

IGNITING SUSTAINABLE GROWTH THROUGH

BUSINESS TRANSFORMATION



In this Presentation

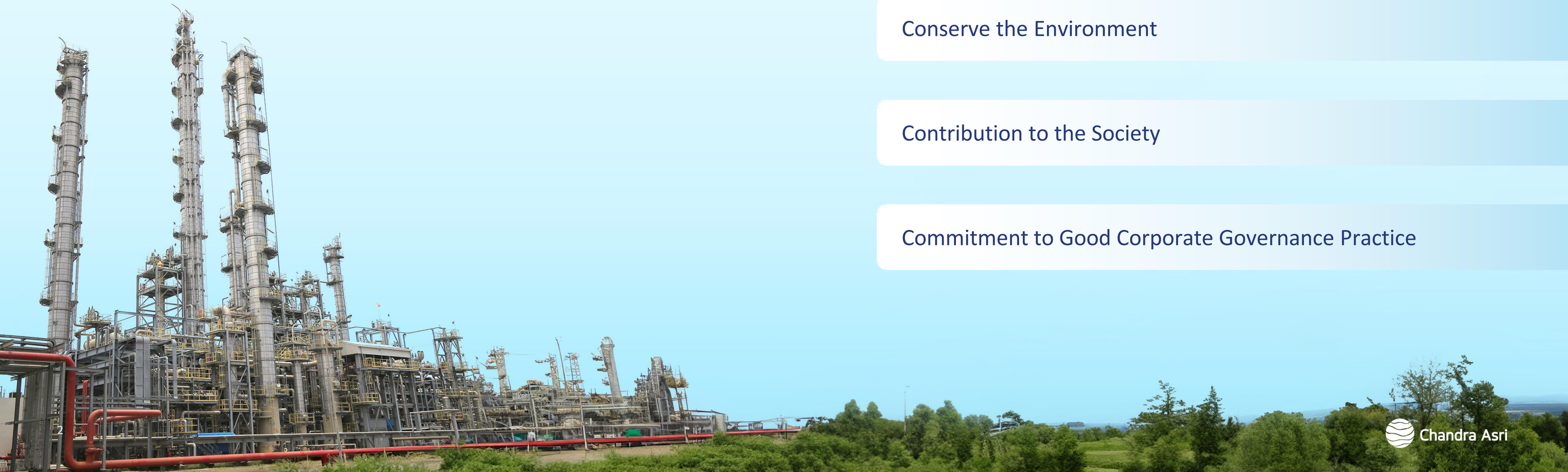
Sustainability in Action

RESPONSIBLE Framework

Conserve the Environment

Contribution to the Society

Commitment to Good Corporate Governance Practice



ESG - Why it matters to Chandra Asri

The pressing need to address climate issues has propelled society towards an urgent and collective pivot towards a low- carbon paradigm. A diverse array of stakeholders, ranging from governmental entities and astute investors to conscientious consumers and the broader society, now places sustainability at the forefront of their considerations.

In this regard, Chandra Asri Group steadfastly maintains its commitment to integrating sustainable practices into its business growth trajectory and delivering low-carbon solutions, in alignment with ESG principles.



Environmental

- Climate Change
- Environmental Performance



Social

- Community Engagement
- Product & Chemical Safety
- Health & Safety
- Labor & Human Rights
- Human Capital
- Development




Governance

- Sustainable Procurement & Supply Chain
- Digital Transformation
- Corporate Governance
- Sustainability Governance
- Business Ethics

Our ESG Recognition & Awards

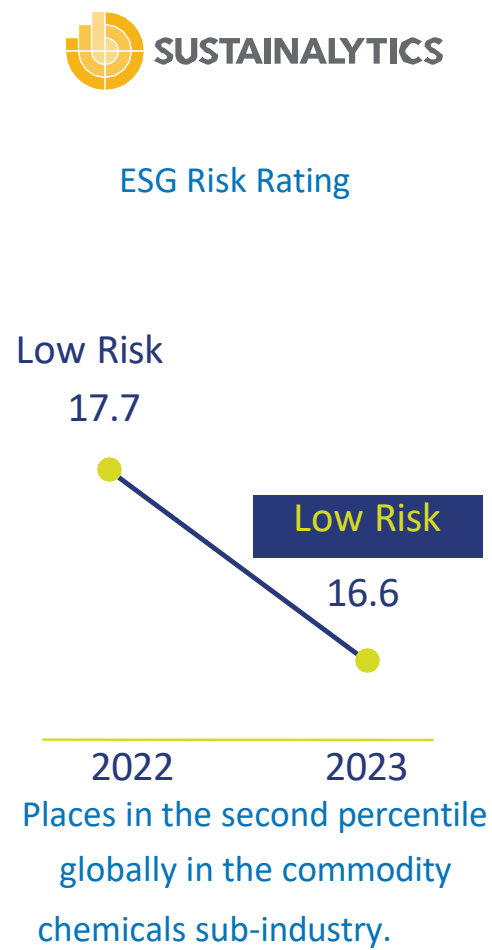
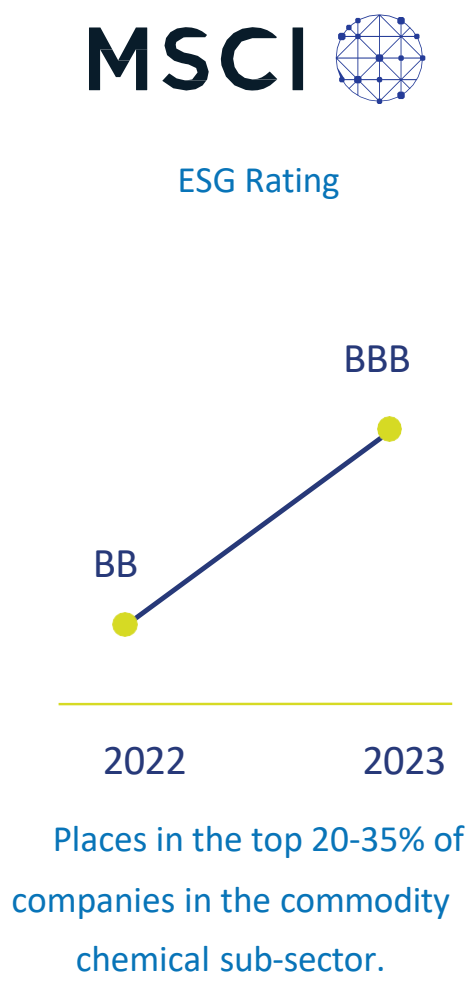
Global Top ESG Rating Providers have assessed that Chandra Asri Group's 2023 ESG performance is improving compared to the previous year.



CDP Score Report
Climate Change 2023

Score
B

B score (Management) means the Company has implemented specific actions to address the climate change issue.





Included in the top 2.3% ranking compared to all participating companies in PROPER at the national level.

Chandra Asri has received the GOLD PROPER award from the Ministry of Environment and Forestry of the Republic of Indonesia (KLHK RI) for Ciwandan Site.



2023-Winner of Plastic Waste Circularity Category

ASEAN Business Advisory Council (BAC) 2023 Awards

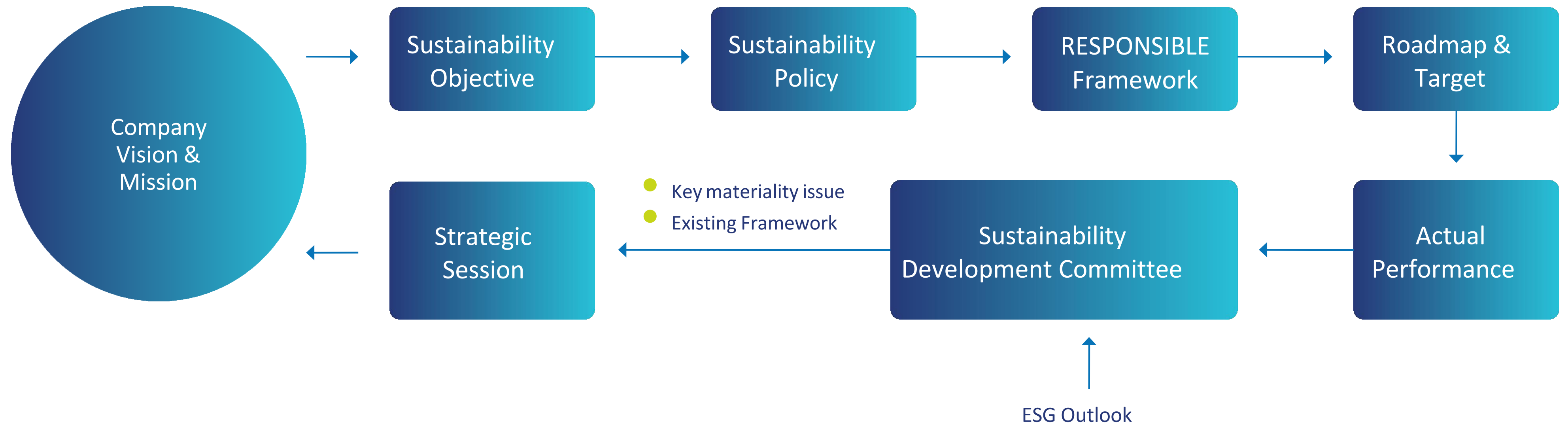


Subroto Award for Energy Efficiency 2023 by Ministry of Energy and Mineral Resources



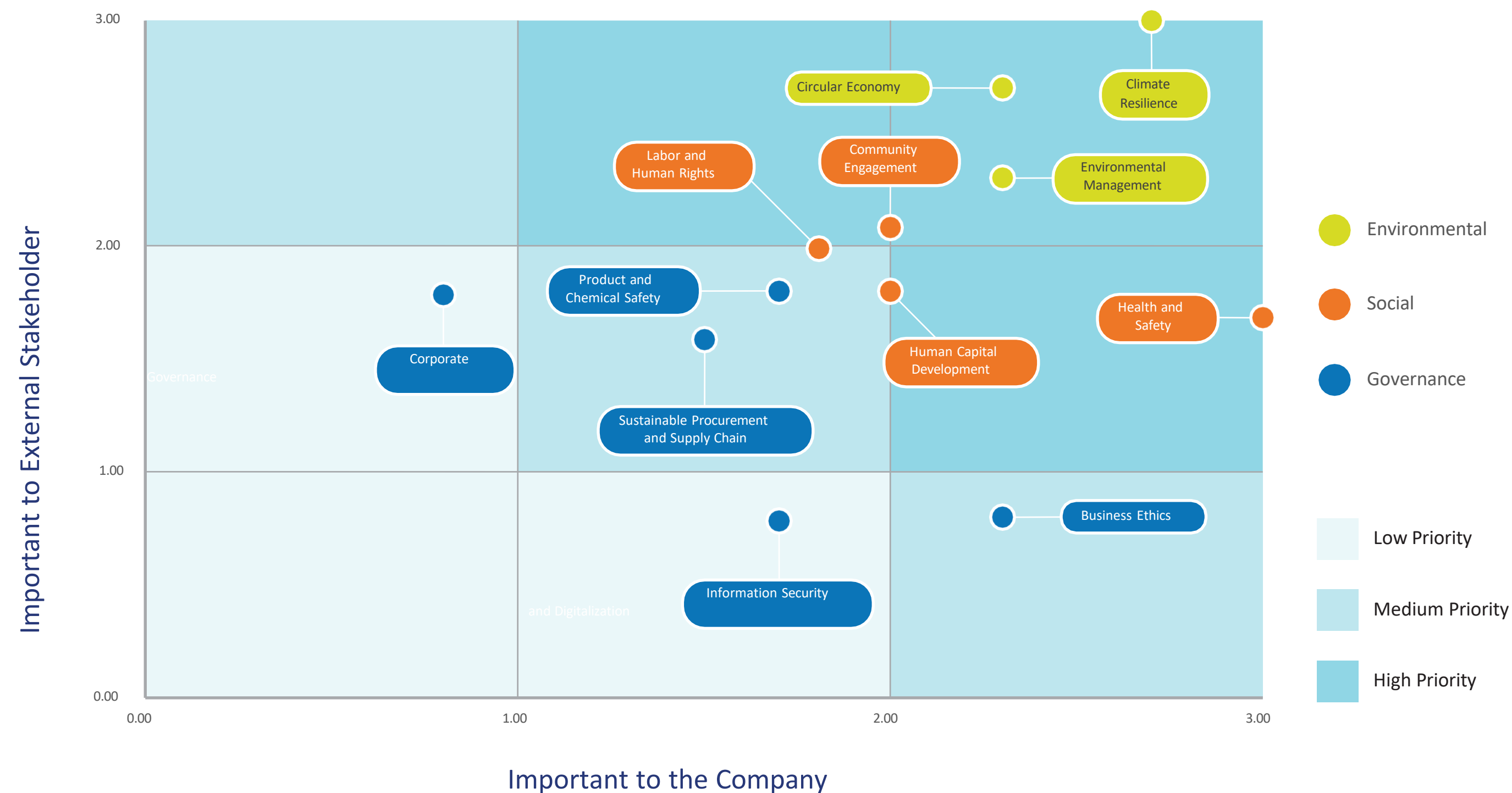
Green PROPER Award for Pulo Ampel Site

Sustainability in Action



Chandra Asri Group strengthens its commitment to sustainability by establishing objectives through PDCA (Plan-Do-Check-Act) processes aligned with the Company's vision and mission. This process is periodically reviewed in strategic sessions, integrating key materiality issues, stakeholder expectations, and global trends.

Materiality Matrix



In each year, Chandra Asri Group conducts a comprehensive review of significant sustainability issues related to internal and external business activities. This assessment includes an analysis of the Company's risks, considering stakeholder expectations, as well as paying attention to ongoing sustainability trends in the petrochemical industry. The materiality topics reflected in the materiality matrix.

RESPONSIBLE Framework



Using the materiality matrix that has been mapped out, Chandra Asri Group has developed the RESPONSIBLE framework to effectively manage ESG material topics in accordance with regulations, standards, and intergovernmental instruments. Designed to meet stakeholder expectations, drive sustainable growth, and generate long-term value for all stakeholders, the framework also involves a governance structure.

Conserve the Environment



Climate Change Governance

- Climate Change Governance
- Climate Change Risk
- Management Climate Change Strategy

Greenhouse Gas
(GHG) Emission

Energy

Environmental Performance

- Environmental Governance
- Environmental Strategy

Water and Wastewater

Air Quality

Waste

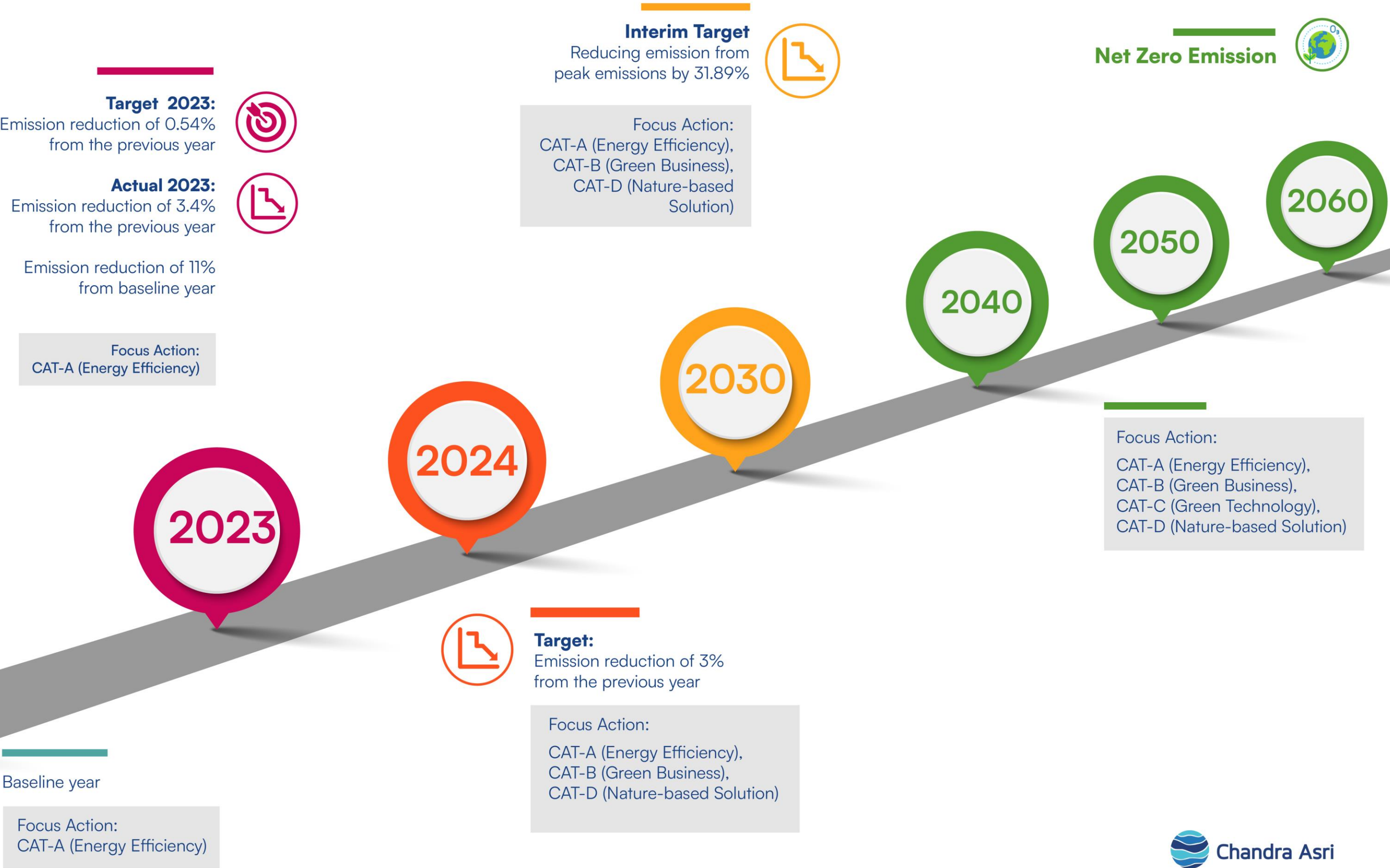
Biodiversity

Materials

Energy & GHG Emissions

Decarbonization Roadmap

Following a comprehensive climate risk assessment, Chandra Asri Group charts an additional course, preparing for rigorous regulations and stakeholder expectations while striving to adhere to Science-Based Targets (SBT). This strategic blueprint intertwines with a commitment to continuously explore, adopt, and monitor cutting-edge initiatives and innovations aimed at emission reduction.



Energy & GHG Emissions

ABCD Strategy

Abate existing emission
through energy efficiency

Implementing energy efficiency through process modification, equipment substitution, wasteheat recovery, digitalization, loss reduction, energy consumption management, and increasing operational efficiency.

Our Program

- Energy Efficiency: System and Technology Optimization
- Energy Efficiency: Process Digitalization
- Natural Gas Combined Heat and Power/Waste Heat Recovery

3.40%

Decreased in emission intensity
compared to 2022 (ton CO₂e/ton
products)



Emission reduction from energy efficiency programs,
use of renewable energy, biodiversity programs, and
use of electric vehicles

10,320 ton CO₂e



Decreased in energy intensity
compared to 2022 (Gigajoule/ton)

2.11%



Energy saving
207,578 Gigajoule

Energy & GHG Emissions

ABCD Strategy

Balance
future emission by
incorporated green
business

Business expansion with lower emission, expanding renewable energy business, study on green or sustainable product development, circular plastic, a new chemical pathway, and potential business from nature-based solution.

Our Program

- Utilization of Clean Technology
- Development of Chlor-Alkali Plant
- Exploration of Environmentally Friendly Energy Business



Investment in Clean Technology

US\$ 11.25 million



Energy & GHG Emissions

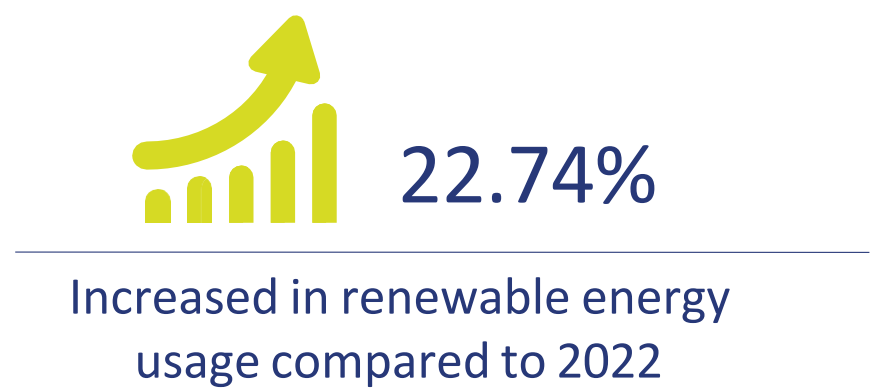
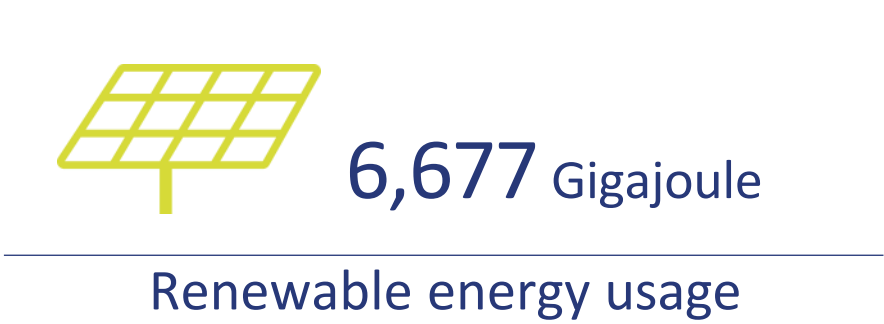
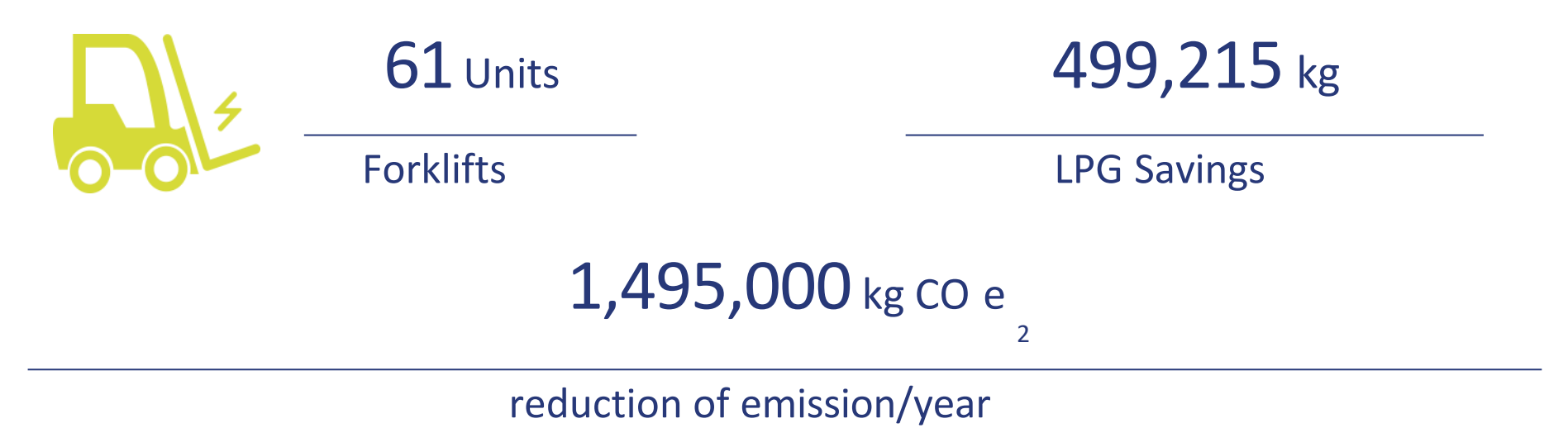
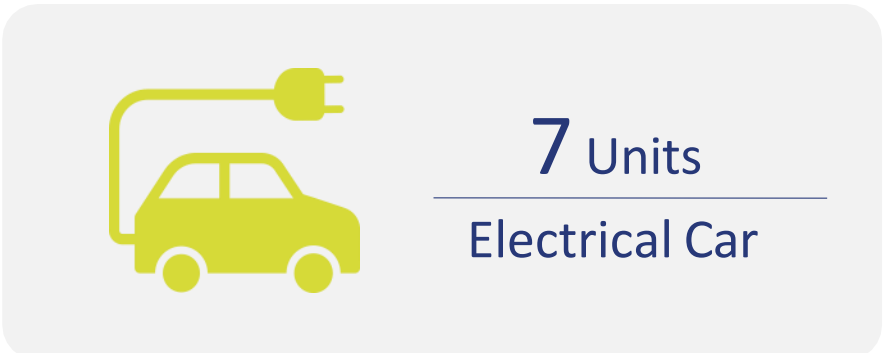
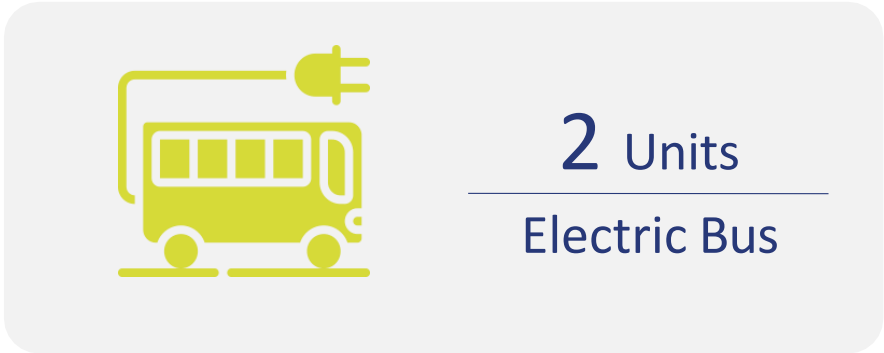
ABCD Strategy

Control
emission through
green technology
application

Study on low carbon fuel application such as blue/green H2, RDF and CCUS implementation in collaboration with technology and service providers.

Our Program

- Utilization of H2 by-products as fuel in furnace units to reduce carbon emissions and toxic emissions.
- Study and collaboration with external suppliers for solar energy development.
- Study the implementation of Carbon Capture, Utilization, and Storage (CCUS) technology.
- Study of mini-hydro power plant application at the mouth of the sea.
- Study of RDF-co-firing application (waste energy).



Energy & GHG Emissions

ABCD Strategy

Decarbonize
through nature
based solution

Providing nature-based solutions such as forestry practices, blue carbon, restorative agriculture, and marine practices.



Air Quality Management



Chandra Asri Group conducts evaluations on air quality management, which include comparing its performance with peers, analyzing trends from the previous year, and calculating a 3-year average to determine and set better environmental targets for the future.

Our Strategy

- Reducing toxic emissions by maximizing operational efficiency and optimizing natural resource conservation;
- Reducing toxic air emissions from operational activities by implementing best practices and complying with procedures;
- Regularly monitoring and controlling toxic emissions and noise.

Our Program

- Energy Efficiency Program in Boilers Continuous Emission Monitoring System (CEMS) Dry Low NOx Burner Program
- Installation of an electrostatic precipitator (ESP) on a coal boiler
- Conducting studies to phase-out Ozone Depleting Substances/ODS such as CFCs, HCFCs, and halon
- Reduction of VOC Hydrocarbon Open Source/ Leak Detection and Repair (LDAR) Program

Increase in SOx emission intensity by 3.9% and decrease in NOx emission intensity by 3.57% compared to 2022



Toxic emissions in 2023 have complied with the quality standards set by the government.



Water and Wastewater



The Company continues to place a high focus on impact management related to water risk, especially related to the use of fresh water and wastewater management, due to high water consumption in general.

To enable water stress risks to be identified and considered in the Company's strategy, the relevant internal functions have integrated water risk as part of the climate- related risk assessment.

Our Strategy

- Reducing water use by maximizing operational efficiency;
- Reducing freshwater usage by utilizing alternative water;
- Treating wastewater to meet established quality standards;
- Reducing the wastewater pollution load.

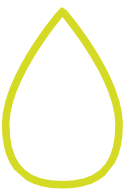
Our Program

- Water conservation across the Company's operation
- Increasing alternative water use from desalination
- Replacing amine-based chemicals with caustic-based chemicals in dilution steam generation (DSG) system
- Installation of a continuous and networked wastewater quality monitoring system (SPARING)

Our Achievement

The increase in water intensity of 8.84% was due to low production loads in 2023.

Reducing the intensity of the water pollution load (chemical oxygen demand) by 42.24%



Percentage usage of alternative water
28.31%

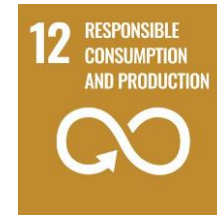


Increased
3.6%
compared to 2022



Total Water Saving In 2023
1,379,280 ton

Waste



In striving for sustainability, the Company consistently conducts evaluations on waste management, which include comparing the Company's performance with peers, analyzing trends from the previous year, and calculating a 3-year average to establish and formulate better environmental targets for the future.

Our Strategy

Improving circular economy practices within operational boundaries to reduce liquid waste, hazardous waste, and non-hazardous waste; and

Strengthening circular economy practices in the product life cycle to reduce end-product waste.

Our Achievement

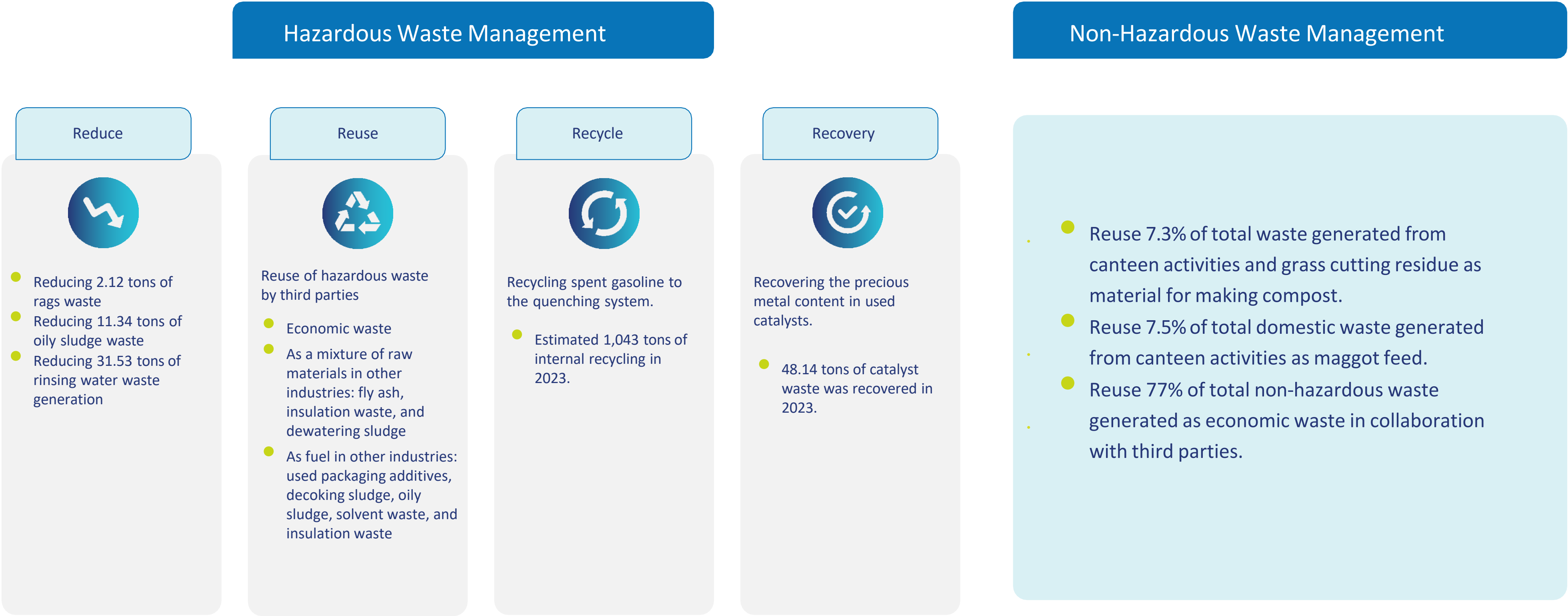
Reduction of hazardous waste intensity by 5% per year

Non-hazardous waste utilization is 80%



Waste

Our Program & Achievement



Recycle End of Life Products



Plastic Asphalt Roads

Chandra Asri Group's flagship program has succeeded in reaching 120.83 km, exceeding the Company's commitment in Our Ocean Conference in 2018, namely 100 km of plastic asphalt by 2023.

Every 1 km of plastic asphalt requires approximately 1.6 tons of plastic waste, which is equivalent to 1.2 million plastic bags.

Environmental Impact



120.83 km of plastic asphalt roads

144.78 billion waste used of plastic bag

1,086,337 kg of accumulation of plastic waste managed from landfill since 2018

434,637 kg of plastic waste managed from landfill in 2023

Social Impact



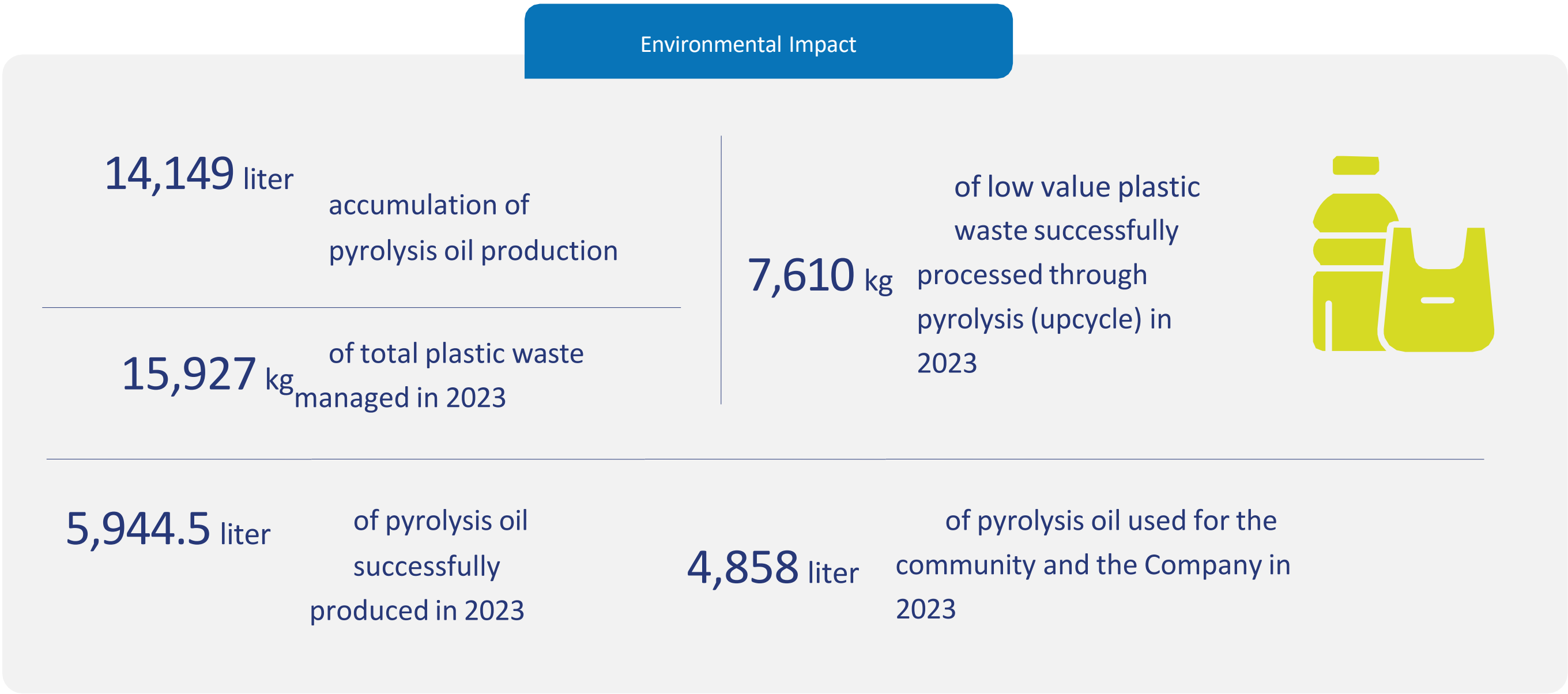
12,071 scavengers who benefit from added economic value



Recycle End of Life Products

End-to-end Plastic Waste Management

Plastic waste management facility of IPST ASARI managed by the community in Serdang, Serang



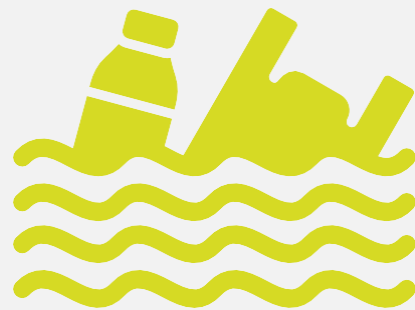
Recycle End of Life Products

SAGARA: Reducing Plastic Marine Debris

Through SAGARA, Chandra Asri Group collaborates with Bank Sampah Digital (BSD) to disseminate the collection and sorting of non-organic waste in Anyar Village, Banten Regency.



Environmental Impact



153,513 kg of total waste treated

4,063.15 kg of plastic waste including marine waste

Social Impact



1,748 liter beneficiaries or 437 heads of families

Recycle End of Life Products

World Cleanup Day (WCUD) 2023 Jakarta



600 points	spread throughout the Jakarta area	278,960 kg	of plastic waste and managed waste collected
348,700 kg	of waste collected and diverted from landfill	306,690	participants



Supporting WCUD 2023, which is spread throughout Jakarta, through waste management education activities and waste collection via waste banks to commemorate World Cleanup Day.

Coastal Clean Up



1,013.75 kg	of total waste collected
348	volunteers

Chandra Asri Group held the 2023 Coastal Clean Up Day. This beach clean-up campaign was a collaboration with the central government, local government, Bank Sampah Digital, and involved volunteers, including Chandra Asri Group employees, Anyer Village residents, scout members, school students, and representatives of other community elements.

Biodiversity



The Company has established a biodiversity protection policy including identification and inventory of biodiversity potential, determination of protected areas, allocation of adequate resources, involvement of all related parties, and support for actions in accordance with the principles of biodiversity conservation.

Our Strategy

Protecting, maintaining, sustainably managing, and restoring biodiversity.

Our Achievement

Increased in biodiversity index by **1.7%** from the previous year

Coral Reef Rehabilitation Program



75 m2
area size

1,250
coral reef clusters

10 types
of coral reefs

35.76 cm
average height

100%
survival rate

Biodiversity

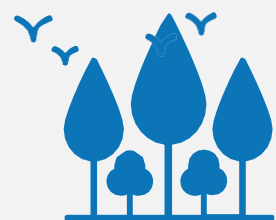
Taman Kehati Asri Conservation

Taman Kehati Asri, covering 1,500 m² at the front entrance garden and 6,000 m² in the Cerlang area within the plant premises, features facilities dedicated to biodiversity maintenance and monitoring.



Flora

Namnam *Cynometra cauliflora*)
Plants originating from Banten or
Lebak Regency



Endangered

Kokoleceran
(*Vatica bantamensis*)
Rare plants from in-situ locations
Grows well in the ex-situ location of
Taman Kehati Asri

Critically
endangered

Fauna

Kuya Batok
(*Cuora amboinensis*)
Endangered



Kera Ekor Panjang
(*Macaca fascicularis*)
Critically endangered



419 plants consisting of
45 types

103 aves of 15 types

22 herpetofauna of
7 types

6 mammals of
4 types

Contribution to the Society

Community Engagement

- Community Engagement

Human Resources Management

- Human Capital Development
- Labor and Human Rights

Occupational Health and Safety Management

- Health and Safety

Responsibility to Customers

- Product and Chemical Safety



Community Engagement

“Through CSR initiatives, Chandra Asri group is dedicated to promoting the welfare of the community while actively preserving the environment.”

Our Strategy

- Designed CSR programs across education, health, and economic sectors in harmonize with the Sustainable Development Goals (SDGs).
- Committed to conserving and safeguarding the environment, along with preserving biodiversity.
- Fostering partnerships with local organizations to strengthen social impact.

Our Achievement



122 students

Beneficiaries of
Scholarship Program



80 Mothers and Children

Beneficiaries of Health
Program



4,051 people

Beneficiaries of the Community
Development Program



2.66

SROI Pesona
Anyar



3.4%

Poverty in Anyar Village
alleviated through the
Pesona Anyar program

Community Engagement



Education Pillar



6 scholarship program for 122 highschool and university students in 2023.



74 college students have been selected for the official work commitment program since the establishment of Politeknik Industri Petrokimia Banten (PIPB) in 2022.



Monitoring and educating 5 Adiwiyata schools in Banten on recycling organic and non-organic waste to create economic value.



80 teachers across 20 schools underwent Academic Potential Test (TPA) and English training.

Community Engagement



Health Pillar



50 toddlers and
30 pregnant women with Chronic
Energy Deficiency (CED) benefited
health intervention program

Community Engagement

Economic Pillar



- 225 households participated in the circular economy program, with a total Rp30 million of waste savings until 2023.
- 13.75 tons of Asri fertilizer was marketed and 600kg of planting medium was produced.

Social-Environment Pillar



- 23 zakat, infaq, and alms for communities in 23 sub-districts/village.
- 89 sacrificial animals were donated at 56 locations.



- Planting of 93 tree seedlings in the Taman Kehati Kadubeureum.
- Maintenance of 12,500 tree stands in an area of 25 ha.

Human Capital Management

"Chandra Asri Group's commitment to human capital management is aimed at fostering employee development, value, and active contribution to the Company's success."

Human Capital Development

Our Strategy

- Providing competency and career development through fair promotion and comprehensive education.
- Performance evaluations were carried out fairly and honestly, based on integrity and responsibility.

Our Achievement



27% Increased on training hours compared to 2022

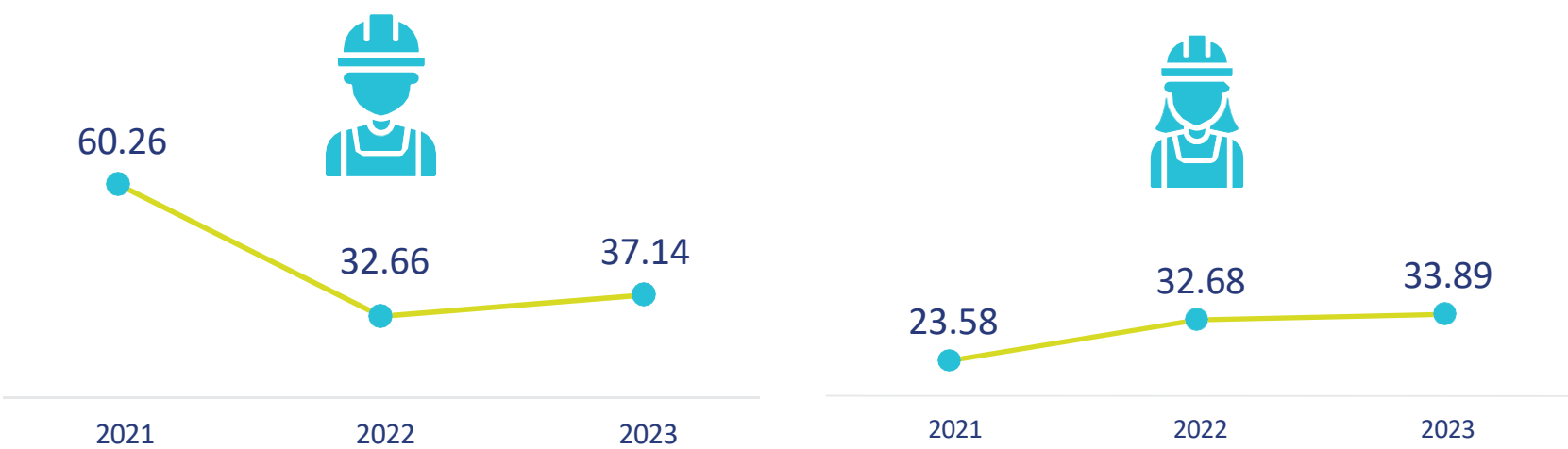


91.2% Annual Learning Development Program Implementation



100% Employees received yearly performance evaluation

Average Hours of Education and Training by Gender



Competency Growth in 2023

Manufacturing **12%**

Non-Manufacturing **8%**

Human Capital Management

"Chandra Asri Group adheres to the principles of universal human rights by ensuring that all individuals have equal and fair opportunities without discrimination."

Labor and Human Rights

Our Strategy

- Issuing Human Rights Policy covering across the business and supply chain.
- Ensuring non-discriminatory hiring practices based on competency and suitability.
- Offering competitive remuneration (including pension program).
- Ensuring freedom of assembly for personal fulfillment.

Our Achievement



1,719
Number of employees



21.1% Composition of Female
employee at Managerial Level



0 Forced & child labor were
employed within the Company

The wages for the lowest-level new employees exceed provincial minimums in our operational areas

- Jakarta: **122%**
- Banten: **154%**

Occupational Health and Safety Management

“In implementing employment practices, Chandra Asri Group relies on OHS principles to ensure that every employee works in a safe and healthy work environment.”

Our Strategy & Program

- Company operating units certified OHSMS and ISO.
- Promotion of OHS on a regular basis with "Let's Pause For Life" program and golden rules "Life Saving Rules".
- Behavior Based Safety (BBS) for reporting safe and unsafe behavior.
- Avoiding incidents through effective implementation of process safety management (PSM), Management of Change, Contractor Safety Management, and MIQA.

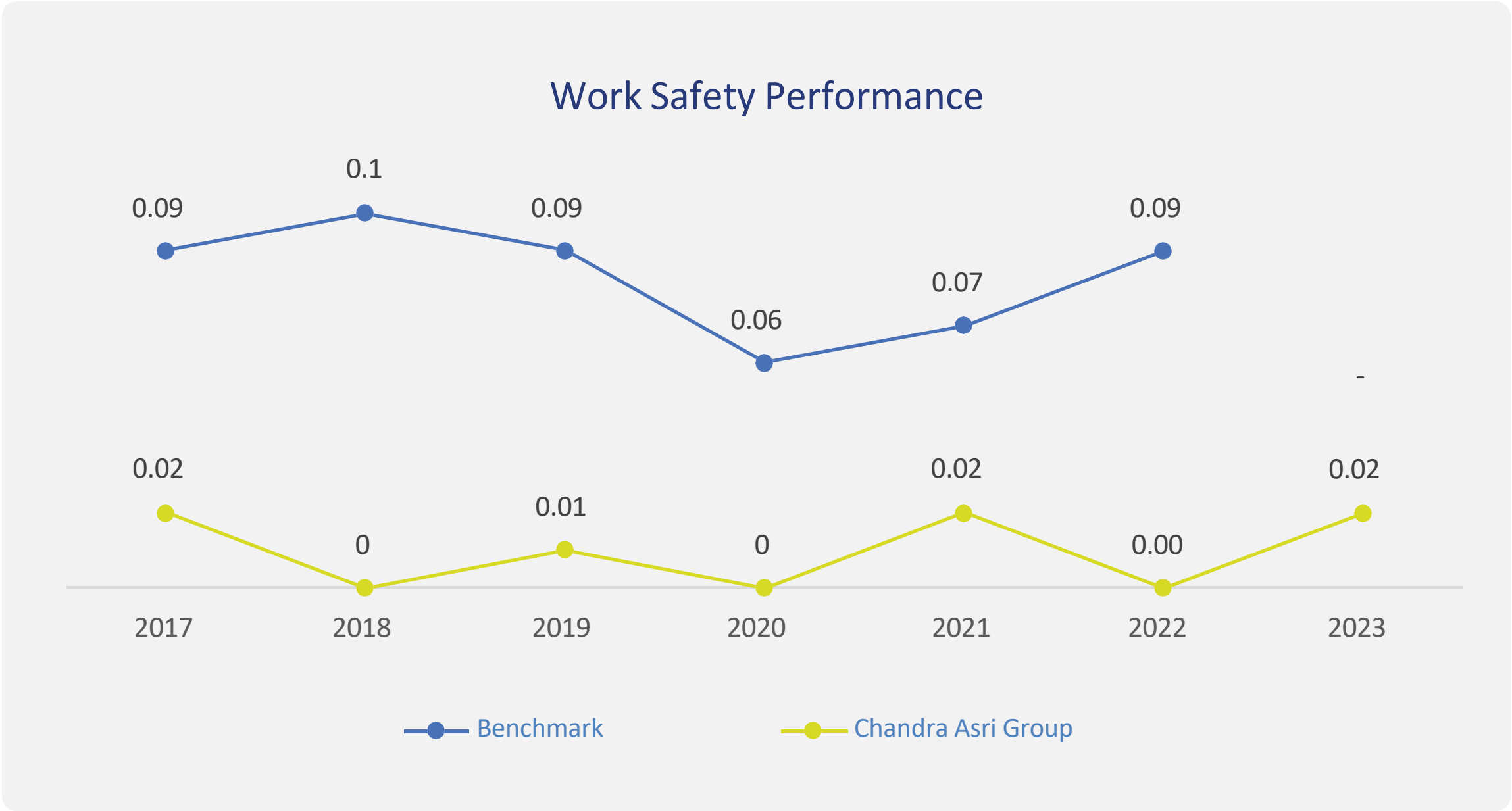


14 PSM Principles have been 100% implemented at the Ciwandan Site and Pulo Ampel Site.

Occupational Health and Safety Management

Our Achievement

	Chandra Asri Only	Contractor
Lost Time Accident (LTA) Rate	0.23	0
Case of LTA	1	0
Total incident rate	0.5	0
Total working hours	4,277,840	3,910,038



Note

- Safety Performance in Lost Time Case Rate (LTCR) per 200,000 working hours
- Benchmarks from The International Association of Oil & Gas Producers (IOGP)
- IOGP 2023 performance benchmarks were not yet available at the time this report was prepared

Responsibility to Customers

Product and Chemical Safety

Our Strategy

- Audit activities are conducted to verify that product quality aligns with standards and adheres to relevant regulations.
- Throughout the manufacturing process of Asrene and Trilene, compliance with the SVHC EU-REACH Candidate List of Substances has been maintained.
- Conduct periodic environmental impact analysis for each product using the life cycle assessment method.
- Implement product information labeling and documentation in accordance with the Global Harmonized System (GHS) guidelines.

“Chandra Asri Group is dedicated to delivering consistent service and meeting customer expectations, ensuring enhanced satisfaction through the provision of safe products and services.”

Our Achievement

100% Followed-up
Complaints

20% Decrease in product return cases (-
10 cases)

IRCA score (Product Stewardship)

98.6% Ciwandan Site Office
98.4% Pulo Ampel Site Office

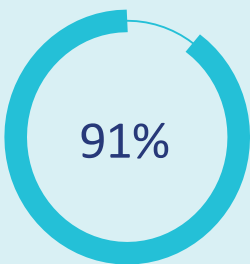


Case

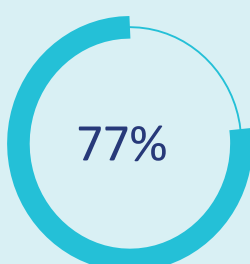
Incident of non-compliance regarding health and safety of products and services during 2021-2023



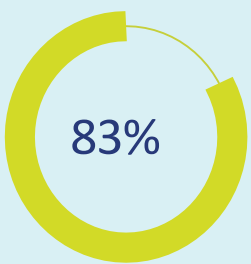
Customer Satisfaction Survey



Monomer*
*Including Styrene Monomer



Polymer



Average Customer Satisfaction

Commitment to Good Corporate Governance Practice

Corporate Governance

- Board Structure
- Sustainable Procurement
- Digital Transformation

Business Ethics

- Code of Ethics
- Anti-Corruption and Anti-Bribery
- Freedom of Association



Corporate Governance

Composition of the Board

17 BoC Members

to ensuring the Company’s operations run in accordance with governance principles.

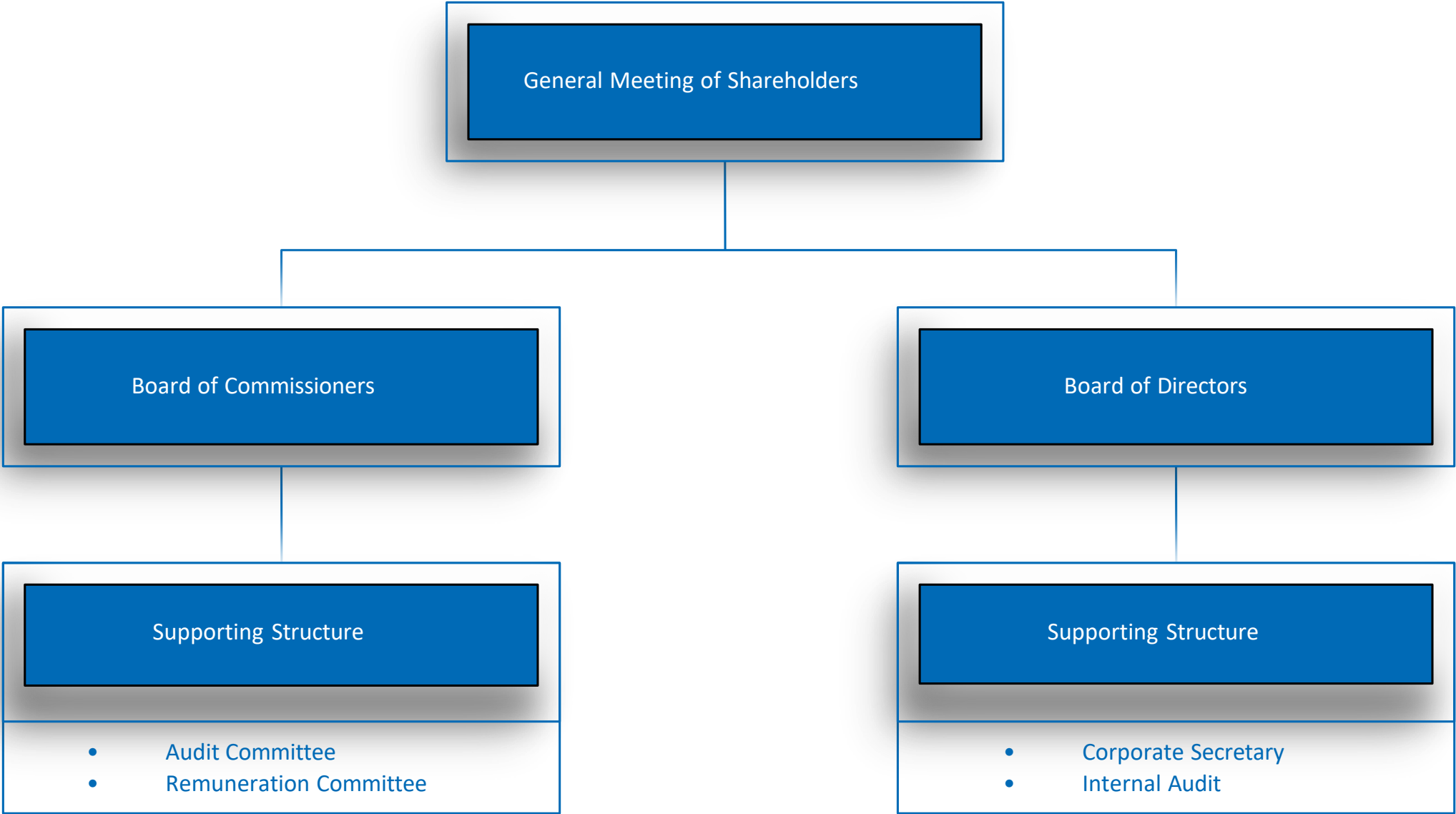
- 33% Independent Commissioners (more than the required 30%)

15 BoD Members

to managing and leading the Company’s operations, formulating policies and strategic goals, and ensuring alignment with the Company's Vision and Mission.

1 Sustainability Director

to leading the management of sustainability initiatives within the Company, and driving continuous improvement in sustainable practices.



Pay Linked to Sustainability

The Company integrates sustainability achievements into remuneration decisions alongside other Corporate Scorecard metrics, influencing overall performance evaluations and affecting remuneration for employees and management.

Corporate Governance

“Chandra Asri Group emphasizes the significance of ESG considerations in sourcing goods and services, while also prioritizing local procurement.”

Sustainable Procurement

Our Strategy

- The procurement process is carried out in a transparent, accountable, and fair manner and follows the principles of Good Corporate Governance.
- Digitize supply chain management by utilizing Blockchain technology.
- Contractor SHE Plan outlines selection requirements to ensure suppliers prioritize operational safety for workers and reduce environmental risks to nearby communities.

Our Achievement

100% New suppliers have been selected using social and environmental criteria.



0 Suppliers identified has significant actual and potential negative social impacts



US\$ 122,800,362

Domestic purchase value

US\$ 178,709,884

Total purchase value

Corporate Governance

Digital Transformation

Digitized Human Resources Process

Digitize human resources processes through re-assessment of applicable human resources process and investing in reliable integrated HR system.

- Recruitment;
- Onboarding;
- Organization management;
- Actions on personnel including hiring, promotion, advancement, and termination;
- Changes to personal data;
- Change of employee status;
- Attendance;
- Paid leave;
- Reimbursement of medical expenses;
- Request for documents by employees;
- HR Helpdesk;
- Awards
- Company social media;
- Performance management; and Mapping and talent succession.

Digitized Manufacturing Function

Digital transformation of manufacturing function to increase operational efficiency, reduce energy consumption, improve quality, and product consistency.

- Advanced Process Control (APC)
- Asset Information Management System (AIMS)
- Operator Training Simulator (OTS) Machine Learning
- Alarm Management System

"Through digital transformation, Chandra Asri Group enhances efficiency, agility, scalability, and achieves organizational sustainability."

Chandra Asri Group strengthens its IT infrastructure and cybersecurity position through the launch of a Security Operation Center (SOC), in partnership with leading IT company, DXC Technology.



Chandra Asri Group have successfully achieved the "National Lighthouse Industry 4.0" award from the Ministry of Industry (Kemenperin).

Business Ethics

"Chandra Asri Group's commitment to ethical conduct and corporate integrity is upheld through regular communication of Code of Ethics and Corporate Culture, supported by comprehensive oversight mechanism."

Our Strategy

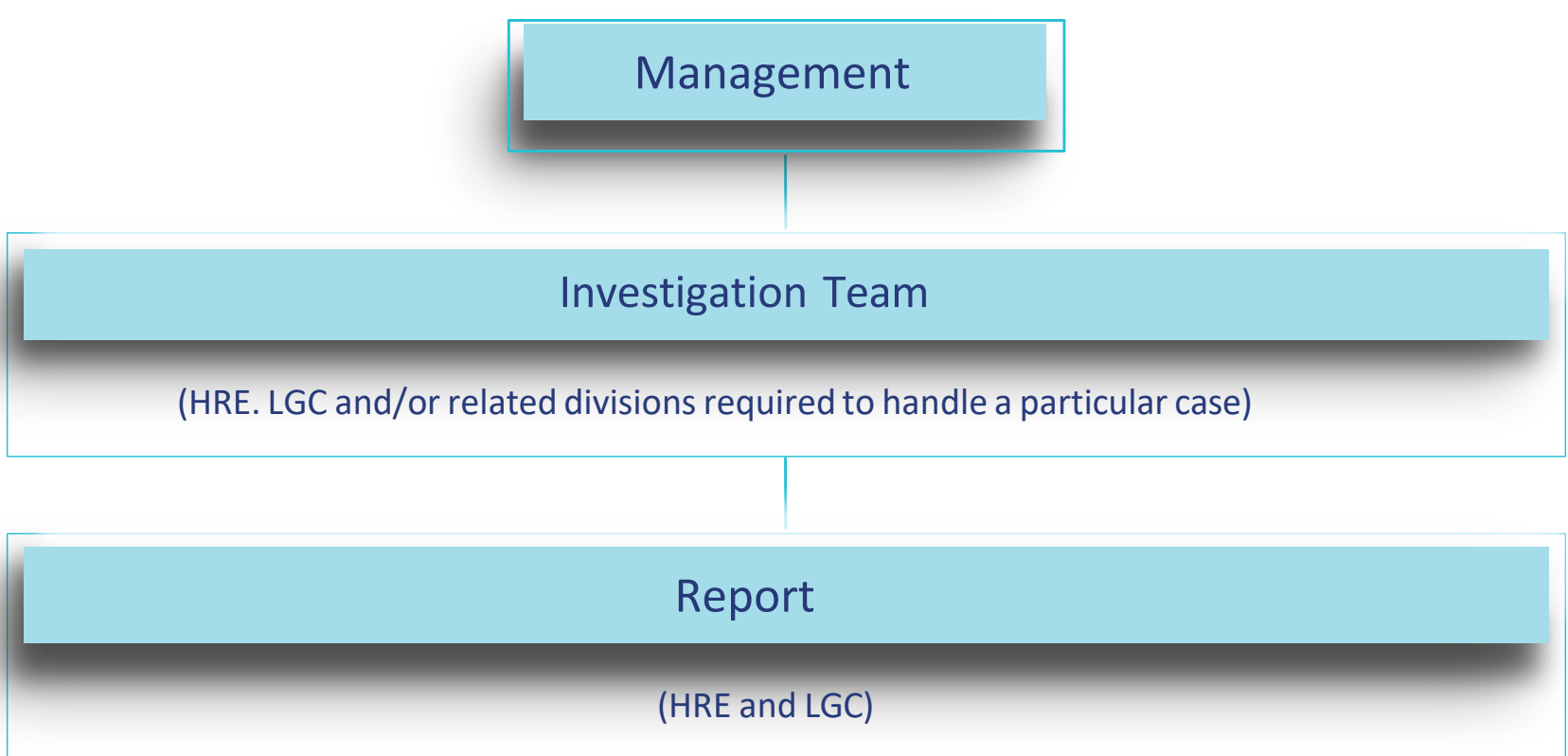
- Code of Ethics and Corporate Culture, based on iSTAR Values, are regularly communicated to all employees via intranet portal, new employee orientation materials, and direct meetings and discussions.
- Ethics and Integrity are maintained through the Ethics Oversight and Bribery & Anti- Corruption Policy, reinforced by the Whistleblowing System.
- Upholding freedom of association, particularly employees' rights to join labor unions.

Basics of the Code of Ethics

- Personnel and Safety
- Fighting Corruption
- Business Activity
- Information and Asset Protection
- Communication

The Whistleblower Committee is tasked with managing and investigating all reports/complaints received through the whistleblower channels.

The Company offers whistleblower protection, ensuring confidentiality for both informants and involved parties, and safeguarding against threats or intimidation.



Business Ethics

Our Achievement

Chandra Asri is the Chairman of 3 Industrial Associations, including INAPLAS, RCI, and FIKI. As well as the Head of Policy and Business Division of HPI.



Chandra Asri Group is a member of the Organizing Committee



22 Code of Conduct Training Sessions throughout 2023



100% Percentage of employees covered by Code of Conduct training



0 Confirmed internal and external legal actions related to the Code of Conduct



0 Cases of violation of the Code of Ethics



0 Confirmed corruption cases



For more information please contact:



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