

Shaping our future impacts, today

2023 Sustainability Report

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Strategy

Our approach

As part of the Environmental Pillar of the Group's Health, Safety and Environment (HSE) Improvement Strategy, CLP sets out a nature-related strategy which aims to develop a more systematic and global perspective on nature and circular economy, going beyond compliance with existing environmental regulations. It entails obtaining a more thorough understanding of the relationship between nature and business as well as developing a systematic management approach that considers the Group's dependencies and impact drivers, and will ultimately cover its value chain. By embracing this enhanced approach to nature, CLP aims to effectively address the increasing interest from investors and stakeholders regarding how businesses are integrating nature into corporate strategy.

Focus areas for nature-related strategy

CLP's nature-related strategy emphasises three areas, including biodiversity conservation, circular economy transition and the reduction of environmental discharges. It aims at ensuring these critical nature-related issues are well incorporated into CLP's governance, risk management and decision-making processes.

Biodiversity	Biodiversity conservation creates positive impacts on local economies, particularly for critical industries that rely on certain ecological processes. CLP strives to preserve natural resources with a goal of "no net loss of biodiversity". To manage this topic holistically, CLP is in the process of adopting nature-related frameworks, such as the Taskforce on Nature-related Financial Disclosures (TNFD) framework. Read more in the Biodiversity and ecosystem section.
Circular Economy	CLP is dedicated to driving the transition towards a circular economy, recognising its ability to address waste and pollution problems, and tackle climate change and biodiversity loss. In pursuit of this goal, CLP actively engages and partners with stakeholders to integrate circular economy principles throughout its operations and supply chain. Read more in the Waste management and material use section.
Reducing Pollution	CLP strives to comply with regulatory requirements and minimise its environmental impacts by managing its air emissions, water use and waste generated during operations on a beyond compliance basis. Read more in the Air emissions, Water and Waste management and material use sections.

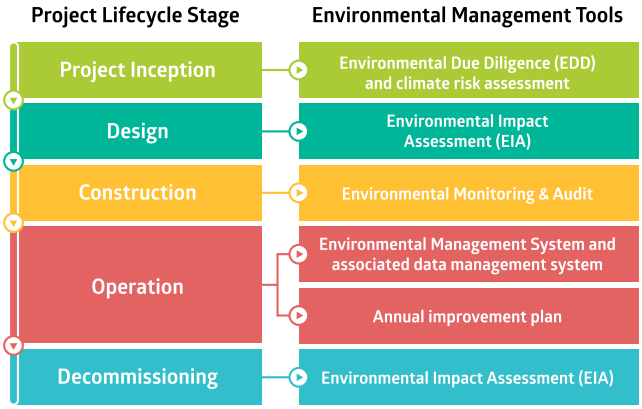
Project cycle framework for environmental management and assessment

Underpinned by the Group HSE Policy, the CLP Group Health, Safety and Environment Management System (HSEMS) sets out various environmental management tools and processes to identify and manage significant environmental impacts and risks arising from new investments, project planning and operations.

GRI reference: 2-23

To strengthen the management of nature-related topics in its HSEMS, CLP completed a review of nature-related frameworks (including TNFD) and CLP's own practices on nature in late 2022.

The environmental management tools and processes across the project lifecycle include:



Learn more about CLP's HSEMS

- **Environmental Due Diligence (EDD) and climate risk assessment**
  At the project design and planning stage, CLP conducts Pre-investment Environmental Risk Assessment which includes EDD to identify potential environmental risks, liabilities and impacts. A climate risk assessment tool is also used to identify potential climate-related risks to which the proposed project may be exposed. These due diligence processes enable early evaluation of operational and business risks associated with the proposed project, and are followed by further analysis and stakeholder engagement exercises to mitigate the risks if appropriate.

- **Environmental Impact Assessment (EIA)**
  EIA is a crucial step in ensuring all relevant environmental impacts, such as air quality and biodiversity, have been properly considered and addressed by effective mitigation measures. CLP has processes in place to fulfil the EIA requirements and recommendations stipulated by local regulators, and follows these same requirements in countries where regulations are not as stringent.

Read about how environmental issues are considered in new projects

- **Environmental Management System (EMS)**
  Over the years, CLP has diligently managed its environmental impacts in line with international best practices. For example, under the HSEMS, all power generation assets of which CLP has operational or joint operational control are required to achieve third-party certification to international ISO 14001:2015 Environmental Management Systems standard within two years from the commencement of operation or acquisition. In 2023, all assets in this category had successfully certified their EMS to the ISO 14001: 2015 standard.

- **Data management system**
  Digital technology in data management is deployed to ensure data integrity and measure progress against targets, as well as to facilitate follow-up actions for each asset. In addition to CLP's customised Group Operations Information System (GOIS), CLP has been implementing a customised environmental data management system, named "EMIS" and "MonitorPro" in Hong Kong and Australia respectively. The tool is designed to safeguard environmental data, automate trend analysis and data reporting, and support compliance and risk management.

- To enhance the digitalisation of greenhouse gas (GHG) accounting, CLP also commenced a GHG emission profile project on a digital platform designed to measure, track and manage GHG emissions and environmental impacts. This platform streamlines data collection, analysis and reporting for enhanced transparency and data governance. The pilot test was completed in July 2023, and historical data migration and configuration is now underway.

For details of how these environmental management tools and processes are applied to specific environmental aspects, please refer to the Managing impacts, risks and performance section.

Conducting biodiversity sensitive area analysis

As the first step in CLP's efforts to strengthening group-wide nature and biodiversity strategies, CLP conducted a biodiversity sensitive area analysis which serves as an initial assessment to locate key biodiversity-sensitive areas and identify nature-related impact drivers and dependencies stemming from the interactions of its business activities on natural capital.

Making reference to the integrated LEAP approach and the tools recommended by the TNFD, the analysis facilitates a shift in CLP's approach to nature from a compliance to a risk and opportunity management perspective.



As an initial assessment, this current analysis focused on the first two stages and was completed at the end of 2023. At the "Locate" stage, all existing sites of CLP's operations and assets were assessed using the Integrated Biodiversity Assessment Tool (IBAT) which contains a database of global biodiversity-sensitive areas and threatened species. The assessment enabled CLP to determine the priority locations which are close to key biodiversity-sensitive areas for further analysis.

At the "Evaluate" stage, CLP identified a list of potential dependencies and impact drivers on nature across its own operations and assigned each of them a materiality rating for prioritisation. The exercise made reference to the World Business Council for Sustainable Development (WBCSD) guideline, the database of Natural Capital Opportunities, Risks and Exposure (ENCORE) tool as well as the World Resource Institute's Aqueduct Water Risk Atlas particularly for water-related aspects. Based on the dependencies and impact drivers prioritised, a preliminary list of potential nature-related risks and opportunities was derived, providing an overall picture of potential nature-related issues that CLP could potentially focus on.

Outcome and way forward

Riding on the results of this biodiversity sensitive area analysis, CLP will strengthen risk management and explore potential material topics related to nature and biodiversity for which corporate-level targets and commitments may be set to address their associated risks and opportunities. In addition, CLP will refine the list of prioritised dependencies and impact drivers by iterating the assessment for thermal and renewable assets for selecting priority locations. The analysis will focus on the material site-specific nature-related dependencies and impact drivers and proceed to the "Assess" stage of the LEAP approach. The associated risks and opportunities will be reviewed to help CLP prioritise actions to avoid and reduce negative impacts and promote opportunities to recover the state of nature.

In addition, the assessment also facilitated the identification of key areas for improvement between CLP's current environmental management processes and the recommendations of TNFD. The key areas of improvement identified will be included in review of Group's 2025-2027 HSE Improvement Strategy. Looking ahead, CLP will

- Strengthen the EDD process with consideration of applying appropriate tools to locate key biodiversity sensitive areas;
- Conduct a site-level nature-related assessment; and
- Review appropriate metrics for disclosures after the site-level assessment.

Integrating circular economy principles into operations

CLP formed a Circular Economy Steering Committee, chaired by Senior Director - Group HSE, in 2023 to drive the development and implementation of circular economy initiatives across business functions.

A circular economy review study was conducted to review CLP business processes against circular economy principles from a project life cycle perspective and identify areas of improvement.

CLP also reviewed the environmental target-setting process to better align with the Group's circular economy strategy and refined waste reduction and recycling targets. For details, please refer to the Waste management and material use section.

To develop internal expertise and foster inter-departmental collaboration about the circular economy, training and communication sessions were conducted among project, procurement and operation teams from different business units. The aim is to integrate circular economy principles and approaches into CLP's operation and procurement practices.

Setting beyond compliance goals to reduce environmental discharges

For the purpose of driving CLP's performance beyond regulatory compliance, CLP reviewed its environmental target-setting methodology to enhance performance analysis in terms of reducing environmental discharges.

The updated targets focus on the percentage reduction of emissions sulphur dioxide (SO_2), nitrogen oxides (NO_x) and total particulate matter (total PM), freshwater consumption and total waste produced taking into consideration the Group's wider decarbonisation strategy, calibrated to reflect the decline of coal-fired power in CLP's asset portfolio, and affirm the Group's commitment to ongoing improvement in environmental performance. These new targets cover all CLP's operational control assets, and the target years are set as 2025 and 2030 against a baseline year of 2021 in order to track CLP's progress towards its medium- and long-term goals. For details, please refer to the Air emissions, Water and Waste management and material use sections.