and long-tailed macaques (*Macaca fascicularis*) in Kariangau frequently visit residential areas in search of food. According to local residents, since 2024 these monkeys have come to the settlement on a daily basis to forage. This behavioral shift indicates that biodiversity conditions in the proboscis monkey's natural habitat have deteriorated to a level that requires serious attention, as food availability and habitat quality in the wild are likely no longer sufficient to support their needs.

Start from 2026, WIKA Beton will focus in Kariangau for biodiversity conservation especially on proboscis monkeys (*Nasalis larvatus*) and mangrove area since this area has been designated for company's dedicated owned-land for conservation action

CLOSING

WIKA Beton's Biodiversity and Environment Report reflects the Company's commitment to integrating environmental stewardship into its core business operations. Through systematic biodiversity risk assessments using the WWF Risk Filter, the implementation of innovative and environmentally friendly products, and active conservation initiatives, WIKA Beton demonstrates a proactive approach to minimizing ecological impacts across its operational sites.

Despite operating in the construction materials industry, WIKA Beton continues to develop solutions that contribute positively to ecosystem protection, climate resilience, and biodiversity conservation. Moving forward, the Company remains committed to strengthening collaboration with stakeholders, enhancing data-driven environmental management, and expanding conservation efforts to support sustainable development and long-term environmental sustainability in Indonesia.