**CK Infrastructure Holdings Limited**

長江基建集團有限公司

(Incorporated in Bermuda with limited liability)

(HKEX: 1038 / LSE: CKI)

# SHAPING GLOBAL INFRASTRUCTURE FOR TODAY AND TOMORROWS

## Sustainability Report 2024

**CK Infrastructure Holdings Limited**
**長江基建集團有限公司**

CK Infrastructure Holdings Limited ("CKI" or the "Company", together with its subsidiaries, the "Group") is one of the world's largest global infrastructure companies. The Company aims to make the world a better place through a variety of infrastructure investments and developments in different parts of the world. The Group has diversified investments in Energy Infrastructure, Transportation Infrastructure, Water Infrastructure, Waste Management, Waste-to-energy, Household Infrastructure and Infrastructure Related Businesses. Its investments and operations span Hong Kong, Mainland China, the United Kingdom, Continental Europe, Australia, New Zealand, Canada and the United States.

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# 1 About this Report

## Shaping Global Infrastructure For Today and Tomorrows

Since its incorporation in 1996, CKI has evolved from a regional business focused on Hong Kong and Mainland China into a diversified portfolio of over 20 business units worldwide, establishing itself as one of the world's largest infrastructure companies. Building on this legacy, we remain committed to shaping a sustainable future by investing in and developing a wide range of infrastructure assets and services across the globe.

CKI is listed on The Stock Exchange of Hong Kong Limited ("HK Stock Exchange") and London Stock Exchange plc ("London Stock Exchange").

## Scope of the Report

This Sustainability Report provides an overview of the Group's sustainability strategies, management approach, progress, and highlights during the year from 1st January, 2024 to 31st December, 2024, unless otherwise specified. The information disclosed in this Sustainability Report covers the key businesses in which the Group has an equity interest. These businesses are presented in Section 2 Our Business Portfolio.

This report should be read alongside the Company's Annual Report 2024, which offers a full review of financial performance and corporate governance, as well as key policies available on the Company's website. For more detailed information on the sustainability efforts and achievements of each business unit, please refer to their separate sustainability reports or websites.

## Reporting Process and Frameworks

This Sustainability Report is reviewed and approved by the Sustainability Committee and the Board of Directors of the Company. This report is prepared in accordance with regulatory frameworks and with reference to global reporting standards that are relevant to our business:

- HK Stock Exchange's Environmental, Social and Governance Reporting Guide ("ESG Guide") (effective from 31st December, 2023, which remains applicable to ESG reports for financial years commencing before 1st January, 2025). The Sustainability Report has also referenced Hong Kong Stock Exchange's Environmental, Social and Governance Reporting Code ("ESG Code") (effective from 1st January, 2025), including the new climate-related disclosure requirements under Part D of the ESG Code, as a preparatory measure for the next reporting cycle.
- Recommendations from the Task Force on Climate-related Financial Disclosures ("TCFD"), in line with the Group's "comply or explain" obligation under the Listing Rules of the UK's Financial Conduct Authority ("UK Listing Rules").
- Sustainability Accounting Standards Board ("SASB") Standards, referenced by the Group for the first time. Initial reporting focuses on two sectors: Electric Utilities & Power Generators and Gas Utilities & Distributors, which together account for over half of the Group's attributable revenue[1].

As a LargeCap issuer listed on HK Stock Exchange, CKI will need to follow the new climate reporting requirements under the ESG Code, which aligns with the International Financial Reporting Standards ("IFRS") S2 Standard. These new requirements will apply to CKI on a "comply or explain" basis for the financial year 2025 and will become mandatory starting in 2026. The Group will continuously enhance our climate-related disclosures to comply with these new requirements.

The HK Stock Exchange ESG Guide Content Index, TCFD Content Index, and SASB Content Index in Section 11 Annex show how the Group has applied these reporting frameworks and provide cross-references to the relevant sections in this report.

## Language

The Report is available in both English and Traditional Chinese versions. In case of any discrepancies, the English version will take precedence.

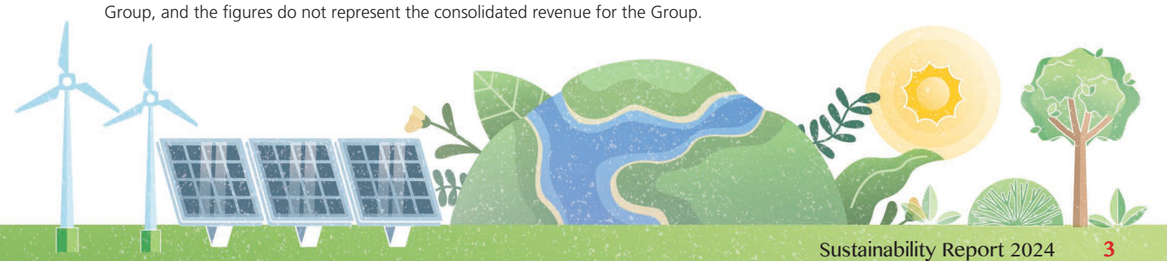
## Feedback

We welcome any suggestions, comments, or questions about our Sustainability Report and sustainability performance. Please feel free to contact us at **sustainability@cki.com.hk**.

This report is provided online by default to our stakeholders. Hard copies are available upon request, aiming to reduce paper consumption and promote environmental protection.

Note:

(1) percentage of attributable revenue represents the revenue of each business multiplied by the effective interests owned by the Group on a see-through basis, divided by the summation of the attributable revenue. This is an illustration of the scale of each business to the Group, and the figures do not represent the consolidated revenue for the Group.



# 2 Our Business Portfolio

- Electricity Distribution
- Gas Transmission & Distribution
- Household Infrastructure
- Electricity Generation
- Clean & Renewable Energy
- Water Utilities & Services
- Energy-from-waste
- Waste Management
- Transportation
- Construction Materials
- Oil Pipelines & Storage Facilities


### Canada

- Reliance Home Comfort
- Canadian Power
- Park'N Fly
- Canadian Midstream Assets

### United Kingdom

- UK Power Networks
- Northumbrian Water
- Northern Gas Networks
- Wales & West Gas Networks
- Phoenix Energy
- UK Rails
- Seabank Power
- UK Renewables Energy

### Continental Europe

- ista
- Dutch Enviro Energy

### Power Assets

- Power Assets

### Hong Kong and Mainland China

- Alliance Construction Materials
- Shen-Shan Highway (Eastern Section) and Shantou Bay Bridge
- Green Island Cement
- Anderson Asphalt

### Australia

- SA Power Networks
- Victoria Power Networks
- United Energy
- Australian Gas Networks
- Dampier Bunbury Pipeline
- Multinet Gas Networks
- Energy Developments
- Australian Energy Operations

### New Zealand

- Wellington Electricity
- Enviro NZ

# 2 Our Business Portfolio

## The Group's Businesses and Operations

The Group operates in over six regions and expanded its portfolio in 2024 through the acquisitions of Phoenix Energy and UK Renewables Energy.

### Investment in Power Assets

The Power Assets Group is a global investor in power and utility-related businesses with investments in electricity generation, transmission and distribution, renewable energy, gas distribution and energy-from-waste. Power Assets has established a strong global presence with investments in the United Kingdom, Australia, New Zealand, Mainland China, Hong Kong, the United States, Canada, Thailand, and the Netherlands, bringing sustainable energy and lighting up the lives of millions around the world.

### Infrastructure Investments in the United Kingdom

In the UK, CKI has investments in electricity and gas distribution, water and wastewater services, electricity generation as well as railway rolling stock.

- UK Power Networks ("UKPN") – an electricity distribution network operator which serves London, the South East England and the East of England.
- Northumbrian Water – a water supply, sewerage and wastewater company that serves North East England and provides water supply to certain areas in South East England.
- Northern Gas Networks ("NGN") – a gas distribution business that serves the North of England.
- Wales & West Gas Networks ("WWU") – a gas distribution business that serves Wales and the South West England.
- Phoenix Energy – the largest natural gas distribution networks in Northern Ireland.
- UK Rails – one of the three major rolling stock companies in the UK.
- Seabank Power – an electricity generation plant located near Bristol in the South West of England.
- UK Renewables Energy – a portfolio of 32 wind farms located in England, Scotland and Wales.

### Infrastructure Investments in Australia

In Australia, CKI has investments in electricity distribution, gas transmission and distribution, as well as renewable and remote energy solutions.

- SA Power Networks ("SAPN") – the primary electricity distributor in the state of South Australia.
- Victoria Power Networks ("VPN") – of which its member companies – Powercor and CitiPower – distribute electricity to over 1.2 million residential households and commercial customers across the state of Victoria.
- United Energy – an electricity distribution business in the state of Victoria serving approximately 700,000 customers across the East and the Southeast of Melbourne and the Mornington Peninsula.
- Australian Gas Networks ("AGN") (part of Australian Gas Infrastructure Group ("AGIG")) – operates gas infrastructure (distribution and transmission pipelines) in Victoria, South Australia, Queensland, New South Wales and the Northern Territory.
- Dampier Bunbury Pipeline ("DBP") (a member of AGIG) – operates Western Australia's principal gas transmission system, the Dampier to Bunbury Natural Gas Pipeline.
- Multinet Gas Networks ("MGN") (part of AGIG) – is a natural gas distribution business operating in Victoria, Australia.
- Energy Developments ("EDL") – a global producer of sustainable distributed energy supporting the transition to decarbonised solutions.
- Australian Energy Operations ("AEO") – a renewable energy power transmission business in the state of Victoria.

### Infrastructure Investments in New Zealand

In New Zealand, CKI has investments in electricity distribution and waste management.

- Wellington Electricity – an electricity distributor which serves New Zealand's capital city and its surrounding areas.
- Enviro NZ – provides waste and recycling collection, resource recovery and reuse and disposal services nationwide.

### Infrastructure Investments in Continental Europe

In Continental Europe, CKI has investments in energy-from-waste and household infrastructure businesses.

- ista – a leading sub-metering player in Europe, with key markets covering Germany, France, the Netherlands and Denmark.
- Dutch Enviro Energy – owns AVR-Afvalverwerking B.V. ("AVR"), the Netherlands' leading energy-from-waste company.

### Infrastructure Investments in Canada

- Reliance Home Comfort – a residential services company under the Household Infrastructure portfolio of the Group.
- Canadian Power – holds a portfolio comprising stakes in Okanagan Wind in British Columbia and five electricity generation plants in Ontario, Alberta and Saskatchewan.
- Park'N Fly – the largest off-airport car park provider in the country.
- Canadian Midstream Assets – holds oil and gas midstream assets in Alberta and Saskatchewan.

### Infrastructure Investments in Hong Kong and Mainland China

CKI's Hong Kong and Mainland China portfolio comprises infrastructure materials manufacturing businesses and Mainland China infrastructure investments.

- Alliance Construction Materials – the leading concrete and aggregates total solutions provider in Hong Kong.
- Green Island Cement – a leading cement manufacturer and distributor of cement and cementitious products in Hong Kong and has cement operations in South China.
- Anderson Asphalt – provides bituminous material, laying and maintenance services for the construction industry in Hong Kong.
- Shen-Shan Highway (Eastern Section) and Shantou Bay Bridge – toll roads and bridges in Guangdong province.

## Our Business Portfolio

**Employees** [1] **37,063**

Note:
(1) Includes both full-time and part-time employees.

**Electricity Network Length** over **390,000 km**

**Gas Pipeline Length** over **116,000 km**

**Installed Capacity Mix** Total **9,631 MW**

- Coal: **2,250 MW**
- Gas: **5,581 MW**
- Oil: **618 MW**
- Renewable energy
  - Wind: **369 MW**
  - Solar: **84 MW**
  - Biomass: **301 MW**
- Energy-from-waste and others [2]: **428 MW**

Note:
(2) 117 MW is temporarily out of service for repairing at AVR.

# 3 Message from the Chairman

## VICTOR T K LI
Chairman

I am pleased to present this year's sustainability report which showcases the Group's ongoing commitment to sustainability. As a global leader in infrastructure investment, the Group understands the urgent need to address climate-related challenges and support global efforts to decarbonise and achieve the net zero ambition. In alignment with COP29 objectives, investment in decarbonisation, clean energy, and resilient infrastructure is one of our key focus areas to actively shape global infrastructure for today and tomorrows. Through these efforts, we are not only responding to the demands of today but also anticipating the needs of the future.

## Advancing Our Legacy, Shaping Tomorrows

Our vision is reflected in our focus on impactful and sustainable businesses that drive the net zero transition. We strive to build and invest in resilient and sustainable infrastructure that will make a long-term contribution to the world by adopting innovative technologies, modernising critical systems, and incorporating sustainability into our operations.

The Group's strategy is formulated with an understanding of the complex and evolving sustainability trends and our stakeholders' needs. This year, we voluntarily adopted a double materiality approach to sharpen our focus on sustainability disclosure and solidify our sustainability approaches. The assessment identified key sustainability topics that are financially material to our business and impactful to our stakeholders, which are also coherent to the Group's focuses such as decarbonisation, hydrogen economy, energy transition, climate resilience and adaptation, and greenhouse gas ("GHG") emissions management. The Group is making meaningful development in line with our stakeholders' expectation.

In 2024, the Group alongside its partners CK Asset and Power Assets, acquired three businesses that align with its focus on decarbonisation and commitment to achieving net zero, with two businesses in the renewable energy sector. Phoenix Energy, the largest gas distribution network in Northern Ireland, enables its customers to transition from oil heating to gas heating, and thereby reduce carbon emissions. It also has the potential to distribute low carbon and carbon free gases, such as green hydrogen, in the future. UK Renewables Energy comprises 32 wind farms located in England, Scotland and Wales, with a total installed capacity of 175 MW. Powerlink Renewable Assets, acquired by the Group through UK Power Networks, operates a 69 MW renewable energy portfolio which includes 65 solar photovoltaic assets, four onshore wind farms, and one hydropower plant. Over the last year, the Group's total installed renewable energy capacity increased by 304 MW.

During the year, the Group spent approximately HK$15 billion on sustainable investment and activities focusing in four key areas: low-carbon transition technology, sustainable transportation, asset modernisation and energy efficiency, and water, biodiversity and circular economy.

## Progressing Well on Decarbonising Our Portfolio

The Group has been implementing a low-carbon transition plan built on six strategic levers to achieve its decarbonisation goals: decarbonising electricity generation and prioritising renewable energy, modernising and digitalising electricity networks, recovering methane and capturing carbon emissions, embracing hydrogen as a clean energy source, promoting resource efficiency, and innovating sustainable practices across the value chain. These levers provide a structured and measurable roadmap, ensuring our business units contribute effectively to the global net zero transition. A standout initiative within this framework is the modernisation and digitalisation of electricity networks, enabling the Group to decouple electricity demand from emissions. Notably, all of our electricity distribution businesses are now investing in smart energy solutions to optimise efficiency and help customers decarbonise their daily lives and businesses.

# 3 Message from the Chairman

In 2024, our efforts resulted in a 6.0% year-over-year reduction in Scope 1 and 2 GHG emissions, keeping us on track to achieve a 50% reduction by 2035 (versus 2020 levels) and net zero by 2050. These milestones reflect the Group's unwavering commitment to decarbonising its operations and shaping a sustainable future.

## Preserving and Restoring Biodiversity

The Group remains steadfast in environmental stewardship and biodiversity conservation as a responsible corporate citizen. In 2024, we formalised our approach with a biodiversity policy applied across our operations. This policy ensures potential impacts on natural habitats are identified through detailed assessments, with mitigation plans implemented to minimise environmental harm.

Measurable goals and actions across our business units show our dedication to preserving natural ecosystems. For example, Northumbrian Water aims to achieve a 10% net gain in biodiversity across all of their construction activities by 2050. The business undertakes a range of activities to protect and improve biodiversity across its landholdings to achieve this goal. One notable effort involves the transformation of low-biodiversity grassland into a thriving ecological habitat while simultaneously addressing water infrastructure needs and benefiting communities. Similarly, UK Power Networks and Wales & West Utilities are committed to biodiversity preservation and restoration targets, and are planning initiatives to accomplish them. By preserving ecosystems today, we are creating the environmental foundation for a resilient, sustainable tomorrow.

## Empowering Our Workforce with a Focus on Sustainability

Investing in human capital is vital to attracting and retaining top-tier talent, a cornerstone of the Group's long-term success. We safeguard employees' rights by fostering strong relationships, upholding human rights, facilitating knowledge transfer, supporting professional development and maintaining a healthy, safe work environment. We are also dedicated to diversity, equity, and inclusion, as well as cultivating a respectful and inclusive workplace. Northumbrian Water was recognised as the 2024 National Winner for British Business of the Year – People and Work, for its innovation and development initiatives, including diversity networks and digital platforms that enhance career progression. Australian Gas Infrastructure Group's newly launched Diversity, Equity, and Inclusion Engagement Plan, sets out gender targets, aiming for 40% female representation in the workforce and senior leadership roles by 2027 and 2030, respectively. We strengthen our capability to deliver inclusive utility services that meet the evolving needs of our global customers by building and embracing a diverse workforce.

## Driving Change Together for a Just Transition

The Group is dedicated to ensuring that global infrastructure is shaped to benefit everyone – today and in the future. Our commitment to a just, inclusive, and orderly shift to a low-carbon future places social well-being at the core of our efforts.

We support vulnerable customers by providing financial assistance, fostering innovation to identify those in need, and delivering educational programmes on energy savings. We also endeavour to improve the living standards for underprivileged communities through funding, grants, and partnerships with non-profits. Since 2021, Northern Gas Networks has helped 130,000 customers facing financial difficulties by directing them to support services and provided over £550,000 in essential fuel crisis payments, leading to more than £6 million in savings for customers. We demonstrate our dedication to building a net zero future that leaves no one behind by bridging social gaps and empowering communities, and ensuring tomorrow's global infrastructure is inclusive, sustainable, and accessible to all.

## Aligning with Global Sustainability Standards

This year's sustainability report reflects our ongoing commitment to accountability and transparency as we advance our legacy of building resilient, sustainable infrastructure. We have voluntarily reported on industry-based metrics from the SASB Standards in alignment with global practices, beginning with those in the energy sector. This expanded disclosure provides a detailed view of our performance through a sectoral lens.

In addition, we continue to enhance our climate-related disclosures to align with the latest IFRS S2 requirements adopted by the HK Stock Exchange ESG Code, and ensure adherence to local regulatory frameworks while meeting global expectations. Integration of these practices reinforces our commitment to shaping global infrastructure with accountability, transparency, and sustainability.

Furthermore, following our admission to the main market of the London Stock Exchange in August 2024, we will ensure sustainability disclosures are aligned with the relevant requirements under the UK Listing Rules and the applicable regulations in the UK.

Collaboration remains at the heart of addressing the climate challenge and advancing the net zero transition. I would like to take this opportunity to sincerely thank our employees, customers, partners, local communities and stakeholders for joining us in driving the net zero transition and embracing every opportunity to shape a resilient, sustainable future for generations to come.

**VICTOR T K LI**

Chairman

19th March, 2025

# 4 2024 Highlights

## ESG PROGRESS

### Environment

#### Scope 1 and 2 Emissions

↓6.0%
Reduction from 2023

↓15.6%
Reduction from 2020 baseline of Group's target for 2035

#### Avoided Carbon Emissions

1,896,222 $tCO_2e$
Avoided emissions from renewable energy and energy-from-waste operations

#### Water Consumption

↓27%
Reducing to 78,130 thousand $m^3$ in 2024 from 2023 (107,228 thousand $m^3$)

#### Biodiversity

- New Group-level Biodiversity Policy
- Biodiversity net gain commitments at business unit-level

### Social

#### No. of Employees

37,000+
UK: 38%
Continental Europe: 18%
Australia: 18%
Hong Kong and Mainland China: 12%
Canada: 8%
Rest of the world: 6%

#### Gender Diversity

Women in total workforce
26%
Women in top management positions
21%

#### Safety

Fatalities (employees)
Zero
Lost time injury rate (employees)
0.52

#### Training

Percentage of full-time employees who received training
91.7%
Average hours of training per full-time employees
33.0 hours

#### Community Contributions

Volunteering
70,524 hours

### Governance

#### New Sustainability and Corporate Governance Policies

Established Group-level Workforce Diversity Policy and GenAI Use Policy

#### Double Materiality

Delivered our first double materiality assessment to evaluate the bilateral sustainability impacts on the Group and the broader society

#### Business Ethics Training

35,085 hours
Provided to employees on anti-corruption, ethics, and integrity

#### Annual Directors' Training: Sustainability and climate

- Evolving climate-related disclosure requirements
- Sustainability management practices

#### In-house ESG Conference

- Reinforce sustainability vision and foster synergies
- 100+ representatives from business units

# 4 2024 Highlights

## PROGRESS ACROSS BUSINESS SEGMENTS

### Electricity Distribution

**Capacity of Connections to Distributed Renewable Energy Generation**
12.3 GW in 2024

**Customer Satisfaction Score**
85.5% in 2024
(consolidated, 100% as basis)

### Electricity Generation / Clean & Renewable Energy

**Renewable Energy**
754 MW in 2024
Includes wind, solar, hydro, and biomass
⬆ 68% vs. 2023

**Generation Efficiency[1]**
45% in 2024
⬆ from 43% vs. 2023

**Weighted Average Availability Factor of Plants**
87% in 2024

### Water Utilities & Services

**Percentage of Wastewater Recycled**
*Northumbrian Water*
100% during 2022-2024

**Customer Satisfaction Score**
*Northumbrian Water*
>80 during 2022-2024
(100 as basis)

### Construction Materials

**Concrete Production GHG emissions Intensity**
0.267 tonnes $CO_2e/m^3$ of concrete in 2024

**Cement Production Carbon Intensity**
618 kg $CO_2$/tonne of cementitious product in 2024

**Sales of Low Carbon Materials**
201,945 tonnes (including GGBS and PFA, etc.)[2] in 2024
⬆ 10% vs. 2023

### Gas Transmission & Distribution

**Mains Replacement**
1,442 km in 2024
⬆12% vs. 2023

**Renewable Gas Production**
19,083 kg in 2024
⬆ 22% vs. 2023

**Biomethane Injected**
1,497 GWh in 2024

### Household Infrastructure

**Net Promoter Score**
*Reliance Home Comfort*
83 (Sales) in 2024
73 (Service) in 2024
Highest during the 2022-2024 period

**Recycling Rate**
*Reliance Home Comfort*
75% in 2024
⬆ from 71% vs. 2023

**Heating Energy Emissions**
*per ista user*
-10.8% in 2022[3]
vs. 2018 base year

### Waste Management

**Percentage of Waste Diverted from Landfills**
*Enviro NZ*
19% in 2024
⬆ from 13% vs 2023

**Methane Captured**
*Enviro NZ*
15,736 tonnes in 2024
⬆ 5% vs. 2023

### Transportation

**Percentage of Rolling Stock Electrified / Bi-mode (hybrid)**
*UK Rails*
~80% in 2024

Notes:
(1) Excluding power plants operated by Canadian Power.
(2) Ground Granulated Blast-furnace Slag (GGBS) and Pulverised Fuel Ash (PFA) are low-carbon cementitious materials that can be added to concrete to reduce its embodied carbon. PFA is a byproduct of pulverised coal combustion in electricity generation, while GGBS is a byproduct of the iron and steel-making process.
(3) Latest data available.

# The People

# 5 Sustainability at CKI

The Group's sustainability strategy is built on sustainability pillars, principles, and policies, with oversight from the Board and management. Our focus is on key sustainability priorities that are relevant to our business and stakeholders. In doing so, we aim to drive meaningful impact, create long-term value, and shape sustainable infrastructure for today and tomorrows.


## Approach to Sustainability

The Group's sustainability approach is guided by four pillars – The Business, The People, The Community, and The Environment. Aligned with the UN SDGs, the Group is committed to advancing the 2030 Agenda, and contributing to seven key UN SDGs.

## Sustainability Governance

The Group's sustainability governance spans all levels, overseen by the board-level Sustainability Committee, led by the management-level Sustainability Working Group, and implemented through ESG committees in business units.

## Stakeholder Engagement and Materiality Assessment

In 2024, the Group conducted its first double materiality assessment, identifying sustainability topics material to both the Group and society. This ensures transparency, aligns with stakeholder priorities, and informs decision-making.

# 5.1 Approach to Sustainability

In today's complex and rapidly changing environment, we are committed to managing our businesses responsibly, ensuring long-term success, and upholding integrity and accountability to all stakeholders.

## Sustainability Pillars and Policies

The Group's sustainability strategy is anchored to four pillars, namely, The Business, The People, The Environment, and The Community. These pillars are supported by comprehensive policies, guided by leadership at the Group level, and propelled by a unified effort throughout our various business units. These strategic pillars provide a framework that steers the Group towards embedding sustainable practices into every facet of our operations. We have established a robust set of policies, procedures, and guidelines designed to assist our management teams in tackling significant sustainability issues within the Group, details of which are elaborated within this report.

Across the Group, these guiding principles are embraced and implemented by individual business divisions, tailored to meet the unique social, economic, and environmental needs of their local contexts. We ensure adherence to these principles and assess their application through regular management reviews and reporting.

For more information on our policies and procedures, please visit the Sustainability Policies and Corporate Governance Policies sections on the Company's website.

Sustainability Policies

Corporate Governance Policies

## BUSINESS

**Having a strong business model is essential to remaining competitive in the market and attracting new investment opportunities. It also allows us to retain top talent and motivate our staff to pursue sustainable development.**

### Core Principles:

- Comply with all relevant and applicable laws and regulations within its operational frameworks.
- Enhance long-term return for its shareholders.
- Focus on sustainable development of its businesses and the communities it operates in.
- Conduct business with uncompromising integrity and safeguard against unfair business practices.
- Commit to the maintenance of good corporate governance practices and procedure and emphasise a quality board, sound internal controls, and transparency and accountability to all stakeholders.

## PEOPLE

**At the centre of our operations are our employees, who are a critical component of our corporate success. We strive to cultivate an inclusive, diverse and equitable work environment for all, where individual development and growth are prioritised.**

### Core Principles:

- Provide a positive work environment that values the wide-ranging perspectives inherent in its diverse workforce.
- Maintain proper systems to ensure internal equity and external competitiveness of staff remuneration and recognition.
- Uphold a high standard of business ethics and the personal conduct of its employees.
- Adhere to non-discriminatory employment practices and procedures.
- Foster individual growth and achievement of business goals and offer a wide range of training and development programmes and interest courses and activities.
- Provide a safe workplace for all its employees.

## ENVIRONMENT

**Environmental protection is one of the core principles and a central aspect of our sustainable strategies. As a global infrastructure company, we believe it is our responsibility to lead in the decarbonisation of our industry and to manage our assets in a responsible manner.**

### Core Principles:

- Comply with or exceed the relevant laws and regulations to control any GHG emissions, discharges into water and land, and waste generation.
- Set targets, and review and assess the results regularly to ensure the efficiency of the measures to control emissions.
- Monitor and manage the use of resources, including energy, water and other raw materials.
- Minimise the impact of its business activities on the environment and natural resources.
- Encourage and provide support for conservation and environmental protection programmes.
- Develop and implement environmentally-friendly products and processes with potential commercial applications.

## COMMUNITY

**Community engagement is critical to the achievement of our decarbonisation goals. We make an effort to connect with our stakeholders regularly to enhance communication, understand their needs and ultimately improve our sustainability performance in the long run.**

### Core Principles:

- Encourage employees to play a positive and active role in the community.
- Implement internal guidelines and controls on donations and contributions to safeguard stakeholders' and shareholders' interests.
- Consult with local communities and undertake initiatives catered to the needs and benefits of the communities within which it operates, with a focus on employee volunteerism, education, health and elderly care, arts and culture, sports and disaster relief.

# 5.1 Approach to Sustainability

## Contribution to UN SDGs

As a global infrastructure player, the Group strives to contribute to the UN SDGs and the 2030 Agenda by promoting the transition to net zero for our customers and businesses. We have identified seven SDGs highly relevant to our business and operations, which we believe we are well-positioned to meaningfully contribute towards achieving.

### Our prioritised SDGs and contributions in 2024

5 GENDER EQUALITY

#### Achieve gender equality and empower all women and girls

The Group has zero tolerance for any form of discrimination or harassment. We strive to create a diverse and inclusive workplace where equal opportunities to thrive are offered to all staff. Our Corporate Social Responsibility Policy, Human Rights Policy and the new Workforce Diversity Policy stipulate our commitment to equal opportunity and value to diversity.

- Formulate new Workforce Diversity Policy

7 AFFORDABLE AND CLEAN ENERGY

#### Ensure access to affordable, reliable, sustainable and modern energy for all

Recognising the significance of transforming the energy sector, the Group made a public commitment to phase out coal-fired generation by 2035. Our Environmental Policy articulates the Group's commitment to manage direct and indirect impacts arising from our operations and increase the use of innovative, clean and energy efficient technology.

- 100% of our gas transmission and distribution companies have developed plans to blend green gases like biomethane or hydrogen into their existing gas transmission and distribution systems.

8 DECENT WORK AND ECONOMIC GROWTH

#### Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The Group has established the Corporate Social Responsibility Policy, Health and Safety Policy, Human Rights Policy and Modern Slavery and Human Trafficking Statement to demonstrate our commitment to fostering a decent working environment and making an impactful contribution to the economic growth of society.

On top of ensuring compliance with all relevant laws and regulations of health and safety, we also continuously monitor and report on the health and safety performance of our operations. To encourage career growth and success for our employees, we provide various training and development programmes to allow their continuous upskilling and capacity building.

- 92% of our full-time employees received training.

# 5.1 Approach to Sustainability

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

## Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

The Group is firmly committed to fostering creativity, innovation and agility as we explore innovative solutions and advanced technology to fulfil our decarbonisation targets. In line with the Group's decarbonisation strategy, business units have been enhancing their operations to offer more sustainable services and products.

- 100% of our electricity distribution companies are committed to investing in smart energy solutions.

11 SUSTAINABLE CITIES AND COMMUNITIES

## Make cities and human settlements inclusive, safe, resilient and sustainable

The Group is committed to ensuring resilient and sustainable infrastructures for the cities and communities in which we operate by implementing stringent measures to manage air pollution and enhance air quality, as well as offering sustainable waste management services in our areas of operation.

- 82% of the Group's attributable revenue was covered by the Environmental Management System (EMS) certified by ISO 14001 or other relevant EMS certificates.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

## Ensure sustainable consumption and production patterns

The Group strives to adopt sustainable practices and responsibly manage natural resources across its businesses. We have established the Environmental Policy which demonstrates our commitment to promoting the reuse and recycling of resources in our day-to-day operations. To facilitate our material management, we also encourage the adoption of new technologies to optimise our production and operation processes and improve our environmental management procedures.

Furthermore, business units are exploring sustainable material options and working with external parties to move towards more sustainable patterns of consumption and production.

- Water consumption – 78,130 thousands of $m^3$, which is a 27.1% reduction compared to 2023.

13 CLIMATE ACTION

## Take urgent action to combat climate change and its impacts

In response to the global call for swift action against the climate emergency, we have publicly declared a Group-level carbon reduction target of 50% by 2035 compared to 2020 levels. Business units are supporting the successful transition to a low-carbon economy as they develop, operate and invest in low-carbon infrastructure. While delivering cleaner products and services to our customers, the Group also ensures our operations are resilient to the impacts of climate change as part of our business strategy.

- Scope 1 and 2 emissions – 7,193,286 $tCO_2e$, which is a 6.0% reduction compared to 2023.

# 5.2 Sustainability Governance

Robust sustainability governance structure within the Group has always been a key priority, ensuring that our dedication to sustainable practices is interwoven throughout the Group, from the Board level down through the Sustainability Committee to the Sustainability Working Group comprising all personnel responsible for key businesses. This structure steers the Group in executing sustainable strategies, setting and managing goals and targets, enhancing stakeholder communications, and upholding accountability across the businesses.

The Company established its Sustainability Committee on 1st December, 2020. As at 31st December, 2024, the Sustainability Committee comprises three Directors, a majority of whom are Independent Non-executive Directors, and the Company Secretary. The Sustainability Committee, with delegated responsibility, oversees management and advises the Board on the development and implementation of the sustainability initiatives of the Group, including reviewing the related sustainability policies and practices, and assessing and making recommendations on matters concerning the Group's sustainability development and ESG risks. The Sustainability Committee held two meetings in March and November of 2024. At the meeting of the Sustainability Committee held in March 2025, the Sustainability Committee reviewed the sustainability report for the year 2024 and reviewed the sustainability policies of the Company.

The following is a summary of the major work of the Sustainability Committee during the year of 2024:

- Reviewed the Group's sustainability objectives, strategies, priorities, initiatives, goals, targets, work progress and highlights for the year of 2023, in consultation with the external professional consultant;
- Reviewed the new IFRS S2 (Climate-related Disclosures) issued by the International Sustainability Standards Board ("ISSB") which was adopted by the HK Stock Exchange and such disclosures would impact on the Company's business model, value chain and strategy;
- Considered rating agencies' analyses of the Group's sustainability performance;
- Reviewed the sustainability-related issues, trends and best practices that might affect the Group;
- Reviewed the Company's sustainability frameworks and sustainability-related policies, practices and management approach;
- Reviewed the Company's sustainability report for the year of 2023, prepared in consultation with the external professional consultant;
- Reviewed the progress of the Group in 2024 towards the sustainability targets and sustainability-related issues, trends and best practices;
- Reviewed alignment for the Group's sustainability targets and goals with the UN SDGs;
- Considered the plan and preparatory work for the Company's sustainability report for the year of 2024; and
- Reviewed the Biodiversity Policy and Workforce Diversity Policy, duly adopted in 2024.

The Group recognises the rapidly evolving nature of sustainability and climate trends and ensures that Board members, key personnel, and the Sustainability Working Group stay informed through targeted training by external experts. Annual Directors' training covers climate-related disclosure requirements (e.g., IFRS S1 and S2, HK Stock Exchange's listing rules, and global developments) and broader sustainability practices, supported by case studies from various sectors.

To achieve the Group's sustainability ambitions, all businesses are accountable for the execution of sustainability initiatives and the management of relevant risks and performance. ESG committees have been established within the business units to design, implement, and oversee sustainability strategies. These committees provide updates and assurance to senior management on sustainability activities and practices, ensuring continuous improvement and regular reassessment of processes.

The Group formed its CK Sustainability Council in June 2022, intending to create a forum to discuss sustainability topics, facilitate the coordination of responses and initiatives on sustainability, and steer sustainability strategy and investor relations across the Group. In 2024, the Council conducted four quarterly meetings and addressed different sustainability-related major items, including understanding the upcoming regulations and their impact on our business units.

## Building ESG Capacity Across the Group

In September 2024, CKI and Power Assets co-hosted a two-day ESG Conference themed "Challenges in the Emerging Sustainability Landscape". The event brought together 100 representatives from business units to discuss key topics, including sustainability disclosure trends, sustainable financing, just transition, Diversity, Equity, and Inclusion, and biodiversity. The conference aimed to foster connections among ESG teams, enhance understanding of ESG reporting requirements, and strengthen networks through collaboration.

# 5.2 Sustainability Governance

Top-down Strategy

## CKI's Sustainability Governance Structure

### The Board

- Has ultimate accountability for the Group's sustainability strategy, management, performance and reporting.
- Examines and approves the Group's sustainability objectives, strategies, priorities, initiatives, goals and targets as well as the related significant policies and frameworks that support their achievement.

### Sustainability Committee

- Chaired by Mr. Ip Tak Chuen, Edmond, the Deputy Chairman and Executive Director, and comprised of two Independent Non-Executive Directors, Mr. Lan Hong Tsung, David and Mr. Paul Joseph Tighe, and the Company Secretary, Ms. Eirene Yeung, as members.
- Has an overarching role in supporting the Board on matters of sustainability and oversees the development and implementation of the sustainability initiatives of the Group, including reviewing the related environmental, social and governance ("ESG") policies and practices, and assessing and making recommendations on matters concerning the Group's sustainability development, and ESG risks.
- Reports periodically to the Board on sustainability risks and opportunities, and their impact on business strategy and new investments.
- For more information, please refer to the Terms of Reference of the Sustainability Committee.

### Sustainability Working Group

- Composed of key members of senior management of the head office and the business divisions of the Group.
- Focuses on proactively addressing sustainability issues and policies and driving strategic initiatives across the Group.
- Reports to and receives feedback from the Sustainability Committee regularly.

### Management of Business Units

- Identifies operational-specific sustainability-related risks and opportunities.
- Monitors and tracks progress against agreed targets and initiatives.
- Provides feedback to the Sustainability Working Group on sustainability-related achievements and progress.

Bottom-up Information Flow

# 5.3 Stakeholder Engagement and Materiality Assessment

## Double Materiality Assessment

In order to understand our stakeholders' needs and enhance our business performance in the continuously evolving industry landscape, the Group strives to enhance the transparency of our sustainability disclosure and focuses on meeting the expectation of our stakeholders. Over the years, we have regularly conduct stakeholder engagement activities to gain a deeper understanding of the perspectives, priorities, and expectations of our diverse stakeholder groups, including but not limited to employees, customers, business partners, regulatory bodies, investors, and financiers. Their valuable insights and constructive feedback have been instrumental in helping us stay responsive to shifting market dynamics and global sustainability trends.

While the materiality assessments conducted previously with material topics identified have provided guidance to addressing sustainability challenges, we recognise that the interconnected relationship between our business and the broader world have not been fully explored. Understanding how our business both influences and is influenced by the external environment offers us a more holistic perspective on aligning ourselves with global stakeholders and actively contribute to building a more sustainable and thriving future.

In 2024, we stepped up our engagement efforts with our stakeholders by conducting our first double materiality assessment. It highlights the dual importance of sustainability impacts – both on our financial performance and reputation, as well as our broader effects on societal well-being and environmental health. The double materiality approach aligns with major international sustainability disclosure standards, while meeting the growing expectations from investors, regulators, and other stakeholders for more comprehensive and meaningful disclosures. Ultimately, double materiality assessment fosters a more comprehensive strategy for reporting and decision-making, aiming to meet stakeholder expectations while embedding sustainability into business operations.

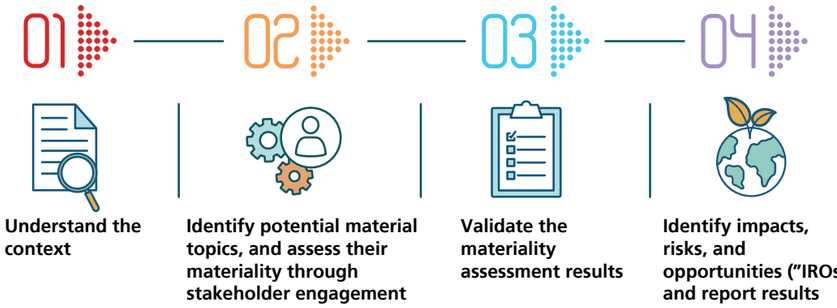
We are dedicated to a future where business decisions are informed by thorough understanding of sustainability impacts, demonstrating our commitment to accountability and long-term value creation for all stakeholders. The corporate sustainability disclosure landscape is rapidly evolving. As part of the journey, we have observed the development of higher disclosure requirements in the past few years, and are committing to conduct a double materiality assessment to enhance the transparency of our reporting and support decisions that contribute to a sustainable future.

Through double materiality assessment, we focus on identifying critical economic, environmental, and social issues which have a significant impact on both within the corporate context and in the wider community, so as to:

- Enhance accountability and drive long-term sustainable value creation by focusing on key priorities;
- Inform the overall risk management process by reviewing and potentially integrating materiality assessment results; and
- Ensure our sustainability report provides a balanced and transparent view, addressing both financial risks and opportunities for the Group, as well as our broader impacts on society and the environment.

# 5.3 Stakeholder Engagement and Materiality Assessment

A four-steps methodology have been established for the double materiality assessment exercise.




## Step 1: Understand the context

Methodologies of the four-step double materiality assessment exercise were developed with reference to the standards established by the Global Reporting Initiative and the European Financial Reporting Advisory Group. Double materiality assessment considers both impact and financial aspects. Impact materiality focuses on the assessment of the Group's effects on society and the environment. Financial materiality focuses on the impact on the Group's financial performance and metrics, such as asset value and profitability, due to risks and opportunities arising from the company's sustainability matters.

## Step 2: Identify material topics, and assess their materiality through stakeholder engagement

This step examines the current and potential IROs associated with ESG factors across the Group's operations as well as the upstream and downstream value chain. It involves identifying and evaluating impacts on the environment and society, sustainability-related financial risks, and opportunities to be leveraged.

### Identifying material topics

Before initiating the materiality assessment process, we thoroughly reviewed and updated the list of material topics as part of a broader materiality analysis procedure. Starting with the process of analysing research papers and publications from professional institutions published within the previous three years, four megatrends have been identified: **Climate Change, Technological Acceleration, Demographic Bifurcation, and Geostrategic Shifts**.

### Megatrends relevant to the Group

| Climate Change | Technological Acceleration | Demographic Bifurcation | Geostrategic Shifts |
|---|---|---|---|
| The paths of global warming and their potential impacts on earth systems, driven by human actions and environmental changes. | A structural force driven by exponential advances in computing power and analytics. | Changes in population size, growth, and structure at national, regional, or global levels, impacting socioeconomic systems. | Changing geopolitical dynamics, including global and regional alliances, national attitudes toward key actors, governance, and strategic goals. |

Under the four megatrends and research of a non-exhaustive list of sources including external reports, articles, previous material topics identified, ESG ratings and assessments, and peer benchmarking, we compiled a list of material topics that are most relevant to the operation and business strategy of the Group. We also considered the underlying principles of Just Transition and UN SDGs when identifying material topics. The Group has identified seven UN SDGs highly related to our business and operations. Please refer to Section 5.1 Approach to Sustainability for details.

The number of material topics which are most relevant to our businesses have been expanded to twenty topics in 2024, compared to twelve topics in 2023. This reflects the growth in scale of our businesses as well as sustainability responsibilities.

| Material topics identified/consolidated from 2023 | Newly appended material topics |
|---|---|
| **Environment (5 topics)** | |
| • Decarbonisation, Hydrogen Economy, and Energy Transition<br>• GHG Emissions<br>• Resources Management<br>• Biodiversity and Nature | • Climate Resilience and Adaptation |
| **Social (9 topics)** | |
| • Supply Chain Management<br>• Human Capital Management<br>• Community Engagement and Investment<br>• Service Excellence<br>• Initiating Sustainability Transition in Community<br>• Health, Safety, and Well-being | • Diversity, Equity, and Inclusion<br>• Labour and Human Rights<br>• Future-ready Skills for Development |
| **Governance (6 topics)** | |
| • Innovation and Digitalisation<br>• Integrated Governance Structure<br>• Business Ethics and Anti-corruption<br>• Cybersecurity, Asset Integrity, and Crisis Management | • Sustainable and Responsible Investment<br>• Privacy and Data Security |

# 5.3 Stakeholder Engagement and Materiality Assessment

## Engaging stakeholders

This year, our efforts were concentrated on deepening our understanding of double materiality by incorporating insights from a diverse range of internal stakeholders, including representatives from head offices and business units, as well as external stakeholders such as financiers and investors. To facilitate this process, we employed a combination of online surveys and focus group discussions, enabling us to engage stakeholders, gather valuable perspectives, and foster constructive dialogue effectively.

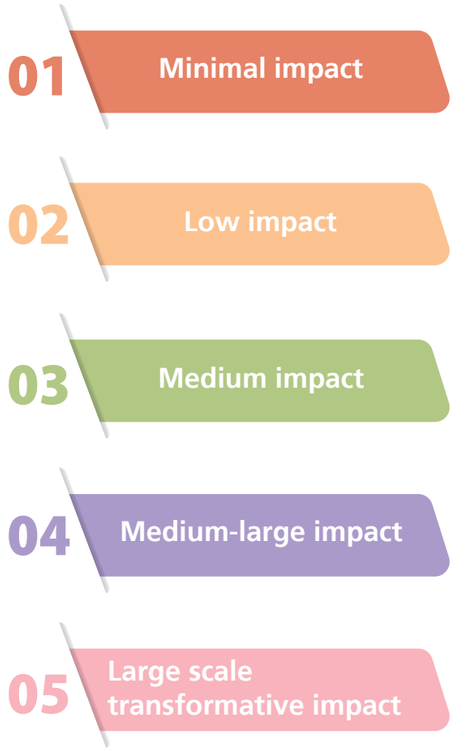
## Stakeholders engaged in double materiality assessment

| | Key stakeholder groups | Engagement details |
|---|---|---|
| Internal Stakeholders | • C-suite representatives<br>• Department heads from business departments of head office<br>• Employees from business departments of head office | Stakeholders are invited to take part in sharing their insights on the Group's sustainability initiatives and performances, as well as the ranking of the material topics according to impact and financial materiality perspective from the point of view of their roles. |
| | • Senior Management / Sustainability representatives of business units | Stakeholders are invited to complete an online survey to rank the material topics according to both impact and financial materiality perspective from their businesses. |
| External stakeholders | • Financiers<br>• Investors<br>• Sustainability Experts | Stakeholders are invited to complete an online survey to score the material topics according to both impact and financial materiality perspective from the point of view of their roles. |
| | • Shareholders | In-person external focus group discussion was conducted, targeting major shareholders focused on both impact and financial materiality. |

## Scoring criteria for double materiality assessment

| Impact Materiality | Financial Materiality |
|---|---|
| For the Group's positive and negative impacts on the society and environment.<br>• **Scale**<br>How grave/beneficial an impact is<br>• **Scope**<br>How widespread an impact is<br>• **Ability to reverse/remedy impact**<br>Possibility of reversing an impact<br>• **Likelihood**<br>Possibility of the impact occurring | For financial effects that the material topic have on the Group.<br>• **Impact to profitability and cost of capital**<br>• **Regulatory compensation and penalty**<br>• **Likelihood**<br>Possibility of occurrence |

Stakeholders were asked to give scores to each material topic based on different angles, and all the scores from the focus group discussions and the survey were added up and calculated as the "degree of materiality," which is made up of five levels of impact:




## Step 3: Validate the materiality assessment results

The materiality results are presented in a matrix, with ten out of the twenty topics identified as highly material. These topics are considered critical for driving the long-term performance of the Group.

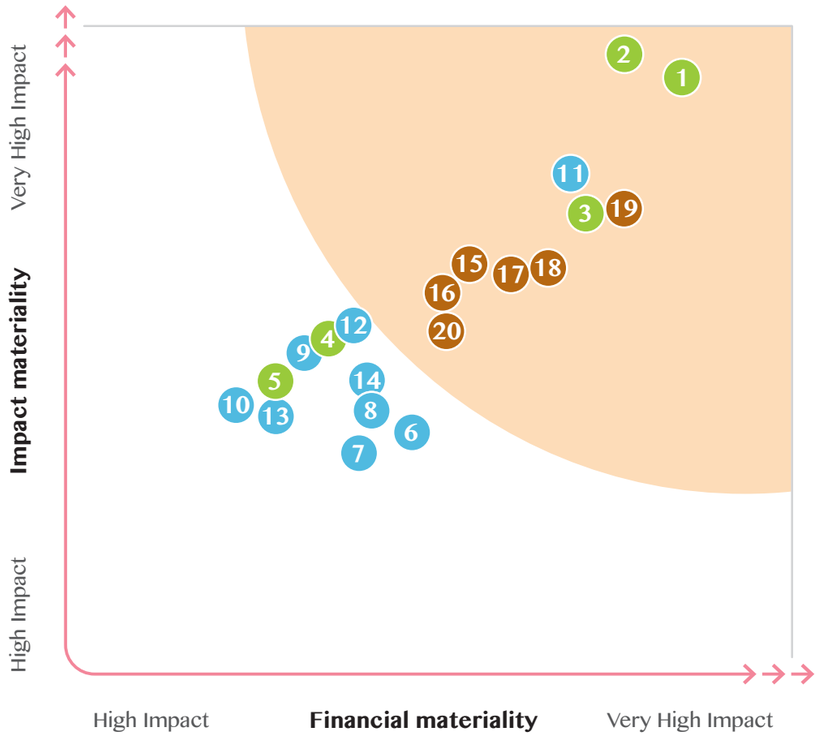
Among the ten topics, three are identified as the most material to the Group from a double materiality perspective:

- **Decarbonisation, Hydrogen Economy, and Energy Transition**
- **GHG Emissions**
- **Cybersecurity, Asset Integrity, and Crisis Management**

The materiality findings were reviewed and approved by the Board-level Sustainability Committee. These findings directly inform the content of this sustainability report.

# 5.3 Stakeholder Engagement and Materiality Assessment

## Materiality Matrix




| Environment | Social | Governance |
|---|---|---|
| 1 Decarbonisation, Hydrogen Economy, and Energy Transition | 6 Supply Chain Management | 15 Integrated Governance Structure |
| 2 GHG Emissions | 7 Service Excellence | 16 Business Ethics and Anti-corruption |
| 3 Climate Resilience and Adaptation | 8 Human Capital Management | 17 Sustainable and Responsible Investment |
| 4 Resources Management | 9 Labour and Human Rights | 18 Privacy and Data Security |
| 5 Biodiversity and Nature | 10 Diversity, Equity, and Inclusion | 19 Cybersecurity, Asset Integrity, and Crisis Management |
| | 11 Health, Safety, and Well-being | 20 Innovation and Digitalisation |
| | 12 Future-ready Skills for Development | |
| | 13 Initiating Sustainability Transition in Community | |
| | 14 Community Engagement and Investment | |

### Step 4: Identify impacts, risks, and opportunities, and report results

Finally, based on the identified material topics, we conducted an assessment of the potential IROs that may arise from them. To achieve this, a comprehensive list of IROs was compiled through a review of risk factors at both the Group and business units levels. This included identifying positive and negative impacts derived from the SASB industry standards, as well as analysing risk factors and IROs disclosed by industry peers. The process then involved mapping the compiled IROs to the relevant material topics, ensuring a structured and focused approach to addressing key sustainability priorities. The Group is actively managing these risks while capitalising on opportunities to drive sustainable growth and long-term value creation. The tables below outline the potential positive and negative IROs associated with the ten highly material topics.

**Potential Positive and Negative Impacts arising from 10 Highly Material Topics**

| Potential Positive Impact | Potential Negative Impact |
|---|---|
| **Decarbonisation, Hydrogen Economy, and Energy Transition** | |
| CKI's expanding footprint into renewable energy, including solar, wind, and green hydrogen:<br>• Helps societies and economies transition to a low-carbon economy;<br>• Benefits the environment and communities by supporting their net zero ambitions and reducing global warming; and<br>• Provides more diverse, affordable, and reliable energy. | • Inadequate efforts to support decarbonisation, green energy, and facilitate the energy transition may contribute to delays in achieving net zero targets.<br>• The effects would be felt globally, with more frequent extreme climate events and shifts in climate across geographies.<br>• The Group's reputation may also be negatively affected, risks of non-compliance with government requirements increased. |
| **GHG Emissions** | |
| Dedicated efforts to reduce GHG emissions play a vital role in moderating the effects of global warming. These efforts:<br>• Assist communities in achieving net zero;<br>• Help reduce the frequency of extreme climate events; and<br>• Mitigate the impacts of such events, including flooding, extreme heat, and forest fires. | Insufficient efforts to reduce GHG emissions, particularly in alignment with the Group's established carbon reduction targets, could:<br>• Exacerbate climate change; and<br>• Result in more extreme climate events and shifts in climate across societies. |
| **Cybersecurity, Asset Integrity, and Crisis Management** | |
| Enhanced investment in cybersecurity, asset integrity, and crisis management can:<br>• Better equip the business to withstand cyber threats and operational disruptions; and<br>• Minimise potential damages, downtime, and business interruptions. | • Inadequate cybersecurity protection against the latest cybersecurity threats, alongside an incomplete crisis management plan, may lead to data breaches and service disruptions, affecting customer trust and satisfaction.<br>• Deficiencies in asset integrity could reduce service reliability and lead to lower customer satisfaction. |

# 5.3 Stakeholder Engagement and Materiality Assessment

| Potential Positive Impact | Potential Negative Impact |
|---|---|
| **Health and Safety, and Well-being**<br>• Greater hazard awareness, a sharper focus on health and safety, and attention to employee well-being help cultivate a proactive mindset on health and well-being among our workforce and the communities we serve.<br>• As a mean to attract and retain talents.<br>• Reduce safety incidents.<br>• Our emphasis on health, safety, and well-being also strengthens trust with stakeholders and enhances brand reputation in our operating regions. | • A lack of emphasis on health, safety, and well-being significantly increases the risk of illness, injury, or even fatalities.<br>• Insufficient focus on employees' well-being may also affect workforce morale, productivity, and the quality of services delivered.<br>• Weak health and safety performance may result in fines and liabilities.<br>• Frequent significant health and safety incidents could make hiring increasingly difficult due to the company's declining reputation. |
| **Climate Resilience and Adaptation**<br>• Enhancement in climate resilience can better equip the business to withstand extreme weather events, minimising damages and disruptions. | • A lack of effort to bolster assets against extreme climate events, such as flooding and extreme heat, could potentially result in infrastructure damage, energy supply outages, and service downtime.<br>• This would disrupt customers' daily lives and negatively impact the business' reputation. |
| **Privacy and Data Security**<br>Focusing on enhancing the protection and resilience of data systems and customer data in an increasingly evolving threat landscape:<br>• Helps safeguard customer trust; and<br>• Ensures regulatory compliance and builds brand value, delivering substantial benefits to the communities we serve. | • Ineffective policies or a lack of policies for privacy and data security may lead to data breaches or data misuse, undermining customer trust in the company's ability to protect personal and commercial data.<br>• Incidents of data security breaches may also attract attention from governments or regulators, increasing public scrutiny of the company's operations.<br>• This could ultimately impact the company's public reputation and long-term stakeholder relationships. |
| **Sustainable and Responsible Investment**<br>• Sustainable and responsible investments – including in clean energy, energy efficiency, environmental management, and asset improvements – enable the company to deliver more diverse and stable services to customers.<br>• These investments offer significant benefits to the environment by reducing GHG emissions. | Inadequate investments in sustainable and responsible activities may<br>• hinder the company's progress towards achieving its committed net zero target;<br>• reduce the company's ability to respond to regulatory requirements and industry changes; and<br>• disrupt services if underinvestment prevents assets from operating effectively during adverse climate conditions. |
| **Integrated Governance Structure**<br>• A healthy culture, strong governance, effective risk management, and a commitment to ethical behaviour and legal compliance optimise business performance.<br>• These elements foster trust from governments, regulators, and customers. | • A lack of internal control standards and policies may result in inconsistent corporate practices and a lack of transparency.<br>• This may undermine trust with governments, regulators, and the public. |
| **Business Ethics and Anti-Corruption**<br>• A high standard of business ethics and a strong commitment to anti-corruption are important factors in building trust with governments, regulators, and other stakeholders. | • A lack of business ethics and a weak commitment to anti-corruption can affect various aspects of a company.<br>• This can result in the loss of assets, damage to reputation, and a loss of trust and credibility with regulators and customers. |
| **Innovation and Digitalisation**<br>• Innovation and digitalisation of assets deliver substantial value to customers and the environment.<br>• Our continuous support for innovative projects and asset digitalisation helps improve service capability and flexibility, enabling our services to reach a larger customer base while providing existing customers with more reliable services.<br>• Innovation and digitalisation enable more efficient delivery of products and services, reducing waste and contributing to a greener, more sustainable environment. | • A lack of innovation and development in digitalisation may lead to asset deterioration and reduced service flexibility in responding to demand. It may weaken the company's ability to adapt to demand fluctuations and future industry changes.<br>• Customers may experience less reliable services and higher costs due to inefficiencies in service delivery. |

# 5.3 Stakeholder Engagement and Materiality Assessment

## Potential Risks

| Potential risks | Our response |
|---|---|
| **Decarbonisation, Hydrogen Economy, and Energy Transition**<br>• Insufficient governmental and regulatory support, as well as inadequate sustainable planning for the energy transition, could hinder the success of decarbonising our business and the broader economy.<br>• Inadequate support or frequently changing policies related to decarbonisation and energy transition from the governments may increase uncertainty for our investment in energy transition.<br>• Delays or challenges in obtaining regulatory approvals for investments and business plans could hinder decarbonisation progress in regulated businesses. | ***Section 8.1*** |
| **GHG Emissions**<br>• Governmental regulatory policies on limiting GHG emissions, including the use of carbon tax, on certain or all industries may result in an increase of operation cost.<br>• Aggressive restriction on the use of fossil fuel such as coal may also lead to stranded asset risk. | ***Section 8.2*** |
| **Cybersecurity, Asset Integrity, and Crisis Management**<br>• Cybersecurity incidents, including data breaches and cyberattacks, may result in litigation from customers and penalties from governments and regulators.<br>• Inadequate allocation of capital or ineffective long-term planning for cybersecurity systems could leave our operations vulnerable to evolving cyber threats, compromising data security and operational resilience. | ***Section 7.3*** |
| **Health and Safety, and Well-being**<br>• Failure to maintain a safe and healthy environment as required by regulatory safety standards may lead to penalties and litigation.<br>• Health and safety incidents arising from operations also affect the business' reputation and brand value. | ***Section 9.3*** |

| Potential risks | Our response |
|---|---|
| **Climate Resilience and Adaptation**<br>• Increasing severity and frequencies of extreme climate events may increase the risk of asset failure and affect business operations. | ***Section 8.3*** |
| **Privacy and Data Security**<br>• Privacy and data security incidents, including data breaches, may lead to regulatory actions and civil claims, resulting in penalties and litigation. | ***Section 7.4*** |
| **Integrated Governance Structure**<br>• The absence of an integrated governance structure covering ESG factors could undermine the overall strategy and management of the business, potentially impacting long-term sustainability and stakeholder trust. | ***Section 7.1*** |
| **Business Ethics and Anti-Corruption**<br>• Potential cases of employee misconduct, fraud, corruption, bribery, or criminal activities are likely to result in legal actions and penalties imposed by the government or regulatory bodies. | ***Section 7.2*** |

# 5.3 Stakeholder Engagement and Materiality Assessment

**Potential Opportunities**

| | |
|---|---|
| **Decarbonisation, Hydrogen Economy, and Energy Transition** | |
| Asset Value and Revenue | • As regulatory changes and customer preferences shift towards using cleaner products, assets that employ green technologies and have low-carbon capabilities may be preferred by the markets, potentially leading to higher revenues and valuations.<br>• Government policies promoting higher electrification may present opportunities for greater asset base growth for our electricity distribution networks. |
| Cost of Capital | • Businesses with clear commitment on decarbonisation and improving sustainability performances may make them more attractive to certain investors and financiers which focus on companies' sustainability parameters. |
| **GHG Emissions** | |
| Asset Value and Revenue | • Businesses with reduced GHG emissions are less vulnerable to government environmental policies, such as carbon taxes and regulatory changes.<br>• Lower carbon risks and being future-proof may increase the business' attractiveness to investors.<br>• Developing and offering low-carbon products and services caters to the growing demand in the clean energy market, opening up new revenue streams for the business. |
| Cost of Capital | • With solid decarbonisation planning and performance, businesses may gain access to capitals with focus on sustainability. |
| **Cybersecurity, Asset Integrity, and Crisis Management** | |
| Asset Value | • Capital expenditure permitted by regulators for strengthening cybersecurity, asset integrity, and crisis management increases the asset bases and leads to higher returns in the future. |
| **Health and Safety, and Well-being** | |
| Operating Expenditure | • Investments in a comprehensive health and safety system reduce long-term operational expenses by preventing accidents, injuries, and disruptions.<br>• Reduced absenteeism, turnover, and insurance premiums due to fewer workers' compensation claims, optimise operating expenditure while ensuring a motivated and productive workforce. |
| **Climate Resilience and Adaptation** | |
| Asset Value and Revenue | • Investing in asset resilience against climate risks can reduce the likelihood of damage or failure during extreme weather events, prolonging the assets longevity and values.<br>• For our regulated businesses, the value of the asset bases will increase when more capital expenditure, which include investment in climate resilience, is spent.<br>• Higher regulated asset bases will lead to higher revenue bases. |
| Operating Expenditure | • Investments in resilience reduce costs associated with service disruptions caused by climate events, such as emergency repairs, downtime, and customer compensation, resulting in a more stable and cost-efficient operation.<br>• More resilient assets benefit insurance costs and may contribute to lower insurance premiums. |
| **Privacy and Data Security** | |
| Asset Value | • For our regulated business, emphasis on data security will increase allowances for related expenditures, which can lead to higher growth in asset bases. |
| **Sustainable and Responsible Investment** | |
| Asset Value and Revenue | • Expanding the business portfolio by investing in sustainable and renewable projects create synergies with established business, adding further value to our operations.<br>• Sustainable investments unlock new business opportunities and revenue streams, expanding our businesses and strengthening our position as a leading global infrastructure company. |
| **Innovation and Digitalisation** | |
| Asset Value | • Investments in innovation and digitalisation enhance asset performance by improving efficiency, reliability, and adaptability. |
| Operating Expenditure | • Technologies improve operational performance by reducing inefficiencies, automating processes, and optimising resource use, leading to long-term operating expenditure savings. |

# 5.3 Stakeholder Engagement and Materiality Assessment

## Stakeholder Engagement

Our stakeholder engagement aligns with our goal of making the world a better place through investments. A key part of our sustainability commitments is maintaining transparency about our strategies, actions, targets, outcomes, and societal contributions. To cultivate an open, meaningful, and informed dialogue about our activities and address the needs and expectations of all stakeholders through engagement, we actively communicate with different stakeholder groups across various platforms.

### Engaging business units at Group level

The Group-level management team and local executive teams maintain a strong relationship built on trust and respect. The management team focuses on understanding and offering thought leadership and guidance to enhance the performance of business units. Over time, the Group-level team has supported the success of business units by participating in overseas board meetings, collaborating on subcommittees and special projects, maintaining seamless communication between local management and the head office, and fostering synergy through committees and conferences on topics such as health and safety, risk management, innovation, IT, and public relations. The Group has established a shared platform to align business units toward achieving common goals.

To address the Group's evolving needs in a dynamic business environment, a great variety capacity building, in-house training, and knowledge exchange initiatives were offered to board members, representatives from our business units, and employees. Alongside in-house training, the Group, together with other CK companies and its subsidiaries, organised four conferences in 2024, creating platforms for business units to exchange insights on diverse ESG topics. These conferences promoted open dialogue and collaborative problem-solving, strengthening the Group's adaptability and proactive stance in responding to the shifting sustainability landscape.

### Customer-facing stakeholder engagement initiatives at the business unit-level

In our business unit-level, we actively engage with local government, customers, first nations, and stakeholders in co-creating a lasting, inclusive, and sustainable community. To communicate customer concerns, business units introduce regular engagement initiatives, such as the Customer Liaison Group of HK Electric, as well as Gas Matters, the online engagement forum of AGIG.

### Regulatory-reset led engagement

As a regulatory requirement, our business units in the regulated utilities segment must provide documentation detailing their investment and activity plans, including a stakeholder and customer engagement report. Accordingly, a robust stakeholder engagement programme is implemented to capture customer and community perspectives.

### Project-based stakeholder engagement

Our business units actively engage with stakeholders to facilitate timely decision-making involving affected individuals and ensure these groups are provided with adequate opportunities to express their views on specific projects.

For case studies on how our business units engage with stakeholders, please refer to Section 10.1 Initiating Sustainability Transition in Community and Section 10.2 Community Engagement and Investment.

## Key Stakeholders and Corresponding Engagement Channels

| Purpose of Engagement | Engagement Channels | Top Material Topics |
|---|---|---|
| **Financiers and Investors** | | |
| • Enhancing transparency<br>• Understanding investors' expectations on sustainability<br>• Attracting potential investors | • ESG ratings ●●<br>• Capital Markets Day ●<br>• Interim and annual investor presentations ●<br>• Stakeholder engagement survey ●<br>• Investor calls, questionnaires, and emails ●● | • Integrated Governance Structure ●<br>• Decarbonisation, Hydrogen Economy, and Energy Transition ● |
| **Shareholders** | | |
| • Ensuring effective and timely communication with shareholders | • Annual General Meetings ●<br>• Annual and interim reports ●<br>• Investor relations ●<br>• Corporate website ●<br>• Meetings and dialogues ● | • Decarbonisation, Hydrogen Economy, and Energy Transition ●<br>• GHG Emissions ● |
| **Employees** | | |
| • Boosting morale, building rapport and trust<br>• Retaining talent<br>• Building the brand as an employer of choice | • Intranet ●●<br>• Employee opinion surveys ●●<br>• Staff engagement activities ●●<br>• Stakeholder engagement focus groups ●●<br>• Performance reviews and personal development dialogues ●●<br>• Induction and training opportunities ●●<br>• Town hall meetings ●●<br>• Annual conferences ●<br>• Whistleblowing and grievance channels ●● | • GHG Emissions ●<br>• Decarbonisation, Hydrogen Economy, and Energy Transition ● |

Legend:

Group level ● Business units level ● Environment ● Social ● Governance ●

# 5.3 Stakeholder Engagement and Materiality Assessment

| Purpose of Engagement | Engagement Channels | Top Material Topics |
|---|---|---|
| **Management Teams of Business Units**<br>• Implementing of sustainability strategies<br>• Building trust<br>• Accelerating knowledge transfer | • Business unit-level board and committee meetings<br>• Stakeholder engagement surveys<br>• Annual conferences | • Decarbonisation, Hydrogen Economy, and Energy Transition<br>• Health, Safety, and Well-being |
| **Customers**<br>• Building trust<br>• Enabling customers to achieve low-carbon transition | • Corporate websites<br>• Social media<br>• Customer service and outage hotlines<br>• Customer satisfaction surveys<br>• Customer engagement initiatives<br>• Complains and whistleblowing channels<br>• Customer forums, roundtables, and consultations<br>• Newsletters and capacity building materials | • Decarbonisation, Hydrogen Economy, and Energy Transition<br>• Cybersecurity, Asset Integrity and Crisis Management |
| **Service Providers**<br>• Ensuring a respectful work environment for suppliers and service providers<br>• Aligning sustainability visions | • Stakeholder engagement surveys<br>• Regular supplier assessments<br>• Tendering procedures<br>• Supplier due diligence or audits<br>• Site visits<br>• Workshops and seminars for suppliers | • Decarbonisation, Hydrogen Economy, and Energy Transition<br>• Health and Safety, and Well-being |

Legend:

Group level | Business units level | Environment | Social | Governance

| Purpose of Engagement | Engagement Channels | Top Material Topics |
|---|---|---|
| **Community**<br>• Building trust<br>• Gaining support from community<br>• Ensuring community benefit<br>• Responding to community concerns | • Community events and initiatives<br>• Public meetings and consultations<br>• Liaison teams | • Initiating Sustainability Transition in Community<br>• Cybersecurity, Asset Integrity and Crisis Management |
| **Government and Regulatory Bodies**<br>• Ensuring regulatory compliance | • Consultation panels<br>• Responses to public consultations<br>• Focus groups<br>• Documentation related to regulatory reset<br>• Meetings and dialogues with policymakers | • Decarbonisation, Hydrogen Economy, and Energy Transition<br>• Climate Resilience and Adaptation |
| **Associations, Councils, Academic or professional Institutions**<br>• Ensuring with professional institutions and staying informed on the latest industry trends<br>• Building the talent pipeline | • Local research projects<br>• Apprenticeships<br>• Collaborations on learning and development initiatives<br>• Community project collaborations<br>• Campus recruitment | • Decarbonisation, Hydrogen Economy, and Energy Transition<br>• Climate Resilience and Adaptation |
| **Non-Governmental Organisations (NGOs)**<br>• Building capacity in the local community<br>• Pooling resources to enhance community well-being | • Local research projects<br>• Community projects collaborations<br>• Partnership with NGOs | • Community Engagement and Investment<br>• Initiating Sustainability Transition in Community |

# 6 Net Zero Transition

The Group deploys a strategic, comprehensive approach to climate action and transition planning, dedicated to achieving net zero across our operations while actively supporting the broader economy in this endeavour. By focusing on resilience and innovation, we are shaping sustainable infrastructure that addresses today's climate challenges and lays the foundation for a low-carbon future.

## Low-carbon Transition Plan

The energy transition has enabled the Group to play a significant role in global decarbonisation. Committed to driving change, the Group is preparing its portfolio for the future economy. The Group has developed six transition levers – key strategic areas designed to drive decarbonisation progress across our diverse operations.

## Sustainable and Responsible Investment

We lead by evolving strategies in our business units and investing in infrastructure critical to building a net zero economy. To support the transition, we invest – directly or indirectly through our business units – in opportunities that facilitate the shift from traditional fossil fuels to low-carbon energy solutions, such as wind, solar, hydrogen, biomethane, and hybrid electricity solutions that replace fossil fuels with renewable energy and batteries.

## Climate-related Financial Disclosures

The Group is committed to enhancing our resilience to the changing climate and responding to the risks and opportunities arising from the transition to a low-GHG emissions and climate resilient economy. The Group understands that tackling the escalating challenges posed by climate change and extreme weather events is crucial for preserving the delicate balance of the world.

# 6.1 Low-carbon Transition Plan

## Our role in global transition

Scaling up capital is essential to enable the global shift towards a low-emissions, climate-resilient economy. As a global infrastructure company, the Group recognises the responsibility as a corporate citizen to contribute to this critical effort. By leveraging our expertise, we aim to play a meaningful role in mobilising capital and preparing infrastructure – the backbone of economies worldwide – for a net zero future.

Investments in energy transition projects are strategically important to the Group's growth and development during the global shift to low-carbon energy. Achieving this transition also requires innovation in infrastructure management, advancements in technology, and government support through effective policies and regulations.

## Sources of emissions

In 2024, the Group's primary sources of Scope 1 and 2 emissions are electricity generation, which is the largest contributor, followed by construction materials. From the attributable revenue perspective, these businesses only account for 15% of the Group. The Group reports Scope 3 emissions and is actively working to expand the coverage of its Scope 3 inventory to include additional business units. Details of our GHG emissions disclosures can be found in Section 8.2 GHG Emissions.

Our business portfolio consists of a variety of regulated businesses around the globe, including electricity distribution networks, electricity generation, water utilities and gas transmission and distribution networks. On a attributable revenue basis, electricity distribution was the largest segment. These infrastructure businesses operate under regulated frameworks, where regulators have set environmental targets linked to permitted financial returns. This, in turn, incentivises asset managers to deliver strong performance in managing climate-related risks and opportunities.

## Our low-carbon transition plan

As a global infrastructure company, the Group's vision to shape sustainable infrastructure underpins our low-carbon transition plan. This plan, initially published in April 2023, serves as a strategic roadmap for transitioning the Group to a net zero business, detailing GHG reduction targets, commitments, and strategies. The Group is aligned with the goal of the Paris Agreement to limit temperature rise. We pledge to pursue net zero by 2050 and a 50% reduction in Scope 1 and 2 GHG emissions by 2035, using 2020 as the baseline. By leveraging our expertise and influence, we aim to drive meaningful progress across all our business units, aligning with global climate ambitions while ensuring long-term value creation for our stakeholders.

When setting targets, we considered various factors to ensure they are realistic and relevant across our business segments. These include the GHG reduction targets of our business units, the pathways available for achieving GHG emissions reductions – such as the Science Based Targets initiative ("SBTi") sectoral decarbonisation pathways or the International Energy Agency ("IEA"), national and state climate action plans, the Group's business planning assumptions, investment strategy, and other relevant considerations.

The progress of these targets are reviewed on an annual basis by the Board-level Sustainability Committee. For details, please refer to the Governance section under Section 6.3 Climate-related Financial Disclosures.

### CKI's Commitments and Targets

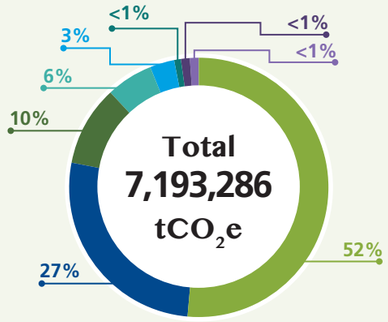
The Group's overarching goal is to decarbonise our portfolio operations and invest in critical infrastructure to facilitate the net zero transition and advance decarbonised energy systems.

This goal is supported by specific quantitative targets, including:

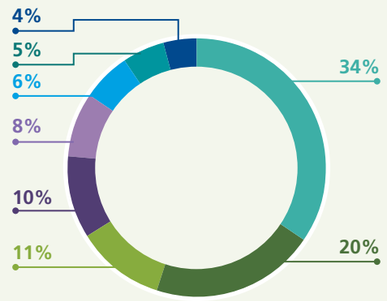
- Phasing out coal-fired generation by 2035;
- Achieving a 50% reduction in its Scope 1 and 2 GHG emissions by 2035, using 2020 as the baseline; and
- Pursuing net zero by 2050.

### GHG Emissions and Revenue Distribution

GHG Scope 1 & 2 Emissions by Key Business Segment



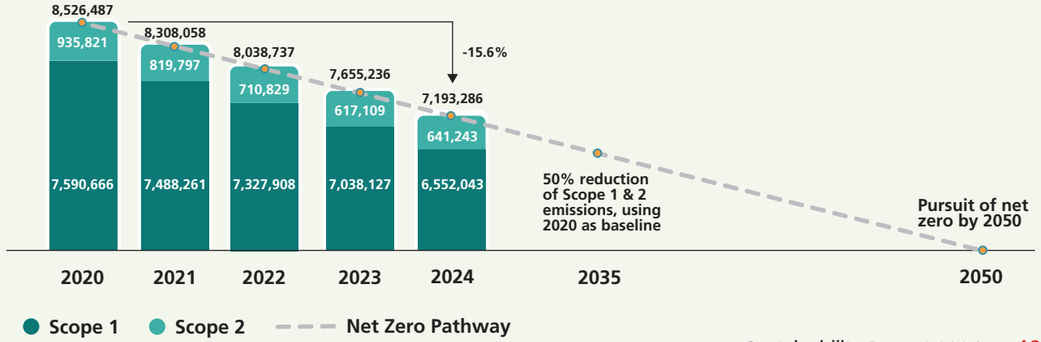

Percentage of Attributable Revenue by Key Business Segment




- Electricity Distribution
- Gas Transmission and Distribution
- Household Infrastructure
- Electricity Generation/ Clean & Renewable Energy
- Water Utilities & Services
- Waste Management
- Transportation
- Construction Materials

### Performance against Targets

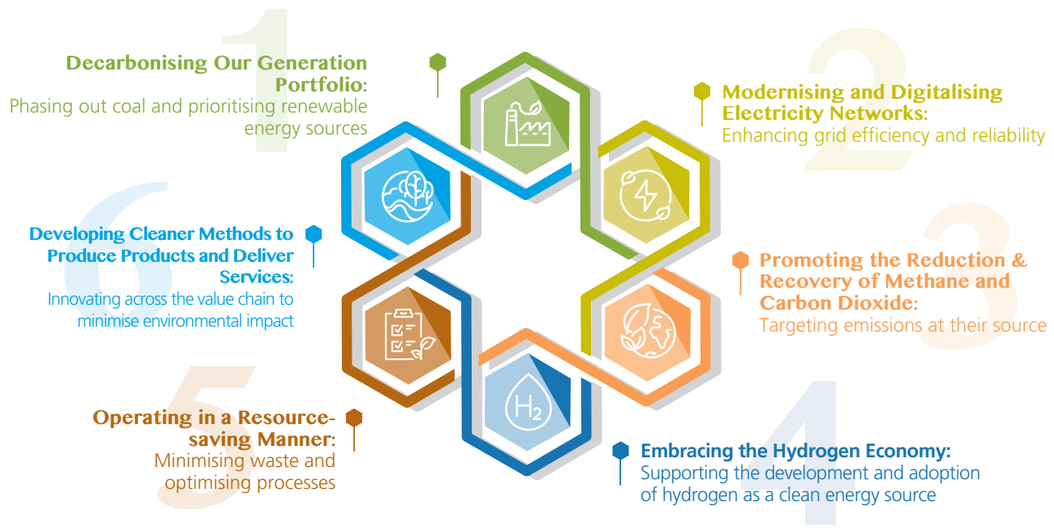
Scope 1 & 2 Emissions ($tCO_2e$), 2020-2024



# 6.1 Low-carbon Transition Plan

## Our Transition Levers

### Driving decarbonisation and operational excellence




For an enlarged version of the diagram, please refer to page 115.

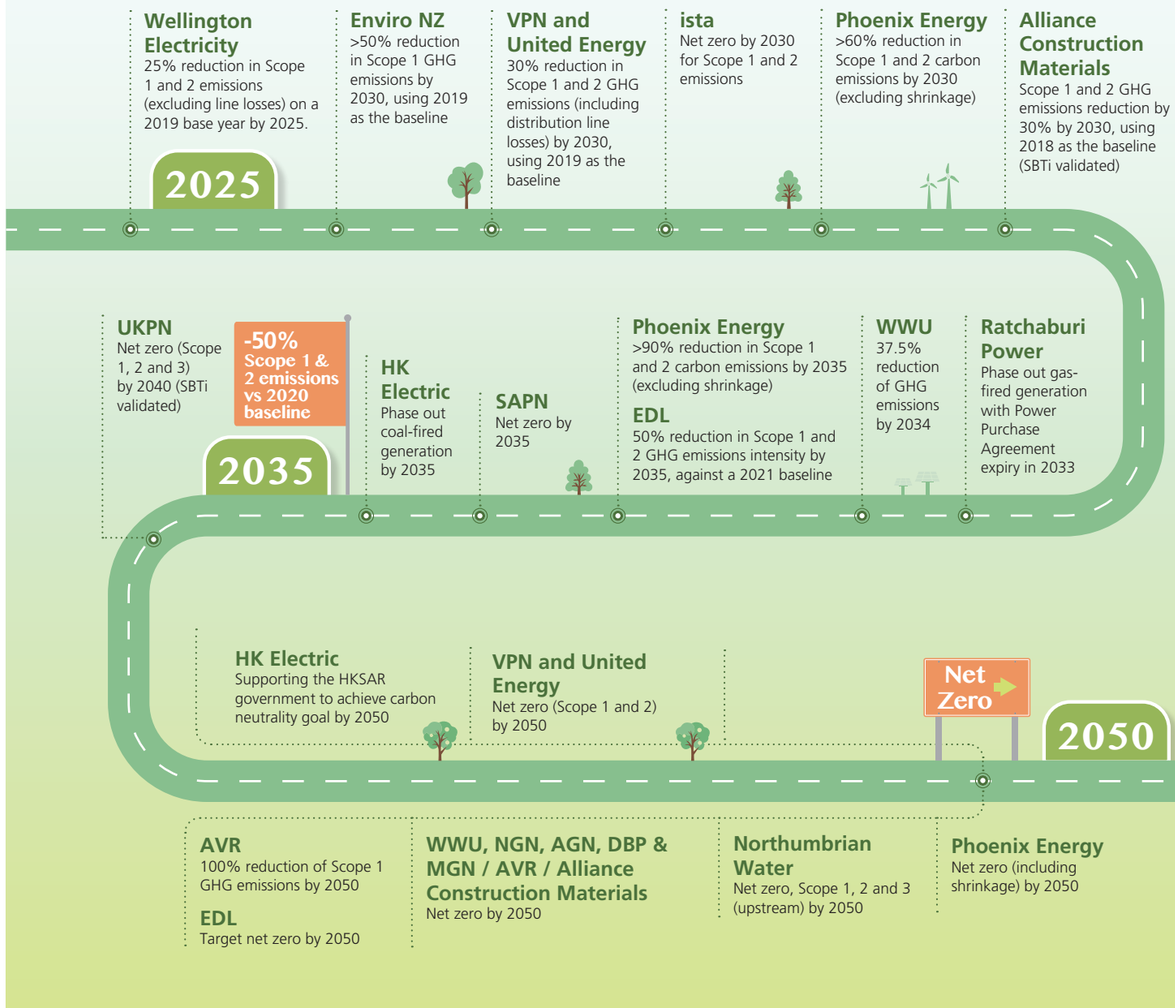
Achieving net zero emissions is a complex yet essential goal for tackling climate change. To guide this effort, the Group has identified six transition levers – strategic areas of focus designed to drive emissions reductions at their sources. By tailoring these levers to different business segments, CKI ensures a targeted approach to decarbonisation, aligning with global climate ambitions and the Group's unique operational strengths. Alongside these levers, the Group has developed a phased roadmap to ensure an orderly and effective transition. Spanning short-term, medium-term, and long-term timeframes, each business segment is tasked with achieving specific progress milestones.

We recognise the importance of engaging key stakeholders in implementing our transition plan. The Group and our business units work closely with regulators, governments, and stakeholders across the value chain to support the commercialisation of alternative energy sources and technologies, such as hydrogen, biomethane, and carbon capture. We are also committed to a just transition, ensuring that investments in infrastructure and operations create secure, inclusive jobs and provide equitable access to training and career advancement opportunities in the evolving energy landscape.

The Group is actively involved in various pilot projects and energy transition opportunities to reduce emissions across its operations. We are actively supporting our businesses to further develop their decarbonisation strategies through measures such as facility modernisation, electrification, integration of renewable energy, and other capital enhancements to align with evolving market trends. We believe that our strategic approach, paired with the diverse nature of our businesses, position us to be resilient amidst various transition pathways and equip us to seize opportunities arising from this transition.

## Our Roadmap to Net Zero

### Commitments and targets: the Group and business units




***Uncertainties:***

*The trajectory of the shift towards a net zero economy remains highly fluid, varying across sectors and geographies due to factors such as policy shifts, market conditions, technological advancements, and societal expectations. The Group acknowledges that the successful delivery of our transition plan and targets depends on these dynamic assumptions and conditions, even though a majority of the jurisdictions where our business units operate in have established national net zero target. In the face of such uncertainties, which are shared globally in addressing climate change, we believe that continued efforts and proactive contingency planning based on informed assumptions will enable us to navigate the ever-changing climate landscape effectively.*

***The use of carbon credits:***

*As technologies continue to advance, there may be new viable solutions to reduce carbon emission across the portfolio. The Group actively monitors these trends and regularly reviews our low-carbon transition plan. For hard-to-abate and residual emissions, we will consider exploring alternatives, such as the procurement of credible carbon credits and renewable energy certificates,as a last resort.*

# 6.1 Low-carbon Transition Plan

## Our Decarbonisation Strategy

### Business units contributing to transition levers across time horizons

| Transition Levers | Contributing Business Units |
|---|---|
| Decarbonising Our Generation Portfolio | HK Electric |
| | HK Electric, EDL, Canadian Power & UK Renewables Energy |
| Modernising and Digitalising Electricity Networks | UKPN, SAPN, United Energy, VPN & Wellington Electricity |
| Promoting Reduction & Recovery of Methane and Carbon Dioxide | EDL |
| | WWU, NGN, AGN & MGN |
| | Enviro NZ |
| | Northumbrian Water |
| Embracing the Hydrogen Economy | UK Rails |
| | WWU, NGN, AGN, MGN & Phoenix Energy |
| Operating in a Resource-saving Manner | Green Island Cement |
| | ista & Reliance Home Comfort |
| Developing Cleaner Methods to Produce Products and Deliver Services | Alliance Construction Material |
| | AVR |

Electricity Distribution | Gas Transmission & Distribution | Household Infrastructure | Electricity Generation

| 2025 | 2035 | 2050 |
|---|---|---|
| **Short-term (1-5 years)** | **Medium-term (5-15 years)** | **Long-term (15-30 years)** |
| **Priorities:** Reduce carbon footprint through near-term electric fleet transition and asset modernisation | **Actions:** Accelerate carbon reduction through phasing out of coal-fired generation and reducing reliance on fossil fuels | **Commitments:** Progress towards net zero operations with renewable energy and green hydrogen and other zero carbon solutions |
| Coal-to-gas transition | Phasing out coal-fired generation by 2035 | Exploring the potential applications of new technologies in renewables, hydrogen fuel, battery storage and importing zero-carbon energy |
| Expanding renewable energy portfolio | | |
| Reducing distribution line loss emissions by enabling an increased uptake of renewable energy into local electricity grids | | |
| Establishing Distribution System Operator ("DSO") capability to increase control of customer owned energy resources for network and customer benefit | | |
| Continuing to innovate and optimise network investments to support the energy transition | | |
| Capturing waste coal mine gas for electricity generation | | |
| Converting methane from landfills to renewable natural gas and electricity | | |
| Reducing emissions through replacement of old pipelines with new polyethylene pipes | | |
| Capturing landfill gas to generate electricity | | |
| Reducing methane emissions by utilising biogas generated from sludge to produce gas and electricity | | |
| Investigating hydrogen as alternative fuels for trains | | |
| | Enabling 100% renewable and carbon neutral gas connection by 2050 | |
| Using alternative fuels and raw materials to reduce reliance on fossil fuels | | |
| Facilitating customers decarbonisation by introducing energy-efficient products and green services | | |
| Replacement of truck fleet to latest EURO VI 5-axle concrete mixer trucks and promote the use of low carbon products | | |
| Expanding carbon capture and utilisation capacity at the energy-from-waste facilities | | |

Clean & Renewable Energy | Water Utilities & Services | Energy-from-waste | Waste Management | Transportation | Construction Materials

# 6.1 Low-carbon Transition Plan

## Main Contributions by Key Business Segments

### Decarbonisation progress in 2024

#### Electricity Distribution

GHG Emissions: 457,656 $tCO_2e$

Attributable Revenue: 34%

Segment KPI

| Transmission losses | Distribution losses | System Average Interruption Duration Index (from distribution) |
|---|---|---|
| 1.20% | 6.19% | 1.00 |

| | |
|---|---|
| UKPN | All electricity purchased and consumed is on a 100% renewable tariff |
| SAPN | Diverted 90% of waste from landfill |
| United Energy | Reducing line loss emissions by enabling more renewable connections; Efforts to improve solar inverter compliance have boosted new connections from under 30% in 2021 to over 90% by the end of 2024 |

#### Transportation

GHG Emissions: 5,244 $tCO_2e$

Attributable Revenue: 5%

| | |
|---|---|
| UK Rails | Working with industrial partners in the H2Steam Project to generate high pressure steam with zero carbon emission |

#### Gas Transmission & Distribution

GHG Emissions: 704,080 $tCO_2e$

Attributable Revenue: 20%

Segment KPI

Gas leakage rate[1]

0.29%

| | |
|---|---|
| AGN | More than 189 km of cast iron pipelines have been replaced with polyethylene material to reduce gas leakage; HyP SA increased hydrogen blending from 5% to 10% (by volume), while production of hydrogen commenced at HyP Gladstone |
| NGN | 8% reduction in gas leakage compared with 2023, attributed to effective pressure control and pipeline replacement programme |
| WWU | 82% of the Low Pressure and Middle Pressure network has been upgraded to hydrogen-ready Polyethylene pipeline by the end of 2024 |
| Phoenix Energy | 99% of electricity purchased comes from renewable sources |

#### Water Utilities & Services

GHG Emissions: 62,123 $tCO_2e$

Attributable Revenue: 8%

| | |
|---|---|
| Northumbrian Water | 110 GWh of biomethane captured and exported from wastewater treatment, transforming operational waste to useful energy |

#### Waste Management

GHG Emissions: 240,093 $tCO_2e$

Attributable Revenue: 6%

| | |
|---|---|
| AVR | The plant in Duiven captured around 37,000 $tCO_2e$ for reuse in the greenhouse horticultural sector |
| Enviro NZ | The Pokeno timber processing facility diverted over 14,000 tonnes of timber from landfill to further process into biofuel for replacing coal used in cement production |

#### Electricity Generation / Clean & Renewable Energy

GHG Emissions: 3,726,339 $tCO_2e$

Attributable Revenue: 11%

Segment KPI

GHG emissions intensity of generation

0.49 $kgCO_2e/kWh$

| | |
|---|---|
| HK Electric | Commissioning of new gas-fired generating unit L12, reducing coal-fired generation from 44% to 32% |
| EDL | Expanded Byron Center landfill gas power station in Michigan, with renewable electricity generation capacity raised from 3.2 MW to 4.8 MW. EDL's total avoided emissions for the year amount to 3.55 MtCO2e, equivalent to the emissions of approximately 1.1 million passenger vehicles over the course of a year |

#### Household Infrastructure

GHG Emissions: 6,436 $tCO_2e$

Attributable Revenue: 10%

| | |
|---|---|
| ista | Accelerating decarbonisation by increasing purchase of energy from renewable sources, 76% of energy needs in ista are from green electricity |
| Reliance Home Comfort | Recycled 75% of residential and commercial waste |

#### Construction Materials

GHG Emissions: 1,948,101 $tCO_2e$

Attributable Revenue: 4%

| | |
|---|---|
| Alliance Construction Materials | Completed a one-year trial on the E-concrete mixer truck in Hong Kong, with positive feedback received |
| Green Island Cement | Sales of low carbon cementitious materials increased 10% compared with 2023 |

Note:
(1) Gas leakage rate includes Venting, Fugitive, Pneumatic and unburnt gas loss.

# 6.2 Sustainable and Responsible Investment

As the world advances towards a zero-carbon economy, the scale of sustainable investment required in sustainable infrastructure and innovative technologies is immense. As a global infrastructure company, the Group's extensive experience in sustainable investments and operations positions us to realise value and capitalise on opportunities during this pivotal time. At the core of our strategy for sustainable value creation, the Group operates with a deep commitment to ESG principles, integrating them into the heart of our operations and investment decisions.

## Embedding ESG considerations into our investment process

At the Group level, we integrate sustainability criteria into all new investment decisions to achieve competitive and strategic advantages. By evaluating both financial performance and non-financial factors, we enhance shareholder returns while reducing risks and generating meaningful positive impacts for society and the environment.

Our rigorous, four-stage investment approach integrates ESG considerations, including climate-related factors, throughout the entire investment life cycle. This process is guided by robust governance:

- When making investment decisions, ESG factors are considered in accordance with investment mandates and sector-specific context;
- The Sustainability Committee reports directly to the Board, highlighting ESG impacts and ensuring alignment with the Group's long-term strategy.

### ESG factors in evaluating potential investments

To ensure a more thorough evaluation of potential investments and acquisitions, we incorporate a range of relevant non-financial criteria into our assessment process. These factors include:

- Compliance with legal, regulatory, and ESG-related obligations and standards
- Current and potential physical climate risks, along with mitigation strategies
- Impacts and opportunities related to the energy transition
- Land use and biodiversity considerations
- Energy consumption and carbon emissions
- Water resource management
- Waste management practices
- Labour relations
- Operational performances such as health and safety records
- ESG commitments and targets

Given the diverse nature of investment and acquisition opportunities, relevant ESG factors are duly evaluated. The list of factors is neither definitive nor exhaustive and is regularly reviewed and updated to ensure informed decision-making by management.

## Implementing ESG in post-investment management

We believe that effectively managing ESG factors enhances investment returns. In the post-investment management phase, our approach combines local expertise and accountability with our broader investment and operational experience to manage diverse assets across jurisdictions. Local management teams of business units are responsible for addressing sustainability risks and opportunities throughout the asset operation process, supported by the Group-level management team. This structure enables the implementation of sustainability initiatives, the sharing of best practices and the deployment of necessary remediation measures.

### ESG Integration into our Investment Process


**Investment Screening**

Monitor sustainability and energy transition trends, and identify potential acquisition targets

**Monitoring Industry Trends:** Regularly monitoring ESG trends and regulations that may affect the infrastructure industry.

**Identifying Acquisition Targets:** Identify assets or businesses that align with our investment mandate for long-term, stable returns, while also considering ESG factors, including investments that the Group avoids or excludes.

**Pre-investment Due Diligence**

Assess ESG risks and ensure compliance

**Assessing ESG Risks:** Identifying any environmental impacts and regulations, social concerns, and governance issues that could affect the investment's performance.

**Evaluating Compliance:** Ensuring the potential investment adheres to relevant ESG-related laws, regulations, and standards.

**Investment Decision-making**

Integrate ESG factors in business analysis for investment decisions

**Integrating ESG into Business Analysis:** Assessing how ESG factors may affect business strategy and could impact the financial outcomes, including potential costs, savings, or revenue drivers.

**Weighing ESG Factors:** Giving appropriate consideration to material ESG issues in the investment appraisal and selection process.

**Post-investment Management**

Enhance ESG performance through monitoring and engagement

**Reporting and Monitoring:** Regularly tracking ESG performance and reporting on progress against ESG objectives and metrics; incorporating ESG topics into the agendas of ongoing Committees under Board supervision for enhanced oversight and strategic integration.

**Active Engagement:** Working with the management of invested entities to improve their ESG performance, leveraging the ESG experience and best practices across business units to foster a culture of sustainability and responsibility.

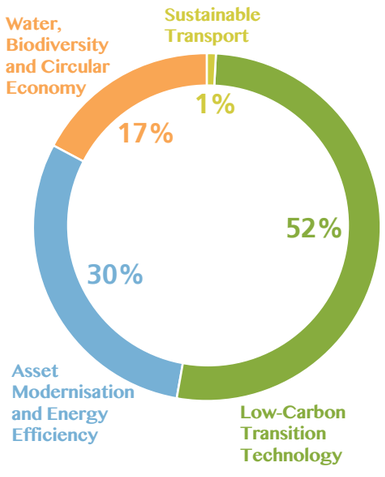
# 6.2 Sustainable and Responsible Investment

## Mobilising capital to a net zero economy

In response to the pressing challenges of climate change, sustainable investments are a cornerstone of our strategic and economic planning. Across our business units, we are directing substantial capital and operating expenditures to projects that deliver long-term environmental benefits, drive efficiency, and align with global sustainability goals.

In 2024, the Group and its business units allocated approximately HK$15.2 billion in capital and operating expenditures to comprehensive sustainability programmes, marking a 63% increase compared to the previous year. These expenditures were directed toward four key areas: low-carbon transition technology, asset modernisation and energy efficiency, sustainable transport, and water, biodiversity, and the circular economy. The targeted capital deployment demonstrates a coordinated effort across the Group and portfolio levels to implement our low-carbon transition plan and strengthen the climate resilience of our assets.

**Total Spending on Sustainable Activities in 2024: HK$15.2 billion**




### Low-Carbon Transition Technology

Capex 86% Opex 14%

Investments are aimed at renewable energy deployment, coal-to-gas transition, grid connectivity for green sources, carbon capture innovations, bioenergy development, and smart grid upgrades to optimise energy distribution.

### Asset Modernisation and Energy Efficiency

Capex 89% Opex 11%

Investment in asset modernisation and integrity is being prioritised to enhance energy efficiency, reduce environmental impact, and uphold the reliability and safety of operational procedures.

### Water, Biodiversity and Circular Economy

Capex 80% Opex 20%

Our capital is directed towards a comprehensive approach that encompasses sustainable water management, active preservation of biodiversity within ecosystems, and circular economy principles.

### Sustainable Transport

Capex 73% Opex 27%

Projects focus on transitioning to electric transport, expanding electric vehicle ("EV") infrastructure, and promoting eco-friendly urban mobility.

## Reviewing 2024 Acquisitions Through a Sustainability Lens

In 2024, the Group made three strategic acquisitions that align with our commitment to sustainability and energy transition. The acquisitions and their underlying sustainability contributions are described below:

### *Phoenix Energy*

Phoenix Energy operates a gas distribution network covering approximately 900,000 people across Greater Belfast in Northern Ireland, the United Kingdom. In addition to the stable returns provided within the established regulatory framework, the Group was drawn to Phoenix Energy's significant role in advancing decarbonisation for Northern Ireland. With 57% of heating energy demand in Northern Ireland currently reliant on oil heating, Phoenix Energy supports household decarbonisation by offering natural gas, which emits approximately half the carbon emissions of oil heating. Furthermore, over 99% of the pipelines in the network are made of High Density Polyethylene material, positioning the infrastructure to support the distribution of green gases, such as biomethane or hydrogen, once they become commercially viable.

### *UK Renewables Energy and Powerlink Renewable Assets*

The UK Renewables Energy includes 32 onshore wind farms located in England, Scotland, and Wales, with a total installed capacity of 175 MW. Alongside this, Powerlink Renewable Assets consists of a 69 MW portfolio of renewable assets in the United Kingdom, which includes 65 solar photovoltaic installations, four onshore wind farms, and one hydropower plant. This acquisition was made through our business unit, UKPN. Together, these acquisitions contributed to the increase in the Group's renewable energy capacity to 754 MW, reinforcing the Group's commitment to expanding our renewable energy portfolio and advancing the transition to a sustainable, low-carbon future.

# 6.3 Climate-related Financial Disclosures

Building on our commitment to climate action, we have been enhancing our climate-related financial disclosures. This section outlines how our climate-related financial disclosures are consistent with the TCFD Recommendations. During 2022-2023, we identified the climate-related risks and opportunities that our Group may encounter and undertook our inaugural climate scenario analysis to assess the potential impacts of these factors on our operations. The outcomes and insights from the climate scenario analysis were reviewed by the Board-level Sustainability Committee and published in March 2024. During this reporting period, the Group reviewed the scenario analysis results and determined that there were no material changes to the findings.

The insights gained from the scenario analysis help inform our strategy and decision-making processes. Our efforts to continuously evaluate and adapt our strategy have revealed new opportunities in the context of a changing climate. This section includes our climate-related financial disclosures, categorised into four thematic areas: Governance, Strategy, Risk Management, and Metrics and Targets. These reflect our unwavering dedication to responsible and strategic climate resilience. We seek to continuously improve and refine our processes to respond to stakeholders' expectations and align with industry standards and best practices.

## 6.3.1 Governance

We have long recognised climate change as a principal risk to our business. Climate-related risks and opportunities have firmly been one of the key topics in our corporate governance and have been included in our business planning and decision-making, enabling effective stewardship and execution of our strategy and objectives. Governance of climate-related issues follows our overall ESG governance framework, as described in Section 5.2 Sustainability Governance. The Board and management provide oversight over the Group's climate change approach, risks and opportunities, as outlined in the Climate Governance Structure diagram.

Our board has the essential skills and knowledge to effectively oversee CKI's business strategy and resilience, which includes the consideration of climate-related risks and opportunities. The Remuneration Committee, in assessing remuneration proposals, has taken into account the progress of the Company's performance towards achieving short and long term climate-related sustainability metrics and targets as adopted by the Company and the progress towards other matters, such as climate and environment, and health and safety, against such applicable metrics and targets.

In 2024, the Sustainability Committee convened two meetings, both of which focused on climate strategy, targets, and the management of climate-related risks and opportunities. Topics discussed included a review of the new IFRS S2 (Climate-related Disclosures) issued by the ISSB and adopted by the HK Stock Exchange's ESG Code, as well as the potential impact of these disclosures on the Company's business model, value chain, and strategy. The timing for the applicability of the HK Stock Exchange's new climate-related disclosure reporting requirements to CKI is provided in Section 1 About this Report. The Committee also reviewed the Group's progress in 2024 towards its sustainability and climate-related targets, along with sustainability-related issues, trends, and best practices.

To enhance the Board's expertise in climate-related matters, we engage external advisors to provide climate-focused training. Additionally, we strengthen internal sustainability capabilities by organising initiatives such as internal conferences and knowledge-sharing sessions. Please refer to Section 5.2 Sustainability Governance for details.

### CKI's Climate Governance Structure

**The Board**

- Defined clear authority and oversight mechanisms for assessing and managing climate-related risks and opportunities
- Takes into account the importance of climate change impacts when overseeing the Group's growth and adaptation strategies

**Sustainability Committee**

Reports to the Board

- Oversees the Group's climate-related business strategies and performance
- Oversees the development and progress of climate-related targets on an annual basis
- Provides guidance on the development and implementation of sustainability initiatives, encompassing climate governance, strategy, planning, and risk management

**Audit Committee**

Reports to the Board

- Assists the Board in monitoring climate-related risks
- Oversees the material climate-related risks
- Oversees the level and effectiveness of key controls in place to manage the climate-related risks

Top-down strategy

Bottom-up information flow

**Sustainability Working Group**

Executive management leadership in climate strategy and implementation

- Implements and tracks the Group's sustainability strategies, with the support of business units' management
- Assesses climate-related risks and opportunities and integrates the results into the broader annual enterprise risk assessment to ensure ESG-related risks – including physical and transition climate risks – are considered in the Group's strategic decision-making processes
- Provides regular updates to the Sustainability Committee to ensure a cohesive approach to the Group's sustainability and climate governance efforts

# 6.3 Climate-related Financial Disclosures

## 6.3.2 Strategy

Our commitment is in step with the worldwide urgency for decarbonisation, and we aspire to support the net zero carbon goals set by various jurisdictions in which the Group operates. Realising this ambition will demand substantial financial resources, a transformative approach to asset management, and supportive governmental policies and regulations. We are poised to contribute our operational and investment expertise to executing practical decarbonisation strategies that will prepare businesses for the future economy.

In guiding our business units through this transition, our sustainability objectives direct us to maintain a balance between our duty to generate enduring value for our investors and stakeholders and the responsible conduct of our business operations. Our strategy remains to invest in assets and businesses with the potential for stable and expanding cash flows over time. We are confident that with prudent management and oversight, which includes preparing them for a lower-carbon future, the value of these assets is likely to increase over time.

The Group has established a low-carbon transition plan to guide our business operations in reducing emissions in line with our GHG emission reduction targets. In 2024, we allocated approximately HK$15.2 billion towards sustainable and climate-related activities. For details, please refer to Section 6.1 Low-carbon Transition Plan and Section 6.2 Sustainable and Responsible Investment.

### Our approach to scenario analysis

The Group takes a proactive approach to anticipate and manage climate-related impacts on our businesses which includes building climate resilience into the core of our strategy and operations. We use climate risk assessment, including scenario analysis, to identify events that can potentially affect our business operations or be a business opportunity. We engaged an external advisor to assist with the risk modelling and provide the assumptions that underpin our scenario analysis, ensuring our approach is both thorough and informed.

Climate-related scenario analysis serves as a valuable tool to understand potential business performance under various future states, helping organisations to develop an understanding of the possible impacts of physical and transition risks and opportunities over time, and to shape strategic responses.

A scenario outlines a development pathway leading to a specific outcome, focusing on key elements and drivers of possible future scenarios rather than offering a comprehensive prediction. These scenarios are hypothetical constructs – they are neither forecasts nor predictions, nor are they sensitivity analyses. Consequently, scenario analysis is not meant to be seen as forecasting the expected future of the Group's operations or as an indicator of anticipated operational results. Investors should not rely on these scenarios as definitive representations of future performance or outcomes in making investment decisions, as these scenarios are intended to serve as exploratory tools within a broader strategic evaluation.

### Climate Scenario Analysis Process

**Determine scope and boundaries**

We identified the businesses most critical to the Group in terms of financial contributions. The analysis led us to select nine business units, accounting for over 70% of the Group's Earnings Before Interest and Tax ("EBIT") and total asset values, for the scenario analysis. These selected business units include electricity and gas transmission and distribution businesses, water utilities and transportation businesses, whose industries could be profoundly impacted by climate change.

**Prioritise risks and opportunities**

We adopted a structured approach to prioritise the list of most significant climate-related risks and opportunities for the selected business units by evaluating the likelihood and potential impact of climate-related events on their value chains. This review considered the business units' potential revenue and cost exposures, as well as their adaptability to climate-related impacts.

**Select scenarios and parameters**

The selection of scenarios includes a 4°C pathway (the "Business-as-usual Scenario") and a 1.5°C pathway (the "High-transition Scenario"). The Business-as-usual Scenario considers how the economy could look in the absence of new climate policies beyond those in place today. Meanwhile, the High-transition Scenario stimulates a potential future pathway for the economy assuming the successful introduction of climate policies.

**Perform scenario analysis**

| Physical Risks | Transition Risks & Opportunities |
|---|---|
| Analysed the exposure to six extreme weather hazards over time, based on the region and segment, under the two climate scenarios. | Modelled the potential changes to various macroeconomic variables over time, based on the region and segment, under the two climate scenarios. |

**Assess business resilience**

| Physical Risks | Transition Risks & Opportunities |
|---|---|
| Considered the potential impacts of business interruptions and site damages from extreme weather hazards. | Considered the potential impacts of transition risks and opportunities due to changes to the macroeconomic variables. |

# 6.3 Climate-related Financial Disclosures

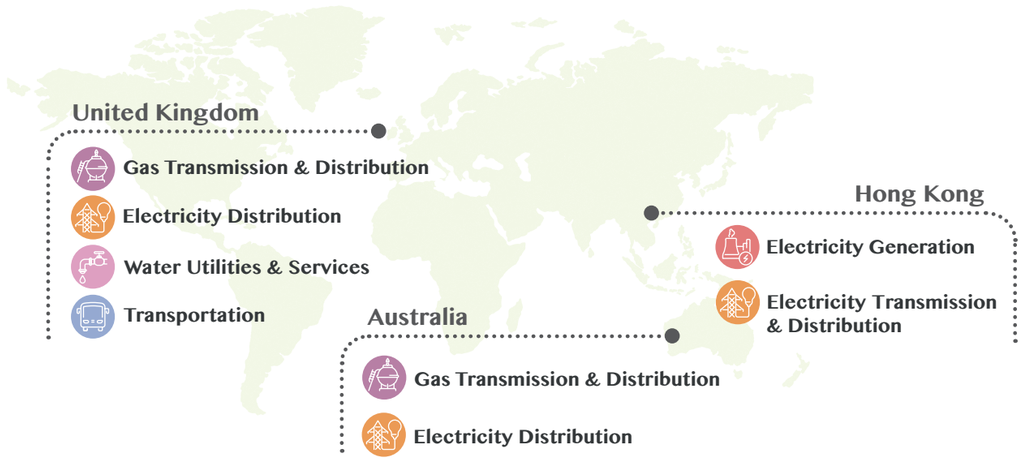
## Scope, assumptions and time horizons

Our scenario analysis began by identifying the businesses which are the most critical to the Group in terms of financial contributions. This was achieved by considering the contribution of each business unit to the EBIT and total assets of the Group. We also took into account strategic importance to ensure comprehensive coverage of the majority of the financial value at risk, as well as a diverse range of business segments and geographical locations. Following the financial materiality review and strategic considerations, five business segments spanning three geographical regions were selected for the scenario analysis. These selected operations account for over 70% of the Group's EBIT and total asset values.

To inform strategy, we used two scenarios to 2050 to assess the resilience of our businesses against inherent uncertainty. In line with the TCFD Recommendations and the Paris Agreement's goal to hold global temperature increase to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels, we selected two climate scenarios to evaluate the resilience of our business strategy. The first is a high-emissions (or business-as-usual) pathway (4°C scenario), and the second is a stringent pathway striving to achieve a lower-carbon economy (1.5°C scenario). These scenarios provide a basis for assessing both physical and transition risks, consistent with the TCFD's requirement to consider an organisation's resilience under different climate-related scenarios, including those limiting warming to 2°C or lower. This approach supports the Group in understanding how key value drivers of our businesses may be impacted under different future states. CKI uses proprietary climate models underpinned by data sources from the IEA, Intergovernmental Panel on Climate Change ("IPCC"), and other organisations.

Using 2021 as the base year, our scenario analysis assessed the magnitude and potential impact of each item and how they may materialise over different time horizons: short-term (1-5 years), medium-term (5-15 years), and long-term (15-30 years). These time horizons are chosen to align with our internal actionable planning timeframes and to reflect the long-lived nature of our infrastructure assets.

### Scope and boundaries selected for scenario analysis




## Scenario Assumptions and Underlying Data Sources

| | 4°C Business-as-usual Scenario | 1.5°C High-transition Scenario |
|---|---|---|
| **Parameters assumptions** | | |
| Decarbonisation trends | Emissions continue to increase in line with the current business-as-usual pathway | Global decarbonisation trajectory in line with achieving the Paris Agreement which sets out a target to limit global warming to well below 2°C and ideally 1.5°C |
| Policy expectation | Current regulatory framework remains in place, with government or state intervention on climate change maintaining its current levels | Current regulatory framework would effectively continue with additional emission reduction measures implemented by the government to achieve the global 1.5°C target |
| Physical impacts | Likely increased severity and frequency of climate change-related weather events | Reduced likelihood of severe climate change-related weather events |
| GDP growth | GDP continues to grow in line with historical trends | Most economies continue to see GDP growth, but at a slower rate, as efforts to meet the global 1.5°C target led to a diversion of resources away from other productive activities |
| Electricity demand | Relatively consistent with current levels | Policy support for EVs and the substitution of gas is driving an increase in consumption, with this growth being partially offset by energy savings from improved energy efficiency and consumer investments in distributed energy systems |
| Gas demand (fossil fuel sources) | Relatively consistent with current levels | Relatively stable consumption in the short-term, but a sharp decline is anticipated beginning by 2030 due to the phase out of natural gas |
| Carbon pricing | No carbon pricing | Carbon prices remain low until 2030, after which the rapid implementation of climate policies leads to very high global carbon prices in all jurisdictions over the long-term |
| Fuel price | No further policy action and thus only moderate movements in fuel prices | Fuel prices will rise more drastically, largely driven by aggressive carbon policies |
| Labour price | Increase steadily in line with historical trends | Labour demand and prices are impacted by economic constraints |
| **Climate models used and underlying data sources** | | |
| Physical | Proprietary physical risk model<br>• Emission models with CMIP5 projection data are utilised to conduct asset stress testing under two distinct scenarios – a higher emission, business-as-usual scenario consistent with the current global trajectory (RCP8.5), and a lower emission trajectory (RCP2.6). | |
| Transition | Proprietary macroeconomic model<br>• A global economic model which incorporates an analysis of the potential carbon emissions of economic activities and the potential consequential impact of constraining emissions from different activities on macroeconomics with data sources from market leading and industry approved providers, including IEA, International Institute for Applied Systems Analysis (IIASA) shared socioeconomic pathway database, Model for the Assessment of Greenhouse Gas Induced Climate Change (MAGICC), Joint Research Centre (JRC) Global Energy and Climate Outlook reports, and Global Trade Analysis Project databases. These aspects constitute an Integrated Assessment Model which draws upon climate science as established by the IPCC. | |

# 6.3 Climate-related Financial Disclosures

## Assessment outcomes

The material climate-related risks and opportunities were identified as shown in the table on the next page. These material risks and opportunities were then subject to different climate outcomes to determine their implications under different climate scenarios. The assessment results indicate their potential impacts on our financial planning, such as the impact of physical risks on our asset value over various time horizons. The assessment results do not consider mitigation strategies, such as decarbonisation plans, structural reinforcements, emergency response plans, and other relevant initiatives, in place at the business unit level and, as such, post-mitigation risk levels are generally likely to be lower.

## Potential effects of physical risks

Climate change is expected to increase both the frequency and severity of extreme weather events, such as floods and forest fires (acute risks). It is also expected to result in more gradual shifts, such as extreme wind and extreme heat (chronic risks). These hazards could potentially cause significant business disruption and asset damage, leading to a loss of revenue.

To evaluate these physical risks, we mapped our assets to their respective primary business segments and regions. In partnership with an external physical risk specialist, we performed an analysis of our exposure to a range of perils over time under two climate scenarios. For each scenario and type of risk, we reported the anticipated financial effects from asset damage caused by our exposure to the physical impacts of climate change in a heatmap on the next page.

## Potential effects of transition risks and opportunities

The development of new renewable or alternative energy sources, along with critical infrastructural support, is essential for the net zero transition and to meet escalating future energy demands. As a global infrastructure company, CKI is anticipated to progressively develop and implement comprehensive carbon reduction strategies and climate adaptation measures across both the Group and business unit levels. Inaction in this area could lead to rising operational costs, undermine business strategy effectiveness, and result in non-compliance with evolving regulations, among other potential risks.

However, the shift towards a more sustainable future will also unlock opportunities. Proactive management of transition risks and opportunities enhances the Group's capacity to foresee and adapt to imminent changes. There are chances to decrease operational costs for business units and enhance their responsiveness to evolving market demands. To assess these transition risks and opportunities, we project adjustments to key macroeconomic indicators under selected climate scenarios and analyse their effects on the financial performance of our strategically significant businesses over time.

In the context of assessing transition risks, the 4°C scenario serves as a 'business-as-usual' benchmark, representing a future where current trends in emissions continue without significant changes in policy or behaviour. However, the core focus of our transition risk assessment is on the 1.5°C scenario. This scenario is more ambitious and reflects the goals outlined in the Paris Agreement to limit global temperature rise. While current global policies evolve and may not fully align with these commitments, the 1.5°C scenario provides a benchmark for evaluating the potential risks and opportunities associated with a transition to a lower-carbon economy and aligns with the long-term objective of limiting global warming.

For details of the potential effects of physical risks and transition risks and opportunities, please refer to the heatmaps on the subsequent pages.

## Material Climate-related Risks and Opportunities

| Type | Climate factor | Description |
|---|---|---|
| **Physical risks** | | |
| Acute/Chronic | Coastal inundation | Sea water flooding due to high tides, wind, low air pressure and waves caused by hurricanes and typhoons can damage coastal land, infrastructure, and buildings. |
| Acute | Surface water flooding | Surface water flooding can damage buildings or infrastructure assets. Increased frequency of extreme rainfall also leads to overland flooding. |
| Acute | Riverine flooding | Riverine flooding can damage low-lying buildings or infrastructure assets. Changes in precipitation in a catchment also cause a river to exceed its capacity, inundating nearby areas. |
| Chronic | Extreme wind | Changes in wind regimes, sea surface temperature and wind speeds. High-wind conditions may exceed a building's design specifications. |
| Acute/Chronic | Extreme heat | Business operations may be disrupted due to heat waves or equipment malfunctioning when their design temperature is exceeded. |
| Acute | Forest fire | A destructive fire that spreads via trees and forest. Flames and heat from burning vegetation can damage buildings and infrastructure. |
| **Transition risks** | | |
| Market/ Technology | Changing Demand for Electricity from the Grid | Reducing electricity consumption in an aggressively transitioning world and introducing solar panels as a local electricity source will reduce demand for electricity from the grid. This may be offset by other factors, such as the transition away from gas as a fuel source. |
| Market/Regulation/ Reputation | Changing Demand for Gas | Limiting global temperature increases to 1.5°C requires a significant reduction in gas consumption as an energy source as an interim measure. The above is likely to be driven by changing social attitudes, economic activities, and governmental policies, reducing demand due to surge in gas prices, and introducing other zero-carbon gases, e.g., biomethane and hydrogen. |
| Market | Increasing in Operational Expense | Operational expenses, e.g., fossil fuel and labour costs, may change due to resource scarcity, changes in market needs, carbon price implications, and revamp in the fuel mix and technological innovation. |
| Policy and Legal | Introduction of Carbon Taxes | Carbon tax mechanisms are often introduced to the market due to heightened carbon emission objectives. This mechanism will likely be instigated in markets where carbon markets do not currently exist, which could impact all organisations with a significant quantity of Scope 1 emissions. |
| Market | Increasing Prices of Raw Materials | Supply-side disruptions could significantly impact raw material costs, which drive up supply chain costs for each business unit. The increase in prices of raw materials may have a flow on effect on the costs of procurement activities. |
| **Transition opportunity** | | |
| Market/ Technology | Increasing Demand for Zero-Carbon Energy | Fossil fuel will be significantly offset by the increasing demand for energy from renewable energy sources in electricity generation. Increased demand for green gas sources like green hydrogen and new technologies to meet growing low-carbon distribution networks and demand for EV infrastructure will also present new business opportunities. |
| Market/ Technology | Increasing Demand for European Rail Transport | Increasing economic activity in Europe in a low-carbon environment could drive demand for new trains up, as could people turning away from highly carbon intensive modes of transport such as aviation. |

# 6.3 Climate-related Financial Disclosures

## Potential Financial Effects of Physical Risks on Business Model and Value Chain

### Potential effects on business model

Coastal and riverine flooding is a material risk to UK-based assets. Such flooding could cause physical damage, leading to significant repair costs or insurance claims to restore operations. Other assessed risks did not show material levels of risk. It should be noted that the modelling for extreme wind does not explicitly account for cyclonic winds, which could also disrupt operations and damage assets, considering the historic windstorms that have occurred in the UK.

Electricity distribution and water utilities & services are particularly vulnerable to flooding. Rising sea levels, overflowing rivers, and accumulated rainfall could lead to severe water ingress into critical electrical infrastructure and ground-mounted transformers. This water ingress could cause equipment damage and result in loss of power supply to customers.

Australian-based assets have risk exposure to coastal and riverine flooding, extreme heat, and forest fires, all of which can interrupt business operations. Physical damage from these events may require significant repair costs or insurance claims to resume operations.

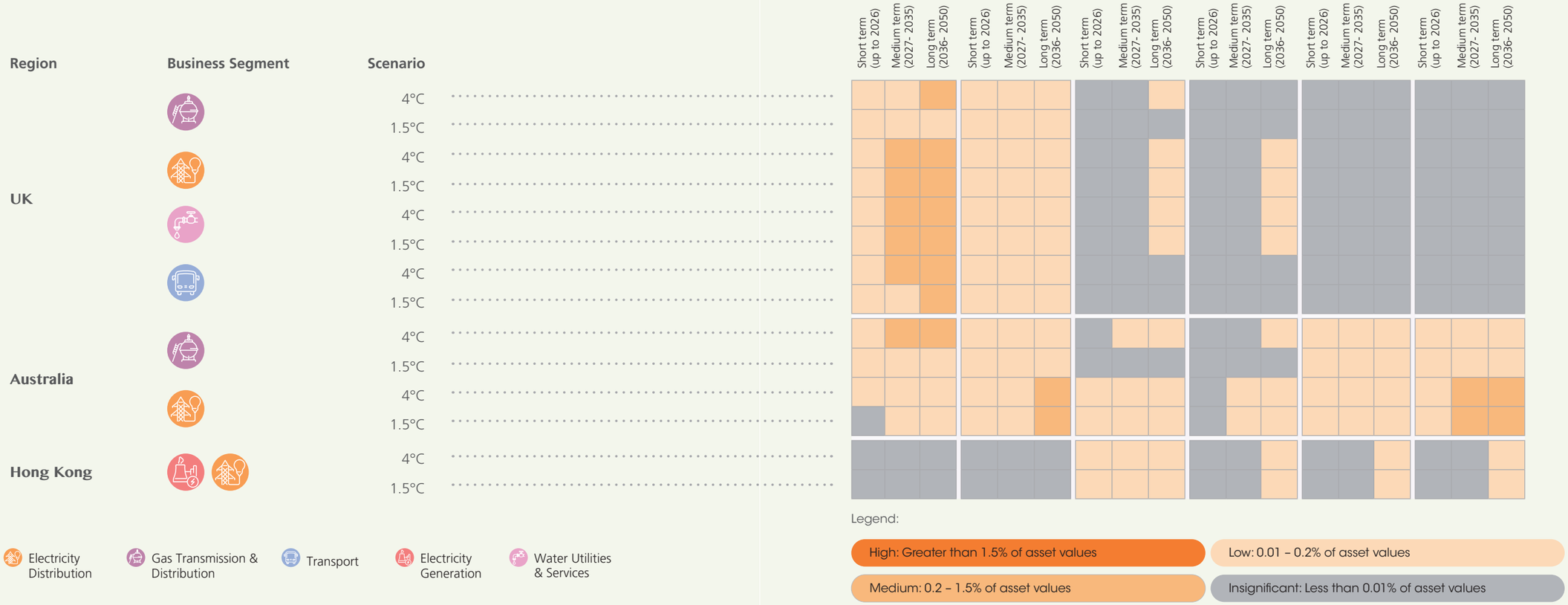
Electricity distribution is vulnerable to forest fires compared to other segments. In contrast, gas infrastructure, being predominantly underground, has greater resilience to climate risks and is less affected by external factors.

### Potential effects on value chain

The increasing frequency and intensity of climate-related events pose significant challenges to the value chain. Severe weather could lead to supply chain disruptions, financial losses, and heightened customer complaints. Delays in restoring service could further diminish customer satisfaction, highlighting the need for resilience in operations. The risks associated with climate events could also lead to higher maintenance costs and increased insurance premiums, further straining operational budgets.

Local communities could suffer from climate-related impacts, which may strain relationships between energy utilities and stakeholders. Such strains could complicate efforts to secure public support for projects and damage our utilities' reputation if communities feel overlooked during crises. Furthermore, climate stress could accelerate the deterioration of physical assets, like power plants and transmission lines, leading to increased maintenance costs and reduced reliability.

Finally, a lack of proactive measures to address climate risks could erode trust among stakeholders, including investors, regulators, and customers. If stakeholders perceive that our operations are unprepared for climate challenges, it could result in decreased investment, regulatory scrutiny, and lower customer loyalty. Addressing these physical climate risks is crucial for our operations to maintain the integrity of their value chain and ensure long-term business resilience.



# 6.3 Climate-related Financial Disclosures

## Potential Financial Effects of Transition Risks on Business Model and Value Chain

| Risk / Opportunity | Business Segment | Region | Scenario | Short term (up to 2026) | Medium term (2027-2035) | Long term (2036-2050) | Key Observation | Potential effects of transition risk / opportunity on business model | Potential effects of transition risk / opportunity on value chain |
|---|---|---|---|---|---|---|---|---|---|
| Changing Demand for Electricity from Grid | Electricity Distribution | UK | 4°C | | | | The 1.5°C scenario sees a higher growth in revenue / permitted returns due to investment in new infrastructure to support the increasing demand for green electricity. | • Revenue growth due to increasing electricity demand from the grid and higher capital investments permitted under the regulatory frameworks. | • High costs of digital technologies may create inequalities and vulnerabilities for some customers<br>• Shifts in consumer behaviour toward sustainable energy consumption can alter demand patterns<br>• Green electricity growth requires infrastructure investment<br>• Potential for lower costs and greater consumer control<br>• Opportunities for innovation and technology advances |
| | | | 1.5°C | | | | | | |
| | | Australia | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| | Electricity Distribution & Gas Transmission & Distribution | Hong Kong | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| Changing Demand for Natural Gas | Gas Transmission & Distribution | UK | 4°C | | | | This is a key risk for the business units which generate revenue from gas distribution as the results indicate a sharp decline in demand for natural gas under a 1.5°C scenario. | • Revenue impact due to operational changes such as downsizing capacity or altering the operation of existing facilities | • Customers transitioning from natural gas to electricity due to increased EV adoption and reduced use of gas for heating, hot water, and cooking<br>• Switching from gas to electricity may result in higher energy costs<br>• Increasing public and political pressure to adopt sustainable practices |
| | | | 1.5°C | | | | | | |
| | | Australia | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| Increasing Fuel Costs | Electricity Distribution & Electricity Generation | Hong Kong | 4°C | | | | Fluctuations in fuel prices significantly affect the business units that consume high volumes of gas and electricity. For the electricity generation and transmission business in Hong Kong, despite a similar upward trend in total fuel costs, as the prices for coal, gas, and oil are anticipated to rise more rapidly under the 1.5°C scenario, these costs are expected to taper off after 2035 with the phase out of coal and the introduction of renewable power. | • Increases in operating expenses[1] | • Increasing energy costs for customers<br>• Potential supply chain disruption<br>• Growing investment in alternative energy |
| | | | 1.5°C | | | | | | |
| | Water Utilities & Services | UK | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |

Legend:
Increasing opportunity — Insignificant risk — Increasing risk

# 6.3 Climate-related Financial Disclosures

| Risk / Opportunity | Business Segment | Region | Scenario | Short term (up to 2026) | Medium term (2027-2035) | Long term (2036-2050) | Key Observation | Potential effects of transition risk / opportunity on business model | Potential effects of transition risk / opportunity on value chain |
|---|---|---|---|---|---|---|---|---|---|
| Increasing Labour Costs | Electricity Distribution, Gas Transmission & Distribution, Transport, Water Utilities & Services | UK | 4°C | | | | Given the diversity of labour market behaviour across regions, it is likely that economies will experience differing trajectories of rising labour costs.<br><br>In Australia and Hong Kong, labour costs may be seen to increase gradually under the 4°C scenario. This projected change is based on historical labour cost trends, which may persist if economies do not experience the moderating effects of capital being diverted towards decarbonisation.<br><br>Meanwhile, scenario analysis for the UK businesses indicates that there would be faster growth in labour demand under the 1.5°C scenario, which would drive labour costs upwards more rapidly. | • Increases in operating expenses[1] | • Growing investment in automation, potentially reducing the demand for labour<br>• Improving operational efficiency to mitigate the impact of higher labour costs |
| | | | 1.5°C | | | | | | |
| | | Australia | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| | | Hong Kong | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| Introduction of Carbon Taxes[2] | Electricity Distribution, Electricity Generation | UK | 4°C | | | | In a 1.5°C scenario, it is anticipated that most jurisdictions will implement carbon pricing before 2030 to meet their NDC commitments, thereby posing a material risk in the medium to long-term. | • Increases in operating expenses[1] | • Increasing energy costs passed on to customers<br>• Greater investment in clean and sustainable technologies to reduce carbon emissions |
| | | | 1.5°C | | | | | | |
| | | Australia | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| | Gas Transmission & Distribution | Hong Kong | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| | | UK | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| | | Australia | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| | | UK | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| Increasing Prices of Raw Materials | Electricity Distribution, Electricity Generation | Hong Kong | 4°C | | | | Costs for materials are likely to rise due to higher energy expenses in their production, impacts are expected to emerge in the longer term | • Increases in operating expenses[1] | • Higher overall production expenses |
| | | | 1.5°C | | | | | | |
| | Gas Transmission & Distribution | UK | 4°C | | | | | | |
| | | | 1.5°C | | | | | | |
| Increasing demand for UK Rail Transport | Transport | UK | 4°C | | | | Both increased economic activity within the UK and shift of preferences away from air towards rail transport will lead to higher revenue growth under a 1.5°C scenario. | • Increases in revenue | • Reduction in transportation costs and emissions, but could require investment in rail infrastructure or capacity expansion |
| | | | 1.5°C | | | | | | |

Legend:
Increasing opportunity — Insignificant risk — Increasing risk

Notes:

(1) The results present the potential changes in operating expenses. For our regulated businesses, the regulatory regimes allow these rising costs to be recovered over time, which helps to maintain financial stability by aligning revenue with increased operating expenses.

(2) It is assumed there is no carbon pricing mechanism under the 4°C scenario.

# 6.3 Climate-related Financial Disclosures

## Climate resilience of our strategy

The potential impacts of climate-related risks and opportunities on our strategy are analysed to ensure resilience and adaptability amid evolving environmental, regulatory, and market dynamics.

### Building resilience to physical risks

Our physical risk assessment has identified business locations that may be vulnerable to particular hazards. Overall, the potential financial impact at a 1.5℃ scenario presents a lower risk than that at a 4℃ scenario. This reflects the associated weather impacts and extreme weather events associated with a warming world. In response, business units have established comprehensive emergency response plans that feature evacuation procedures, prompt communication with emergency services, and the provision of medical assistance. To guarantee readiness and efficacy, these protocols are reinforced by consistent testing of emergency equipment, regular drills, and annual training for the emergency response teams. In addition to these preparedness measures, actions have been taken to bolster the resilience of our infrastructure against climate-related risks. Our business units have implemented resilience measures to physical risks. For details, please refer to Section 8.3 Climate Resilience and Adaptation.

While we continue to address these localised risks at individual assets, the geographic spread of our portfolio acts as a buffer, reducing the overall potential impact of these physical risks. Additionally, the varying vulnerability of our assets, influenced by both their category and unique characteristics, means that the diverse nature of our portfolio further aids in risk mitigation. We also factor in existing mitigation and adaptation strategies in our analysis.

We pay close attention to the structural resilience of assets under varying weather conditions. Our maintenance and capital investment strategies are designed to enhance asset integrity in the face of climatic shifts. Moreover, we proactively incorporate considerations for future environmental resilience into our standards for designing, constructing, and upgrading assets. Business continuity strategies are in place across our business units to lessen the impact of extreme weather events.

### Building resilience to transition risks and capitalising on opportunities

By assessing the transition impact under the 1.5℃ scenario, we are recognising the growing consensus that drastic and immediate action is essential. This focus allows us to prepare for the stringent policy measures, technological advancements, and shifts in investor and consumer expectations that are expected to accompany efforts to limit warming to this level. It also places us in a better position to adapt to the low-carbon transition and to anticipate the financial and strategic implications of the evolving regulatory and market landscapes that are likely to emerge from global efforts to meet this target.

Opportunities for transition within the segments we invest in are abundant, particularly in the electricity distribution segment, which is crucial for meeting the growing demand for electricity spurred by the ongoing shift towards electrification. The success of electrification hinges on the existence of robust infrastructure, necessitating the expansion and modernisation of distribution grids.

Meanwhile, the transition away from higher-carbon fuels could affect the gas transmission and distribution segment due to potentially reduced demand for fossil fuels and the impact of escalating carbon pricing. However, natural gas is likely to serve as an interim solution for baseline electricity generation and as a substitute for more carbon-intensive fuels like coal along the transition to renewable energy sources.

Additionally, our gas transmission and distribution businesses generally have indirect exposure to the changing natural gas demand, as they provide infrastructure for natural gas producers, and these assets could potentially be repurposed for a lower-carbon economy. We are engaging with our business units in this segment on decarbonisation strategies, as well as exploring new markets, including hydrogen, for their products and services. We believe that decarbonisation and repurposing efforts will mitigate the potential long-term transition risks of our businesses in this segment.

Other segments in which we invest, such as water utilities and services and transportation, have limited risks associated with the transition, with the nature of risks being generally indirect. These indirect impacts might stem from macroeconomic shifts such as changes in GDP growth or energy pricing, which differ by country based on their readiness for transition. For example, countries better prepared for transition may witness favourable impacts on economic growth, which could translate into expansion opportunities for businesses in those regions. Companies may thrive in this transition if they are able to adapt their operations and business model to become low-carbon and serve low-carbon industries.

While scenario analysis informs our strategy, we acknowledge the uncertainties and limitations inherent in such approaches, including the selection of assumptions and methodologies, as well as the complexity and interdependencies of the energy transition. We remain committed to periodically updating our scenario analyses to ensure alignment with our strategy and evolving business needs.

The trajectory of the transition to a net zero economy remains uncertain and will vary by segment and geography. To support our businesses in navigating this shift, we promote decarbonisation strategies such as carbon capture, facility modernisation, electrification, renewable energy integration, and other capital enhancements. Our diverse portfolio, coupled with our strategic approach, positions us to remain resilient amidst various transition pathways while capitalising on emerging opportunities in the transition to a low-carbon future.

# 6.3 Climate-related Financial Disclosures

## 6.3.3 Risk Management

The Group has put in place an Enterprise Risk Management ("ERM") framework to identify, assess, manage, monitor and control current and emerging risks, including climate-related risks. This process permeates all levels within the Group, ensuring a comprehensive risk assessment that aligns with our commitment to sustainability and value preservation. Each identified risk is meticulously assessed, considering both its potential impact and the likelihood of occurrence, allowing us to prioritise our mitigation efforts effectively. Recognising that climate-related regulatory requirements evolve, the Group considers existing and emerging regulatory requirements related to climate change in the process of identifying and assessing climate-related risks. For details of the Group's risk management and internal controls, as well as the Risk Management Policy, please refer to the Corporate Governance Report in the Annual Report 2024. Together with the Risk Factors section in the Annual Report, our disclosures outline the prioritised climate-related risks and other types of risks.

In line with our risk management framework and process, designated risk owners are tasked with the critical responsibility of developing and overseeing the implementation of appropriate mitigation and adaptation strategies for each identified risk. These strategies are not static; they are subject to ongoing scrutiny and adjustment to ensure they remain effective and relevant in an ever-evolving risk landscape.

To secure our assets against climate risk, we have prepared a complete suite of strategies including proactive management along with reactive policies and systems. At the forefront, the Group is committed to mitigating climate risk by ensuring our progress towards reaching our pledged emission reduction targets. Along the journey, we demand our business units' efforts to match or outperform the Group's decarbonisation targets. Strengthening our existing infrastructure as well as investing in our future assets are also important. The Group works continuously with our underlying businesses to support the assets' integrity and resilience against future climate risks. In addition, awareness campaigns and programmes including asset inspection programmes are conducted regularly to refresh employees' understanding of climate risks and ensure our assets are properly maintained.

Climate risks vary across different geographical regions. With our extensive business footprint across the globe, we also work with our business units to evaluate and mitigate climate-related risks at the local level. Utilising the latest technologies, improved analytics and predictive tools are used to quantify risks, providing useful information for our businesses to enhance planning capabilities and make early interventions if needed. Advanced local risks assessments are conducted to produce a comprehensive picture of climate risks within a vicinity. At the industry level, our businesses proactively forge internal and external working groups on climate change resilience to improve monitoring, facilitate innovation, and ensure prudent standards are upheld within the industry.

Adaptation measures are equally important for robust risk management against climate-related risks. The Group works closely with our business units to design appropriate and adequate mitigation measures. We also emphasise the importance of customer support. In the case of climate events or emergencies, response team members from businesses would be dispatched to support our customers in need.

The effectiveness of our risk controls is continuously monitored and evaluated, with findings reported to ensure transparency and accountability. Our review process not only ensures the robustness of individual controls but also fosters a consistent and standardised approach to risk categorisation and management across the Group.

This structured and dynamic approach to climate risk management is integral to our operations. It allows us to anticipate and adapt to the challenges posed by climate change, thereby ensuring that our business remains resilient and that we contribute positively to the broader climate objectives that society demands.

## 6.3.4 Metrics and Targets

Upholding the principles of transparency, the Group discloses GHG-related metrics, including Scope 1, 2, and 3 emissions. Details can be found in Section 8.2 GHG Emissions.

As we look towards the future, we reaffirm our commitment to phasing out coal from our generation business and reducing our Scope 1 and 2 emissions by 50% by 2035 from our 2020 baseline, as detailed in Section 6.1 Low-carbon Transition Plan. To achieve these targets, we are investing in renewable energy sources, enhancing our energy efficiency, and developing new business models that prioritise sustainability. In alignment with these efforts, the Company's performance towards achieving both short- and long-term climate-related metrics and targets is taken into account in our remuneration policy, reinforcing accountability and driving progress toward our climate-related commitments.

Our progress thus far fuels our optimism and determination to meet the challenges ahead, and we remain devoted to delivering energy solutions that are not only reliable and affordable but also environmentally sound. Our emissions performance and targets are outlined in Section 6.1 Low-carbon Transition Plan, while the progress of our low-carbon transition efforts is detailed in Section 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition. Our commitment to a sustainable future is further reinforced by concerted efforts to allocate financial resources. In 2024, the Group and its business units directed approximately HK$15.2 billion in capital and operating expenditures toward sustainability programmes, with a focus on the low-carbon transition. Further details are available in Section 6.2 Sustainable and Responsible Investment.

The Group recognises carbon pricing as a tool for supporting the transition to a low-carbon economy. To this end, the Group has utilised carbon pricing as a parameter in climate scenario analysis to assess the resilience of our business strategy. Furthermore, we are considering the adoption of internal carbon pricing in our decision-making processes to better align with and achieve our climate commitments. In parallel, our business units have begun adopting internal carbon pricing to inform decision making where appropriate, based on their specific business contexts. For instance, UKPN is considering it for investment decisions on items that directly impact our business' carbon footprint, taking into account performance against our carbon targets. In certain investment decisions, EDL considers the potential implications of a carbon price to inform design, commercial decisions, and discussions with customers.

The Group's steadfast commitment to sustainability drives our efforts to innovate and adapt in the transition toward a low-carbon economy, shaping a resilient and sustainable future.

# 7 Responsible Business

Operating responsibly is at the core of the Group's commitment to long-term success and stakeholder trust. The key principles and practices that underpin our responsible business approach ensure robustness, efficiency, and readiness to meet the evolving needs of the communities and industries we serve.

## Material Topics

7.1 Integrated Governance Structure
7.2 Business Ethics and Anti-corruption
7.3 Cybersecurity, Asset Integrity and Crisis Management
7.4 Privacy and Data Security
7.5 Service Excellence
7.6 Supply Chain Management
7.7 Innovation and Digitalisation

# 7.1 Integrated Governance Structure

The Group's long-term sustainability is driven by our vision, values, and strategy, which are underpinned by a robust corporate governance structure across the Group and its business units.

The Board and the management of the Company are committed to the maintenance of good corporate governance practices and procedures of the Group. The Company acknowledges that a good corporate governance framework is essential for effective management, a healthy corporate culture, business growth and shareholder value enhancement. The corporate governance principles of the Company emphasise a quality Board, sound internal controls, and transparency and accountability to all shareholders.

The Group adopts a structured approach to integrate governance practices and procedures throughout the business, from Board-level committees to executive management, cascading to business units, as presented in the "integrated governance structure" diagram.

This section should be read in conjunction with the Corporate Governance Report in the 2024 Annual Report, which serves as the primary source of information on the Group's corporate governance framework and practices. Details on sustainability governance and climate governance can be found in Section 5.2 Sustainability Governance and Section 6.3 Climate-related Financial Disclosures, respectively, of this report.

## The Board

The Board is responsible for shaping and monitoring the corporate culture, setting long-term strategic objectives, policies and directions of the Company with appropriate focus on values creation and risk management.

Accountable to the shareholders under the leadership of the Chairman, the Board leads, directs and supervises the Company's affairs to enable the long-term success of the Company. The Board is responsible for shaping and monitoring the corporate culture, setting long-term strategic objectives, policies and directions of the Company with appropriate focus on values creation and risk management. The Board evaluates the Group's operating, financial, and sustainability performance and oversees the executive management of the Company with the support of various standing committees: the Audit, Remuneration, Nomination, Sustainability, and Executive Committees. Each committee has been constituted under clearly defined terms of reference. The structure ensures the Company maintains effective communication with shareholders and appropriate engagement with other key stakeholders.

The Executive Committee comprises of six Executive Directors and six other key personnel of the Company. The Executive Committee is chaired by the Chairman of the Board and meets regularly to discuss and make decisions on matters relating to the management and operations of the Company, and to assess and make recommendations to the Board on acquisitions of or investments in businesses or projects. The Chairman determines the broad strategic direction of the Group in consultation with the Board and is responsible for the high-level oversight of management. The Group Managing Director, with the support of the Executive Directors, is responsible for the strategic planning of different business functions and the day-to-day management and operations of the Group.

## Board Composition

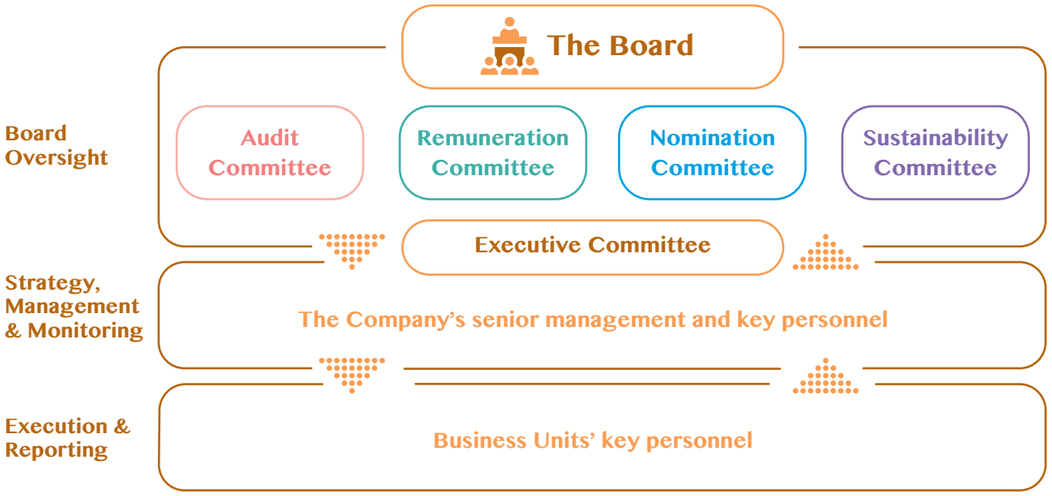
As at 31st December, 2024, five out of the 15 members of the Board are Independent Non-executive Directors accounting for approximately 33.33% of the Board. Separation of the roles of the Chairman and the Group Managing Director ensures there is a balance of power and authority.

A balanced composition secures strong independence on the Board and the Board Committees. The Audit Committee, the Nomination Committee and the Remuneration Committee are chaired by Independent Non-executive Directors. The Audit Committee comprises Independent Non-executive Directors only. Independent Non-executive Directors comprise a majority of each of the Nomination Committee and the Remuneration Committee. A majority of the Directors sitting on the Sustainability Committee are Independent Non-executive Directors. To maintain the desired independence, the Company assesses the independence of the Independent Non-executive Directors periodically on the Board in accordance with the requirements of the Rules Governing the Listing of Securities ("HK Listing Rules") on the HK Stock Exchange.

Pursuant to the Company's Board Diversity Policy and Director Nomination Policy, the Board, through the Nomination Committee, reviews and assesses the profile of a candidate for directorship with a view to achieving a balance of skill set, experience, expertise and diversity of perspectives appropriate for the strategies of the Company. In 2024, four out of 15 board members are women, representing about 26.66% of the Board. The Company will follow the Board Diversity Policy and the Director Nomination Policy to take into account various factors to identify suitable candidates for appointment to the Board, and may adjust the proportion of female directors over time as and when appropriate. Notwithstanding the foregoing, gender diversity may be less relevant to the Group's infrastructure business due to the nature of business.

# 7.1 Integrated Governance Structure

## CKI's Integrated Governance Structure




**Independent Non-executive Directors**

**33.33%** Five out of 15 Directors are Independent Non-executive Directors

**Female Directors**

**26.66%** Four out of 15 Directors are female

The Directors' biographical information and the relationships among the Directors are set out on pages 62 to 69 of the Company's Annual Report 2024 and on the website of the Company.

## Risk Management and Internal Control

The Board is responsible for maintaining sound and effective risk management and internal control systems, which include the development of necessary policies and procedures. Such systems are reviewed twice a year to ensure they are operating effectively on an ongoing basis.

Risk management is embedded into all business functions and decision-making processes, ensuring a balanced approach to risk and opportunity, which is crucial for the Group's growth and sustainability. This ongoing process is applied across all levels of the organisation. The Group has put in place an ERM framework, which is consistent with the Committee of Sponsoring Organisations of the Treadway Commission framework, to identify, assess, manage, monitor, and control current and emerging risks including ESG and climate-related risks.

The Group adopts a "Top-down and bottom-up" approach to managing risk exposures, involving input from each major business unit as well as discussions and reviews by the key personnel and the Board, through the Audit Committee.

Through this "top-down and bottom-up" risk review process, the risks identified in each business unit will be presented in the Group Risk Register, where they are considered significant on a group level. This Register, whose content is confirmed by the Group Managing Director and the Chief Financial Officer, forms part of the Risk Management Report for review and approval by the Audit Committee every half-yearly. The Audit Committee, on behalf of the Board, reviews the Report to ensure that all the significant risks are identified and appropriately managed.

A description of the Group's risk factors which could affect the Group's financial condition or results of operations to differ materially from expected or historical results is outlined on pages 190 to 200 of the Company's Annual Report 2024.

# 7.2 Business Ethics and Anti-corruption

The Group is committed to maintaining high standards of business integrity, honesty and transparency in all its business dealings. In addition to the risk management and internal control measures discussed above, the Company has adopted, and regularly reviews, its comprehensive set of corporate governance policies and sustainability policies, which provide frameworks and directions at the Group level on corporate governance and sustainability-related matters. Business units and operating subsidiaries also develop additional implementation policies and practices that better suit their specific business and operating circumstances.

The Group adopts a "zero tolerance" approach to bribery, corruption and fraud of any kind. Relevant Corporate Governance Policies (e.g. the Anti-Fraud and Anti-Bribery Policy, Anti-Money Laundering Policy, the Employee Code of Conduct and the Whistleblowing Policy – Procedures For Reporting Possible Improprieties, etc.) are in place and available to employees for their attention and adherence for promotion and support of the anti-corruption laws and regulations. In addition to the specific requirements included in the contracts with suppliers for compliance with local laws and regulations, the Supplier Code of Conduct requests that the appointed suppliers maintain the ethical standards which align with the compliance requirements and practices as provided therein. Tailor-made internal seminars and workshops are held from time to time with the assistance of regulators, legal professionals and other experts to provide employees with training on the latest development of the legal and regulatory requirements in relation to anti-corruption and other legal compliance issues. The Group maintains a robust corporate governance framework and internal control systems to uphold its accountability with support from internal and external auditors and other professional advisors.

**35,085 hours**
of training provided to employees on anti-corruption, ethics, and integrity

The Group is subject to the HK Listing Rules, the Codes on Takeovers and Mergers and Shares Buy-backs, the Securities and Futures Ordinance, the Companies Ordinance, the Companies Act of Bermuda and other applicable laws, rules and regulations. The Group is committed to conducting its businesses in compliance with the applicable local and international law, rules and regulations. The Group is also subject to the relevant UK Listing Rules following the Company's Secondary Listing on the main market for listed securities of London Stock Exchange in August 2024. During the year of 2024, the Board is not aware of any legal or regulatory non-compliance by the Directors or employees of the Group which might have significant impact on the Group.

## Our Policies

To promote fair competition and uphold ethical business standards, the Company has established a suite of policies for our stakeholders. These policies define our commitment to integrity and transparency, ensuring that employees, suppliers, and business partners operate within a framework that aligns with our ethical standards.

The Employee Code of Conduct (the "Code") serves as the foundation, setting clear expectations for professional and ethical behaviour across the organisation. Our governance policies and others ethics and compliance-related polices are as follows:

## Our Governance Policies

**Employee Code of Conduct**: The Code establishes guidelines on professional integrity and ethical behaviour, covering areas such as conflict of interest, fair dealing, personal data protection, political contributions, and reporting of illegal or unethical behaviour. While this Code is mandatory for all employees, we also encourage our non-controlled affiliates to adopt similar standards.

**Supplier Code of Conduct**: This code requests the appointed suppliers maintain the ethical standards which align with the compliance requirements and practices as provided therein:

- Promoting ethical standards – anti-corruption policy on suppliers: Suppliers are expected to implement anti-corruption policies and programmes, and to verify that such policies and programmes are complied with. It also encourages its business partners and suppliers to establish their own policies, practices and systems to ensure the promotion and dissemination of their own codes of conduct, where applicable, within their operations.
- Protecting the rights of all employees: To protect employee rights and dignity, the Group encourages its business partners and suppliers to maintain a harassment-free, safe workplace, prohibit forced and child labor, ensure fair wages and working hours, implement clear disciplinary practices, and uphold employees' rights to association and collective bargaining.
- Operating responsibly: The Group encourages its business partners and suppliers to mitigate climate change risks and to mitigate their environmental impacts, as well as to adhere to the Group's Environmental Policy simultaneously.

**Anti-Fraud and Anti-Bribery Policy**: This policy articulates the Group's zero-tolerance approach to bribery and corruption, helping employees to identify situations that could lead to unethical business practices or the perception of misconduct. It addresses key areas such as kickbacks, political and charitable contributions and sponsorships, facilitation payments, and guidelines on gifts and hospitality. Aligning with this policy, the Group generally avoids making donation to political associations or individual politicians.

## Other Relevant Policies

The Group has established a suite of policies to support robust governance and ethical business practices. These policies include:

**Information Security Policy**: Protects the security of Company data and information systems.

**Media, Public Engagement and Donation Policy**: Sets guidelines for public interactions and corporate donations.

**Policy on Appointment of Third Party Representatives**: Ensures responsible selection and oversight of external representatives.

**Policy on Handling Confidential Information, Information Disclosure, and Securities Dealing**: Provides guidelines on managing sensitive information.

**Whistleblowing Policy – Procedures for Reporting Possible Improprieties**: Offers secure channels for reporting any suspected unethical or illegal conduct.

# 7.2 Business Ethics and Anti-corruption

## Communication and Training

We ensure that all employees complete mandatory training on the Code upon joining the Group and are held accountable for adhering to its principles. In addition, we conduct regular, role-specific training sessions, with a particular focus on anti-fraud and anti-corruption topics tailored to the responsibilities of individual employees.

Further reinforcing our commitment to combating corruption, individual business units within the Group have implemented customised educational initiatives. For instance, HK Electric organised regular compliance webinars including topics of anti-discrimination, anti-corruption and personal data privacy. Thematic anti-corruption training courses were also organised to equip employees with up-to-date practices and know-how in preventing corruption at the workplace.

## On-going Assessment

We continuously review and enhance our business practices and internal controls to prevent and address corruption across both the Group and individual business units. Regular audits, guided by a risk-based approach, are conducted to prioritise critical risk areas and ensure robust process controls are in place.

At the Group level, biannual anti-bribery and anti-corruption control assessments are carried out to evaluate the effectiveness of measures for managing bribery risks. Within individual business units, each operating company performs risk-based audits to ensure attention remains on key areas of vulnerability. These audits assess the design and operational effectiveness of processes and controls, identifying and addressing any deficiencies that may lead to fraud or corruption.

## Due Diligence

The Group conducts thorough screening and evaluations of third parties before entering into contracts or agreements. We adopt a comprehensive set of procurement and tendering procedures to ensure that related activities are carried out in a fair and transparent manner. The appointment of third-party representatives requires approval from the relevant functional or department heads of the business units or operating companies in accordance with the respective guidelines and procedures of the business unit of the Group company concerned prior to the engagement of the third party representative.

For further details, please refer to the Policy on Appointment of Third Party Representatives.

## Whistleblower Programmes

All directors, employees, and relevant stakeholders are encouraged to report any suspected breaches of the Code or other Group policies. We have established escalation channels to facilitate the reporting of concerns regarding improper conduct or business practices, with the option for individuals to report anonymously. All reported cases are handled confidentially, and those who report issues are protected from retaliation, such as unfair dismissal, victimisation, or unjust disciplinary measures. Any confirmed violations are documented, investigated, and communicated to the Board through the Audit Committee, with disciplinary actions, including potential termination, applied as if substantiated violations have been found.

Alongside Group-level procedures, each business unit customises its internal escalation processes to suit its specific operational needs.

## Actions by Business Unit

### HK Electric Enhances Compliance Training to Strengthen Workplace Integrity

In 2024, HK Electric ramped up its compliance training initiatives by hosting webinars and workshops, equipping hundreds of employees and managers with essential knowledge about workplace laws and corruption prevention.

Six webinars were organised, covering critical workplace legislation, including the Anti-discrimination Ordinances, the Prevention of Bribery Ordinance, and the Personal Data (Privacy) Ordinance. These sessions aimed to improve employees' awareness and understanding of key workplace regulations.

Additionally, HK Electric provided targeted training for management, holding four workshops attended by over 100 managers. These workshops focused on the practical application of Anti-discrimination Ordinances, helping managers effectively oversee team performance while mitigating compliance risks.

A major seminar titled "Corruption Prevention – Digitalisation in Procurement and Works Supervision" attracted over 450 attendees, underscoring the company's commitment to integrity in operations. Speakers from the Independent Commission Against Corruption shared insights into digital tools for preventing corruption, highlighted major risks, and addressed common shortcomings in procurement and works inspection practices.

## Regulatory Compliance

The Group recognises the importance of regulatory compliance and has established respective preventive, monitoring and control measures to ensure compliance with relevant laws and regulations relating to conflict of interest, bribery, extortion, fraud and money laundering in respective industries. The Group is not aware of any material breach of laws and regulations relating to conflict of interest, bribery, extortion, fraud and money laundering that would have a significant impact on the Group during the Reporting Period.

# 7.3 Cybersecurity, Asset Integrity, and Crisis Management

Effective management of cybersecurity, asset integrity, and crisis response is crucial for our infrastructure operations as growing cyber threats and interconnected systems increase the risk of disruptions to essential utility services. Ensuring asset integrity is vital for reliable operations, while strong crisis management and contingency planning are key to maintaining business continuity during unexpected events.

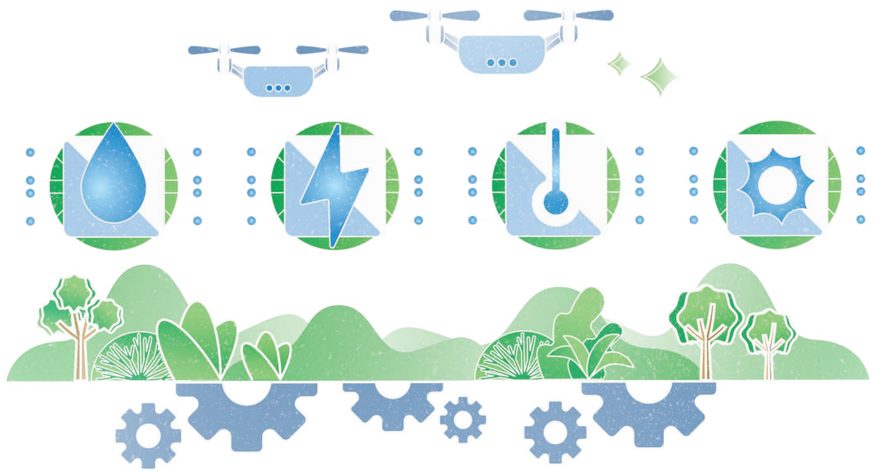
The Group is committed to safeguarding operation, ensuring public safety, and building resilience against emerging threats. Through proactive measures and a focus on preparedness, we aim to bolster stakeholder trust and deliver reliable services.

## Cybersecurity Management

The Group is steadfast in its commitment to protecting critical corporate information and data through the adoption of industry-leading cybersecurity practices. We are focused on enhancing cybersecurity measures to mitigate the risk of malicious attacks. To this end, the Group has implemented an Information Security Policy that establishes core principles for ensuring the confidentiality, integrity, and availability of information across all operations. As outlined in the policy, business unit leaders are tasked with implementing and maintaining cybersecurity protocols to safeguard systems and data against unauthorised access and cyber-attacks. Key measures include:

- Deploying internet security and anti-virus software on workstations to defend against malware;
- Installing firewalls to control external access to company networks;
- Encrypting sensitive business and personal data to enhance data protection; and
- Conducting regular operating system updates to address security vulnerabilities.

These proactive measures reflect the Group's commitment to maintaining robust cybersecurity and safeguarding its digital ecosystem amidst evolving global risks.



The Group has appointed a dedicated Group Information Security Officer to lead efforts in fostering a strong information security culture throughout the Group. The Information Security Officer keeps a close watch on emerging internal and external cybersecurity trends and ensures senior management remains well-informed about security-related matters and their potential impact on the organisation.

To manage cybersecurity risks effectively, the Audit Committee performs regular reviews, which include:

- Updating the cybersecurity policy periodically to address evolving threats.
- Strengthening cyber protection measures across the organisation's infrastructure.
- Conducting penetration tests to identify and resolve system vulnerabilities.
- Undertaking internal and external audits to evaluate and improve application systems.

The Group adopts a comprehensive approach to safeguarding corporate information assets. We mitigate risks and effectively respond to potential cyber threats by implementing a range of measures that enhance our resilience against such challenges.

## Cybersecurity Measures

| Adopting Global Standards | Raising Awareness and Building Resilience | Commitment to Cybersecurity Excellence |
|---|---|---|
| A majority of the Group's business units have implemented ISO 27001 or equivalent information security standards. The standard has been a globally recognised framework in managing information security across infrastructure, network support, application maintenance, and system operations.<br><br>The Group also works closely with external partners to enhance its cybersecurity risk management by:<br>• Performing external audits to assess risks and identify gaps.<br>• Developing and implementing additional measures to address weaknesses. | Cybersecurity awareness is a key component of the Group's strategy. As part of onboarding, all new employees are required to undergo cybersecurity awareness training, which is supplemented by regular refresher sessions for existing staff. These initiatives are designed to enhance cybersecurity awareness among employees and contractors, reinforcing the importance of safeguarding information assets. | The Group is committed to implementing best-in-class cybersecurity practices to protect customer privacy and business data. By implementing various strategies such as conducting third-party vulnerability analyses and simulated hacker attacks in some of our business units, we ensure a comprehensive approach to mitigate risk, respond to emerging cyber threats and staying vigilant on latest cybersecurity trends. |

# 7.3 Cybersecurity, Asset Integrity, and Crisis Management

## Asset Integrity

Infrastructure assets form the backbone of the regions the Group operate in, servicing the daily lives of communities. We manage a vast and diverse portfolio of critical infrastructure, which requires a multifaceted and long-term approach to bolster integrity and mitigate associated risks. Asset integrity is not only essential for maintaining reliable and efficient operations but also for ensuring public safety and regulatory compliance.

Our approach to asset integrity includes rigorous maintenance strategies, regular inspections, and the implementation of advanced monitoring technologies to proactively identify potential issues before they escalate. We are committed to adopting best practices and industry standards to extend the lifespan of our assets, reduce downtime, and enhance operational reliability. By emphasising asset integrity, our business units ensure the resilience of their operations and the trust of stakeholders.

## Crisis Management

The Group is steadfast in its preparedness for a wide range of potential crises, including system disruptions, cyberattacks, severe weather events, natural disasters, and other unforeseen challenges. To ensure operational resilience and preparedness for such unforeseen events, the Group has engaged with our business units to establish robust business continuity plans and incident response procedures. A contingency plan is in place to facilitate the recovery of critical digital operations and services when necessary. These plans are rigorously tested and reviewed annually to ensure their effectiveness and relevancy in addressing emerging risks. Examples of such plans include detailed runbooks for dealing with attack scenarios, backup systems for restoring services, multiple cloud locations for data storage, and offsite backups for physical disasters. We continuously encourage our business units to monitor and revisit their business continuity plans, if needed, to ensure adequate measures are taken in the event of crises.

The Group also recognises the importance of comprehensive crisis management protocols to respond quickly and effectively to incidents that could impact operations. Our business units develop protocols that prioritise the safety of employees and stakeholders, minimise disruptions, and maintain the reliability and integrity of our infrastructure.

## Actions being Recognised

### SAPN Recognised as a Global Cyber Security Leader

SAPN has been celebrated for its excellence in cyber security, earning recognition at the prestigious OnCon Icon Awards as one of the top 50 corporations worldwide—the only Australian company to achieve this honour. The company also received individual accolades thanks to its outstanding employees, including the Australian Women in Security Award, the Best Collaborator Award, and leadership recognition for Head of Cyber Security and IT Resilience at the CSO30 Australia Awards and iTnews Benchmark Awards.

The voting criteria for these awards emphasised making a significant impact within the organisation or the broader industry, contributing to the professional community through thought leadership, driving innovation, and demonstrating exceptional leadership.

These achievements highlighted SAPN's commitment to innovation, resilience, and safeguarding South Australia's electricity supply.


# 7.3 Cybersecurity, Asset Integrity, and Crisis Management

## Cybersecurity Resilience in Action

### Enabling Sustainable Business Operations: Governance-driven Cybersecurity Resilience

As the digital landscape grows more complex, our business units are acknowledging the vital role of robust cybersecurity frameworks for sustainable development. UKPN and SAPN exemplify the Group's commitment to safeguard cybersecurity by establishing governance-driven frameworks that protect critical infrastructure while promoting transparency and continuous improvement.

### UKPN: Pioneering Cybersecurity and Operational Resilience

UKPN has adopted a multi-layered cybersecurity framework designed to protect its systems, data, and operations against evolving threats. This approach is built on three core pillars:

| Cybersecurity Management System | Cyber Hygiene Practices | Proactive Testing and Continuous Improvement |
|---|---|---|
| UKPN aligns its policies with ISO 27001 and legislative standards, including compliance with NIS CAF requirements. Leveraging 24/7 monitoring and advanced analytics, UKPN ensures early detection of threats through external intelligence and user behavior analysis. Documented incident response procedures enable rapid containment and resolution of cyber incidents, reinforcing organisational resilience. | Through certification under the Cyber Essentials Scheme, UKPN ensures its IT systems remain robust and adaptable. Regular patch updates and phishing simulations bolster the organisation's defense mechanisms, while targeted awareness campaigns equip employees and partners with critical cybersecurity skills. | UKPN actively addresses vulnerabilities by conducting simulated cyber-attack exercises and unannounced penetration tests through third-party providers. These initiatives highlight areas for improvement and ensure consistent performance reporting to executive leadership, creating a culture of transparency and continuous enhancement. |

### SAPN: Setting Standards in Cybersecurity and IT Resilience

SAPN's cybersecurity and IT resilience strategy exemplifies a governance-focused approach to operational integrity. With dedicated frameworks and adherence to industry standards, SAPN ensures its IT and Operational Technology systems remain reliable and secure.

#### Cybersecurity Governance Framework

SAPN adopts the Australian Energy Sector Cyber Security Framework and the NIST Cyber Security framework to guide its cybersecurity practices. A 24/7 managed security service monitors potential threats, while the governance framework ensures critical assets, such as ADMS and SCADA systems, remain secure and segregated. Compliance with FIRB conditions further reinforces data protection by requiring certain critical information remains onshore.

#### Secure IT Procurement and Vendor Oversight

SAPN's IT Procurement Guidelines and privacy assessment programme help safeguard against third-party risks. Procurement processes are rigorously reviewed for compliance with cybersecurity standards, while vendor assessments assess privacy practices and mitigation of potential breaches. Event-driven reviews provide an additional layer of accountability for suppliers.

#### Awareness and Resilience Initiatives

SAPN fosters a culture of vigilance through mandatory annual security training for employees, contractors, and third-party vendors. Regular audits, reviews, and targeted campaigns ensure systems remain resilient and threats are proactively addressed.

# 7.4 Privacy and Data Security

Protecting customer privacy is a top priority for the Group. We are committed to safeguarding personal and customer data by implementing strong internal polices, procedures, and compliance guidelines that govern the use and protection of sensitive information across all operations.

## Our Policies

To protect sensitive information including personal and customer data, the Group has established the Information Security Policy and the Policy on Handling of Confidential Information, Information Disclosure, and Securities Dealing. These frameworks ensure that data privacy and confidentiality are strictly maintained. Employees are required to keep proprietary information confidential and use customer data only for legitimate business purposes.

Recognising the potential risks associated with generative artificial intelligence (GenAI), such as breaches of confidentiality, privacy violations, and intellectual property issues, the Group has introduced the GenAI Use Policy. This policy allows only IT-approved GenAI tools for work purposes and prohibits inputting confidential or personal data into these tools. It also stresses risk management through training, regular reviews, and reporting mechanisms, ensuring GenAI is used responsibly while safeguarding the Group's reputation and data integrity.

## Our Measures

We prioritise employee education to foster a culture of privacy and accountability. Regular training programmes are conducted to raise awareness about data protection and equip employees with the skills to handle sensitive information securely. Additionally, we routinely perform customer privacy impact assessments to identify risks and implement necessary safeguards.

The Group also actively engages with customers to understand their concerns and expectations regarding data privacy. By maintaining open communication, we continuously refine our practices to align with their needs. This ongoing dialogue strengthens trust and transparency, reinforcing our commitment to protecting customer privacy and ensuring the highest standards of data security. Feedback received through customer surveys inform what areas relating to data privacy need to be further enhanced and guide us to refine our data protection policies.

## Actions by Business Units

### SAPN: Privacy Training and Policy Compliance

SAPN has implemented a comprehensive approach to privacy training and policy compliance. The external-facing Privacy Policy is regularly reviewed to ensure adherence to obligations, while the internal Privacy Policy and resources are kept up to date to provide meaningful guidance to personnel.

All senior leadership groups receive training to reinforce their privacy obligations and to keep abreast of ongoing privacy reforms in Australia. In 2024, the online privacy training was updated and rolled out to areas of the business with high exposure to personal information, with remaining staff expected to complete the training by January-February 2025. Additionally, privacy practices are included in the twice-yearly Legal Compliance programme, requiring business units to report on their compliance with privacy obligations and identify any non-compliances, with training provided during new employee induction and on an annual basis thereafter.

### HK Electric: Privacy Impact Assessment and Privacy Management Programme

HK Electric has established Guidelines for Privacy Impact Assessment, requiring each business unit to conduct assessments to identify potential privacy risks associated with changes to projects, systems, or policies involving personal data. These guidelines ensure that appropriate risk mitigation measures are effectively implemented and are accessible to all employees via the Company's Intranet Portal.

In addition, HK Electric is implementing a Privacy Management Programme, which includes annual personal data inventory reviews and privacy impact assessments to evaluate data handling effectiveness and identify areas for improvement. The Privacy Management Programme involves internal stakeholders, including the Personal Data Protection Officer and business unit coordinators, and is conducted annually. This programme aims to build a robust privacy infrastructure, ensure compliance with legal requirements, and foster a culture of respectful privacy within the organisation.

# 7.5 Service Excellence

With a diverse customer base, the Group understands that customers are at the heart of our success. Understanding their needs and expectations is essential for building strong, lasting relationships, improving the quality of our services, and consistently meeting or exceeding our service goals.

The Group values every interaction with our customers and focuses on processes that shape their experience. We are committed to being transparent and honest in all communications, as these are key to building trust and mutual respect with our customers. By communicating openly, we aim to foster understanding and collaboration while delivering high-quality products and services. To achieve this, our business units take customer needs into account and have developed specific policies to address them effectively.

We work closely with customers to better understand their needs and preferences, ensuring their satisfaction remains a top priority. To address concerns effectively, we have established a robust complaints management process and multiple communication channels, making it easy for customers to access information or assistance.

## Complaints Handling

The Group has established a structured and efficient approach to resolve customer concerns, ensuring that feedback is managed in a consistent, fair, and timely manner.

Each business unit has designated individuals responsible for managing customer feedback, ensuring accountability and responsiveness. To simplify the feedback process for customers, we have made complaint channels and contact details readily available on our websites. This reflects our commitment to transparency and continuous improvement in customer service.

## Response to Customer Inquiries

We are dedicated to handling customer inquiries promptly and transparently. Our systematic approach ensures all questions or concerns are addressed consistently, enabling customers to make informed decisions on our products and services.

To support this process, each business unit has established dedicated customer service teams. These teams undergo comprehensive training to provide accurate, up-to-date information and address customer inquiries proficiently.

## Providing Updates on Health, Safety and Environmental ("HSE")

We prioritise the safety and well-being of our customers by keeping them informed about potential HSE risks associated with our products and services.

To enhance safety, we have also implemented emergency plans and established reporting hotlines that adhere to best practices in safety management. These measures demonstrate our commitment to maintaining a safe and secure environment for all our customers.

## Customer Satisfaction

We prioritise delivering exceptional customer service by continually tracking and measuring customer satisfaction. This includes using tools such as surveys, feedback forms, and performance metrics to assess our service quality and identify areas for improvement.

By regularly gathering and analysing customer feedback, we ensure that our services align with their needs and expectations. We also benchmark our performance against industry standards and implement long-term development initiatives to enhance customer experience and maintain high satisfaction levels.

## Actions by Business Segments

### Electricity Distribution

**Customer Satisfaction Score**

**85.5%**

**in 2024** (Consolidated, 100% as basis)

**Group's System Average Interruption Duration Index (from distribution) in 2024**

**1.00**

### Water Utilities & Services

**Customer Satisfaction Score**

*Northumbrian Water*

**>80**

**during 2022-2024**

**(100 as basis)**

### Household Infrastructure

**Net Promoter Score**

*Reliance Home Comfort*

**83**

**(Sales) in 2024**

**73**

**(Service) in 2024**

*Highest in the last 3 years*

## Actions being Recognised

### UKPN

Ranked #1 during the 2023/24 reporting period by Ofgem for our Broad Measure of Customer Satisfaction score.

Ranked #1 utility in the UK Customer Satisfaction Index, based on customer votes, with results released in January 2025.

# 7.5 Service Excellence

## Actions by Business Units

| | Customer Service Target | Status |
|---|---|---|
| HK Electric | Maintain better than 99.999% supply reliability rating. | Achieved in 2024. |
| UKPN | Expand the scope and reach of our Priority Services Register, delivering an overall 30% increase in registrations from the end of RIIO-ED1 in those categories that are most impacted by our service by the end of RIIO-ED2 with a target of 3 million households and 600,000 businesses registered. | On track – Over 2.5 million customers registered on Priority Services Register in 2023/24. |
| WWU | Target to achieve score of 9.2 in CSAT. | Achieved – 9.23/10 reported in 2024. |
| NGN | 5,000 customers referred to priority services register. | Achieved – Over 9,000 customers referred. |
| VPN | Outperform System Average Interruption Duration Index ("SAIDI") target of 124 minutes by 2026 for Powercor. | Achieved – 91.4 minutes in 2024. |
| | Outperform System Average Interruption Duration Index ("SAIDI") target of 24.7 minutes by 2026 for CitiPower. | Achieved – 20.9 minutes in 2024. |
| United Energy | Outperform System Average Interruption Duration Index ("SAIDI") target of 50.7 minutes by 2026. | Achieved – 33.4 minutes in 2024. |

## Supporting the Vulnerable in Action

Energy providers play a vital role in supporting vulnerable communities by delivering tailored safety programmes that meet specific needs. Whether it is protecting people from carbon monoxide risks or helping elderly residents navigate electricity-related issues, these initiatives aim to build safer and more resilient communities.

### NGN: Promoting CO Safety and Reaching Those in Need

At NGN, customer safety remains a top priority. Through the Vulnerability and Carbon Monoxide Allowance, the company receives £1 million annually from Ofgem to fund projects that promote carbon monoxide safety and provide targeted support for vulnerable customers. In 2023/24, NGN conducted over 54,000 face-to-face carbon monoxide safety sessions and delivered more than 11 million impressions of safety messaging. Collaborating with partners such as Kidney Care UK, NGN also provides tailored advice on energy efficiency, welfare, and CO safety to patients living with Chronic Kidney Disease.

### HK Electric: Empowering Elderly Customers with Practical Safety Education

In Hong Kong, HK Electric delivers safety education for elderly customers through its "Electricity Safety Talks" programme. Reaching more than 500 participants, the sessions offer practical tips on handling planned power shutdowns, voltage dips, emergency situations, and energy-saving habits. By focusing on the everyday concerns of older residents, the programme helps build awareness, confidence, and self-reliance.

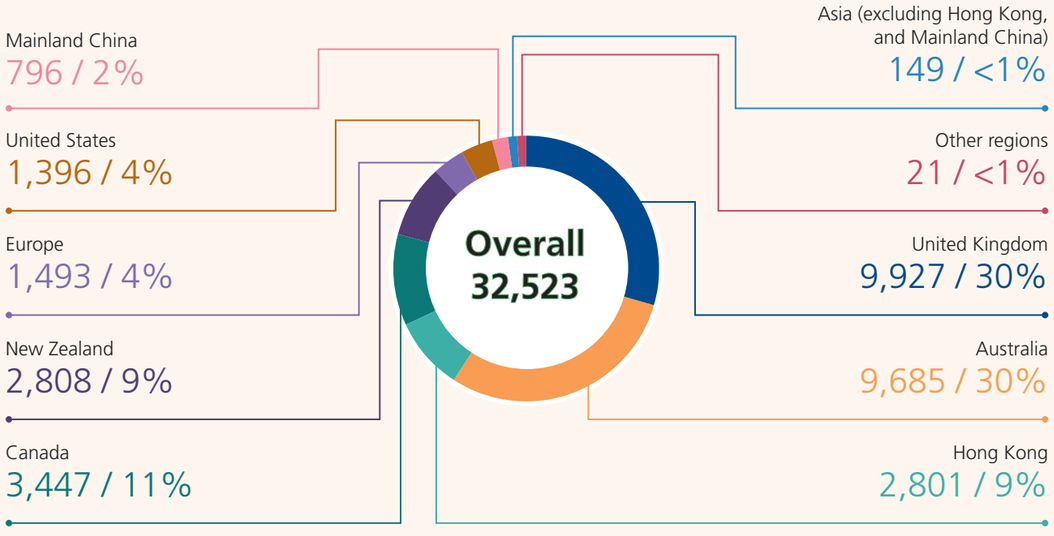
# 7.6 Supply Chain Management

As a global investor with partnerships spanning over 30,000 suppliers in the energy and utility sectors, the Group acknowledges the significant influence it wields in driving sustainable practices. Leveraging our extensive industry knowledge, we actively encourage our suppliers to align with our commitment to sustainability, ethical conduct, and responsible operations.

We require our suppliers to uphold the Group's core commitments, including respect for human rights, fair working conditions, occupational health and safety ("OHS"), non-discrimination, business ethics, and environmental stewardship. These principles are integral to fostering a responsible and ethical supply chain.

The Group places a strong emphasis on collaboration with stakeholders across the supply chain to ensure resilience and sustainability. By promoting responsible practices and strengthening partnerships, we aim to maintain the seamless delivery of essential services while adapting to the evolving dynamics of globalisation. Our focus remains on innovating and enhancing ways of working to meet the demands of an ever-changing environment.

Number of suppliers by geographical region in 2024




## Supplier Code of Conduct and Policies

At the heart of our efforts lies the Group's Supplier Code of Conduct, which serves as a foundational guideline for our business units and suppliers. The code underscores our dedication to fostering sustainable practices and enhancing performance for the benefit of stakeholders and the communities we serve.

The Supplier Code of Conduct applies to all business units, products, and service providers within the Group's operations. It draws on internationally recognised charters and conventions, including the United Nations Declaration on Human Rights and the International Labour Organisation Core Conventions. These global frameworks guide our approach, ensuring that our supply chain reflects the highest standards of ethics, sustainability, and social responsibility. By partnering with suppliers who share our values and commitment, the Group continues to build a supply chain that not only meets the challenges of today, but also contributes to a sustainable and equitable future.

To uphold our commitment to promoting sustainability across the supply chain, we have implemented a series of robust policies that guide our business practices and set clear expectations for our business units and suppliers. These policies reflect our values and our dedication to ethical and sustainable operations:

- **Upholding Human Rights**: Our Human Rights Policy underscores the importance of respecting and promoting human rights as a core value of the Group. This policy establishes our expectation that all business units and suppliers shall adhere to the principles outlined in the policy. Additionally, we encourage our suppliers to adopt similar human rights policies within their own organisations to ensure a shared commitment to ethical practices.
- **Prohibiting Modern Slavery and Human Trafficking**: The Group is committed to ensuring its contractors and supply chain are free from modern slavery and human trafficking. Our Modern Slavery and Human Trafficking Statement mandates transparency in the practices of business units and suppliers, requiring them to demonstrate clear strategies for addressing and preventing modern slavery. This approach reinforces our dedication to maintaining ethical standards in all business relationships.
- **Environmental Stewardship**: Recognising the environmental impact of our value chain and investments, our Environmental Policy highlights the Group's responsibility to promote sustainable practices. This policy encourages suppliers to raise awareness of the direct and indirect environmental issues, adopt eco-friendly practices, and consider professional environmental standards in their operations. Through this policy, we aim to influence positive environmental performance across the value chain.

# 7.6 Supply Chain Management

## Supplier ESG Screening

The Group understands that supplier ESG screening is essential to building an effective, sustainable and ethical supply chain. We systematically monitor, evaluate or conduct auditing on our suppliers to ensure they meet our standards for quality, reliability, and ethical practices. This evaluation process includes assessing suppliers' sustainability performance, compliance with regulations, and adherence to our Supplier Code of Conduct.

To mitigate risks, promote sustainability, and foster strong partnerships, we employ a robust supplier screening approach. Each of our business units tailor its screening methods to address the specific needs and circumstances of its local operating environments, ensuring relevance and effectiveness across the supply chain.

## Supplier Assessment and Development

The Group is committed to implementing effective supply chain management practices to mitigate risks, enhance supplier performance, and ensure alignment with our core values and high standards. Through regular monitoring, assessments, and audits, we ensure that our suppliers' operations adhere to the principles outlined in our Supplier Code of Conduct and align with the Group's core values and high standard.

The Group recognises the potential environmental and social impacts within the supply chain. ESG considerations are critical factors in the evaluation and selection of potential suppliers and contractors, ensuring they are integral to decision-making. To prioritise supplier oversight, this responsibility is embedded at the top executive management level within each business unit, aligning ESG strategies across functions and driving operations toward sustainability goals.

Our business units employ various practices to ensure effective monitoring systems, with nearly all suppliers participating in these assessments. We work closely with suppliers to address these risks, promoting responsible practices and sustainable development. By tailoring monitoring systems to local operating context, business units across the Group ensure robust and effective oversight. This approach fosters transparency, accountability, and continuous improvement across the supply chain, reinforcing our commitment to ethical and responsible business practices.

## Strengthening Supplier Relationships

To build strong and effective partnerships, we prioritise regular communication, offering support to improve suppliers' sustainability performance. Beyond enforcing compliance with our Supplier Code of Conduct, we engage with suppliers through regular meetings to gather feedback, address challenges, and foster collaborative solutions. This two-way dialogue strengthens relationships and encourages suppliers to actively participate in achieving shared sustainability goals.

## Actions by Business Unit

| | Supply Chain Target | Status |
|---|---|---|
| HK Electric | Conduct a Sustainable Procurement Survey with key suppliers in 2024 to enhance their awareness of climate change and related topics. | Achieved – 66 suppliers participated in the survey. |
| UKPN | Work with suppliers to reduce Scope 3 emissions by 25% by 2028, compared to a 2018/19 baseline. | On track – 17% reduction in supplier – specific Scope 3 emissions in 2024. |
| Phoenix Energy | Engaging with our supply chain to further improve the quantification of our Scope 3 indirect emissions associated with purchased goods and services. | On track – Engaged top 91% suppliers from the Purchased Goods and Services category in 2024. |
| WWU | Supply Chain Charter – Record 100% of our supply base acknowledging awareness of our Supplier Charter, either through the supplier onboarding process, desktop risk analysis or contract renewal. | On track, 85% supplier response rate and 78% acknowledgment reported in 2024. |
| Northumbrian Water | Committed to supporting our local economies by maintaining spending at least 60p in every £ with suppliers in our region. | Achieved – Reported spending of 61.7p per £ in 2024. |
| NGN | Minimum 85% supply chain compliance with Supplier Code of Conduct by 2031. | Achieved |

# 7.6 Supply Chain Management

## UKPN: Engaging Top 15 Suppliers on Carbon Plans

As part of the commitment to achieving its verified Science-Based Target, UKPN is working with its suppliers to reduce Scope 3 emissions by 25% by 2028, using a 2018/19 baseline. To date, UKPN has completed comprehensive assessments of supply chain carbon emissions through both spend-based and activity-based approaches. For the 2023/2024 reporting year, the improvement between the two methodologies was 17%.

In order to complete an activity-based assessment, a new portal has been developed in collaboration with the Minimum Consultancy. UKPN considers this to be a much more accurate method as it analyses the vendors' actual carbon emitted in fulfilling their contracts with UKPN. It allows UKPN to better identify their biggest carbon emitting vendors and determine their carbon hotspots.

In 2023/24 UKPN expanded the number of vendors submitting data on this portal from 100 to over 150. The 2023/24 activity-based assessment demonstrated a 20% decrease in emissions compared to the 2018/19 spend-based baseline year. In addition, supplier specific Scope 3 category reduction is 17%.

### Progress for FY2024

**20%** **decrease in activity-based emissions compared to the spend-based baseline year**

Key achievements and initiatives include:

### Supplier Engagement

Among the top 15 emitting suppliers, five have already adopted Science-Based Targets. UKPN actively engages its suppliers by requesting detailed information on:

1. Environmental commitments
2. Carbon reduction targets
3. Science-based Target
4. Overall company carbon footprint
5. Key performance indicators (KPIs) and intensity metrics

### Digital Tools and Reporting Platforms

UKPN developed an online platform to improve communication and simplify accounting for embodied carbon. This platform includes features for seamless data tracking, reporting, and supplier engagement, ensuring ease of use and continual improvement. Suppliers provide Environmental Product Declarations for specific products, allowing for focused questions and enhanced reporting capabilities

### Circular Economy Initiatives

UKPN is creating a circular economy tool to address the environmental impact of high-carbon materials. Work has commenced to integrate circular economy reporting with suppliers, alongside the development of an in-house tool to track progress during the RIIO-ED2 regulatory period.

These efforts underline UKPN's dedication to fostering sustainability within its supply chain, leveraging data-driven tools, collaboration, and continual improvement to meet ambitious carbon reduction targets.

# 7.6 Supply Chain Management

## WWU: Supplier Assessment and Charter Compliance

In the pursuit of a responsible and sustainable supply chain, the supplier assessment remains a core focus. One of WWU's key initiatives is the Supply Chain Charter, which aims to have 100% of their suppliers acknowledge their awareness of our Supplier Charter, either during onboarding, through risk assessments or at contract renewal. The process of tracking and encouraging supplier engagement with our charter has been structured to progressively increase compliance and understanding among WWU's supply base.

Supplier engagement with the Charter increased over the past three years. In 2022, 155 suppliers were surveyed, yielding 132 responses and 70 acknowledgments. Engagement increased in 2023 to 954 suppliers, achieving a 95% response rate and 81% acknowledgment. In 2024, the record reached 884 suppliers, with an 85% response rate and 78% acknowledgment. Additionally, WWU's focus is to ensure that suppliers meet specific sustainability benchmarks and establish their own KPIs. For instance, by 2023-24, 78% of suppliers (by value) were compliant with the licensee's supplier code, and 85% had established their own sustainability metrics or KPIs.

This structured approach of WWU's supplier assessment has enabled them to build a more accountable and sustainable supply chain, fostering stronger partnerships and aligning supplier practices with WWU's core values and sustainability objectives.

| Year | Number of suppliers questioned | Number of responses | Number of suppliers acknowledging Charter |
|---|---|---|---|
| 2022 | 155 | 132 | 70 |
| 2023 | 954 (98% of spend) | 319 (95% of spend) | 236 (81% of spend) |
| 2024 | 884 (91% of spend) | 442 (85% of spend) | 278 (78% of spend) |

| Supply Chain | 2021-22 | 2022-23 | 2023-24 |
|---|---|---|---|
| Percentage of suppliers (by value meeting licensee's supplier code) | 74% | 76% | 78% |
| Percentage of suppliers (by value) that have their own sustainability metrics or KPIs | 45% | 71% | 71% |

# 7.7 Innovation and Digitalisation

Technology and decarbonisation megatrends are driving industries to adapt and evolve. The Group is committed to fostering creativity, innovation, and flexibility as we seek advanced technological solutions to support our decarbonisation goals. Our business units underscore our commitment to adapting to these changes and providing products and services that meet our customers' diverse needs.

Our business units in various industries have proactively deployed resources to facilitate innovation. In the electricity distribution segment, UKPN, SAPN, VPN and United Energy have a dedicated independent DSO to expand the use of network capacity, flexibility and further enable increasing connection of distributed renewable generation. Our gas transmission and distribution networks in Australia and the United Kingdom have also conducted a variety of experiments and trials on residential and commercial application of hydrogen. These efforts in developing intelligent energy solutions through innovation and digitalisation have been crucial to the Group's current and future success of decarbonisation and delivering excellent products and services for customers.

In our electricity distribution business, we are utilising the latest technologies, such as drones, and industry-leading practices, including using helicopters and Light Detection and Ranging ("LiDAR") technology for asset inspection. This ensures asset integrity and service reliability for our customers. For example, VPN and SAPN have implemented these advancements effectively.

# 7.7 Innovation and Digitalisation

## Harnessing Technology in Action

The Group's electricity businesses are applying technologies to modernise and enhance the reliability of energy systems while improving customer experience.

### UKPN Launches Dynamic EV Charging Trials

UKPN has initiated "Shift 2.0," an innovative trial to examine how dynamic pricing models affect EV charging behaviours. The UK-first project aims to determine whether real-time tariff adjustments can incentivise EV owners to charge during off-peak hours, alleviating grid pressure and reducing energy costs for consumers.

The trial integrates advanced data analytics and dynamic pricing to explore smart grid solutions that improve sustainability and customer satisfaction. The project showcases the potential for efficient energy distribution and more intelligent EV infrastructure by leveraging these technologies.

"Shift 2.0" also highlights the role of digitalisation in energy innovation. Using dynamic pricing algorithms and advanced metering infrastructure offers a scalable approach to modernising energy systems, paving the way for a more sustainable future.

### Electricity Distribution Companies Utilising Drone Technology For Remote Asset Inspections

SAPN has conducted a historic drone flight that inspected 150km of powerlines beyond visual line of sight. This initiative aims to enhance electricity supply reliability in South Australia, especially following recent outages in Victoria. The Civil Aviation Safety Authority approved this automated flight, marking a significant step in operational efficiency and improved customer experience.

VPN is deploying an in-house drone inspection team as an extra safety precaution ahead of summer season to monitor power poles in areas at high risk of bushfires. This initiative enhances their asset inspection and maintenance programmes, allowing for the early detection of issues, such as bird nests on high-voltage insulators, which can prevent outages.

## SPOTLIGHT

### Northumbrian Water Leads Innovation in the Water Sector

Northumbrian Water aims to become the most innovative company in the water sector and beyond. With an innovation pipeline valued at over £100 million, including contributions from the Ofwat Innovation Fund, the company is committed to maintaining this momentum through 2030. To date, Northumbrian Water has secured nearly £19 million in funding by winning 12 bids from the Ofwat Innovation Fund – a total of 40% of those submitted. The company is also recognised as a global leader in innovation, highlighted by its annual Innovation Festival now in its ninth year.

Northumbrian Water received the Innovation Award at the Utility Week Awards for its Organics Ammonia Recovery project. This initiative converted ammonia recovered from wastewater into green hydrogen fuel. Traditional wastewater treatments are energy-intensive and typically only produce nitrogen, which, while harmless, fails to capitalise on the intrinsic value of ammonia. The project's novel approach aligns with the government's green gas and renewable fuel agenda. It accelerates the water industry's journey to net carbon neutrality and aims to improve the ecological status of rivers – demonstrating that waste can be treated and recovered for added value.

The pilot demonstrated that the payback period for the investment could be within 5 years. This includes the initial CAPEX cost, the revenue generated from ammonia sales, aeration savings, the value of carbon reduction, and reduction in $NO_x$ emissions.

The pilot was based at Northumbrian Water's Advanced Anaerobic Digestion facility in Newcastle and removed >95% of the ammonia from the advanced anaerobic digestion liquor.

Capturing >95% of the ammonia

NOx emissions reduction

# 8 Environmental Stewardship

The Group is committed to combating and adapting to climate change through transformative initiatives that support decarbonisation, climate resilience and environmental management. By harnessing technology and innovation, we continue minimising our footprint, strengthening environmental stewardship and demonstrating our deep respect for the natural world.


## Material Topics

8.1 Decarbonisation, Hydrogen Economy, and Energy Transition
8.2 GHG Emissions
8.3 Climate Resilience and Adaptation
8.4 Resources Management
8.5 Biodiversity and Land Use

# 8.0 Overview

## Environmental Management

In our commitment to environmental stewardship, we recognise that the natural world is not just a resource but a vital partner, with its wellbeing closely connected to our own. We prioritise minimising the environmental impact of our operations, particularly on the natural habitats near our sites. Beyond reducing harm, we aim to create a positive impact on the communities we serve, ensuring our business activities contribute to the planet's long-term health and sustainability.

The Group's Environmental Policy serves as the foundation for shaping our strategy and guiding our business approaches to environmental stewardship. Below are the key strategic priorities highlighted in the policy:

### Climate Change action

- Integrate climate change risks into the Group's risk management process.
- Establish long-term targets to reduce GHG emissions and implement systems to monitor the Group's carbon footprint.
- Incorporate climate change considerations into business strategies.

### Water management

- Track, monitor and reduce water consumption while ensuring responsible management to address risks from water scarcity.
- Enhance water stewardship and security through proactive management practices.

### Waste management

- Reduce waste generation, manage effluent effectively and encourage reuse and recycle in daily operations.
- Advocate the use of sustainable materials and adopt technologies to streamline production and enhance process circularity.

### Air Quality

- Track, monitor and reduce emissions of ozone depleting substances and other air pollutants across the Group's operations.

### Biodiversity

- Operate with a life-cycle approach to land and habitat stewardship.
- Minimise disturbance and mitigate impact on natural landscapes, avoiding areas with high biodiversity value.

## Environmental Management System

Our EMS have been fully enforced to ensure compliance with environmental regulations, mitigate the risk of adverse impacts on nature, and foster a culture of environmental accountability. This comprehensive framework enables systematic monitoring and assessment of our environmental performance, allowing us to identify and address areas for improvement effectively.

In 2024, 82% of our attributable revenue was covered by ISO 14001 or equivalent EMS certifications. Furthermore, 86% of attributable revenue underwent external environmental and/or energy audits during the year, underscoring our strong focus on enhancing environmental performance.

## Regulatory Compliance

The Group has established mechanisms to hold individuals accountable, ensuring that operations across all business units comply with relevant laws and regulations. Management stays well-informed about the latest regulatory requirements and provides relevant training to staff as necessary. Resources are also allocated to implement effective monitoring and detection measures to ensure compliance.

During the Reporting Period, we were not aware of any non-compliance with laws and regulations that had a significant impact on the Group relating to air and GHG emissions, discharges into water and land, and the generation of hazardous and non-hazardous wastes.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

The infrastructure industry stands at the forefront of the global effort to combat climate change, as it is both a contributor to GHG emissions and a vital enabler of sustainable solutions. At CKI, we are committed to leading this transition through proactive engagement in decarbonisation initiatives, alignment with regulatory frameworks, and support for governments' net zero commitments. Our strategy is driven by our defined targets: Phasing out coal-fired generation by 2035, reducing Scope 1 and 2 GHG emissions by 50% from 2020 levels, and achieving net zero emissions by 2050.

To meet these ambitious targets, the Group has developed a comprehensive framework that integrates sustainability into every aspect of our operations. Central to this effort are six transition levers – key strategic areas designed to track and drive emissions reductions across our diverse business units. These levers form the foundation of our low-carbon transition plan, ensuring targeted interventions and measurable progress towards our goals.

These levers are not just guiding principles – they are actionable pathways tailored to the unique demands of each business segment. By aligning our operational strengths with global climate ambitions, we are creating a structured and phased roadmap that spans the short, medium, and long term. This roadmap is designed to ensure each business unit achieves specific milestones, contributing to the Group's overall decarbonisation journey.

This section will delve into each transition lever, showcasing our progress and outlining the initiatives undertaken across our business units. These efforts underline our commitment to a low-carbon future and our resolve to make a meaningful impact against climate change.

For the overview of the low-carbon transition plan, please refer Section 6.1 Low-carbon Transition Plan.

## Transition levers

1. **Decarbonising Our Generation Portfolio:** Phasing out coal and prioritising renewable energy sources
2. **Modernising and Digitalising Electricity Networks:** Enhancing grid efficiency and reliability
3. **Promoting the Reduction & Recovery of Methane and Carbon Dioxide:** Targeting emissions at their source
4. **Embracing the Hydrogen Economy:** Supporting the development and adoption of hydrogen as a clean energy source
5. **Operating in a Resource-saving Manner:** Minimising waste and optimising processes
6. **Developing Cleaner Methods to Produce Products and Deliver Services:** Innovating across the value chain to minimise environmental impact

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Decarbonising Our Generation Portfolio

Electrification is a key enabler of decarbonisation. By accelerating the electrification of energy end-uses, such as transport and industry, possibilities for reducing society-wide GHG emissions could be unlocked. However, to fully realise the benefits of electrification, decarbonising electricity generation is essential. Our strategy focuses on transitioning electricity generation from high-carbon sources, such as coal, towards lower-carbon alternatives, including natural gas and renewable energy.

CKI is committed to accelerating the energy transition within our generation portfolio. We have set targets to phase out coal from our generation business by 2035 and reduce Scope 1 and 2 emissions by 50% by 2035, using 2020 as the baseline. In addition, we invest in renewable energy sources, collaborate with each key segments, and strategically expand our initiatives to advance our decarbonisation goals.

### Advancing Coal-to-gas transition

In 2024, our installed capacity mix saw a significant shift from coal to gas. Coal-fired generation accounted for 23% of the mix, down from 30% in 2023 while gas-fired installed capacity increased to 58%, up from 54% in 2023.

This progress reflects our ongoing implementation of our coal-to-gas transition strategy. In Hong Kong, HK Electric continues to increase the use of natural gas in its generation mix, with gas-fired electricity accounting for 68% of total output in 2024, up from 56% in 2023. The offshore LNG terminal, developed jointly with another energy utility, has enhanced long-term natural gas supply stability, supporting Hong Kong's energy transition for electricity generation.

### Expanding renewable energy portfolio

Renewable energy generation accounted for 8% of the mix in 2024. In 2024, the Group acquired UK Renewables Energy, and our business unit UKPN acquired Powerlink Renewable Assets, contributing to 68% increase in our renewable energy installed capacity compared to 2023. These acquisitions reflect the Group's commitment to investing in clean energy transition, reducing reliance on fossil fuels and advancing the energy transition.

## Progress Highlights

**GHG Emissions Intensity of Generation**

**0.49 kg $CO_2$e/kWh in 2024**

Reduced from 0.53kg $CO_2$e/kWh in 2023

**Renewable Energy**

**754 MW in 2024**

Includes wind, solar, hydro, and biomass ↑68% vs. 2023

**Generation Efficiency[1]**

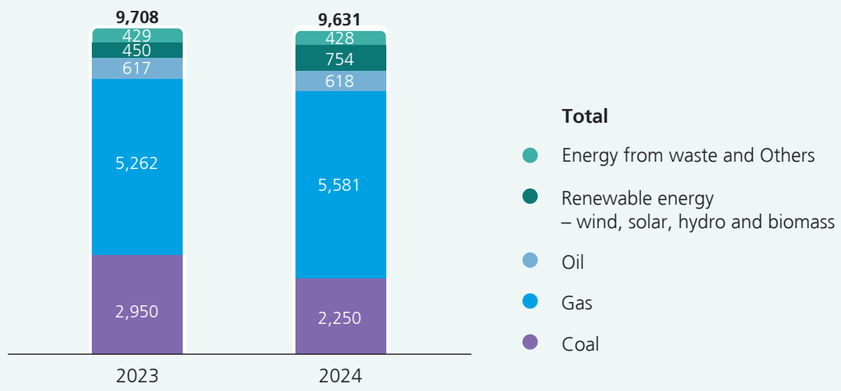
Increased from 43% vs. 2023

**45% in 2024**

**Weighted Average Availability Factor of Plants**

**87% in 2024**

Installed Capacity Mix (MW), 2023-2024




Note:

(1) Excluding power plants operated by Canadian Power

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Actions by Business Units

### Advancing Coal-to-gas transition

HK Electric

**Commissioning of new gas-fired generating unit to facilitate coal-to-gas transition**

As a key step to achieve phasing out coal-fired generation by 2035, HK Electric successfully commissioned its new gas-fired generating unit L12 in March 2024, completing their 2019-2023 Development Plan. The unit represents a significant advancement in the company's environmental strategy, and effectively halving carbon emissions compared to existing coal-fired generating units at Lamma Power Station ("LPS").

The implementation of L12 marks a substantial shift in HK Electric's generation portfolio, increasing gas-fired generation from 56% in 2023 to 68% in 2024. Meanwhile, another gas-fired generating unit, L13, is being constructed and is scheduled for commissioning in 2029.

The strategic infrastructure investment demonstrates HK Electric's commitment to accelerating the clean energy transition, whilst maintaining reliable electricity generation for its customers.

Gas-fired generation in 2024

**68%**

up from 56% in 2023, while coal-fired generation declined to 32% from 44%.

CAPEX in generation assets in 2024

**HK $1,474 million**

for green energy transition and to improve system resilience against extreme weather events

L12 began commercial operation at the end of March 2024.

### Expanding renewable energy portfolio

Canadian Power

Canadian Power acquired its first renewable energy project in Canada in 2021, consisting of two wind power facilities with a total of 10 wind turbines located in the Okanagan region of British Columbia. Since then, the two wind farms with a total capacity of 30 MW, has maintained steady renewable energy output, sufficient to power approximately 9,000 homes in the region.

EDL

EDL is leading the charge in distributed renewable energy generation in Australia, backed by a robust pipeline of projects. In addition, the company has focused on expanding its presence in the UK and US. An example is the 2024 expansion of its Byron Center landfill gas power station in Michigan. Since 2009, the station has harnessed biogas from decomposing waste to generate renewable electricity. With the addition of a third engine, EDL aims to increase biogas utilisation, enhancing renewable energy contributions to the local power network.

UK Renewables Energy and Powerlink Renewable Assets

In 2024, the Group acquired two renewable energy assets in the United Kingdom. UK Renewables Energy, established after the acquisition, includes 32 wind farms across England, Scotland, and Wales, with a total installed capacity of 175 MW.

Additionally, the Group acquired Powerlink Renewable Assets through UKPN, which operates a 69 MW portfolio comprising 65 solar photovoltaic assets, 4 onshore wind farms, and 1 hydropower plant. The Group will continue to identify and pursue green investment opportunities and will prudently position ourselves in the growing demand for clean and renewable energy sources when appropriate and if aligns strategically.

**UK Renewables Energy**

32 onshore wind farms located in England, Scotland, and Wales

Total installed capacity

**175 MW**

**Powerlink Renewable Assets**

A portfolio of renewable assets in the United Kingdom, which includes 65 solar photovoltaic installations, four onshore wind farms, and one hydropower plant

Total installed capacity

**69 MW**

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Modernising and Digitalising Electricity Networks

Facilitated by the transition to net zero, power networks are in key positions to transform and meet the demands of the changing industry landscape. While clean energy adoption helps decarbonisation, it also brings challenges to power grids, including rising electricity demand and the integration of distributed energy resources such as variable renewables, batteries, and EVs. This need for additional capacity and flexibility are key influencing factors for network efficiency and reliability.

By adopting advanced digital technologies, we optimise network performance and enable more connections in our servicing areas, creating a larger, more adaptable and robust network infrastructure. In addition, with enhanced grid resilience and reliability while performing cost-effective infrastructure upgrades, we are able to deliver better service quality and sustainability for all stakeholders.

### Enhancing the flexibility of electricity network capacity

Our power networks business have expanded their roles to DSO, reflecting the effort to ensure evolving power demands are met by sufficient network capacity. This enables the integration of distributed energy resources and improves demand response management, reducing peak loads and enhancing overall grid stability and efficiency.

### Focusing on electricity distribution efficiency

GHG emissions from electricity losses in the distribution network accounts for a significant portion of the overall emissions from our electricity distribution businesses. Reducing these distribution losses is crucial for lowering GHG emissions for these operations. To address this, innovative equipment and practices have been utilised across our business units. For example, our Australian electricity distribution businesses, VPN and United Energy, have collaborated with the industry to integrate renewables and low-carbon electricity into the distribution network. Meanwhile, our UK business, UKPN, is replacing transformers with Ecodesign specification units, effectively reducing line losses in its networks.

### Investing in network technologies

To support the energy transition, our electricity distribution companies are investing in advanced technologies. Sensors and smart meters are widely used to gather data on how the network operates. Advanced data analytic tools and artificial intelligence are utilised to optimise the network effectively.

Business units deploy smart grid solutions where feasible. For instance, Wellington Electricity in New Zealand keeps electricity prices low by using demand response tools to manage the network, helping to avoid costly generation capacity increases. In parallel, SAPN in Australia is investing in its Data Governance and Analytics Uplift Program by upgrading its core analytics and reporting systems and utilising artificial intelligence to significantly improve data science capabilities. These innovations not only provide customers with more reliable and cost-effective services but also enhance operational efficiency and reduce energy wastage along the network.

## Progress Highlights

**Power Network Length**
Over 390,000 km

**Capacity of Connections to Distributed Renewable Energy Generation**
12.3GW

**HK Electric**
~80%
of its customers covered by smart meters installations by the end of 2024

Aims to complete the full-scale deployment of smart meters by 2025

**VPN and United Energy**
~100%
electric load serviced by smart meters

### Electricity Transmission & Distribution Losses

**Transmission Loss**
1.20% in 2024

**Distribution Loss**
6.19% in 2024

### Investments in Networks

**HK Electric**
Capex in 2024
HK $1,821 million
to enhance system resilience and facilitate better use of energy by customers

**VPN**
Investments from 2022 to 2024
AU $28.2 million
in network and technology innovation

**United Energy**
Investments from 2022 to 2024
AU $17.1 million
in network and technology innovation

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Actions by Business Units

### Enhancing the flexibility of electricity network capacity

**UKPN**

Since launching its DSO in April 2023, UKPN has provided significant benefits to stakeholders. Customers have experienced economic advantages from the network's capacity flexibility, while reduced curtailment of low-carbon generation has lowered carbon emissions. The latest Unlocking Generation Capacity Programme aims to unlock 1.1 GW of generation capacity during the RIIO-ED2 period (2023-2028) through network analysis and new technology deployments. UKPN is on track to deliver an additional 350 MW in 2024/25.

On track to unlock

**1.1 GW**

of generation capacity during 2023-2028

**VPN**

VPN has launched an internal programme focusing on strategic initiatives across multiple business workstreams, including developing DSO capabilities. In 2024, VPN has implemented community batteries, developed a number of solutions to address minimum system load emergency including the development of LV DERMS, modelled the impacts of increased electrification, and conducted trials on EV charging and enabling flexible export services. These advancements aim to ensure the flexible and efficient integration of distributed energy resources into the networks and effective management of network issues triggered by energy transition.

### Focusing on electricity distribution efficiency

**VPN**

VPN has implemented the Dynamic Voltage Management System ("DVMS") to enhance real-time voltage management across distribution networks by utilising data from over 1.1 million smart meters in Victoria. DVMS automatically adjusts voltage levels, ensuring optimal voltage performance. This advanced technology facilitates more solar connections, lowers carbon emissions, and enables affordable power for our customers.

Utilising data from

**1.1 million+**

smart meters to optimise voltage performance

### Investing in network technologies

**VPN**

VPN is focused on enhancing renewable energy exports to the grid through its collaboration with industry partners on the High Voltage Distributed Energy Resource Management System ("HV-DERMS"). By enabling access based on the network's dynamic capacity, HV-DERMS facilitates more connections and optimises the use of current infrastructure, supporting Victoria's clean energy transition and carbon reduction efforts.

**HV-DERMS**

allows new renewable generators to access existing network capacity more efficiently, reducing the need for extensive upgrades

**United Energy**

United Energy's investment in solar enablement has exceeded solar export performance targets, thanks to early investments in both advanced voltage control systems and network augmentation. This has led to the increase of approvals for solar export from 62% to 96%. Additionally, improvements in solar inverter compliance have boosted new connections from under 30% in 2021 to over 90% by the end of 2024.

Total Installed Capacity of Renewable Energy Generation

**830 MW**

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Promoting the Reduction & Recovery of Methane and Carbon Dioxide

Methane, a potent greenhouse gas, is primarily emitted from agriculture energy, and waste sectors, including leaks from natural gas pipelines and coal mines, landfill and wastewater operations. Rapidly reducing methane emissions is one of the most effective strategies for mitigating climate change.

Natural gas serves various energy needs for residential and commercial users, including heating and cooking. Our gas transmission and distribution businesses transport natural gas from production sources to consumers. The Group is committed to reducing methane leakage from our gas networks to help ensure a more efficient delivery system. Additionally, we recover methane emissions from waste and blend it into existing gas pipelines, helping society harness valuable energy and reducing GHG emissions from waste sources.

Carbon capture is another key priority in our strategy to combat climate change. To this end, our business units are launching carbon abatement projects to create impactful solutions for reducing GHG emissions.

### Reducing gas leakage from gas networks

Our gas transmission and distribution operations implement proactive, targeted measures to detect and repair leaks, enhance monitoring systems, and improve the reliability of gas infrastructure. Comprehensive programmes have been implemented, with key initiatives such as replacing aging metallic pipelines with durable and low-leakage plastic pipes, using advanced pressure management technologies to reduce leaks and the need for venting, and adding chemicals to the gas to help prevent leaks.

### Recovering and utilising methane from waste

Our business units are pursuing a diverse pipeline of renewable gas projects to harness low-carbon energy and blending it into existing gas distribution systems, ultimately replacing natural gas. These projects include:

- Landfill gas: EDL collects and processes methane generated in landfills and injects it into the gas network as a substitute for natural gas.
- Biomethane: NGN and WWU have been partnering with biomethane production facilities to introduce green biomethane into the gas network. Phoenix Energy is working with the government and industry stakeholders to evaluate the injection of biomethane from agricultural waste into the local gas networks.
- Biogas from sludge: Northumbrian Water captures the biogas produced during the wastewater treatment process and sends it into the gas network, effectively recycling energy and reducing environmental impacts of wastewater operations.

Beyond its renewable gas projects, EDL captures waste coal mine methane, a byproduct of coal mining, and converts it into electricity, contributing to the recovery and utilisation of methane.

### Capturing carbon and generating carbon credits

Our businesses actively explore ways to capture carbon dioxide emissions from projects through advanced technologies and strategic partnerships. For example, AVR has been capturing carbon dioxide in their operations since 2019 and supplying the captured gas to the greenhouse horticulture and industry sectors for their use. Our commitment to sustainability goes further than just carbon capture. For example, EDL generates carbon credits through green projects and is one of the largest producers of Australian Carbon Credit Units.

## Progress Highlights

**Gas Network Length**
**Over 116,000 km**
Increase from 112,600km in 2023

**Gas Leakage Rate**
**0.29% in 2024**
Decrease from 0.79% in 2023

**Renewable Gas Production**
**19,083 kg in 2024**
Increased 22% vs. 2023

**Biomethane Injected**
**1,497 GWh in 2024**

## Driving a Sustainable Future Through Biomethane Innovation

Northern Ireland, a region heavily reliant on fuel oil for heating, is leading the shift towards sustainable energy. In 2024, the Group acquired Phoenix Energy, Northern Ireland's largest natural gas distribution network, who are actively working to establish a biomethane economy in Northern Ireland, to support the displacement of natural gas and in turn supporting the development of enhanced sustainability and biodiversity within the agricultural sector.

Biomethane, a carbon-neutral alternative to natural gas, can be produced from sustainable feedstocks such as silage, slurry, and food waste.

Through these initiatives, Phoenix Energy is advancing a resilient and sustainable decarbonisation pathway, aligning with local economic and environmental priorities, and driving a cleaner, greener future for Northern Ireland.


Phoenix Energy, alongside other industry players from Northern Ireland, engaged with the Minister for Agriculture, Environment and Rural Affairs and the Economy Minister to discuss opportunities for supporting the production of biomethane from organic and agricultural waste streams.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Actions by Business Units

### Reducing gas leakage from gas networks

#### AGIG: Mains Replacement Programme

AGIG is dedicated to enhancing the reliability and sustainability of the distribution networks through its Mains Replacement Programme. Since 2003, a total of 1,500 km of mains have been replaced from the old cast iron material to polyethylene material, which is more reliable, less emissions, and hydrogen ready for the future.

Replaced pipeline in 2024

**364 km**

#### NGN

Gas leakage makes up over 90% of NGN's carbon footprint. To address this, NGN is investing approximately £100 million of capital expenditure annually to replace metallic pipes near properties with modern plastic pipes, improving safety and significantly reducing leakage. The 30-year programme is expected to continue until 2032. Additionally, in order to manage gas pressure and minimise strain on pipes, NGN uses Monoethylene Glycol to saturate and seal potentially leaky metallic joints. NGN has committed to a target set with the regulator, OFGEM, to reduce gas leakage by 24% between 2021 and 2026.

Reduced gas leakage in 2024

**16%**

Compared to 2021

### Blending biogenic gas into gas distribution networks

#### NGN

In 2023/24, NGN added a new biomethane production site with a maximum capacity of 18,257 standard cubic meters per hour. The annual biomethane injection into NGN's network remained stable at 0.71 TWh, enough to supply approximately 59,000 UK homes.

#### WWU

WWU connects 21 biomethane production sites to its network, supplying green gas to around 151,000 homes. It is trialing a Smart Pressure Control system with UtonomyOne technology. This system optimises network pressure, enabling efficient biomethane use and maximising renewable gas benefits.

### Recovering and utilising methane from waste

#### EDL

EDL is one of the largest landfill gas-to-energy companies in the U.S., converting methane from landfills into renewable natural gas and electricity. In Australia, in addition to converting methane from landfills to electricity, EDL is the market leader in capturing waste coal mine gas for electricity generation.

Total installed capacity in 2024

**1.2GW-e**

increased by 27% since acquisition

#### Enviro NZ

Enviro NZ captures landfill gas and utilises it in various ways. At the Hampton Downs landfill, landfill gas is converted into electricity to meet on-site needs, with surplus power available for export. Meanwhile, at the Bonny Glen landfill, the captured gas is utilised to evaporate landfill leachate.

Landfill gas collection and destruction efficiencies

**90%+**

#### Northumbrian Water

Northumbrian Water is leading the way in methane recovery and utilisation with its "Gas to Grid" plants at Bran Sands Sewage Treatment Works and Howdon Sewage Treatment Works. These facilities process 100% of the sewage sludge generated in the region through advanced anaerobic digestion, converting the resulting renewable biogas into biomethane for export to the grid.

First and only water company to achieve

**100% conversion**

of sewage sludge into green energy in the UK

### Expanding carbon capture and utilisation capacity at energy-from-waste facilities

#### AVR scaling up carbon capture

AVR is advancing decarbonisation with a $CO_2$ capture facility at Rozenburg, set to capture 440,000 tonnes annually. Half of the captured $CO_2$ will support local horticulture, while the rest will be stored in North Sea gas fields via an external partnership. After selecting technology in 2023, AVR entered the Front-End Engineering and Design phase in early 2024, aiming for operation by 2028.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Embracing the Hydrogen Economy

Natural gas plays a crucial role in industries where reducing emissions through electrification is challenging. In heavy industries, it provides the large amounts of energy needed to reach extremely high temperatures for producing raw materials in industrial processes. In residential and commercial settings, natural gas serves as a key energy source for everyday needs.

While natural gas will continue to meet society's energy demands, the Group recognises the potential of hydrogen in replacing natural gas and shaping a net zero economy. We are actively integrating hydrogen into our operations, making use of existing gas infrastructure, to create low-carbon gas networks and reduce emissions from transportation.

### Blending green hydrogen into gas networks

Injecting green hydrogen into gas networks is a critical step toward reaching net zero emissions, especially for the hard-to-electrify industries. Our goal is to create a hydrogen-ready network that enables an orderly transition for our customers. To this end, our gas transmission and distribution businesses have developed roadmaps and launched projects to blend green hydrogen into existing distribution networks. Currently, in certain renewable gas projects, we are able to blend up to 20% (by volume) of green hydrogen into the network.

### Exploring hydrogen as alternative fuels for transport

Hydrogen has the potential to serve as an alternative fuel for decarbonising transport. Our business units are exploring the use of hydrogen in their vehicle fleets. These projects aim to test the feasibility of switching from using conventional fuels to green hydrogen, reducing emissions while maintaining business operations. For instance, Enviro NZ has partnered with a car manufacturer to join a Hydrogen Light Vehicle Trial to assess hydrogen fuel cells as a viable alternative to battery-electric technology. Additionally, VPN has contributed to the development of a hydrogen-fuelled truck prototype in collaboration with their heavy fleet provider.

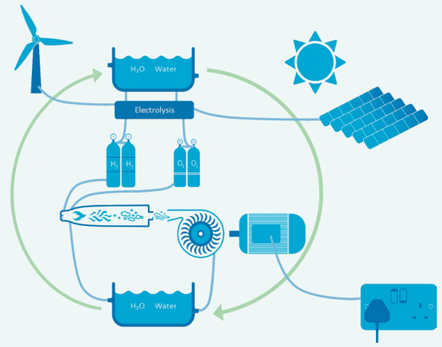
In the rail industry, UK Rails works with the government to evaluate replacing diesel-only trains with hydrogen powered trains, with a target to have this ready by 2040.

## Actions by Business Units

### Exploring hydrogen as alternative fuels for transport

#### UK Rails

UK Rails has partnered with organisations in the H2Steam Project to evaluate green steam technology to eliminate freight train emissions. While electrification remains the most efficient option for railways, many rail networks in the UK are still unelectrified due to difficulty in establishing infrastructure. The project will use Steamology's patented technology to generate high-pressure steam from hydrogen and oxygen with zero-carbon emissions. UK Rails continues to work with its partners to explore options to help its freight customers meet their carbon reduction targets.




Green steam technology generates high pressure steam without carbon emissions by burning hydrogen in oxygen inside small modular steam generators.

### Blending green hydrogen into gas networks

#### AGIG

AGIG has set a target of delivering 10% renewable gas by volume by 2030. To achieve this, AGIG is partnering with governments and industry to deliver renewable hydrogen projects across the country. HyP Gladstone produces renewable hydrogen through a 0.175 MW electrolyser, delivering Australia's first whole of gas network blending project. Beginning production in November 2024, the facility supplies up to a 10% renewable hydrogen blend to the whole of Gladstone, around 700 homes, businesses and industry on the existing gas network.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

SPOTLIGHT

## AGIG Advances Australia's Sustainable Energy Future with Hydrogen

AGIG is targeting net zero Scope 1 and 2 emissions across all our operations by 2050, with an interim aim to reduce our Scope 1 and 2 emissions by 30% from 2020 levels by 2030. While the energy delivered is not classified as a Scope 1, 2, or 3 emission for AGIG, the business' Net Zero Ambition emphasises going beyond their direct responsibilities to support customers in their efforts to reduce emissions. A key component of this is exploring, delivering and facilitating renewable and carbon-neutral gas projects, creating new opportunities for our customers to progress towards net zero emissions.

Hydrogen Park South Australia ("HyP SA"), launched in May 2021, is Australia's largest facility of its kind, supplying up to 10% renewable hydrogen blend to approximately 4,000 households and businesses on the existing gas network. In 2024, the blend increased from 5% to 10% by volume as compared to 2023. HyP SA has also retained its supply of 100% hydrogen to transport and industrial sectors via tube trailers throughout 2024.

Supplying

**100% hydrogen**

to transport and industry sector

**Hydrogen Park South Australia**

Supplying up to

**10% renewable hydrogen**

in 2024

### Community and Industry Engagement

Community acceptance has been strong, with 73% of surveyed customers satisfied with the hydrogen blend. HyP SA has also hosted over 5,500 visitors, fostering collaboration and knowledge sharing to drive further hydrogen innovation locally and globally.

### Expanding Australia's Renewable Hydrogen Footprint

Building on HyP SA's success, In October, construction commenced on AGIG's third renewable gas facility, HyP Murray Valley, with operations targeted for late 2025, while in November, the business began operating their second facility, HyP Gladstone.

AGIG has also actively contributed to policy and certification development, including the Future Made in Australia (Guarantee of Origin) Bill 2024 and the GreenPower Renewable Gas Certification scheme, which will support industrial decarbonisation at HyP Murray Valley. These efforts build on work completed in 2023 to expand the national gas regulatory framework to include hydrogen, biomethane, and other renewable gases, further advancing Australia's transition to a low-carbon energy future.

These hydrogen park projects demonstrate AGIG's commitment to renewable gas production and provides valuable insights for future projects. With additional hydrogen initiatives in planning, AGIG contributes to Australia's transition to a cleaner and more sustainable energy system, supporting community and industry needs.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Operating in a Resource-saving Manner

The world's finite resources make the responsible use and conservation of energy and natural resources essential for sustainability. Resource efficiency not only protects the environment, preserves biodiversity, and reduces pollution and GHG emissions but also enhances business productivity and lowers costs.

Our approach to resource management integrates innovative technologies, operational improvements, and employee engagement to maximise resource utilisation and minimise environmental impact. Through systematic monitoring and targeted interventions, we continuously optimise energy resources. At the business unit level, we prioritise strategic investments in advanced technologies and processes, implement energy management systems, adopt best practices, and pursue ongoing improvements in operational efficiency.

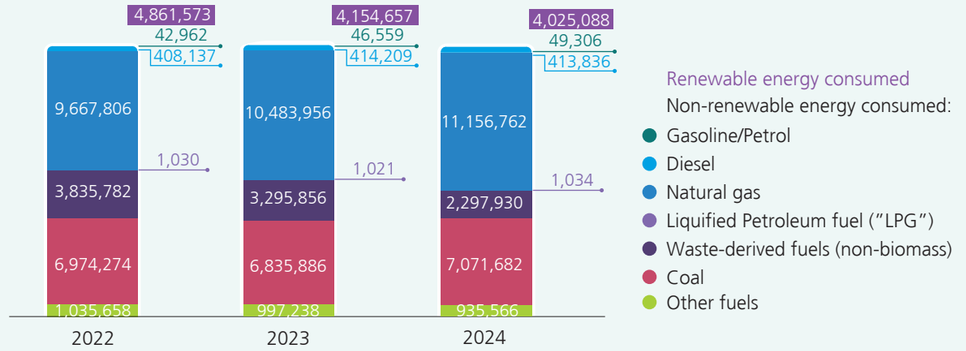
### Enhancing resource and energy efficiency in our operations

The Group seeks to improve energy efficiency and reduce GHG emissions by adopting sustainable practices across our operations. Several of our business units own and operate a sizable fleet to deliver their products and services. To lower operational emissions, the Group works with our business units to replace internal combustion engine vehicles with EVs. Most of our business units have either started or are about to begin their fleet replacement programme.

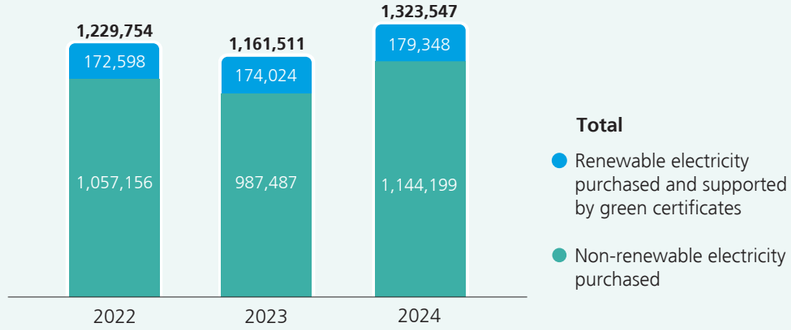
In addition, our business units have implemented upgrade programmes for their buildings and facilities, including refurbishments that enhance energy efficiency and the installation of renewable energy systems where feasible. Such efforts not only improve energy efficiency in our operations, but also bring significant environmental benefits.

## Progress Highlights

Energy Consumption ('000kWh), 2022-2024




Purchased Electricity for Own Consumption ('000kWh), 2022-2024




### Percentage of Wastewater Recycled

*Northumbrian Water*

**100 %** during 2022-2024

### Recycling Rate

*Reliance Home Comfort*

**75 %** in 2024

Increased from 71% vs. 2023

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Actions by Business Units

### Using alternative fuels and raw materials to reduce reliance on fossil fuels

#### Green Island Cement

Green Island Cement is actively reducing coal consumption in its kiln operations by adopting alternative fuels. In recent years, the business has gradually established a stable supply of Rubber-derived Fuel, Wood-derived Fuel, Plastic-derived Fuel, and Polyurethane Residue, replacing up to 25% of total fuel in the precalciner.

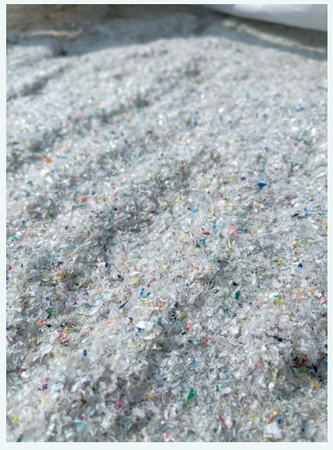
Targeting to replace

**25%**

of total fuel in the precalciner with waste derived fuels by 2035

In the past year, Green Island Cement has also observed that oyster shells produced from local oyster consumption often end up in landfill. This led to the strategic partnership between Great Eagle Group and Harbour Plaza Group, both Hong Kong brands owning chains of hotels, and GIC to launch the Oyster Shell Upcycling Pilot Programme. The partnership seeks to recycle discarded oyster shells and use as alternative raw material for sustainable cement production. By 2024, about 22 tonnes of oyster shells have been successfully converted into sustainable cement products.

By integrating these materials, Green Island Cement shows their unwavering commitment to reducing its reliance on fossil fuels and promoting a more sustainable and environmentally friendly production process.



### Electrifying transport for operation

#### Alliance Construction Material

The company has completed a one-year trial promoting the use of its electric truck for concrete delivery, following the introduction of Hong Kong's first electric concrete mixer truck in 2023. This vehicle produces no tailpipe emissions, making it essential for improving air quality and reducing GHG emissions in the construction industry.

#### Phoenix Energy

After successfully completing a trial using Hydrotreated Vegetable Oil ("HVO") as a direct substitute for diesel, Phoenix Energy has partnered with principal construction contractor to establish processes for permanently integrating HVO as a fuel alternative for a portion of Kier vehicles involved in Phoenix Energy's activities.

In 2024, Phoenix Energy reduced emissions by 55 $tCO_2e$ through the use of HVO instead of diesel. We expect to adjust operational processes in the coming years to further increase the adoption of HVO as a substitute fuel.

Reduced

**55 $tCO_2e$**

through the use of alternative fuel

#### Electric Vehicle Commitments – Selected highlights

HK Electric: Increase EVs in the corporate fleet to 55% by 2025.

ista: Convert the entire fleet to 100% EVs by 2028.

Phoenix Energy: Transition the commercial fleet to green fuels by 2035.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Developing Cleaner Ways to Produce Products & Deliver Services

In order to reduce GHG emissions and reach the Group's net zero target, our operational efficiency and circularity requires constant improvements. One of our focusing areas is using alternative fuels in business operations. In the construction materials businesses, dedicated efforts are made to optimise materials types, volumes, as well as alternative materials used in the manufacturing process. This transition helps recycle waste from operations and reduces the reliance on traditional fossil fuel. As a result, products and services are delivered with lower environmental impact.

### Enabling resource savings in the value chain

Alongside our efforts to save resources in our business operation, the Group also strives to develop low-carbon products and services to help our customers reduce emissions. For example, ista offers energy management solutions that provide users with monthly energy consumption information, empowering them to make informed decisions about their daily energy usage. Similarly, Reliance Home Comfort, our residential household infrastructure business in Canada, facilitates customers' green transitions by introducing products with higher thermal efficiency and lower energy consumption. By enhancing products and service offerings, customers are able to lower emissions and achieve decarbonisation goals.

### Green transport services for customers

EV services is another key area where we support customers in reducing their carbon footprint. The Group is committed to enabling the transition to sustainable transportation by offering EV-related products and services that promote resource efficiency and emissions reduction. In 2024, ista completed the acquisition of Chargemaker GmbH, which owns around 2,000 EV charging point in Germany. This move reflects ista's vision to offer customers a broader range of services related to climate-friendly solutions in the future. HK Electric has also been supporting the Hong Kong government by providing EV charging infrastructure solutions that cater to both residential and commercial customers, ensuring convenient and accessible charging options. By expanding our EV services, we aim to empower our customers to embrace sustainable mobility and accelerate progress toward a low-carbon future.

## Progress Highlights

### Household Infrastructure

**Heating Energy Emissions**

*per ista user*

2022: -10.8%

vs. 2018 base year

### Transportation

**Percentage of Rolling Stock Electrified / Bi-mode (hybrid)**

*UK Rails*

~80%

### Construction Materials

**Concrete Production GHG emissions Intensity**

0.267 tonnes $CO_2e/m^3$ of concrete in 2024

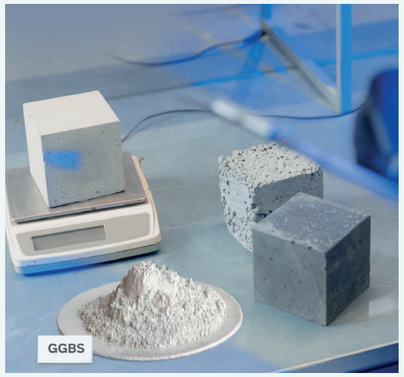
**Cement Production $CO_2$ Intensity**

618 kg $CO_2$ per tonne of cementitious product in 2024

**Sales of Low Carbon Materials**

201,945 metric tonnes (GGBS, PFA)

⬆10% vs. 2023




Ground Granulated Blast-furnace Slag (GGBS) and Pulverised Fuel Ash (PFA) are low-carbon cementitious materials that can be added to concrete to reduce its embodied carbon. PFA is a byproduct of pulverised coal combustion in electricity generation, while GGBS is a byproduct of the iron and steel-making process.

# 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition

## Actions by Business Units

### Facilitating customers decarbonisation by introducing energy-efficient products and green services

#### ista

The ista "Heiz-O-Meter" (Heating-O-Meter) helps tenants understand their heating behaviour by tracking general consumption trends, providing users with reliable insights into energy consumption in the apartment. This enhanced transparency supports the heating transition by encouraging individuals to save energy and reduce $CO_2$ emissions.

Additionally, ista offers EcoTrend, a service that delivers monthly consumption information to residents via app or email, compliant with the new Heating Cost Ordinance and the EU's Energy Efficiency Directive. EcoTrend allows residents to monitor their heating energy, hot water usage, and cost trends, empowering them to make informed energy-saving decisions.

Other solutions offered by ista:

- ESG-Manager: Our service ESG Manager is a data platform that enables our customers to monitor and analyse consumption, emissions and costs reliably, quickly and efficiently on a portfolio or building level, and to use the data in accordance with the usual reporting standards, e.g. CSRD.
- EV-Charging: The transport sector plays a key role in climate protection in the EU. The transformation to emission-free mobility is a decisive factor if the $CO_2$ targets are to be achieved. To make the switch to EVs as easy and convenient as possible, ista is installing charging stations for EVs in commercial and residential buildings in various European countries, such as UK, France and Germany.
- Intelligent heating control system: The system easily integrates into most existing heating architectures, proactively regulates heating output to meet the actual heat demand of the building. This leads to significant energy savings for our users.
- Digital heating bills: We offer customers the option to view their heating bills on our digital web portal. This saves valuable paper and logistics resources.

### EV charging services for customers

#### Wellington Electricity

Wellington Electricity's commercial EV managed charging is in the market and is currently used by NZ Bus to manage load in a capacity challenged part of the network. Wellington Electricity is currently in negotiations with NZ Bus for deploying charging stations at additional location.

Wellington Electricity is facilitating a customer project between 2025 and 2030 with KiwiRail, a major rail and ferry operator in the New Zealand. The rail company requires four new traction substation connections to its network, along with five additional sites requiring 33kV and 11kV reinforcement. The partnership on connections and reinforcements will support greater use of electric trains within the Wellington region.

#### HK Electric

HK Electric supports installing EV charging-enabling infrastructure at 20,000 parking spaces during the period from 2024 to 2028. As at the end of 2024, about 7,000 parking spaces have been supported to install EV charging-enabling infrastructure.

# 8.2 GHG Emissions

The Group recognises the risks and impacts of GHG emissions associated with our operations. Guided by our Environmental Policy, we address these challenges across all business activities. We have established short, medium and long term targets to reduce GHG emissions and implemented robust processes to measure and monitor our carbon footprint.

## Our GHG emissions profile

In 2024, CKI's Scope 1 and 2 emissions decreased by 6.0% compared to last year. The decrease in emissions was predominantly result of decreased output from our coal-fired generation plants and fluctuations of production outputs in certain business units. We continue to enhance our Scope 3 emissions reporting, with Category 1, 3 and 13 being the material sources of emissions in 2024. The reported Scope 3 emissions cover the Group's most significant businesses, those that contribute to a total of 86% of our attributable revenue.

In 2022, CKI pledged to achieving net zero by 2050, supported by an interim target for reducing 50% of Scope 1 and 2 GHG emissions by 2035, using 2020 as the baseline. In 2024, CKI achieved a reduction of 15.6% in Scope 1 and 2 emissions compared to the 2020 baseline. We remain on track to achieve our group-level decarbonisation targets by 2035 and 2050. Our result demonstrates the effectiveness of the Group's low-carbon transition plan in decarbonising its generation portfolio, addressing methane emissions in gas operations, and cleaner production of products like construction materials.

For details of the Group's low-carbon transition plan, please refer to Section 6.1 Low-carbon Transition Plan. Details of the Group's progress against the transition levers can be found in Section 8.1 Decarbonisation, Hydrogen Economy, and Energy Transition. GHG emissions are calculated in line with the Greenhouse Gas Protocol. Details can be found in Section 11.2 GHG Calculation Methodology.

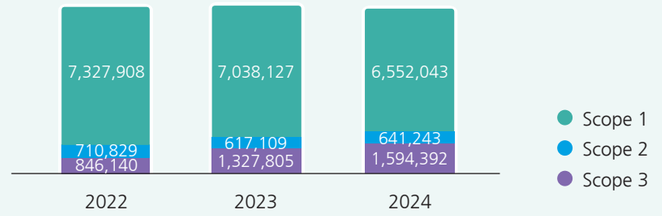
## Decarbonisation across business segments

We proactively manage our carbon footprint across geographies, coordinating with the sustainability functions of various business units to implement initiatives and meet decarbonisation targets. Where possible, our business units have established GHG emissions reduction targets and commitments that align with their respective business segment contexts and unique capabilities. Some of these targets have been validated by the SBTi. Business units actively monitor their progress toward these targets and report to the Group at least twice a year.

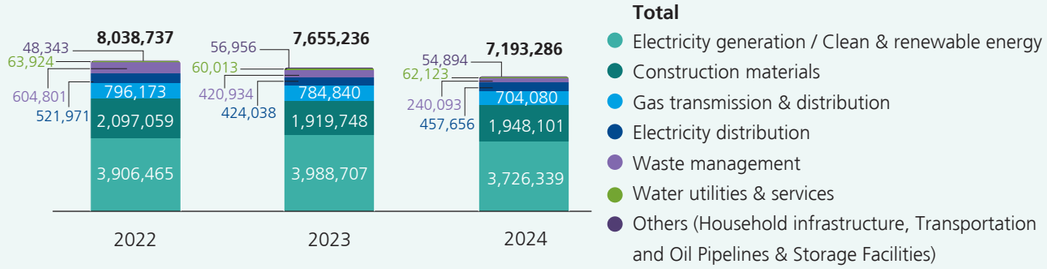
The Group recognises the environmental impact from $SF_6$, a potent greenhouse gas commonly used in electricity networks equipment. UKPN, SAPN, and VPN are adopting innovative strategies to reduce its use. UKPN introduced the UK's first "clean air" Gas Insulated Switchgear system at 132,000 volts with zero global warming potential. Meanwhile, SAPN has been trialling pure air technology and phasing out $SF_6$-insulated assets via a life-cycle management plan. VPN is evaluating non-$SF_6$ alternatives considering future regulatory requirements in relevant jurisdictions, future-proofing its network and supporting a more sustainable electric grid.

## Progress Highlights

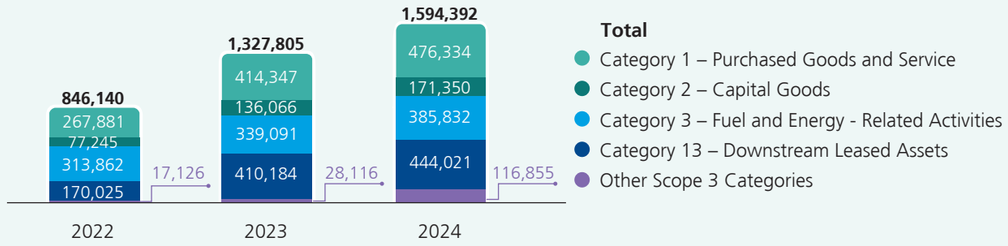
### Total GHG emissions by Scope ($tCO_2e$), 2022-24




### Scope 1 & 2 Emissions by Business Segment ($tCO_2e$), 2022-24




### Scope 3 Emissions Distribution by Category ($tCO_2e$), 2022-24



# 8.3 Climate Resilience and Adaption

The physical impacts of climate change pose significant risks to our operations. To address these challenges, we are committed to safeguarding our assets, and more importantly, our human capital against the unpredictable effects of climate change. Guided by our Environment Policy and global best practices, we develop strategies to enhance resilience and ensure operational continuity.

The climate scenario analysis we undertook in 2023 assessed the physical impacts of climate change on assets and operations. This analysis has informed our resilience strategies, helping us anticipate and adapt to climate-related risks. For details of the resilience assessment, please refer to Section 6.3 Climate-related Financial Disclosures.

In 2024, the Group continues to monitor climate risk and review adaptation actions to prepare for extreme weather events. These initiatives include monitoring short- and long-term weather patterns, leveraging climate projections, executing crisis management and business continuity plans, and investing in infrastructure resilience. Our business units have developed resilience strategies, integrating climate adaptation measures and enhance their overall preparedness.

## Climate Adaptation in Action

The Group recognises the potential risks climate change poses to its operations and is committed to enhancing resilience through proactive adaptation strategies. Guided by its Environmental Policy, the Group conducts climate scenario analyses, implements risk management actions, and invests in infrastructure improvements to safeguard assets, operations, and human capital against extreme weather impacts.

### *UKPN*

UKPN leverages the UK Climate Projections high-emissions scenario RCP8.5 to assess climate risks, projecting a 4.3°C rise by 2081–2100. Initiatives include addressing eight prioritised hazards, installing flood protections at 78 sites in ED1 (2015-2023), and planning further measures in ED2 (2023-2028). Post-Storm Arwen, wood pole designs were reviewed and deemed sufficient, with Ofgem approving related investments.

### *SAPN*

SAPN addresses extreme weather risks, particularly bushfires, through proactive measures. In 2024, the business inspected over 12,500 km as part of the detailed overhead asset inspection program and nearly 50,000 km of powerlines (across three phases) using helicopters or light vehicles to identify bushfire risks. An investment of AU$46.5 million was made in climate resilience measures, including vegetation management across more than 365,000 powerline spans to mitigate bushfire risks.

SPOTLIGHT

## HK Electric Enhances Power System Resilience to Withstand Extreme Weather

With more frequent extreme weather events brought on by climate change, HK Electric has implemented robust measures to strengthen its power network, ensuring a stable electricity supply until 2100. These enhancements include fortified Lamma Power Station infrastructure and advanced anti-flooding measures at substations.

Making reference to the reports of the IPCC and the city's hydrological and astronomical data and forecasts, key upgrades include constructing or extending flood walls to +6.0 metres Principal Datum ("PD") for substations at coastal areas and establishing new design guidelines for primary substations built after June 2022 to ensure they are capable of withstanding flood levels of +7.0 metres PD. Protective features such as automatic water pumps, flood barriers, and multi-stage alarm systems have also been installed across over 280 facilities in vulnerable locations.

At LPS, new critical generating units have adopted an elevated foundation design of +7.0 metres PD, with additional breakwaters and demountable floodgates safeguarding against storm surges and overtopping waves. Enhanced surveillance and rapid response protocols ensure operational reliability during adverse weather.

HK Electric has emphasised the importance of pre-emptive measures since the 1990s and responded to the intensified threats sampled in recent years with upgraded strategies, improved emergency equipment, and regular drills for readiness.

The company's efforts extend to supporting the government's carbon reduction goals, with a commitment to achieving net zero electricity generation by 2050. Combining climate resilience and sustainability, HK Electric aims to maintain its 99.999% reliability rating while contributing to Hong Kong's economic and social stability.



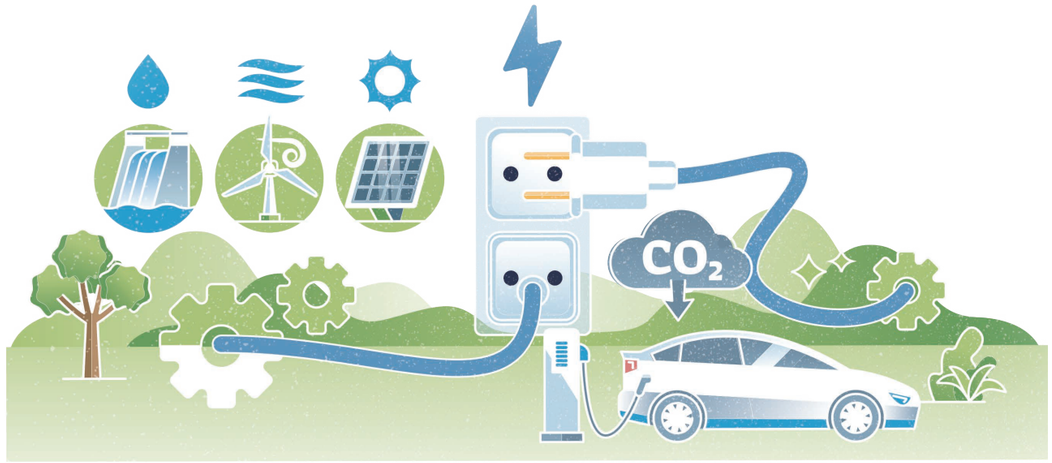
# 8.4 Resources Management

As a global infrastructure company, the Group is committed to advancing sustainable practices and fostering stakeholder trust through effective resource management. By integrating circular economy principles into our operations, we aim to minimise our impact on finite global resources while striving to reduce GHG emissions.

Our Environmental Policy emphasises the sound management of resources, including water, waste, and air quality. These are important aspects that our businesses focus on and are scrutinised by stakeholders. To address this, we actively engage external expertise and innovative practices, such as waste mapping exercises, to identify opportunities for improvement in our processes. Our comprehensive approach to managing critical resources is reported in the following sub-section:

- **Conserving water resources:** Initiatives to enhance water management by reducing water footprint and enhancing water use efficiency.
- **Promoting circular economy:** Strategies to minimise waste and enhance resource circularity.
- **Ensuring air quality:** Measures to reduce emissions and maintain clean air standards.

These efforts reflect our holistic commitment to sustainable resource management and our role in contributing to a more resilient and sustainable future.




## Action being Recognised

### Northumbrian Water won Collaborative Excellence Award at Utility Week Awards

Northumbrian Water has been recognised with the Collaborative Excellence Award at the Utility Week Awards for its innovative partnership with multiple stakeholders. The award winning project was River Deep Mountain AI ("RDMAI"). This collaboration focuses on developing open-source AI and machine learning models to address waterbody pollution in the water industry.

The initiative creates scalable digital models that harness machine learning to analyse both existing and diverse new data inputs. This approach aims to unlock insights into the complex factors affecting waterbodies, foster a deeper understanding and facilitate positive environmental change.

The RDMAI project is poised to transform data collection and insights related to waterbody pollution, driving significant environmental advancements across the regions served.

# 8.4 Resources Management

## Conserving Water Resources

Effective and reliable supply of water is vital to our operations. Amid growing water scarcity and the increasing unpredictability of supply due to climate change, water risk has emerged as a critical concern for businesses worldwide.

The Group responsibly manages this finite resource and identifies risks associated with water scarcity. The Group's Environmental Policy outlines our position on managing the impact arising from water use. We track and monitor water consumption to uncover opportunities to reduce usage and enhance water stewardship and security.

Our water management efforts focus on four key areas:

- **Reducing water use:** Water conservation is a top priority for the Group's water management efforts. Sustainable practices are embedded across all operations to ensure long-term resource stability. Each business unit implements targeted strategies to reduce water consumption, collectively advancing our commitment to preserving this essential resource.
- **Enhancing water use efficiency:** Efficient water use is a cornerstone of our environmental strategy. Our business units are turning this vision into action through practical and impactful measures, ensuring responsible and sustainable water management.
- **Assessing water stress and scarcity:** Conducting water stress assessments is vital for identifying areas where supply and demand may be imbalanced. These insights guide our targeted water management strategies across operations, ensuring sustainable water use and long-term security.
- **Managing wastewater:** The Group integrates efficient and responsible wastewater management practices, with a focus on recycling and reuse. Business units have implemented a series of measures to ensure the responsible treatment and handling of wastewater, reinforcing our commitment to environmental stewardship.

### Our water usage profile

In 2024, the Group's total water withdrawal volume decreased by 24.7% compared to 2023. Compared to water withdrawal, total water consumed by the Group is 78,130 thousand $m^3$ for the year.

The primary business segments responsible for the majority of water withdrawal volume were electricity generation and water utilities. In the electricity generation process, water is mainly used for cooling purpose, with the majority being discharged. Meanwhile, the primary business segment responsible for the majority of water consumption was water utilities, where water is withdrawn and consumed for treatment processes, providing clean water for drinking, cleaning and general use.

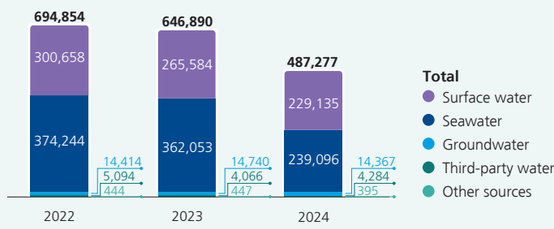
### Water management across business segments

We proactively manage our water use across our network of operating markets. We coordinate with business units across various industries to deploy water-related initiatives and set targets. Where possible, our business units have set water reduction targets and commitments in line with their respective segmental contexts and unique capabilities.

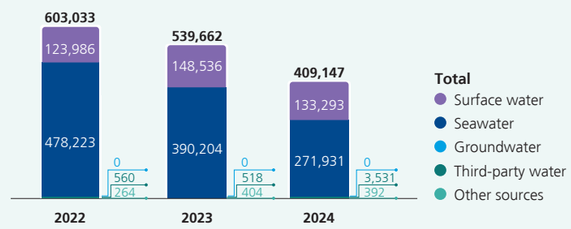
Water is of particular importance to our water utilities business. Our business unit adopts targeted measures to manage risks associated with the quality and availability of water resources, as well as wastewater treatment.

## Progress Highlights

Water Withdrawal by Source (thousand $m^3$), 2022-2024




Water Discharge by Destination (thousand $m^3$), 2022-2024




Water Withdrawal, Discharge and Consumption by Key Business Segment (thousand $m^3$), 2024

| | Water withdrawal | Water discharged | Water consumption |
|---|---|---|---|
| Electricity generation / Clean & renewable energy | 245,925 | 242,732 | 3,192 |
| Water utilities & services | 225,148 | 152,108 | 73,040 |
| Waste management | 14,774 | 14,248 | 526 |
| Construction materials | 1,307 | 15 | 1,292 |
| Gas transimission and distribution | 26 | 41 | – |
| Electricity distribution | 56 | 2 | 54 |
| Transportation | 29 | – | 29 |
| Household infrastructure | 11 | – | 11 |

# 8.4 Resources Management

## Actions by Business Segments

### Electricity generation, Electricity distribution

| Business Unit | Water Target | Status |
|---|---|---|
| HK Electric | Reduce total water consumption of its key office premises by 1% in 2025 as compared to 2020. | Achieved – 6% reduction reported in 2024 compared to 2020. |
| | Reduce corporate water intensity (per unit of electricity sold) by 7% by 2029 as compared to 2024. | Target established in 2024. |
| | Collect at least 80,000 $m^3$ of plant effluent and rainwater for reuse at LPS in 2024. | Achieved |
| UKPN | Reduce 10% water consumption by 2028 as compared to 2024 consumption. | Target established in 2024. |

### Water utilities & services

| Business Unit | Water Target | Status |
|---|---|---|
| Northumbrian Water | Reduce leakage by 12% and 14.1% in the north and the south respectively by 2025 as compared to 2019. | On track |
| | 100% meters to be smart meters by 2035. | On track |

## SPOTLIGHT

Northumbrian Water combines strategic planning with infrastructure investments to address immediate demands and prepare for future challenges. Its efforts promote efficient water use, reduce leakage, and uphold environmental stewardship, ensuring the long-term reliability of water resources and the protection of the environment.

### Securing Water Supply for the Future

Northumbrian Water is tackling the dual challenges of climate change and population growth with strategic investments in infrastructure and sustainable water resource management. Its 2024 Water Resources Management Plan, spanning 2025 to 2050, outlines a roadmap to secure reliable water supplies while achieving significant reductions in leakage and safeguarding the environment. Key targets include:

- A 55% reduction in leakage in the Northumbrian Water region by 2050;
- A 40% leakage reduction in Essex & Suffolk over the same period;
- Reduce household water consumption to an average of 122 litres per person per day by 2038, and 110 litres by 2050; and
- Reduce non-household water demand by 9% by 2038

### Northumbrian Water Invests over £175 Million in Two Major Pipeline Projects to Upgrade and Futureproof its Water Supply Network

More than 200,000 customers across the south of County Durham and into the Tees Valley are benefiting from a £155 million pipeline investment. The programme involves installing entirely new pipelines and replacing sections of the network that have served the area for over 100 years. This multi-year project will improve resilience and allow Northumbrian Water to continue delivering for the people of the area for generations to come.

In Essex, Northumbrian Water is also constructing a pipeline to transfer untreated water from the Layer-de-la-Haye Water Treatment Works to the existing reservoir at Langford Water Treatment Works, providing enhanced resilience during drought and hot weather periods. This £20 million investment will install 19 km of new pipeline, linking and balancing the use of water resources in the northern part of Essex with those in the south of the county. The pipeline will add resilience to supplies for more than 370,000 customers and will be capable of carrying up to 50 million litres of water a day.

# 8.4 Resources Management

## Promoting Circular Economy

CKI strives to use sustainable materials and adopt technologies to recover waste and enhance process circularity. This transition is essential not only for environmental preservation but also for ensuring the responsible use of finite resources.

We are committed to minimising waste generation and effluent disposal throughout our operations. Guided by the Group's Environmental Policy, we implement robust waste practices to reduce waste generation, maximise opportunities for reuse and recycle, and responsibly treat and dispose waste when other options are not feasible.

For hazardous waste, we take all necessary precautions and ensure full compliance with legislation governing its handling and disposal. For non-hazardous waste, our approach focuses on streamlining procedures and processes to enhance efficiency and reduce the consumption of daily operational inputs.

Our circular economy efforts focus on four key areas:

- **Waste reduction:** reduce the volume of waste we produce, strategically redirecting materials away from landfills, and optimising resource utilisation.
- **Waste recycling:** recycling is vital to addressing GHG emissions, particularly methane, resulting from waste disposal.
- **Waste tracking:** The Group advocates for rigorous waste tracking to improve waste reduction and recycling strategies. By analysing waste types and volumes, we identify critical areas for waste minimisation and streamline disposal methods.
- **Waste education and training:** Through various training programs, we empower our workforce and stakeholders with the knowledge and tools needed for effective waste management, fostering a culture of responsibility.

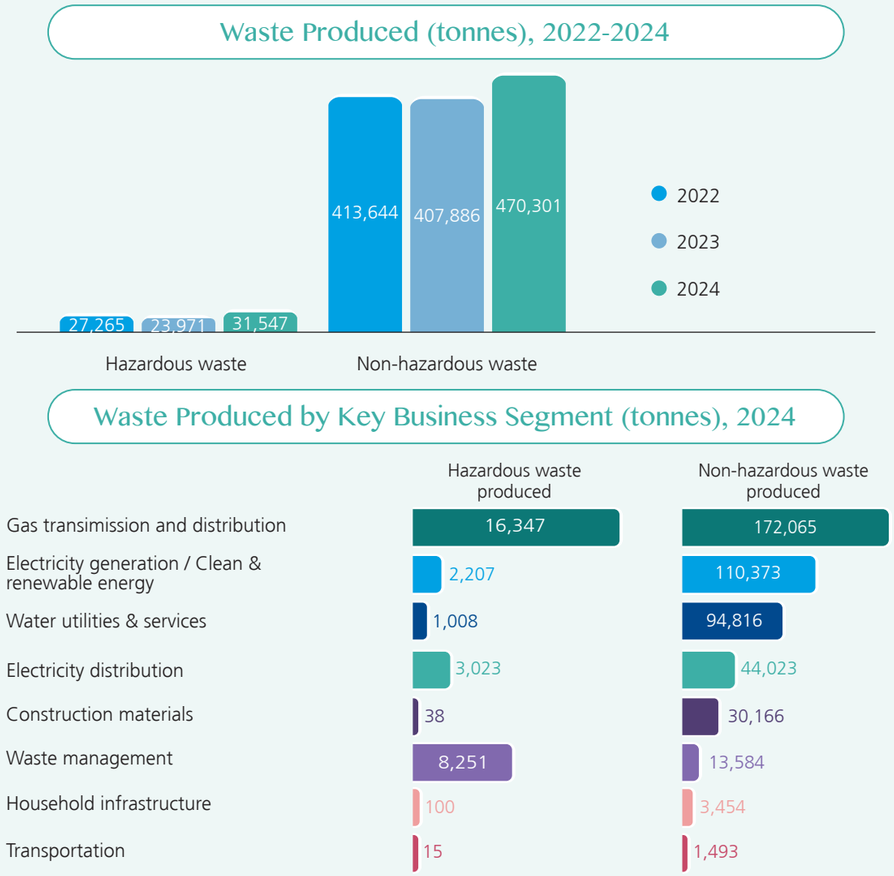
### Our waste profile

In 2024, a total of 501,848 tonnes of waste was generated. Over 93% of the waste generated is non-hazardous.

The major source of non-hazardous waste is the energy-related business segments. Hazardous waste generation is material to our waste management business segment due to the production of fly ash from the waste incineration process.

AVR, operates energy-from-waste facilities that process various types of waste, including household, commercial, wood waste, and paper pulp residue. The incineration process generates residues such as fly ash, A-cokes, and filter cake, which are classified as hazardous waste under local regulations due to their role in filtering substances of concern. Managing these substances is a material issue and reflects AVR's commitment to environmental responsibility.

## Progress Highlights



# 8.4 Resources Management

## Waste management across business segments

Supporting the Group's commitment to minimising waste footprints, our business units set waste reduction and recycling targets wherever feasible and have implemented a waste management plan with responsible and efficient waste handling guidelines.

To manage the impact of ash and other waste generated, our business units are implementing and exploring reuse and recycling solutions, embedding circular economy principles into their planning and strategies.

## Actions by Business Segments

### Electricity generation, Electricity distribution

| Business Unit | Waste Target | Status |
|---|---|---|
| HK Electric | Reduce production of ash and gypsum at LPS by 37% in 2024 as compared to 2019. | Achieved |
| | Reduce total waste generation of its key office premises by 10% in 2025 as compared to 2020. | On track – 5.5% reduction reported in 2024 compared to 2020. |
| | Collect 5,000 kg of used lead-acid batteries for recycling by local recyclers each year during the period from 2024 to 2028. | Achieved in 2024. |
| UKPN | Recycle 80% of office and depot and network waste by 2028. | On track – 70% reported in 2024. |
| | Recycle 99.5% of street works waste by 2028. | On track – 99.9% reported in 2024. |
| | No recoverable waste to landfill by 2025. | On track – 99.4% diversion rate in 2024. |

### Water utilities & services

| Business Unit | Waste Target | Status |
|---|---|---|
| Northumbrian Water | Achieve zero business waste by 2025. | On track – working with contractors to increase recycling, divert waste from landfills, and encourage behavioral changes across the business. |

### Gas transmission & distribution

| Business Unit | Waste Target | Status |
|---|---|---|
| NGN | Send less than 0.1% of excavation spoil by mass to landfill annually by 2026. | On track – 0.0% reported in 2024. |
| | Reduce amount of office and depot waste created by 20% between 2018 and 2026. | On track – 17% reduction in 2024. |
| | Use no more than 2.5% virgin aggregate annually by 2026. | 3.9% reported in 2024. |
| | 0% waste to landfill by 2031. | On track – 0.0% reported in 2024. |
| WWU | Send less than 20% of total excavated spoil materials to landfill by 2026 as compared to 2019. | On track – 0.1% reported in 2024. |
| | Send a maximum of 20% waste to landfill by 2026. | On track – <1% reported in 2024. |

### Others

| Business Unit | Waste Target | Status |
|---|---|---|
| Alliance Construction Materials | Reduce solid waste extracted from plant yard washout to 0.02T/$m^3$ of concrete produced. | Achieved – 0.008T/$m^3$ reported in 2024. |
| Reliance Home Comfort | Recycle 70% of residential and commercial waste. | Achieved – 75% reported in 2024. |
| Enviro NZ | 10% increase in the quantity of organic waste processing by 2025. | Achieved |
| | 5% increase in the quantity of materials for resource recovery by 2025. | Achieved |

# 8.4 Resources Management

## Circularity In Action

CKI is committed to sustainable waste management, guided by its Environmental Policy to minimise waste generation, increase recycling, and handle hazardous materials responsibly. Key strategies include waste reduction, recycling, tracking, and education.

### Enviro NZ

Enviro NZ treats waste responsibly and achieves landfill gas collection and destruction efficiencies exceeding 90%. At Hampton Downs, captured landfill gas generates electricity, while at Bonny Glen, it is used to evaporate landfill leachate.

### HK Electric

HK Electric's primary non-hazardous waste includes ash and gypsum from electricity generation and construction waste from significant projects. "4R" principle – Reduce, Reuse, Recycle, and Recover – to minimise waste production and maximise recycling during electricity generation are adopted in the course of electricity generation. We adopt a recycling maximisation approach for handling the ash and gypsum, extending the materials' lifecycle for industrial use. Construction waste is reused, recycled, or properly disposed of. Hazardous waste is managed through mandatory trip ticket systems and collected by licensed waste collectors for recycling or disposal at licensed waste facilities.

*100% of the ash and gypsum produced from HK Electric's Lamma Power Station is reused by third parties for industrial applications. Storage silos and an ash lagoon have been constructed in the Power Station.*

### AVR

AVR promotes circularity by processing bottom ash into marketable products. The residual byproduct of waste incineration is the ash at the bottom of the incinerator. AVR's partners transform this 'bottom ash' into clean granular aggregates, which manufacturers of construction materials use as a gravel substitute in concrete products. These granules are also utilized as clean construction materials, for example, in Rijkswaterstaat (Ministry of Public Works) infrastructure projects.

*AVR has built a new collection facility to improve efficiency in collecting and processing bottom ash in to useful materials, supporting the circular economy.*

# 8.4 Resources Management

## Ensuring Air Quality

Our commitment to environmental stewardship is exemplified by our stringent measures to reduce air pollutants, robust investments in sustainable technologies, and the adoption of best practices in operations.

The Group's Environmental Policy guides our approach to managing air pollutants. We track, monitor and reduce air pollutants across the Group's operations. We are not simply aiming to reduce emissions; we are determined to contribute to a healthier environment while mitigating the health and ecological risks associated with air pollution. This conscientious approach reinforces the Group's reputation as a forward-thinking leader, deeply invested in the well-being of the communities we serve and the resilience of the ecosystem.

### Our air emissions profile

In our operations, air emissions are primarily generated from fuel or waste combustion for electricity generation, as well as from wastewater treatment processes.

In electricity generation, air pollutants are produced when fossil fuels are combusted to produce electricity. Waste incineration also contributes to air emissions, as burning waste materials can release similar pollutants if not properly managed.

In wastewater treatment facilities, chemical and biological processes can also generate air emissions. For instance, during nitrification and denitrification, nitrogen compounds can be released as gases, including nitrogen oxides.

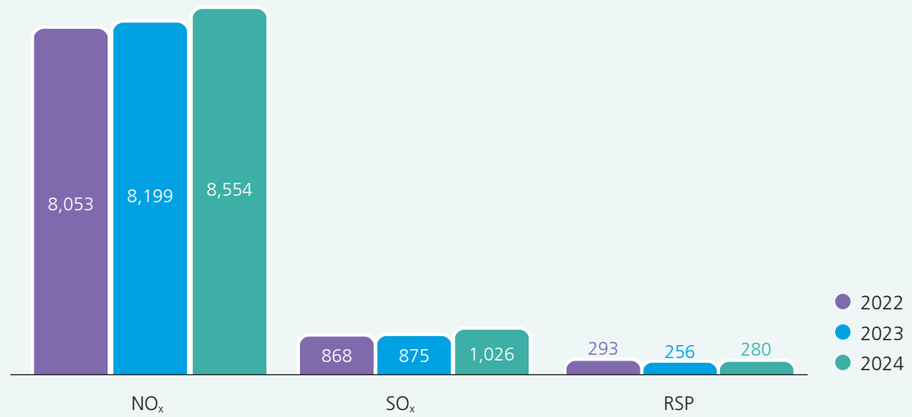
Our facilities operate under strict local environmental permits that set specific limits on air emissions to ensure compliance with regulatory standards. These permits are designed to minimise environmental impact and protect air quality by mandating the use of best practices and advanced technologies for emission control. Regular monitoring and reporting ensure compliance with these limits while driving continuous improvement in our emissions management strategies.

### Air emissions management across business segments

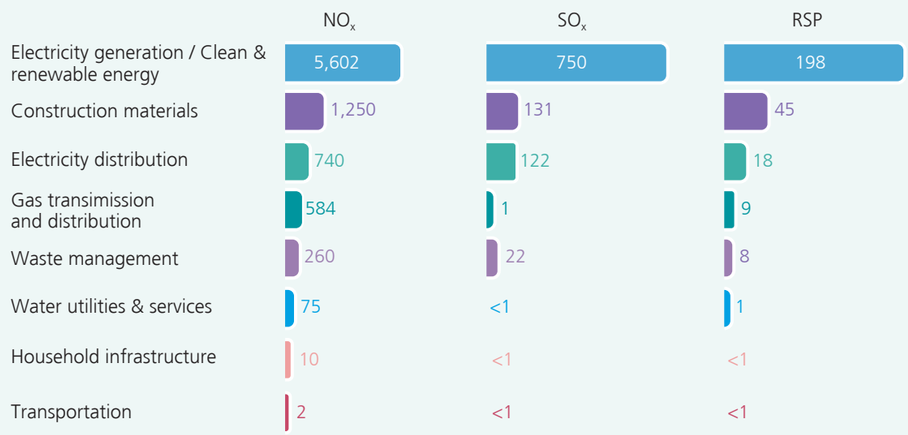
The Group is dedicated to controlling and reducing air emissions through progressive strategies across its various business units. We support our businesses in adopting emission-reducing technologies and cleaner energy sources, aligning with our climate ambitions. By setting clear emissions reduction targets and investing in advanced control systems, the Group actively contributes to a healthier environment.

## Progress Highlights

Air Emissions (tonnes), 2022-2024




Air Emissions by Key Business Segment (tonnes), 2024



# 8.4 Resources Management

## Actions by Business Segments

### Electricity generation, transmission & distribution

| Business Unit | Air Emissions Target | Status |
|---|---|---|
| HK Electric | Commission new gas-fired generating unit L12 in early 2024, with advanced emissions control technology installed for reducing $NO_x$ emissions. | Achieved |
| UKPN | Reduce 33% of $NO_x$ emissions between 2023/24 and 2028/29. | On track – Over 1,000 Euro 5 vans have been replaced by Euro 6 vans, which produces 40% less $NO_x$. |

### Gas transmission & distribution

| Business Unit | Air Emissions Target | Status |
|---|---|---|
| Phoenix Energy | Eliminate all air pollution emissions from Sulphur Oxide ("$SO_x$") and Particulate Matters ("PM2.5" & "PM10") by 2035. | On track |
| | Eliminating all but residual emission for Nitrous Oxide ("$NO_x$") by 2048. | On track |

## Reducing Air Emissions In Action

Our business units in the power business segments are actively improving air quality by reducing $NO_x$ emissions from their operations, particularly regarding emissions from the power generators.

### HK Electric

HK Electric prioritises cleaner fuels such as natural gas and low-sulfur coal while employing continuous flue gas monitoring at the LPS to ensure compliance with government emission standards. HK Electric utilises advanced technologies to manage air emissions, including Selective Catalytic Reduction systems for $NO_x$ control of gas-fired generating units, low $NO_x$ combustion technologies, flue gas desulfurisation plants, and high-efficiency electrostatic precipitators. Overall emissions of $SO_x$, $NO_x$, and RSP in 2024 remained well within statutory caps, showcasing the tangible impact of technological upgrades on reducing environmental footprints.

### UKPN

UKPN tested hybrid diesel-battery generators in 2024 for low power demand periods. Tests showed these hybrid systems reduced fuel use by 25-40%, lowered noise, and decreased $NO_x$ emissions. The company is now replacing diesel generators with hybrid systems and asking suppliers to use low-carbon fuels and Stage V engines.

Data from a recent job shows the hybrid generator used 15 litres of fuel, compared to 52 litres if a standard diesel generator had been used – a 71% reduction in fuel use. UKPN is adding software to measure fuel use across all hybrid generators. This will help track actual savings compared to diesel-only operations and improve emissions reporting. The company will also be collecting customer feedback for sites where hybrid generators have been used.

# 8.5 Biodiversity and Nature

The Group conserves biodiversity to secure natural resources, mitigate supply chain risks, and ensure ecosystem sustainability. Committed to achieving no net loss and striving for biodiversity net gains, we integrate biodiversity and habitat protection throughout the lifecycle of our assets.

To uphold our pledge of returning more to the environment than we take, we require all operations and suppliers to avoid activities near globally or nationally significant biodiversity sites, including World Heritage areas and IUCN Category I–IV protected areas. Where operations are near critical biodiversity areas, we apply the mitigation hierarchy of avoidance, minimisation, restoration, and offsetting to reduce our impact. Land restoration following site closure is a priority, supported by allocated mitigation and rehabilitation efforts.

Environmental management, including biodiversity protection and land rehabilitation, is overseen by management committees or project managers across business units. These teams conduct regular assessments, engage external experts for tailored management plans at high-risk sites. The Group complies with all applicable law, rules and regulations that are relevant to environmental protection and biodiversity conservation across the jurisdictions in which the Group operates. In 2024, the Group issues Biodiversity Policy outlining strategies to minimise adverse impact on natural habitats and enhance biodiversity protection through stakeholder collaboration.

## Biodiversity management across business segments

The Group proactively assesses environmental impacts, implement conservation strategies, and support restoration efforts to address and mitigate biodiversity loss. We incorporate biodiversity considerations into our core operations to promote ecological sustainability across all areas of our business.

In our electricity distribution business, biodiversity is appropriately considered during line clearance operations. At VPN and United Energy, the Environmental Planning and Heritage team is standardising assessment procedures for projects affecting native vegetation, including line clearance, maintenance, and customer connections. Automated risk assessment processes introduced in 2024 for line clearance activities provide contractors with standardised controls in protected areas.

In the water utilities segment, recognising the close link between water and biodiversity, Northumbrian Water has set a 10% biodiversity net gain target by 2050 and continues implementing initiatives to achieve this goal.

## Actions by Business Segments

### Water utilities & services

| Business Unit | Biodiversity Target | Status |
|---|---|---|
| Northumbrian Water | Achieve 10% net gain in biodiversity by 2050 for all our construction activities. | On track |

### Electricity distribution

| Business Unit | Biodiversity Target | Status |
|---|---|---|
| SAPN | Develop an Action Plan for Nature and Biodiversity. | Achieved – The Biodiversity Action Plan was developed in 2024, with a detailed framework to be developed in 2025. |
| | Deploying programme to cover up electrical infrastructure that has high risk of impacting native fauna. | On track. The programme has been developed in 2024. |
| UKPN | In RIIO-ED2 period, the target is to increase biodiversity net gain of 10-20% for new major substation development, as well as improving net-gain of 30% at 100 existing sites. | On track – 25 existing sites received biodiversity improvements, while 1.5 Biodiversity Net Gain units have been purchased for 3 sites. |
| | Identifying and assessing an additional 100 sites for biodiversity enhancement by 2028. | Achieved – Additional 100 sites identified and assessed. |

# 8.5 Biodiversity and Nature

## Gas transmission & distribution

| Business Unit | Biodiversity Target | Status |
|---|---|---|
| AGIG | Setting biodiversity targets by end of 2025. | On track |
| WWU | Committed to "no net loss" on designated projects in GD2 and achieving "biodiversity net gain" on impacting work from 2026. | On track |
| | Committed to planting 5 trees for every tree cut down. | On track – 3,135 tree were commissioned planting in 2024. |
| NGN | Creating "Homes for Nature" on 250 sites by 2026. | On track – Over 110 sites under development. |
| | 20,000 saplings to create 2 miles of new hedgerow on our land by 2031. | On track – Project currently in early planning stage. |

### Biodiversity Net Gain

Northumbrian Water is set to transform an area of poor quality grassland in County Durham into a thriving habitat for flora and fauna. The transformation of this area will deliver "Biodiversity Net Gain" as part of a project to upgrade the water supply network, leaving the local environment in a better state than it was before construction began. The County Durham and Tees Valley project, one of the company's largest in recent years, enhances the resilience of the network connecting water treatment in Teesdale with customers across the south of the county and into the Tees Valley. Some sections of the network have been in service for over 100 years.

SPOTLIGHT

## Northumbrian Water: Pioneering Sustainable and Biodiversity-driven Water Infrastructure

Northumbrian Water is transforming water infrastructure by integrating sustainable practices and leveraging natural landscapes to enhance biodiversity and water management. From creating thriving ecological habitats in County Durham to employing woody dams and site-sourced materials at Milkwellburn Wood, the company demonstrates how innovative approaches can address infrastructure challenges while benefiting communities and the environment.

### Transforming Poor-Quality Grassland into a Biodiversity Haven

Northumbrian Water has set new standards for integrating biodiversity with infrastructure by transforming 15 hectares of low-diversity grassland into a thriving ecological habitat. As part of the £155 million Project Pipeline investment in County Durham and Tees Valley, this initiative embraces Biodiversity Net Gain principles to leave the natural environment in a measurably better state.

Situated along the River Gaunless between Shildon and Bishop Auckland, the site will be enhanced over a 31-year lease. Key developments include 11 hectares of species-rich grassland, over 1,000 metres of native hedgerows, and new woodland areas. Aquatic habitats will also benefit from pond restoration and the creation of three new water bodies alongside 140 metres of rehabilitated hedgerows to strengthen ecological connectivity. This project boosts biodiversity and showcases how infrastructure can support long-term environmental resilience.

### Leveraging Natural Landscapes for Sustainable Water Management

Northumbrian Water's Bluespaces programme makes improvements to the water environment, with a target of improving 250km by 2025 and 500km by 2030. One of these projects was at Milkwellburn Wood near Gateshead in collaboration with Durham Wildlife Trust. Work at the site replaced traditional artificial infrastructure with interventions like leaky woody dams, sustainable willow fencing, and habitat-friendly drainage designs. Using site-sourced materials, these measures control water flow, reduce bank erosion and create microhabitats for wildlife. Enhanced public access, including improved footpaths and signage, connects the community with the project's environmental benefits.

This project has improved 3.8km of blue spaces, fostering biodiversity and engaging local communities through 11 volunteering sessions, contributing over 548 service hours. The Bluespaces programme highlights Northumbrian Water's commitment to sustainable development, combining innovative environmental practices with community involvement to create lasting benefits for people and nature.

# 9 Human Capital

Our people are the foundations of the Group's success, and we are committed to fostering a workplace that supports their growth, well-being, and rights. Engaged and empowered employees not only drive innovation and performance but also strengthen stakeholder relationships, ultimately contributing to the Group's long-term growth and success in a competitive and rapidly evolving industry.

## Material Topics

9.1 Human Capital Management
9.2 Labour and Human Rights
9.3 Diversity, Equity, and Inclusion
9.4 Health, Safety and Well-being
9.5 Future-ready Skill for Development

# 9.0 Overview

## People Management

The Group recognises that employees, with their unique skills and experience, play a critical role in the continued success of our business operations. We are dedicated to providing equal employment opportunities and fostering a supportive environment that nurtures their personal growth and development. We also instil in our employees the values of candour, courtesy, and respect for humanity, personal dignity, and privacy.

The Corporate Social Responsibility Policy of the Group explicitly communicates our position on employees' employment and development, with several key points highlighted below:

- providing a positive work environment that values the wide-ranging perspectives inherent in our diverse workforce and fostering individual growth and achievement of business goals;
- providing a positive work environment where people can grow, and offering a wide range of training and development programmes and interest courses and activities;
- ensuring internal equity and external competitiveness of staff remuneration and recognition; and
- providing a safe workplace for all our employees.

## Regulatory Compliance

During the Reporting Period, we were not aware of any incidents of non-compliance with laws and regulations that have a significant impact on the Group relating to (i) employment and labour practices, occupational health and safety, discrimination and harassment; (ii) health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress, and protection of customer privacy data; and (iii) nor did we identify any incidents relating to the use of child or forced labour.



# 9.1 Human Capital Management

Our skilled and motivated workforce is key to our success, driving innovation, growth, and adaptability in the evolving utilities industry. As the sector increasingly seek for specialised professionals to modernise infrastructure, we recognise the challenges of attracting and retaining top talent. High turnover can lead to costly rehiring, knowledge gaps, and insufficient training, which is why we prioritise strong human capital strategies to address these issues.

We are committed to fostering a supportive and empowering workplace where employees can reach their full potential. By continuously enhancing our human capital initiatives to meet employee expectations and align with industry best practices, we aim to retain top talent and build expertise and capabilities for our employee. These efforts ensure we are well-prepared to navigate industry complexities and achieve the Group's strategic goals.

## Employee Recruitment

Attracting and retaining top talent is critical to sustaining the Group's competitive edge and successfully executing our business strategy. To build a strong and diverse talent pipeline, we collaborate with schools and universities through various recruitment programs. Initiatives such as campus hiring and apprenticeship schemes further expand our reach, enabling us to attract exceptional talent worldwide. These efforts bring in high-potential candidates that are important for us to achieve our strategic goals.

To stay aligned with employee expectations and evolving needs, the Group regularly evaluates and refines its human capital development initiatives.

## Employee Engagement

The Group is committed to fostering a workplace where employees feel valued and aligned with the Group's objectives. We have a well-structured performance review process that fosters two-way feedback and aligns employee compensation with individual goals and management objectives. Performance reviews are team-based and undertaken annually. To understand and address employee needs, we conduct regular engagement surveys. These surveys provide valuable insights into employee experiences, helping us shape an inclusive culture that supports personal growth, talent retention, and long-term satisfaction. For example, building on the results of the employee satisfaction survey conducted in 2023, AVR, launched a leadership programme focused on safety in 2024 and planned to conduct another survey to continue tracking progress and driving improvements. By promoting transparency and empowerment, we strengthen employee satisfaction and innovation, building resilience in meeting future challenges.

We also prioritise creating a supportive and flexible work environment to retain top talent. Initiatives such as working from home, working flexible hours and part-time working options are offered for applicable employees across the Group. For more details, refer to Section 9.4 Diversity, Equity, and Inclusion.

# 9.1 Human Capital Management

## Actions being Recognised

### Phoenix Energy: A Great Place to Work Employee Survey

In 2024, Phoenix Energy focused on enhancing workplace culture and employee satisfaction by participating in the Great Place to Work® survey. This global survey evaluates workplace culture and leadership behaviours, with certification signifying a company culture that employees truly value and appreciate. Phoenix Energy was certified as a Great Place To Work in November 2024, with noticeable improvement on results from the previous survey in 2022.


### Northumbrian Water: Leading with Innovation and Inclusivity

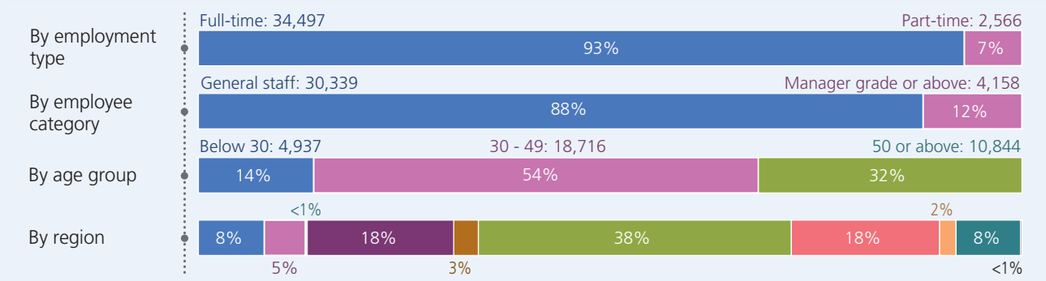
Northumbrian Water Group was recognised as the 2024 British Chamber of Commerce National Winner for British Business of the Year – People and Work, exemplifying how innovation and inclusivity drive success. Serving 2.7 million customers in Northeast England, Northumbrian Water integrates a proactive approach to recruitment, retention, and employee development, fostering diversity and inclusion.

Northumbrian Water's initiatives, such as the Innovate Futures and Aspiring Managers programs, alongside diversity networks and digital platforms, enhance job accessibility and career progression. Since 2019, Northumbrian Water has been recognised as one of the UK's best workplaces. This outcome is reflected in its annual survey conducted by Great Place to Work® UK, a global standard for employee experience., By prioritising people, Northumbrian Water strengthens its workforce and delivers lasting community impact, setting a benchmark in the utility sector.

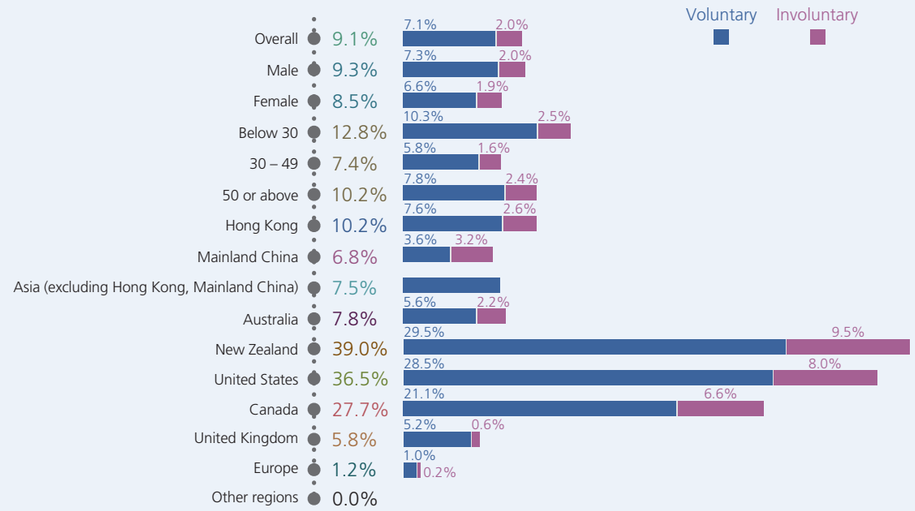
## Progress Highlights

### Employee Profile in 2024

**Total no. of employees: 37,063**

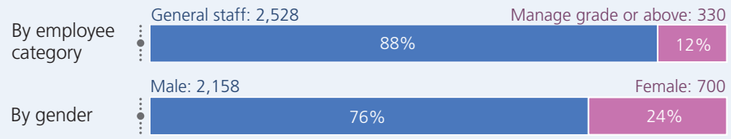



### Employee Turnover in 2024




### Internal Hires in 2024

**Total no. of internal hires: 2,858**




Notes:
(1) All data includes only employees directly employed by the Group.
(2) Data by employee category, age group and region includes only full-time employees

# 9.1 Human Capital Management

## Training and Development

The Group understands that training and development are essential for improving employee performance and driving sustainable growth. We are committed to fostering a culture of continuous learning – equipping employees with the skills and qualifications needed for their roles and positioning ourselves as an employer that values and invests in its people.

Through comprehensive training programmes, mentorship, and career development initiatives, we empower employees to enhance their skills and reach their full potential. Our training efforts focus on technical skill-building, leadership development, and professional certifications, providing opportunities for personal and career growth. To stay effective and relevant, we regularly review and update these programmes to align with employee expectations and industry trends.

By investing in our workforce, we ensure that our employees are ready to meet the challenges of a rapidly changing industry and contribute to the Group's long-term success.

## Employee Training in 2024

### Percentage of full-time employees who received training

**By gender**

| Overall | Male | Female |
|---|---|---|
| 92% | 93% | 89% |

**By employee category**

| General Staff | Manager Grade or Above |
|---|---|
| 93% | 83% |

### Average hours of training per full-time employee (No. of hours)

**By gender**

| Overall | Male | Female |
|---|---|---|
| 33.0 | 38.0 | 18.3 |

**By employee category**

| General Staff | Manager Grade or Above |
|---|---|
| 34.7 | 20.7 |

## Actions by Business Units

### SAPN: A Top Spot for Engineering Interns

SAPN's Engineering Vacation Programme has secured its place among Australia's best, ranking 14th for smaller intakes in the Australian Association of Graduate Employers 2024 Top 50 Intern Programs. This leap from 28th last year highlights the company's commitment to nurturing future talent in the power industry.

The Programme offers engineering and technology students invaluable real-world experiences, bridging the gap between academic learning and professional application. With feedback from over 2,400 interns across 147 organisations, this recognition underscores SAPN's dedication to excellence and innovation.

As one of South Australia's largest employers, the company continues to shape careers, empowering interns and supporting their journey towards a successful future in the energy sector.

### EDL: Young Professionals Network

EDL's Young Professionals Network ("YPN") supports graduate programme employees and student interns by providing opportunities to socialise and build a peer-support network early in their careers.

The YPN coordinate volunteering activities and donations for local charities such as FareShare (meal relief charity) and Brisbane Basket Brigade (Christmas charity). Volunteering days are organised to enhance team building and communication skills among members, and networking with other employees.


*EDL's YPN volunteers with food charity FareShare.*

# 9.2 Labour and Human Rights

Labour and human rights are the ethical foundation of our operations and play a critical role in maintaining our reputation. Upholding these rights ensures a fair, respectful, and inclusive working environment, which is essential for attracting and retaining talent while fostering employee morale and productivity.

The Group complies with international standards on labour and human rights, mitigates risks such as labour disputes, and builds trust with employees, communities, and stakeholders – contributing to long-term success. We strictly prohibit child labour, forced labour, human trafficking, and any form of human rights violations. To ensure this commitment, we have established robust protocols to ensure all our businesses and employees uphold our principles.

Our efforts are guided by key policies, including:

- Corporate Social Responsibility Policy
- Anti-Harassment Policy
- Human Rights Policy
- Modern Slavery and Human Trafficking Statement

We maintain a zero-tolerance approach to discrimination, harassment, and exploitation. Our recruitment process strictly adheres to equal opportunity guidelines, fostering a work environment free from discrimination based on race, ethnicity, gender, religion, age, and disability. Additionally, we conduct thorough onboarding checks and enforce strict measures to prevent child labour and forced labour, creating a workplace that values inclusivity and fairness.

## Human Rights

Protecting and promoting human rights is central to our operations and our engagement with the communities in which we operate. Our approach is guided by the following frameworks:

- Human Rights Policy – This policy emphasises respect for human rights as a core value. It requires all operating companies and suppliers to uphold the principles outlined and adopt similar policies in their own operations. When necessary, the Group undertakes due diligence to identify and mitigate risks, including supplier assessments and whistleblowing case management.
- Modern Slavery and Human Trafficking Statement – This statement ensures that the Group's employees, contractors and supply chain are free from modern slavery and human trafficking practices. Transparency in addressing these issues is required across all businesses.
- The Supplier Code of Conduct – This code applies to all business units, products, and suppliers. It is aligned with international standards, including the Universal Declaration of Human Rights and the International Labour Organization's Core Conventions.

## Promoting Fair Practices

The Group is dedicated to providing a workplace with appropriate working conditions that uphold dignity, respect, and fairness. We recognise collective bargaining as an essential mechanism for fostering ethical and responsible business practices.

We continue working closely with employees and their representatives to ensure that fair and equitable labour practices remain integral to our operations.

## Actions by Business Unit

### WWU: Supporting Living Wage

WWU has been an accredited Living Wage Employer by the Living Wage Foundation since 2022, demonstrating its commitment to fairly compensating employees and recognising their contributions, particularly during the ongoing cost of living crisis. This accreditation reflects WWU's dedication to paying the real Living Wage, an independently calculated rate based on the cost of living, ensuring employees can meet everyday needs such as groceries or unexpected expenses. Throughout 2024, WWU has continued to align with changes to the real Living Wage, reinforcing its promise to support its workforce.

WWU plays a vital role in safely delivering gas to homes and businesses across Wales and south-west England, keeping customers safe and warm. The company takes pride in its employees, who consistently go above and beyond to provide reliable service, and remains committed to ensuring they are rewarded for their hard work.

Fair pay is more important than ever, and WWU hopes its Living Wage Employer accreditation will not only support its current colleagues but also attract new talent to the business. By leading the way in fair pay practices, WWU is strengthening its industry's appeal while continuing to support its employees during challenging times.

# 9.3 Health, Safety, and Well-being

Health, safety, and well-being are key to our operations because they protect our employees and support the quality of our services. By making these priorities, we create a safe workplace that helps prevent accidents and injuries, ensuring smooth operations and steady productivity. Focusing on employee well-being also boosts morale and job satisfaction, which leads to better retention and stronger engagement.

## Health and Safety Management

The Group operates across diverse sectors, in which our employees and contractors are potentially exposed to a range of health and safety risks. We recognise that maintaining a safe and healthy workplace is not only a legal requirement but also a moral responsibility. Every employee, contractor, and visitor has the right to work in a safe and healthy environment. To uphold this commitment, we consistently monitor and improve our health and safety practices, ensuring a secure environment for all stakeholders across our facilities and premises.

Our commitment to health and safety is outlined in the Group's Health and Safety Policy, which provides a framework and sets minimum requirements for all business units. This policy ensures compliance with relevant laws and regulations while incorporating best practices.

Key commitments include:

- complying with all applicable laws and regulations in the relevant jurisdictions;
- meeting industry-specific standards or referencing relevant best practices;
- adopting local or international health and safety guidelines for goods and services purchased;
- maintaining a safe working environment;
- providing employees and contractors with guidelines or training specific to their job requirements;
- assessing the health and safety performance of contractors and suppliers on a regular basis;
- engaging employees and contractors through information sharing and programmes to improve their health and well-being; and soliciting feedback for continuous improvements;
- monitoring and reporting health and safety performance;
- providing adequate resources to implement the Health and Safety Policy; and
- enforcing the implementation of the Health and Safety Policy with regular reviews and internal audits.

The Group adheres to certification standards and legal requirements for health and safety in countries where we operate and has adopted well-established Health and Safety Management Systems (HSMS) to maintain health and safety working conditions beyond mere regulations. Health and Safety Committees play a vital role in overseeing risk assessments within their respective operations, as well as monitoring and addressing work-related injury risks. Throughout the year, internal and external audit programmes are conducted across different business units to facilitate continuous improvement and protect our stakeholders from harm. Additionally, we provide role-specific training and safety awareness programmes to enhance our employees' knowledge and understanding of health and safety practices.

## Progress Highlights

### Safety Performance in 2024

**Employees**

| | | | |
|---|---|---|---|
| Lost time injury rate | 0.52 | No. of fatalities | Zero |
| Lost day due to work injury | 7,071 | Percentage of employees covered by OHSAS 18001 / ISO 45001 | 52% |

**Contractors**

| | | | |
|---|---|---|---|
| Lost time injury rate | 0.82 | No. of fatalities | Zero |

Note:

(1) Lost time injury rate represents the number of injuries per 100 employees per year. It is calculated as "total number of injuries multiplied by 200,000 and then divided by total hours worked"

In addition to our strong commitment to employee safety, the Group is equally dedicated to ensuring the safety of contractors within our operations. To uphold high safety standards, we implement mechanisms such as pre-screening contractors based on their safety performance, requiring compliance with health and safety policies, and partnering only with approved contractors who demonstrate strong safety practices.

## Health and Safety Risk Assessment

The Group understands that effective risk management is essential for maintaining a safe working environment. To achieve this, we regularly conduct internal and external risk assessments across our operations. These assessments help us identify potential hazards, evaluate associated risks, and implement suitable control measures to reduce or eliminate those risks.

## Health and Safety Training for Employees and Contractors

The health and safety of our employees and contractors is a top priority for the Group. To enhance safety awareness and reduce hidden workplace hazards, we provide a range of training sessions and forums. These programmes ensure that everyone is equipped with the skills, knowledge and awareness needed to work safely.

# 9.3 Health, Safety, and Well-being

## Improving Safety Practices with External Stakeholders

Collaborating with external stakeholders is an important part of our commitment to improving safety practices. By fostering open communication and sharing best practices, we aim to build a culture of continuous improvement and maintain the highest safety standards across all our operations.

## Educating Public Safety

We have also implemented different educational initiatives to raise public awareness about the importance of environmental protection and promote energy safety practices to positively impact both the communities we serve and the environment we all share.

## Actions by Business Units

| | Safety Target | Status |
|---|---|---|
| VPN | Zero fatalities by 2026. | On track |
| UKPN | Commitment to engage with the public on safety issues, focusing on those who are at highest risk of injury from contact with our networks by engaging with 300,000 people per year during RIIO-ED2 (vs. 250,000 people per year during RIIO-ED1). | On track – Engaged with over 580,000 people in 2024. |
| HK Electric | Achieve a reduction in the Lost Time Injury Severity Rate in 2024 as compared to the average over the previous three years. | Achieved |
| NGN | Achieve 0.04 of lost time injury rate – employee and contractors – for 2024. | Achieved |
| Reliance Home Comfort | Lost Time Injury Rate target – 1.75 for 2024. | Achieved |

## Actions being Recognised

### AGIG Wins 2024 APGA Safety Award

Given the inherent nature of assets being underground, crews cannot rely on sight as an indicator – meaning the need for thorough surveying and risk management is required before ground penetration. Our Underground Asset Locating focuses solely on strengthening the controls in place to reduce underground gas asset strikes. For our distribution assets, the root cause of many underground asset strikes can be attributed to a lack of effective locating, as well as relying on assumptions.

To reduce distribution asset strikes, AGIG has focussed on opportunities to strengthen safety controls including: Building a positive workplace culture; field engagements; technical training; and locating tools and equipment.

The Australian Pipelines and Gas Association awarded AGIG the national Safety Award 2024 for the work in enhancing the safety of the pipeline industry and AGIG's personnel.

### NGN's Innovative Training Recognised with Collaboration Award

NGN received the Collaborative Initiative of the Year Award at the Energy & Utility Skills Awards. In partnership with Develop Training and JTL, the £500,000 Training Terrace in York simulates real-life emergency gas scenarios, providing an unparalleled hands-on learning experience that equips employees to handle high-pressure situations effectively. NGN elevates safety standards and ensures public protection by fostering a culture of preparedness and technical expertise.

# 9.3 Health, Safety, and Well-being

## Work Safety in Action

Our business units implement tailored safety practices to address critical areas such as distribution safety, fire safety, and road safety. These initiatives ensure employees are well-trained, informed, and equipped to carry out their work safely and responsibly.

### UKPN: Distribution safety

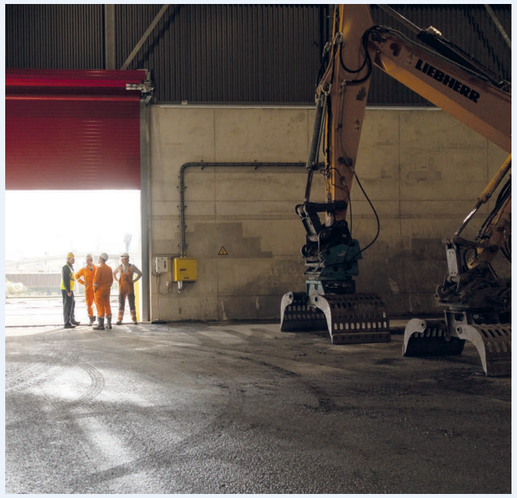
Refresher training is conducted every three years to ensure employees with operational competency remain up to date with distribution safety rules. Competency is monitored through safety visits, audits, and monthly reporting. In June 2024, the latest WAP cycle was completed, ensuring all operational staff stayed within their 3-year cycle. Employees unable to meet requirements will have their respective authorisations removed.

### VPN: Road safety

In 2024, Heavy Vehicle Driver Assessment and Load Restraint training were delivered across 14 depots to enhance driver capabilities and educate employees on road safety rules and load restraint practices. An external provider assessed drivers over a 4-hour period, while the load restraint course was internally delivered. This training improved heavy vehicle driver competency and compliance with business safety requirements.

### AVR: Working Safely with Contractors

AVR has updated its Safety and Health Plan to reinforce safety protocols for contractors, outlining clear policies, procedures, and rules. Additionally, AVR has integrated contractors into its incident registration system (Ultimo), allowing them to directly report accidents, near misses, and incidents while ensuring transparency in follow-up actions. To further strengthen safety awareness, AVR is rolling out new safety instructions, exams, and regular contractor safety meetings to maintain ongoing communication, assess performance, and identify areas for improvement.




# 9.3 Health, Safety, and Well-being

## Investing in Employee Wellness

The Group recognises that our employees are key to our long-term success, so we place a strong focus on their well-being. Throughout the year, we have introduced various programmes and initiatives to promote a culture of care, support, and overall wellness, including launching wellness platforms in specific business units.

By regularly reviewing and improving our wellness strategies, we ensure that employees have the resources and support they need to stay healthy and succeed in their professional lives.

## Actions by Business Units

| | Wellness Target | Status |
|---|---|---|
| NGN | Deliver mental health training for all colleagues by 2026. | 69 line managers and 205 non-operational colleagues have completed training. |
| VPN | Achieve 75% employee satisfaction in the wellbeing and mental health section of the Employee Opinion Survey (EOS) by 2026. | Achieved |
| United Energy | Achieve 75% employee satisfaction in the wellbeing and mental health section of the EOS by 2026. | Achieved |


## Employee Wellbeing in Action

Across different business units, there is a shared commitment to supporting employee wellbeing through proactive, inclusive, and evolving initiatives. Whether it is promoting mental health, improving access to physical care, or encouraging healthy lifestyles, each unit is investing in meaningful programmes to help employees thrive both at work and in life.

### NGN: Building a Holistic Wellbeing Hub

At NGN, innovation and collaboration shape its approach to wellbeing. Following the 2023 Stress Management Project in partnership with the University of Hull, the company implemented targeted measures to address workplace stressors identified using the HSE Stress Risk Assessment Tool. Building on this foundation, NGN introduced a Wellbeing Hub that offers counselling, physiotherapy, self-help apps, and manager resources – covering topics such as sleep, financial wellbeing, and healthy living – to provide holistic support for employees.

### United Energy: Encouraging Peer Support and Healthy Living

United Energy has developed a wide-ranging set of initiatives to enhance overall wellbeing. The Converge Employee Assistance Program provides essential mental and emotional support, while a Wellbeing Subsidy promotes engagement in health-focused activities. A Peer-to-Peer Support Network further strengthens the culture of care by encouraging mutual support and personal growth among colleagues.

### WWU: Empowering Health Ownership with Targeted Services

WWU's Wellbeing Strategy is centred on empowering employees to take control of their health. The company regularly shares health-related updates, provides mental health first-aider training, and offers occupational health services with self-referral options. Its Health Surveillance Programme facilitates early health monitoring, and rehabilitation services – such as physiotherapy – aid both physical and mental recovery. In May 2024, WWU introduced a Wellbeing Advisor to further strengthen and expand its support efforts.

# 9.4 Diversity, Equity, and Inclusion

Diversity, Equity, and Inclusion are important considerations to our industry, driving innovation and improving decision-making by incorporating diverse perspectives into our strategies and long-term planning. A diverse workforce not only reflects the communities we serve but also strengthens relationships with stakeholders and deepens our understanding of their needs.

At the Group, diversity is a core value. We are committed to creating a workplace that is inclusive, equitable, and representative of the communities in which we operate. We aim to foster an environment where every individual feels valued, respected, and empowered to contribute. We also recognise the importance of respecting the values, customs, and traditions of our employees across the diverse markets in which we operate. By embracing these differences, we are building a workplace that is not only inclusive but also reflective of the global nature of our business.

## Workforce Diversity

In 2024, the Group introduced the Workforce Diversity Policy, reaffirming our commitment to fostering a diverse and inclusive workplace.

The policy promotes respect for individual differences and ensures equal opportunities in recruitment, training, development, compensation, and career progression. It places a strong emphasis on advancing gender empowerment, equality, and diversity across all levels of our workforce. The policy is regularly reviewed and monitored by the Board-level Sustainability Committee to ensure continuous improvement.

To support this commitment, Diversity Committee is established in a number of business units. This committee is responsible for promoting diversity and inclusion, facilitating communication, and fostering understanding across our global operations. We actively encourage employee participation in campaigns, networking groups, and initiatives that promote inclusivity. By embedding these principles into our organisational culture, we aim to build a more engaged, innovative, and resilient workforce that reflects the diversity of the communities we serve.

Promoting gender diversity is a key priority for the Group. We are committed to providing a supportive and empowering environment for women in the workplace. Through initiatives that promote gender inclusivity, we aim to enhance career development opportunities for our female workforce and ensure that their contributions are recognised and valued at all levels of the organisation.

## Flexibility and Care

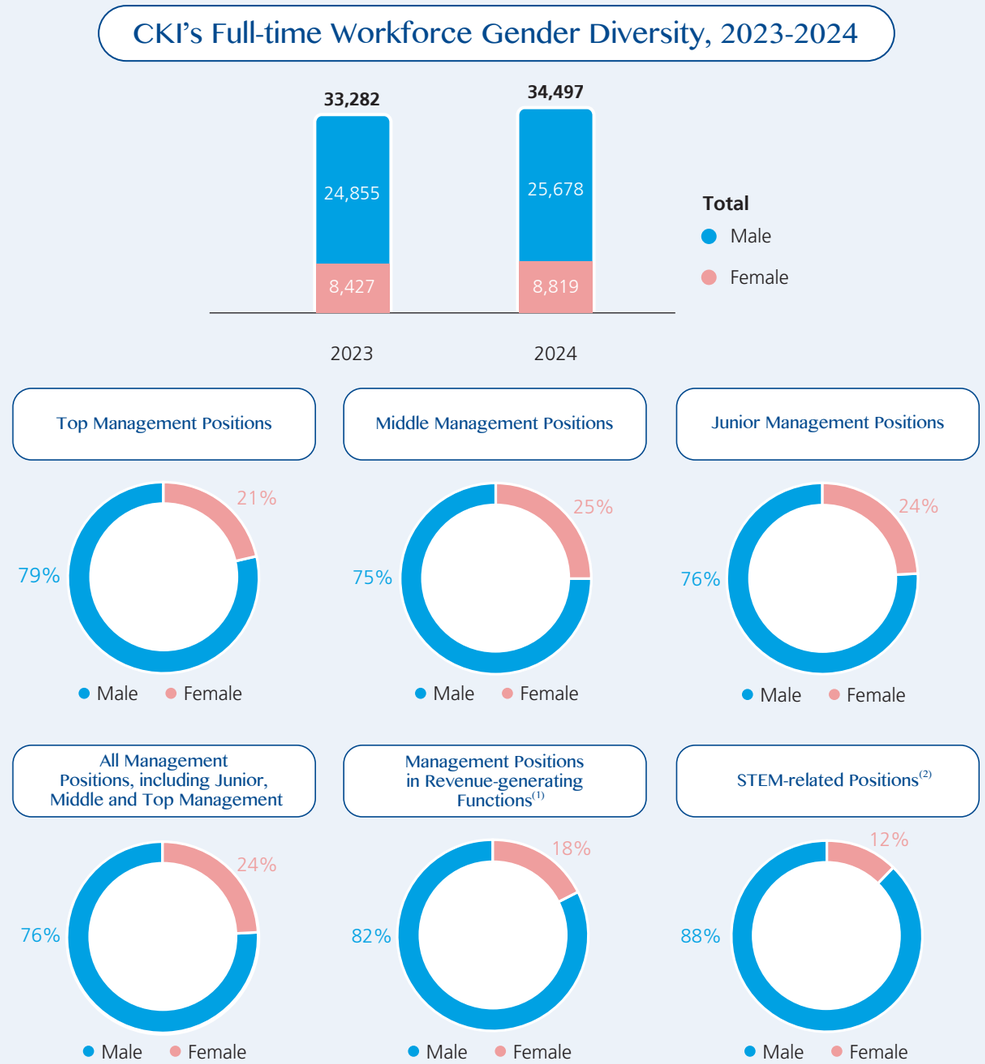
Understanding and addressing the needs of our workforce is critical to fostering engagement and driving performance. To support our employees, the Group offers a range of flexible working arrangements, including remote work, flexible hours, and part-time options. These are complemented by flexible benefits schemes tailored to meet the diverse needs of our employees.

Additionally, we provide enhanced parental leave, caregiving leave, and other supportive policies to help employees balance their personal and professional responsibilities. Effective communication channels are in place to ensure employees feel heard and supported, contributing to a work environment that inspires engagement and high performance.

## Diversity and Inclusion Training

To build awareness and drive engagement around diversity and inclusion, the Group provides regular training sessions for employees. These programmes are designed to enhance understanding of Diversity, Equity, and Inclusion principles, encourage inclusive behaviours, and reinforce our commitment to creating an equitable and respectful workplace.

## Our Workforce Gender Diversity




Notes:

(1) Refers to line management roles that contribute directly to the output of products and services.

(2) Refers to "STEM" workers who apply their knowledge of science, technology, engineering, or mathematics in their daily work.

# 9.4 Diversity, Equity, and Inclusion

## Actions by Business Units

| | Diversity & Inclusion Target | Status |
|---|---|---|
| **Gender representation in employment** | | |
| SAPN | 23% female representation by 2025 and 40% by 2035. | On track – 21% female representation in 2024. |
| United Energy | 27% female employment across the workforce by 2026. | Achieved |
| | 15% women in management roles by 2026. | Achieved |
| VPN | 25% female workforce by 2026. | On track |
| | 22% female in management roles by 2026. | Achieved |
| AGIG | 40% female representation in workforce by 2027. | On track |
| | 40% female representation in our senior leader's category by 2030. | On track |
| NGN | 40% female representation at senior management level by 2031. | On track |
| **Diversity and Inclusion** | | |
| VPN | Achieve 75% for Inclusion and Diversity index outcomes in the EOS by 2026. | Achieved |
| United Energy | Achieve 75% for Inclusion and Diversity index outcomes in the EOS by 2026. | Achieved |
| Reliance Home Comfort | Ethnic Minority Representation – 2024 target to achieve 40%. | Achieved |

## Family Support in Action

Recognising that family responsibilities are a vital part of employees' lives, business units are taking active steps to create more inclusive, flexible, and supportive workplace policies. From parental and adoption leave to fertility treatment support and personalised benefits, these initiatives help employees navigate different stages of family life while reinforcing long-term wellbeing and equality at work.

### SAPN & VPN: Strengthening Financial and Emotional Support for New Parents

SAPN provides 18 weeks of paid parental leave for primary carers and four weeks for secondary carers, giving parents meaningful time to care for and bond with their newborns. At VPN, primary carers are entitled to up to 15 weeks of paid leave, while secondary carers receive two weeks—without a waiting period. VPN also extends superannuation contributions for up to 52 weeks of unpaid parental leave, helping to safeguard the financial future of employees who take extended time away from work.

### WWU: Embracing Inclusive Family Support

WWU has expanded its policies to ensure equitable treatment for all types of families. Adoption leave is now matched with maternity leave, and the company provides time off for fertility treatments and enhanced paternity leave. To promote a sense of belonging, WWU also includes an inclusion policy for colleague events. Beyond leave policies, WWU's flexible benefits scheme allows employees to customise their benefits annually or monthly, with access to wellbeing resources covering physical, mental, and financial health.

### NGN: Offering Compassionate Support

To accommodate a range of family responsibilities, NGN offers a suite of family-friendly policies, including Emergency Leave, Carers Leave, Special Leave, and career break options. As a signatory to the Dying to Work Charter, NGN also supports colleagues diagnosed with terminal illnesses, ensuring they are treated with dignity and flexibility. This includes paid time off for treatment, flexible work arrangements for those well enough to continue working, and financial support for their families through death-in-service payments.

### United Energy: Supporting Work-Life Balance Through Flexibility

United Energy encourages mutual agreements between managers and employees to establish tailored flexible work arrangements, guided by its well-established Flexible Work Arrangements Policy. The policy supports varied work hours, flexible start and finish times, remote work, part-time roles, compressed work weeks, and other alternative schedules, enabling employees to balance their professional and personal commitments more effectively.

# 9.4 Diversity, Equity, and Inclusion

## Gender Pay Gap Analysis

Our business units conduct gender pay gap analyses to understand pay disparities within their organisations and meet regulatory reporting requirements. Generally, a gender pay gap comparison examines the average pay of all employees, regardless of their role, to identify differences between what men and women are paid on average. This differs from an equal pay comparison, which focuses on ensuring that men and women are paid equally for performing the same or similar jobs.

Our business units remain committed to ensuring equal pay for men and women performing the same or similar work.

Our UK-based regulated businesses – UKPN, WWU and NGN – publish their annual Gender Pay Reports on their websites and report their data to the UK Government.

### *NGN*

- Gender pay gap: **19.4%** lower than men's (median hourly pay)
- Bonus pay gap: **38%** lower than men's (median bonus pay)

As part of its commitment to fostering an inclusive workplace, NGN has established a Women's Community, which led the launch of a mentoring scheme in partnership with the Women's Utility Network to support women in building confidence and skills and setting senior-level gender representation targets, now embedded in NGN's People and Planet Strategy.

### *UKPN*

To improve gender balance and reduce the gender pay gap, it uses gender-neutral job adverts and anonymous CV screening for apprenticeships and graduate roles, with plans to expand this across the business by 2028.

- Gender pay gap: **19.1%** lower than men's (median hourly pay)
- Bonus pay gap: **23.6%** lower than men's (median bonus pay)

### *WWU*

- Gender pay gap: **10.4%** lower than men's (median hourly pay)
- Bonus pay gap: **42%** lower than men's (median bonus pay)

In May 2024, WWU launched a 'Diversity Monitoring' form for new starters to collect diversity data for review and reporting purposes. Plans are in place to extend this initiative to all colleagues as a voluntary 'data refresh' aligned with the Equity, Diversity & Inclusion Strategy targets.

## Actions being Recognised

### HIGHLIGHTS

*EDL apprentices and manager at EDL's National Maintenance Facility in Appin, Australia.*

EDL has been recognised as one of the top 101 workplaces for women by WORK180. This assessment evaluates ten standards, including inclusive hiring processes, representative leadership, flexible working arrangements, pay equity, shared caregiving responsibilities, employee voice, career development, an inclusive culture, employee safety, and strategic commitments.

WWU continues to lead the industry in championing equality, diversity and inclusion by pioneering innovative HR practices. Their proactive commitment to fostering a respectful, diverse and inclusive work environment has helped break down workplace barriers, eliminating prejudices and biases. Their continuous efforts to improvement were recognised by CIPD Awards in Wales as the winner of the "Best Equality, Diversity and Inclusion Initiative.

# 9.4 Diversity, Equity, and Inclusion

SPOTLIGHT

## AGIG Sets Gender Targets in its Diversity, Equity, and Inclusion Plan

AGIG has unveiled its Diversity, Equity, and Inclusion Engagement Plan for 2024–2026, reaffirming its commitment to fostering a workplace that reflects the communities it serves. Central to this plan are ambitious gender targets, with AGIG aiming for 40% female representation in its workforce by 2027 and 40% female representation in senior leadership roles by 2030.

These targets highlight AGIG's dedication to addressing gender equity and promoting inclusion across all levels of the organisation. By setting measurable goals, AGIG demonstrates its determination to create a more balanced and equitable workplace.

The Diversity, Equity, and Inclusion Engagement Plan builds on AGIG's already diverse workforce, where 40% of employees come from non-English-speaking cultural backgrounds and 37% are multilingual. AGIG's leadership believes that diversity, equity, and inclusion are not just values but essential drivers of innovation, customer service excellence, and organisational performance.

To achieve its gender targets and broader Diversity, Equity, and Inclusion goals, AGIG has outlined four key focus areas in its plan:

- Fostering a diverse and culturally safe workplace: AGIG is committed to attracting and retaining employees from diverse backgrounds while ensuring a positive employee experience.
- Promoting equity through fair and equal opportunities: The company aims to create transparency and fairness in its policies and practices, enabling all employees to succeed.
- Embedding inclusive practices in daily work: Recognising that inclusion is a shared responsibility, AGIG encourages all employees to contribute to an inclusive workplace.
- Leading by example: AGIG's leaders are champions of inclusive behaviours, driving a culture that values diversity and equity.

By actively seeking feedback, challenging existing systems, and promoting equity, AGIG's Diversity, Equity, and Inclusion Engagement Plan represents a bold and forward-thinking approach to building a more inclusive future. Through collaboration and action, AGIG is poised to make meaningful progress in closing equity gaps and ensuring diversity is embedded in everyday business practices.


In 2023, AGIG set targets as part of our Environmental, Social and Governance (ESG) reporting for the United Nation's Sustainable Development Goal (SDG) 5: Gendery Equality. This Sustainable Development Goal's key purpose is to: Achieve gender equality and empower all women and girls.

**40%**

**Female representation in our workforce**

We will target 40% female representation in our workforce by end-2027

**40%**

**Female representation in our senior leader's category**

We will target 40% female representation in our senior leader's category by end-2030

Along with our Workplace Gender Equality Agency results, the ESG targets represent AGIG's commitment to inclusion practices for gender equity and equality

# 9.5 Future-ready Skills for Development

Future-ready skills are essential for the success of our global infrastructure business, equipping employees to prepare for rapid technological advancements, evolving market demands, and the growing focus on sustainability. The Group is committed to preparing its workforce to navigate this dynamic landscape by prioritising the development of skills for the next generation, including knowledge in digital technology, data analysis, and sustainable practices. These efforts ensure we remain competitive, innovative, and resilient in the face of emerging challenges.

To meet these growing demands, the Group invests in building a forward-thinking and adaptable workforce. These initiatives foster a culture of continuous learning and adaptability, empowering employees to embrace change and contribute to the organisation's long-term success.

Employee development programmes are tailored by our business units to meet both global and local business needs, with a focus on building technical expertise, leadership skills, and problem-solving. Leadership development remains a key priority, with specialised programmes designed to identify and prepare high-potential employees for future roles. Additionally, the Group focuses on developing skills that address the unique needs of local markets, ensuring our teams can deliver infrastructure solutions that serve the specific needs of the communities in which we operate.

## Building a Future-ready workforce in Action

Our business units are leading forward-thinking workforce development initiatives by preparing employees with a strategic focus on sustainability and innovation for future challenges.

### HK Electric – eConnect Programme Shines with Triple Awards in Innovation and Sustainability

HK Electric's eConnect Programme, "Enabling Employees to Perform Process Re-engineering using the eConnect No-Code Platform", was honoured with three awards, namely, Bronze Award, Excellence in Innovation Award, and Excellence in Change Management Award, granted by the Hong Kong Management Association at its 2024 Award for Excellence in Training and Development. This success showcases a key milestone of the company's strategic journey to drive innovation and digitalisation using an end-user computing platform.

Through the eConnect, 114 employees without prior programming training or experience were trained to design and build 132 no-code applications, streamlining processes and boosting efficiency.

This initiative achieved over 200% return on investment, saved over 1,300 work hours annually, and reduced 130,000 pieces of A4 paper, cutting over 2,900 kilograms of carbon emissions. These results underscore HK Electric's commitment to sustainability and innovation.

### VPN: Leadership Development in Action

This year, VPN has delivered a diverse range of leadership programmes to empower employees and enhance workplace performance. Programs included Coaching to Drive Performance, Crucial Conversations, Holding Each Other Accountable, Leading At, Introduction to Leadership, Elevate Your Team From Good to Great, and Giving and Receiving Effective Feedback.

While most programmes were delivered by our in-house training team, the Leadership Excellence program was facilitated by the Australian Institute of Management. These programs were offered multiple times throughout the year, with 99 employees completing one or more modules, reflecting VPN's commitment to fostering strong leadership across the organisation.

# 10 Our Community

The Group is dedicated to creating positive and lasting impacts in the communities where we operate. By initiating sustainability transitions and investing in meaningful community engagement, we foster collaboration, address local needs, and empower communities to thrive. Through targeted initiatives and partnerships, we aim to drive shared progress, ensuring that the benefits of sustainable development are inclusive and far-reaching.

## Material Topics

10.1 Initiating Sustainability Transition in Community
10.2 Community Engagement and Investment

# 10.0 Overview

## Creating value with our communities

Our infrastructure is integral to the fabric of local communities, and our industry requires a long-term planning approach that considers their needs. This commitment is crucial as we develop our planning and business activities, especially in transitioning our infrastructure operations to net zero.

Engaging communities serves multiple purposes: it raises awareness and support for the transition, fosters partnerships, and ensures a fair and inclusive process. By promoting a sense of ownership and responsibility among community members, we can enhance the successful implementation of the energy transition.

The Group is dedicated to establishing meaningful relationships with local communities, valuing their perspectives, and advocating for their needs. This approach guarantees that the transition is inclusive and beneficial for all individuals, regardless of their background or circumstances.

To support our communities, we have implemented various programmes, including community funds and grants, as well as partnerships with non-profit organisations. These initiatives aim to address specific needs and improve the living standards of underprivileged communities.

## Regulatory compliance

During the Reporting Period, we were not aware of any incidents of non-compliance with laws and regulations that have a significant impact on the Group relating to community related aspects.

# 10.1 Initiating Sustainability Transition in Community

The Group is committed to protecting the rights of communities and enhancing their economic and social well-being through active engagement with diverse stakeholders. We understand that the energy transition is not just about moving to cleaner energy sources but also about fostering collaboration and building strong community ties. As a responsible infrastructure company, we recognise that the success of this transition depends on the active participation and support of the communities we serve. To this end, we work closely with customers, local organisations, and stakeholders to create a shared vision for a sustainable and inclusive future.

## Supporting Vulnerable Communities

In light of global economic challenges and rising energy prices, the Group remains focused on supporting customers who face difficulties in accessing affordable energy. To address these challenges, we have partnered with local charities and organisations across our operational regions to implement targeted initiatives. These include one-off subsidies, customer support funds and concessionary tariff schemes, aimed at making energy services more accessible to vulnerable households.

By providing tailored support, we aim to reduce the financial burden on those most impacted while ensuring that essential energy services remain available to all. This commitment reflects our belief that no one should be left behind in the transition to more sustainable energy systems.

## Energy Efficiency Programmes

The Group also recognises the critical role of energy efficiency in fostering both environmental sustainability and cost savings for customers. We have launched initiatives to educate customers on energy-saving practices and energy efficiency in homes and businesses.

### Actions by Business Units

| | Customer Affordability Target | Status |
|---|---|---|
| UKPN | Improve support to disadvantaged and vulnerable customers, ringfencing £5 million of Network Innovation Allowance investment over the RIIO-ED2 period to focus in these areas. | On track – £1.3 million was spent on innovative solutions to support vulnerable customers. |
| AGIG | Support customers in vulnerable circumstances. | On track – Over 120 customers have been supported by South Australia and Queensland Priority Services Program (PSP) by end of 2024. |

# 10.1 Initiating Sustainability Transition in Community

## Supporting Vulnerable Customers in Action

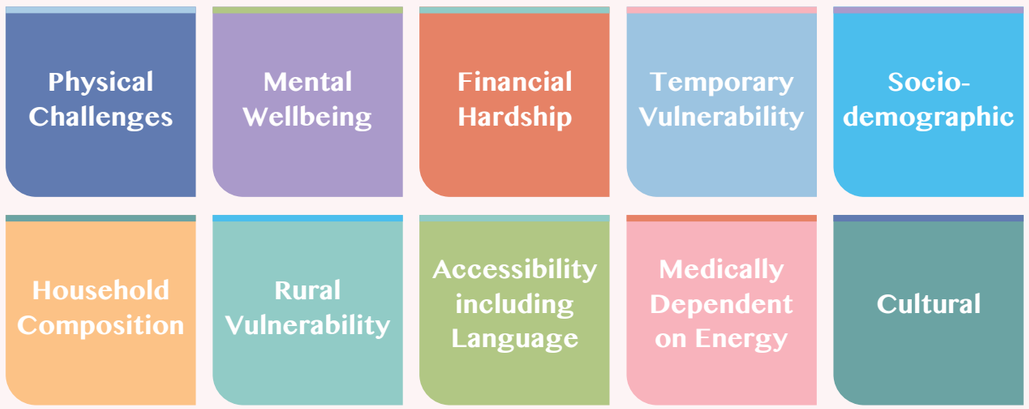
### UKPN: Fuel Poverty Initiative for Vulnerable Customers

UKPN is launching a transformative initiative aimed at supporting 500,000 fuel-poor and vulnerable customers during the RIIO-ED2 price control period, backed by an £18 million investment. The programme seeks to provide £67 million in benefits by 2028, offering assistance to over 500,000 customers at no cost. Additionally, the initiative includes distributing fuel poverty information to 800,000 customers annually and using a vulnerability mapping tool to ensure resources effectively reach those in greatest need. Long-term resilience is also a focus, with co-funded grants helping vulnerable households install low-carbon technologies to reduce energy bills and aid the transition to a Net Zero future.

### NGN: Vulnerable Situations Strategy

NGN has launched a Vulnerable Situations Strategy to support customers facing challenges such as fuel poverty, providing tailored assistance through community partnerships and direct support. Since 2021, NGN has helped over 4,500 fuel-poor customers and assisted 130,000 others through referrals, contributing more than £550,000 in fuel crisis payments and achieving financial savings exceeding £6 million. The company has also prioritised safety by conducting over 54,000 carbon monoxide safety sessions and facilitating access to critical services for over 23,000 customers through the Priority Services Register, earning a customer satisfaction score of 9.3/10. Notably, NGN is unique among gas distribution networks for reallocating revenue from gas theft to further aid vulnerable customers, completing 82 specific and 34 collaborative projects to enhance community resilience and sustainability.

Vulnerability Categories Updated to 10 levels in 2024




| | Energy Efficiency Target | Status |
|---|---|---|
| HK Electric | Conduct 1,000 energy audits and provide subsidies for 500 buildings between 2024 and 2028. | On track – completed over 200 audits and provided subsidies to around 200 buildings in 2024. |
| | Help 500 businesses switch to energy-efficient electrical equipment for their operations during 2024 and 2028. | On track – Supported 85 businesses by end of 2024. |
| | Complete at least 200 audits under Smart Power Energy Audit in 2024, particularly for NGOs, schools and SMEs. | Achieved |
| | Support 100 construction sites to use grid-electricity supply to replace diesel generators during the period from 2024 to 2028. | On track – Supported 20 constructions sites by end of 2024. |
| UKPN | Support all medically dependent Priority Services Register customers in understanding the benefits of having a smart meter by providing tailored advice every two years throughout RIIO-ED2. | On track |
| | Ensure that 71% of off-gas grid homes in our regions have the suitable capacity to decarbonise their heating and transport by the end of RIIO-ED2. | On track |
| Wellington Electricity | Offer commercial EV managed charging service by 2024. | Achieved – Partnered with NZ Bus. |
| NGN | Provide over £1 million of regulatory and shareholder funding annually to support vulnerable customers and communities by 2026. | Achieved – Invested over £3.7 million to support vulnerable customers and communities in 2023/24. |

# 10.1 Initiating Sustainability Transition in Community

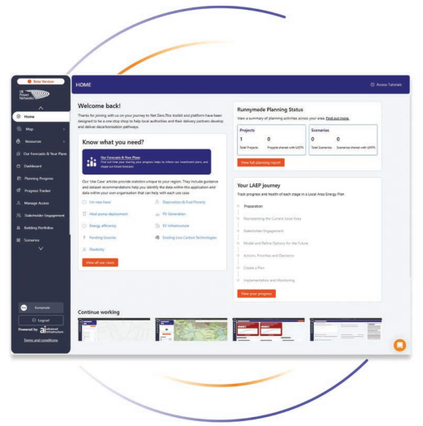
SPOTLIGHT

## Driving Decarbonisation, Empowering Communities


As part of its commitment to sustainable community development, UKPN is leading efforts to transform public transport infrastructure. With a £4 million investment, UKPN has electrified Arriva's bus fleet in Thornton Heath. The project, funded through the Green Recovery Fund, fast-tracked a 4.5MW power connection for the Whitehall Road bus depot, enabling the operation of 109 electric buses. To achieve this, UKPN installed 5km of high-voltage underground cabling and upgraded local substation equipment. These enhancements are reducing carbon emissions and improving air quality across London, contributing to a cleaner and healthier urban environment.

## Supporting Local Authorities for Net Zero Goals

UKPN's Local Net Zero team collaborates with local authorities to implement decarbonisation strategies through expert guidance, data and digital tools. Its free "Your Local Net Zero Hub" online planning tool, open to all 133 local authorities that UKPN serves, allows a local authority to visualise a range of data in their local area, plan deployment of low carbon technologies, create scenarios and share their plans with UKPN to inform future investments, benefiting 17.9 million residents. Its Local Area Energy Planning Open Data page with more than 160 datasets available, empowers local authorities with the data they need for their local area energy planning process. With 82% of local authorities having declared a "Climate Emergency", UKPN fosters collaboration through workshops and open data initiatives, earning the Energy Institute's International Energy Engagement Award for its collaboration with local authorities and facilitating the UK's Net Zero goals.




# 10.2 Community Engagement and Investment

The well-being of the communities we serve is central to our business approach. By actively engaging with the people and organisations in the areas where we operate, we build meaningful connections that foster trust, collaboration, and mutual growth. This engagement allows us to listen to community members, understand their unique needs, and advocate for their interests, particularly during critical transitions such as the move toward lower-carbon infrastructure.

Our commitment to community engagement is guided by our Corporate Social Responsibility Policy, which outlines our dedication to safeguarding the rights and well-being of communities. This policy ensures our efforts are focused, transparent, and impactful. Key elements of the Group's Corporate Social Responsibilities Policy include:

- **Community Initiatives:** We invest in a wide range of philanthropic and community-driven initiatives tailored to the needs of the communities we serve. These include employee volunteerism, education, healthcare, elderly care, arts and culture, sports, and disaster relief.
- **Governance and Compliance:** Donations and contributions are subject to strict internal compliance guidelines to protect stakeholder and shareholder interests.
- **Employee Engagement:** We encourage our employees to take an active role in their communities by offering a range of volunteering opportunities and providing paid days off for such endeavours. This fosters global participation in meaningful volunteer activities.

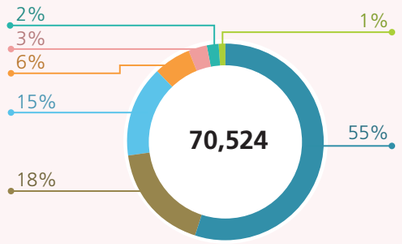
## Resources Contribution

The Group supports a wide range of philanthropic activities designed to benefit the regions where we operate. We actively empower our employees to contribute through volunteer programmes, enabling them to make meaningful impacts in their local communities. Additionally, we implement educational initiatives that raise awareness about environmental protection and energy safety. These programmes not only benefit the communities we serve but also contribute to preserving the environment, demonstrating our commitment to a sustainable and resilient future.

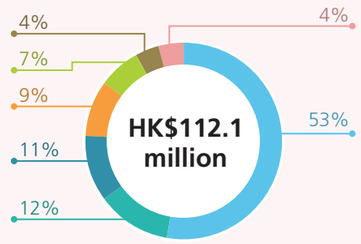
By collaborating with communities and empowering them to take an active role in the energy transition, we aim to create a future that is both sustainable and inclusive. Through meaningful partnerships, targeted initiatives, and employee involvement, we are shaping a better world for the generations to come.

## Resources Contributed to Community in 2024

Hours Contributed by Focus Area




Amount of Money Donated by Focus Area




Education | Environment | Labour needs | Health | Culture | Sport | Others (e.g., chronic disease awareness, coastal conservation, vulnerable communities and animal care)

Note:
(1) The percentages are calculated based on 100% of the data from business units, regardless of equity ownership.

# 10.2 Community Engagement and Investment

## Actions by Business Units

| | Community Activity Target | Status |
|---|---|---|
| HK Electric | Organise 100 stakeholder engagement activities, including workshops and seminars, focused on smart zero-carbon caring cities and sustainability, during the period from 2024 to 2028. | On track – 11 engagement activities arranged by end of 2024. |
| | Involve 120,000 participants in green education activities in 2024. | Achieved |
| United Energy | Involve 1,000 participants in energy literacy programmes by 2026. | Achieved – Over 33,000 participants by end of 2024. |
| VPN | Involve 2,000 customers per annum participate in energy literacy programmes by 2026. | Achieved – Over 60,000 participants by end of 2024. |
| Phoenix Energy | Partnering with The Conservation Volunteers to plant 8,000 native trees each year until 2030. | On track – 8,000 trees planted in 2024. |
| Northumbrian Water | Give time back to the community – at least 50% of employees to spend time volunteering every year. | On track – Over 53% of employees completed over 2,500 volunteering activities in 2024. |
| Reliance Home Comfort | Community Support – 2024 target to provide $1.2 million support. | Achieved |

## Phoenix Community Fund: Driving Inclusion and Empowering Communities in 2024

The Phoenix Community Fund ("the Fund") is committed to fostering inclusive, connected communities by supporting local charities and groups. In 2024, the Fund enabled impactful initiatives that reduced social isolation, promote inclusion, and advance equality, aligning with its mission to build stronger, more resilient communities.

This year, the Fund supported eight diverse community projects across the licensed area. Due to an overwhelming response, the Fund is now closed for 2024 but will reopen in 2025 to continue empowering local organisations. The Phoenix Community Fund remains dedicated to a more inclusive and equitable future by addressing critical social challenges and creating opportunities for positive change.

## AVR: Technique Day Arnhem for children

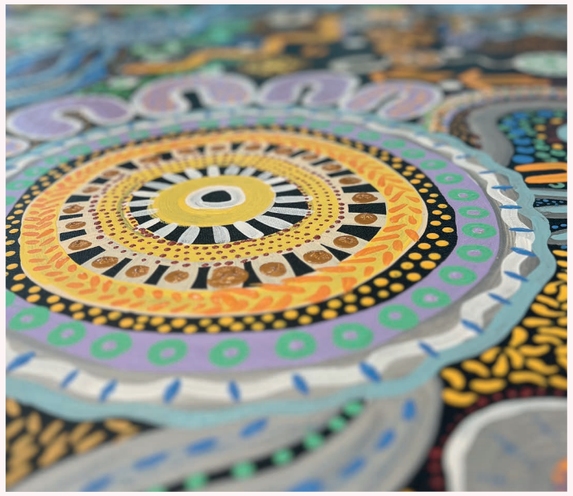
At the well-attended Technique Day in Arnhem, AVR's staff explained how the process of incinerating waste to produce energy works to parents and children. Children were able to operate the buttons on the AVR installation of computer-driven technical Lego and see exactly how it works. The installation generated a lot of attention, and the day was a big success.

# 10.2 Community Engagement and Investment

## Respecting Australia's First Nations Peoples in Action

Our business units implement programmes to support First Nations people through the development and execution of Reconciliation Action Plans ("RAPs"). These plans provide frameworks for building respectful relationships and promoting cultural awareness, and addressing inequalities between the Australian community.

### EDL's Innovate Reconciliation Action Plan



As a leading global producer of sustainable distributed energy, EDL is dedicated to advancing reconciliation and fostering partnerships with Aboriginal and Torres Strait Islander peoples. Through its Innovate RAP, EDL supports initiatives like CareerTrackers, which empowers Aboriginal and Torres Strait Islander students to establish strong career pathways. Additionally, EDL supports First Nations people and businesses local to its operations, furthering its commitment to community empowerment.

EDL also extends its work to economic empowerment by actively engaging with indigenous-owned businesses to support the West Kimberley Power Project that advances sustainable energy solutions through collaborative efforts. Similarly, the partnership with the Djurrubu Rangers in Jabiru, Northern Territory, demonstrates EDL's dedication to environmental stewardship and cultural preservation.

### United Energy: Reflect Reconciliation Action Plan

To support its vision for reconciliation, the company has established a First Peoples Advisory Committee to provide cultural knowledge, perspectives, and direction on the development of a RAP, which aims to deliver tangible benefits for Aboriginal and Torres Strait Islander peoples by fostering economic equity and supporting self-determination.

United Energy is also improving the internal processes by bringing a heritage advisor in-house to support compliance with Cultural Heritage Management Plans in collaboration with Registered Aboriginal Parties (Bunurong and Wurundjeri), helping to preserve cultural heritage. Additionally, United Energy is committed to supporting First Peoples' training, employment, and business opportunities by engaging suppliers like First Nations Traffic Management and exploring further ways to expand First Peoples' participation across our supply chain.

# 11 Annex


DBP 106
Dampier Bunbury Pipeline
KEVREK CRANES
Australian Gas Infrastructure Group
4X4
817
DBP 106
hidrive
WARNING

# 11.1 Environmental and Social Performance Indicators

## Environmental KPIs[1]

| | Unit | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **Electricity generation mix[2]** | | | | |
| Coal | GWh | **n/a** | **10,857** | **8,952** |
| Gas | | **n/a** | **14,811** | **14,375** |
| Oil | | **n/a** | **66** | **49** |
| Renewable energy | | | | |
| Wind | | **n/a** | **459** | **532** |
| Solar | | **n/a** | **40** | **71** |
| Biomass | | **n/a** | **1,843** | **1,630** |
| Energy-from-waste and others | | **n/a** | **1,816** | **1,669** |
| **GHG emissions** | | | | |
| Scope 1 emissions | tonne $CO_2e$ | **7,327,908** | **7,038,127** | **6,552,043** |
| Scope 2 emissions (location-based) | | **1,259,587** | **1,172,147** | **1,244,603** |
| Scope 2 emissions (market-based) | | **710,829** | **617,109** | **641,243** |
| Scope 3 emissions[3] | | **846,140** | **1,327,805** | **1,594,392** |
| **Total Scope 1, 2 and 3 emissions (location-based)** | | **9,433,635** | **9,538,079** | **9,391,038** |
| **Total Scope 1, 2 and 3 emissions (market-based)** | | **8,884,877** | **8,983,041** | **8,787,678** |
| **Total Scope 1 and 2 emissions (location-based)** | | **8,587,495** | **8,210,274** | **7,796,646** |
| **Total Scope 1 and 2 emissions (market-based)** | | **8,038,737** | **7,655,236** | **7,193,286** |
| Scope 1 GHG emissions intensity | tonne $CO_2e$/ HKD million revenue | **148** | **141** | **127** |
| Scope 2 GHG emissions intensity (location-based) | | **25** | **23** | **24** |
| Scope 2 GHG emissions intensity (market-based) | | **14** | **12** | **12** |
| **GHG intensity covering Scope 1 and 2 emissions (location-based)** | | **173** | **164** | **151** |
| **GHG intensity covering Scope 1 and 2 emissions (market-based)** | | **162** | **153** | **140** |
| **Biogenic emissions** | tonne $CO_2e$ | **1,275,010** | **1,121,305** | **843,598** |

| | Unit | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **Use of energy** | | | | |
| **Total energy consumption[4]** | ‘000 kWh | **20,516,802** | **19,825,437** | **20,134,902** |
| Direct energy consumption | | **19,286,416** | **18,663,230** | **18,809,533** |
| *i) Non-renewable energy consumed* | | **21,965,649** | **22,074,725** | **21,926,115** |
| Gasoline/Petrol | | **42,962** | **46,559** | **49,306** |
| Diesel | | **408,137** | **414,209** | **413,836** |
| Natural gas | | **9,667,806** | **10,483,956** | **11,156,762** |
| Liquified petroleum fuel (“LPG”) | | **1,030** | **1,021** | **1,034** |
| Waste-derived fuels (non-biomass)[5] | | **3,835,782** | **3,295,856** | **2,297,930** |
| Coal | | **6,974,274** | **6,835,886** | **7,071,682** |
| Other fuels[6] | | **1,035,658** | **997,238** | **935,566** |
| *ii) Renewable energy consumed* | | **4,861,573** | **4,154,657** | **4,025,088** |
| Wind | | **5,168** | **5,568** | **4,641** |
| Solar | | **1,331** | **2,586** | **3,173** |
| Hydro | | **571** | **848** | **587** |
| Biomass | | **4,784,989** | **4,084,719** | **3,950,905** |
| Other renewables | | **69,514** | **60,936** | **65,781** |
| *iii) Self-generated energy* | ‘000 kWh | **73,712** | **83,662** | **128,842** |
| Electricity | | **73,712** | **83,662** | **128,842** |
| Heating | | **–** | **–** | **–** |
| Cooling | | **–** | **–** | **–** |
| Steam | | **–** | **–** | **–** |
| *iv) Sale of energy* | | **7,614,518** | **7,649,814** | **7,270,512** |
| Electricity | | **5,975,819** | **6,198,434** | **6,068,902** |
| Heating | | **758,462** | **568,121** | **440,685** |
| Cooling | | **–** | **–** | **–** |
| Steam | | **880,237** | **883,259** | **760,925** |
| Indirect energy consumption[7] | | **1,230,386** | **1,162,207** | **1,325,369** |
| Electricity | | **1,229,754** | **1,161,511** | **1,323,547** |
| Heating | | **632** | **696** | **1,822** |
| **Total energy intensity** | ‘000 kWh/ HKD million revenue | **414** | **397** | **391** |
| Direct energy intensity | | **389** | **373** | **365** |
| Indirect energy intensity | | **25** | **23** | **26** |

Notes:

(1) Environmental KPIs in this data table are calculated using the equity method. We only include data in the report that were confirmed by end of March 2024. If significant changes occur after preparation of this report, they will be updated in the following year’s publication. Any discrepancies between (i) totals provided and the sum of the numbers presented; and (ii) percentages provided and the associated numbers throughout the Report are due to rounding.

(2) The data are provided based on 100% of the data from business units, regardless of equity ownership.

(3) The 2022 and 2023 data figures have been restated due to enhanced data collection and reporting to ensure comparability of data over time.

(4) Total energy consumption = Non-renewable energy consumed + renewable energy consumed + indirect energy consumption + self-generated energy what are not consumed – sales of energy.

(5) Waste-derived fuels (non-biomass) include municipal waste (non-biomass fraction), industrial waste, waste oils, and waste coal mine gas.

(6) Other fuels include residual fuel oil, lubricants, and other petroleum products.

(7) Indirect energy consumption refers to purchased energy (electricity and heating) for consumption.

# 11.1 Environmental and Social Performance Indicators

## Environmental KPIs

| | Unit | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **Air emissions[8]** | | | | |
| Nitrogen oxides ("$NO_x$") emissions | tonnes | **8,053** | **8,199** | **8,554** |
| Sulfur oxides ("$SO_x$") emissions | | **868** | **875** | **1,026** |
| Respirable Suspended Particulates ("RSP") emissions | | **293** | **256** | **280** |
| **Use of water[9]** | | | | |
| **Total water withdrawal** | '000 $m^3$ | **694,854** | **646,890** | **487,277** |
| Surface water | | **300,658** | **265,584** | **229,135** |
| Groundwater | | **14,414** | **14,740** | **14,367** |
| Seawater | | **374,244** | **362,053** | **239,096** |
| Third-party water | | **5,094** | **4,066** | **4,284** |
| Other sources | | **444** | **447** | **395** |
| **Total water discharge** | '000 $m^3$ | **603,033** | **539,662** | **409,147** |
| Surface water | | **123,986** | **148,536** | **133,293** |
| Groundwater | | **–** | **–** | **–** |
| Seawater | | **478,223** | **390,204** | **271,931** |
| Third-party water | | **560** | **518** | **3,531** |
| Other sources | | **264** | **404** | **392** |
| **Total water consumption** | '000 $m^3$ | **91,821** | **107,228** | **78,130** |
| Water consumption intensity | '000 $m^3$ / HKD million revenue | **1.85** | **2.14** | **1.52** |
| **Waste production** | | | | |
| Total hazardous waste produced | tonnes | **27,265** | **23,971** | **31,547** |
| Total non-hazardous waste produced[10] | | **413,644** | **407,886** | **470,301** |
| Total hazardous waste produced intensity | tonnes/ HKD million revenue | **0.55** | **0.48** | **0.61** |
| Total non-hazardous waste produced intensity | | **8.34** | **8.00** | **9.13** |
| **Packaging material** | | | | |
| **Total packaging material used for finished products** | tonnes | **2,245** | **2,193** | **1,943** |
| Plastics | | **5** | **4** | **5** |
| Paper | | **2,240** | **2,189** | **1,938** |

Notes:

(8) Our electricity generation businesses produced 0.35 tonnes of mercury emissions in 2024.

(9) The data figures related to water consumption have been restated due to enhanced data collection and reporting to ensure comparability of data over time.

(10) Our electricity generation businesses produced 79,415 tonnes of ash and gypsum waste in 2024.

## Social KPIs[11]

| | | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **Number of employees** | | | | |
| **Total** | | **33,761** | **35,745** | **37,063** |
| By employment type | Full-time | **31,709** | **33,282** | **34,497** |
| | Part-time | **2,052** | **2,463** | **2,566** |
| **Number of full-time employees** | | | | |
| By gender | Male | **23,755** | **24,855** | **25,678** |
| | Female | **7,954** | **8,427** | **8,819** |
| By employee category | General staff | **28,363** | **29,268** | **30,339** |
| | Manager grade or above | **3,346** | **4,014** | **4,158** |
| By age group | Below 30 | **4,734** | **4,977** | **4,937** |
| | 30 – 49 | **16,729** | **17,802** | **18,716** |
| | 50 or above | **10,246** | **10,503** | **10,844** |
| By region | Hong Kong | **2,592** | **2,571** | **2,632** |
| | Mainland China | **1,659** | **1,649** | **1,598** |
| | Asia (excluding Hong Kong & Mainland China) | **117** | **42** | **40** |
| | United Kingdom | **11,605** | **12,332** | **13,159** |
| | Europe | **6,031** | **6,506** | **6,364** |
| | Australia | **5,359** | **5,764** | **6,151** |
| | Canada | **2,646** | **2,634** | **2,663** |
| | United States | **550** | **566** | **678** |
| | New Zealand | **1,150** | **1,218** | **1,142** |
| | Other regions | **–** | **–** | **70** |

Note:

(11) Social KPIs in this data table are calculated using 100% of the data from business units, regardless of equity ownership.

# 11.1 Environmental and Social Performance Indicators

## Social KPIs

| | | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **Turnover rate for full-time employees[12]** | | | | |
| **Overall** | | **12.9%** | **8.7%** | **9.1%** |
| By gender | Male | **12.3%** | **9.0%** | **9.3%** |
| | Female | **14.7%** | **7.9%** | **8.5%** |
| By age group | Below 30 | **19.2%** | **12.3%** | **12.8%** |
| | 30 – 49 | **11.8%** | **7.5%** | **7.4%** |
| | 50 or above | **11.9%** | **9.0%** | **10.2%** |
| By region | Hong Kong | **9.8%** | **14.6%** | **10.2%** |
| | Mainland China | **4.5%** | **4.2%** | **6.8%** |
| | Asia (excluding Hong Kong & Mainland China) | **0.9%** | **0.0%** | **7.5%** |
| | United Kingdom | **8.6%** | **5.3%** | **5.8%** |
| | Europe | **14.5%** | **1.1%** | **1.2%** |
| | Australia | **10.3%** | **7.8%** | **7.8%** |
| | Canada | **30.2%** | **32.8%** | **27.7%** |
| | United States | **23.6%** | **5.3%** | **36.5%** |
| | New Zealand | **35.9%** | **31.0%** | **39.0%** |
| | Other regions | **–** | **–** | **0.0%** |
| **Work-related fatalities** | | | | |
| Number of work-related fatalities | | **1** | **2** | **0** |
| By employee type | Full-time employees | **0** | **1** | **0** |
| | Part-time employees | **0** | **0** | **0** |
| | Contractors | **1** | **1** | **0** |
| Rate of work-related fatalities (employees) | | **0%** | **0.003%** | **0%** |
| **Work-related injury** | | | | |
| Number of lost days due to work injury (employees) | | **3,204** | **3,893** | **7,071** |
| Number of lost time injury incidents (employees) | | **175** | **168** | **166** |
| Lost time injury rate (employee)[13] | | **0.58** | **0.52** | **0.52** |
| **Health & safety management system** | | | | |
| Percentage of employee covered by OHSAS 18001/ISO 45001[14] | | **50.5%** | **50.8%** | **51.7%** |

Notes:

(12) Turnover rate refers to full-time employees of the in-scope entities (excluding Canadian Midstream Assets) only. It is calculated as "total number of full-time employees leaving employment during the reporting year divided by total number of full-time employees as of 31 December of the reporting year and then multiplied by 100%".

(13) Lost time injury rate represents the number of injuries per 100 employees per year. It is calculated as "total number of injuries multiplied by 200,000 and then divided by total hours worked".

(14) It is calculated as "total number of employees covered by OHSAS 18001/ISO 45001 divided by total number of employees as of 31 December of the reporting period and then multiplied by 100%".

| | | 2022 | 2023 | 2024 |
|---|---|---|---|---|
| **Percentage of full-time employees who received training[15]** | | | | |
| **Overall** | | **93.7%** | **93.4%** | **91.7%** |
| By gender | Male | **95.8%** | **94.3%** | **92.7%** |
| | Female | **87.7%** | **90.5%** | **88.7%** |
| By employee category | General staff | **92.6%** | **93.4%** | **92.9%** |
| | Manager grade or above | **100%** | **92.9%** | **82.5%** |
| **Average hours of training per full-time employee** | | | | |
| **Overall** | | **26.2** | **32.0** | **33.0** |
| By gender | Male | **29.8** | **37.6** | **38.0** |
| | Female | **15.5** | **15.6** | **18.3** |
| By employee category | General staff | **26.5** | **33.2** | **34.7** |
| | Manager grade or above | **23.8** | **23.6** | **20.7** |
| **Number of suppliers** | | | | |
| **Total** | | **32,095** | **30,090** | **32,523** |
| By region | Hong Kong | **2,559** | **2,647** | **2,801** |
| | Mainland China | **786** | **734** | **796** |
| | Asia (excluding Hong Kong & Mainland China) | **159** | **151** | **149** |
| | United Kingdom | **11,256** | **9,687** | **9,927** |
| | Europe | **1,433** | **1,467** | **1,493** |
| | Australia | **7,999** | **8,242** | **9,685** |
| | Canada | **1,847** | **2,527** | **3,447** |
| | United States | **3,243** | **1,792** | **1,396** |
| | New Zealand | **2,798** | **2,831** | **2,808** |
| | Other regions | **15** | **12** | **21** |
| **Number of complaints received** | | | | |
| Products and services related | | **254,146** | **297,791** | **253,736** |
| **Number of employees who received training on anti-corruption/ethics and integrity** | | | | |
| **Total** | | **16,251** | **21,245** | **27,392** |
| By employment type | Full-time | **15,415** | **19,928** | **25,312** |
| | Part-time | **836** | **1,317** | **2,080** |
| Percentage of full-time and part-time employees who received training on anti-corruption/ethics and integrity[16] | | **48.1%** | **59.4%** | **73.9%** |
| **Number of training hours on anti-corruption/ethics and integrity completed by employees** | | | | |
| **Total** | | **13,491** | **21,873** | **35,085** |
| By employment type | Full-time | **12,982** | **20,746** | **32,570** |
| | Part-time | **509** | **1,127** | **2,515** |

Notes:

(15) Full-time employees including terminated employees who left the Company during the reporting period. It is calculated as "total number of full-time employees who received training divided by total number of full-time employees as of 31 December of the reporting period and then multiplied by 100%".

(16) It is calculated as "total number of employees who received training on anti-corruption/ethics and integrity divided by total number of full-time employees as of 31 December of the reporting period and then multiplied by 100%".

# 11.2 GHG Calculation Methodology

This section outlines the reporting boundaries, methodologies, and assumptions used in the preparation of the Group's GHG inventory, for 2024.

## OVERVIEW

### GHG emissions scope

The Group's GHG inventory covers six greenhouse gases: carbon dioxide ("$CO_2$"), methane ("$CH_4$"), nitrous oxide ("$N_2O$"), hydrofluorocarbons ("HFCs"), perfluorocarbons ("PFCs"), sulphur hexafluoride ("$SF_6$").

### Verification

The Group's Scope 1, 2, and 3 emissions have been independently verified by a third party. Please refer to Section 11.6 Verification Statement.

### Standard and guidelines

We calculate GHG emissions in accordance with the following standards and guidelines:

- The GHG Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), 2004
- The GHG Protocol: Scope 2 Guidance
- The GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)
- IPCC Guidelines for National Greenhouse Gas Inventories, 2006
- ISO 14064-1: 2018, Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals
- GHG inventory guidance of national or local authorities, including regions where the Group's operations are located.

### Consolidation approach

The Group consolidates GHG emissions using the equity share method, which accounts for emissions based on our ownership interest in each business unit. Under this approach, each business unit's emissions are multiplied by the Group's ownership interest. If the ownership duration is less than a year, the GHG emissions are prorated.

The inventory includes only data confirmed by the end of March 2025. If significant changes occur after this report's preparation, the updates will be reflected in the following year's publication.

### Changes from prior year

There are no material changes in the approach, inputs, and assumptions used in measuring GHG emissions.

## APPROACH, INPUTS AND ASSUMPTIONS

### Scope 1 emissions

#### *Definition*

Scope 1 emissions include direct emissions from sources owned and controlled by our business units for their operations. These sources include:

- Combustion of fuel in stationary sources such as plants and equipment;
- Combustion of fuel in mobile sources such as company-owned vehicles; and
- Fugitive emissions resulting from intentional or unintentional releases, including gas shrinkage for our gas transmission and distribution businesses, methane emissions from venting, HFCs and PFCs emissions from the use of refrigeration and air conditioning equipment, and $SF_6$ emissions from industrial processes.

#### *Calculation methodology*

Scope 1 emissions are calculated using the following standards and guidelines:

- The Greenhouse Gas Protocol
- International Energy Agency's Energy Statistics Manual
- Australian National Greenhouse and Energy Reporting (Measurement) Determination
- Canada's National Inventory Report 1990-2020: Greenhouse Gas Sources and Sinks in Canada
- Dutch Emissions Authority
- New Zealand Ministry for the Environment, Measuring Emissions: A Guide for Organisations
- China Guangdong Provincial Guidance for Reporting of Carbon Dioxide Emissions of the Cement Enterprises
- UK Government GHG Conversion Factors for Company Reporting
- UK Water Industry Research Carbon Accounting Workbook
- Hong Kong Environmental Protection Department's Guidelines

Biogenic emissions, as defined by GHG Protocol, refers to carbon emissions from the combustion or biodegradation of biomass. Starting in 2023, we began reporting biogenic emissions separately in accordance with the GHG Protocol and restarted past figures accordingly.

### Scope 2 emissions

#### *Definition*

Scope 2 emissions include indirect emissions from the following sources:

- Third-party generated energy consumed by our businesses for their own use, including purchased electricity, steam or heat; and
- Electricity network losses, which are emissions associated with energy losses from electricity transmission and distribution grid, for our electricity transmission and distribution businesses.

#### *Calculation methodology*

Scope 2 emissions from consumption of purchased electricity, steam or heat are calculated using two methods:

- Location-based method: Calculates the average electricity or heat emissions based on the geographical location and reflects the emissions intensity of the electricity grid(s) from which electricity is purchased or acquired. Emissions are calculated using the emission factors for electricity and heat generation in the local or national region, or general emission factors for electricity and heat generation provided by the International Energy Agency; and
- Market-based method: Calculates electricity emissions based on electricity choices made by business units, such as their electricity supplier or product, where applicable under regulation. This method uses emission factors derived from contractual instruments (e.g., renewable energy certificates, power purchase agreements) or supplier-specific emission rates.

Scope 2 emissions related to network losses are calculated as the difference between the electricity entering the network and the electricity consumed by customers. This calculation is based on data provided by the industry, typically derived from meter readings.

# 11.2 GHG Calculation Methodology

## Scope 3 emissions

### *Definition*

Scope 3 emissions refer to indirect emissions resulting from the activities of our businesses' value chain. The GHG Protocol Scope 3 Standard organises Scope 3 emissions into 15 categories, divided into upstream and downstream emissions.

### *Calculation methodology*

Our business units conducted a materiality assessment to identify their relevant Scope 3 categories, which were then consolidated and reported at the Group level. In 2024, the Scope 3 emissions inventory covered the Group's most significant businesses, accounting for approximately 86% of our attributable revenue.

The Group reports the following Scope 3 categories:

- Category 1: Purchased Goods and Services
- Category 2: Capital Goods
- Category 3: Fuel and Energy-Related Activities
- Category 13: Downstream Leased Assets

Additionally, the Group reports other Scope 3 categories aggregated under "Others," which include:

- Category 4: Upstream Transportation and Distribution
- Category 5: Waste Generated in Operations
- Category 6: Business Travel
- Category 7: Employee Commuting
- Category 8: Upstream Leased Assets
- Category 9: Downstream Transportation and Distribution
- Category 10: Processing of Sold Products
- Category 11: Use of Sold Products
- Category 12: End-of-life Treatment of Sold Products

These categories are generally calculated using a hybrid method that combines spend data and activity data, with appropriate emission factors applied.

We believe that adopting a more holistic view of Scope 3 emissions across our portfolio not only helps mitigate risks but also uncovers opportunities for value creation. The Group is actively working to expand the coverage of its Scope 3 inventory to include additional business units.

# 11.3 HK Stock Exchange ESG Guide Content Index

## Mandatory Disclosure Requirements

The tables below present the compliance requirements of the HK Stock Exchange's ESG Guide, effective for the 2024 reporting year.

| Mandatory Disclosure Requirements | | Section |
|---|---|---|
| Governance Structure | A statement from the board containing the following elements:<br>(i) a disclosure of the board's oversight of ESG issues;<br>(ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and<br>(iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses. | 5.2 |
| Reporting Principles – Materiality | The ESG report should disclose:<br>(i) the process to identify and the criteria for the selection of material ESG factors; and<br>(ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement. | 5.3 |
| Reporting Principles – Quantitative | Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed. | 11.1, 11.2 |
| Reporting Principles – Consistency | The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison. | 11.1, 11.2 |
| Reporting Boundary | A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change. | 1, 2 |

| Subject Areas, Aspects, General Disclosures and KPIs | | Section |
|---|---|---|
| **A. Environmental** | | |
| **Aspect A1: Emissions** | | |
| General Disclosure | Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. | 8.4 |
| KPI A1.1 | The types of emissions and respective emissions data. | 8.4, 11.1 |

# 11.3 HK Stock Exchange ESG Guide Content Index

| Subject Areas, Aspects, General Disclosures and KPIs | | Section |
|---|---|---|
| KPI A1.2 | Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). | 8.2, 11.1 |
| KPI A1.3 | Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). | 8.4, 11.1 |
| KPI A1.4 | Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). | 8.4, 11.1 |
| KPI A1.5 | Description of emission target(s) set and steps taken to achieve them. | 8.4, 11.1 |
| KPI A1.6 | Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them. | 8.4, 11.1 |
| **Aspect A2: Use of Resources** | | |
| General Disclosure | Policies on the efficient use of resources, including energy, water and other raw materials. | 8.1, 8.4 |
| KPI A2.1 | Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility). | 8.1, 11.1 |
| KPI A2.2 | Water consumption in total and intensity (e.g. per unit of production volume, per facility). | 8.4, 11.1 |
| KPI A2.3 | Description of energy use efficiency target(s) set and steps taken to achieve them. | 8.1 |
| KPI A2.4 | Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them. | 8.4 |
| KPI A2.5 | Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. | 11.1 |
| **Aspect A3: The Environment and Natural Resources** | | |
| General Disclosure | Policies on minimising the issuer's significant impacts on the environment and natural resources. | 8.0 |
| KPI A3.1 | Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. | 8.0 |
| **Aspect A4: Climate Change** | | |
| General Disclosure | Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. | 6.3 |
| KPI A4.1 | Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them. | 6.3 |
| **B. Social** | | |
| **Employment and Labour Practices** | | |
| **Aspect B1: Employment** | | |
| General Disclosure | Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. | 9.0, 9.2 |
| KPI B1.1 | Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region. | 9.1, 11.1 |
| KPI B1.2 | Employee turnover rate by gender, age group and geographical region. | 9.1, 11.1 |
| **Aspect B2: Health and Safety** | | |
| General Disclosure | Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards. | 9.3 |
| KPI B2.1 | Number and rate of work-related fatalities occurred in each of the past three years including the reporting year. | 9.3, 11.1 |
| KPI B2.2 | Lost days due to work injury. | 9.3, 11.1 |
| KPI B2.3 | Description of occupational health and safety measures adopted, and how they are implemented and monitored. | 9.3 |

# 11.3 HK Stock Exchange ESG Guide Content Index

| Subject Areas, Aspects, General Disclosures and KPIs | | Section |
|---|---|---|
| **Aspect B3: Development and Training** | | |
| General Disclosure | Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. | 6.1 |
| KPI B3.1 | The percentage of employees trained by gender and employee category (e.g. senior management, middle management). | 9.1, 11.1 |
| KPI B3.2 | The average training hours completed per employee by gender and employee category. | 9.1, 11.1 |
| **Aspect B4: Labour Standards** | | |
| General Disclosure | Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour. | 9.2 |
| KPI B4.1 | Description of measures to review employment practices to avoid child and forced labour. | 9.2 |
| KPI B4.2 | Description of steps taken to eliminate such practices when discovered. | 9.2 |
| **Operating Practices** | | |
| **Aspect B5: Supply Chain Management** | | |
| General Disclosure | Policies on managing environmental and social risks of the supply chain. | 7.6 |
| KPI B5.1 | Number of suppliers by geographical region. | 7.6, 11.1 |
| KPI B5.2 | Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored. | 7.6 |
| KPI B5.3 | Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored. | 7.6 |
| KPI B5.4 | Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored. | 7.6 |

| Subject Areas, Aspects, General Disclosures and KPIs | | Section |
|---|---|---|
| **Aspect B6: Product Responsibility** | | |
| General Disclosure | Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. | 7.3, 7.4, 7.5, 9.3 |
| KPI B6.1 | Percentage of total products sold or shipped subject to recalls for safety and health reasons. | This indicator is not material to the Group due to the nature of our business and is therefore not disclosed. |
| KPI B6.2 | Number of products and service related complaints received and how they are dealt with. | 7.4 |
| KPI B6.3 | Description of practices relating to observing and protecting intellectual property rights. | 7.4 |
| KPI B6.4 | Description of quality assurance process and recall procedures. | 7.3, 7.4, 7.5 |
| KPI B6.5 | Description of consumer data protection and privacy policies, and how they are implemented and monitored. | 7.4 |
| **Aspect B7: Anti-corruption** | | |
| General Disclosure | Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering. | 7.2 |
| KPI B7.1 | Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases. | 7.2 |
| KPI B7.2 | Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored. | 7.2 |
| KPI B7.3 | Description of anti-corruption training provided to directors and staff. | 7.2 |

# 11.3 HK Stock Exchange ESG Guide Content Index

| Subject Areas, Aspects, General Disclosures and KPIs | | Section |
|---|---|---|
| **Community** | | |
| **Aspect B8: Community Investment** | | |
| General Disclosure | Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests. | 10.0 |
| KPI B8.1 | Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport). | 10.1, 10.2 |
| KPI B8.2 | Resources contributed (e.g. money or time) to the focus area. | 10.1, 10.2 |

## New Climate Disclosure Requirements

The tables below outline the HK Stock Exchange's new climate-related disclosure requirements under Part D of the ESG Code. These requirements have been referenced in the Sustainability Report as a preparatory measure for the next reporting cycle. Details regarding their applicability to CKI are provided in Section 1 About this Report.

| Core Content | Section |
|---|---|
| **Governance** | |
| **Paragraph 19** | |
| An issuer shall disclose information about: | |
| (a) The governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. Specifically, the issuer shall identify that body(s) or individual(s) and disclose information about:<br>(i) how the body(s) or individual(s) determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to climate-related risks and opportunities;<br>(ii) how and how often the body(s) or individual(s) is informed about climate-related risks and opportunities;<br>(iii) how the body(s) or individual(s) takes into account climate-related risks and opportunities when overseeing the issuer's strategy, its decisions on major transactions, and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities;<br>(iv) how the body(s) or individual(s) oversees the setting of, and monitors progress towards, targets related to climate-related risks and opportunities (see Paragraphs 37 to 40), including whether and how related performance metrics are included in remuneration policies (see Paragraph 35); and | 5.2, 6.3.1 |
| (b) Management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities, including information about:<br>(i) whether the role is delegated to a specific management-level position or management-level committee and how oversight is exercised over that position or committee; and<br>(ii) whether management uses controls and procedures to support the oversight of climate-related risks and opportunities and, if so, how these controls and procedures are integrated with other internal functions. | 5.2, 6.3.1 |
| **Strategy** | |
| **Climate-related Risks and Opportunities** | |
| **Paragraph 20** | |
| An issuer shall disclose information to enable an understanding of climate-related risks and opportunities that could reasonably be expected to affect the issuer's cash flows, its access to finance or cost of capital over the short, medium or long term. Specifically, the issuer shall: | |
| (a) describe climate-related risks and opportunities that could reasonably be expected to affect cash flows, its access to finance or cost of capital over the short, medium or long term;<br>(b) explain, for each climate-related risk the issuer has identified, whether the issuer considers the risk to be a climate-related physical risk or climate-related transition risk;<br>(c) specify, for each climate-related risk and opportunity the issuer has identified, over which time horizons – short, medium or long term – the effects of each climate-related risk and opportunity could reasonably be expected to occur; and<br>(d) explain how the issuer defines 'short term', 'medium term' and 'long term' and these definitions are linked to the planning horizons used by the issuer for strategic decision-making. | 6.3.2 |
| **Business Model and Value Chain** | |
| **Paragraph 21** | |
| An issuer shall disclose information that enables an understanding of the current and anticipated effects of climate-related risks and opportunities on the issuer's business model and value chain. Specifically, the issuer shall disclose: | |
| (a) a description of the current and anticipated effects of climate-related risks and opportunities on the issuer's business model and value chain; and<br>(b) a description of where in the issuer's business model and value chain climate-related risks and opportunities are concentrated (for example, geographical areas, facilities and types of assets). | 6.2, 6.3.2 |

# 11.3 HK Stock Exchange ESG Guide Content Index

| Core Content | Section |
|---|---|
| **Strategy and Decision-making** | |
| **Paragraph 22** | |
| An issuer shall disclose information that enables an understanding of the effects of climate-related risks and opportunities on its strategy and decision-making. Specifically, the issuer shall disclose: | |
| (a) information about how the issuer has responded to, and plans to respond to, climate-related risks and opportunities in its strategy and decision-making, including how the issuer plans to achieve any climate-related targets it has set and any targets it is required to meet by law or regulation. Specifically, the issuer shall disclose information about:<br>(i) current and anticipated changes to the issuer's business model, including its resource allocation, to address climate-related risks and opportunities;<br>(ii) current and anticipated adaptation and mitigation efforts (whether direct or indirect);<br>(iii) any climate-related transition plan the issuer has (including information about key assumptions used in developing its transition plan, and dependencies on which the issuer's transition plan relies), or an appropriate negative statement where the issuer does not have a climate-related transition plan;<br>(iv) how the issuer plans to achieve any climate-related targets (including any greenhouse gas emissions targets (in any)), described in accordance with paragraphs 37 to 40; and | 6.1 |
| (b) information about how the issuer is resourcing, and plans to resource, the activities disclosed in accordance with paragraph 22(a). | |
| **Paragraph 23** | |
| An issuer shall disclose information about the progress of plans disclosed in previous reporting periods in accordance with paragraph 22(a). | 6.1, 8.1 |
| **Financial Position, Financial Performance and Cash Flows** | |
| **Paragraph 24 – Current financial effect** | |
| An issuer shall disclose qualitative and quantitative information about: | |
| (a) how climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period; and | 6.3.2 |
| (b) the climate-related risks and opportunities identified in paragraph 24(a) for which there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements. | |

| Core Content | Section |
|---|---|
| **Paragraph 25 – Anticipated financial effect** | |
| The issuer shall provide qualitative and quantitative disclosures about: | |
| (a) how the issuer expects its financial position to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities, taking into consideration:<br>(i) its investment and disposal plans; and<br>(ii) its planned sources of funding to implement its strategy; and | 6.3.2 |
| (b) how the issuer expects its financial performance and cash flows to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities. | |
| **Climate Resilience** | |
| **Paragraph 26** | |
| An issuer shall disclose information that enables an understanding of the resilience of the issuer's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the issuer's identified climate-related risks and opportunities. An issuer shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with an issuer's circumstances. In providing quantitative information, the issuer may disclose a single amount or a range. Specifically, the issuer shall disclose: | |
| (a) the issuer's assessment of its climate resilience as at the reporting date, which shall enable an understanding of:<br>(i) the implications, if any, of the issuer's assessment for its strategy and business model, including how the issuer would need to respond to the effects identified in the climate-related scenario analysis;<br>(ii) the significant areas of uncertainty considered in the issuer's assessment of its climate resilience; and<br>(iii) the issuer's capacity to adjust, or adapt its strategy and business model to climate change over the short, medium or long term; | 6.3.2 |
| (b) how and when the climate-related scenario analysis was carried out, including:<br>(i) information about the inputs used, including:<br>(1) which climate-related scenarios the issuer used for the analysis and the sources of such scenarios;<br>(2) whether the analysis included a diverse range of climate-related scenarios;<br>(3) whether the climate-related scenarios used for the analysis are associated with climate-related transition risks or climate-related physical risks; | |

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| Core Content | Section |
|---|---|
| (4) whether the issuer used, among its scenarios, a climate-related scenario aligned with the latest international agreement on climate change;<br>(5) why the issuer decided that its chosen climate-related scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties;<br>(6) time horizons the issuer used in the analysis; and<br>(7) what scope of operations the issuer used in the analysis (for example, the operation, locations and business units used in the analysis);<br>(ii) the key assumptions the issuer made in the analysis; and<br>(iii) the reporting period in which the climate-related scenario analysis was carried out. | 6.3.2 |
| **Risk Management** | |
| **Paragraph 27** | |
| An issuer shall disclose information about: | |
| (a) the processes and related policies it uses to identify, assess, prioritise and monitor climate-related risks, including information about:<br>(i) the inputs and parameters the issuer uses (for example, information about data sources and the scope of operations covered in the processes);<br>(ii) whether and how the issuer uses climate-related scenario analysis to inform its identification of climate-related risks;<br>(iii) how the issuer assesses the nature, likelihood and magnitude of the effects of those risks (for example, whether the issuer considers qualitative factors, quantitative thresholds or other criteria);<br>(iv) whether and how the issuer prioritises climate-related risks relative to other types of risks;<br>(v) how the issuer monitors climate-related risks; and<br>(vi) whether and how the issuer has changed the processes it uses compared with the previous reporting period; | 6.3.3, 7.1 |
| (b) the processes the issuer uses to identify, assess, prioritise and monitor climate-related opportunities (including information about whether and how the issuer uses climate-related scenario analysis to inform its identification of climate-related opportunities); and | |
| (c) the extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the issuer's overall risk management process. | |

| Core Content | Section |
|---|---|
| **Metrics and Targets** | |
| **Greenhouse Gas Emissions** | |
| **Paragraph 28** | |
| An issuer shall disclose its absolute gross greenhouse gas emissions generated during the reporting period, expressed as metric tons of $CO_2$ equivalent, classified as: | |
| (a) Scope 1 greenhouse gas emissions;<br>(b) Scope 2 greenhouse gas emissions; and<br>(c) Scope 3 greenhouse gas emission. | 8.2, 11.1 |
| **Paragraph 29** | |
| An issuer shall: | |
| (a) measure its greenhouse gas emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) unless required by a jurisdictional authority or another exchange on which the issuer is listed to use a different method for measuring greenhouse gas emissions; | 11.2 |
| (b) disclose the approach it uses to measure its greenhouse gas emissions including:<br>(i) the measurement approach, inputs and assumptions the issuer uses to measure its greenhouse gas emissions;<br>(ii) the reason why the issuer has chosen the measurement approach, inputs and assumptions it uses to measure its greenhouse gas emissions; and<br>(iii) any changes the issuer made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes; | |
| (c) for Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 28(b), disclose its location-based Scope 2 greenhouse gas emissions, and provide information about any contractual instruments that is necessary to enable an understanding of the issuer's Scope 2 greenhouse gas emissions; and | 11.1 |
| (d) for Scope 3 greenhouse gas emissions disclosed in accordance with paragraph 28(c), disclose the categories included within the issuer's measure of Scope 3 greenhouse gas emissions, in accordance with the Scope 3 categories described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011). | 8.3, 11.1 |

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| Core Content | Section |
|---|---|
| **Climate-related Transition Risks** | |
| **Paragraph 30** | |
| An issuer shall disclose the amount and percentage of assets or business activities vulnerable to climate-related transition risks. | We have undertaken climate scenario analysis and are committed to progressing towards the reporting of this information. |
| **Climate-related Physical Risks** | |
| **Paragraph 31** | |
| An issuer shall disclose the amount and percentage of assets or business activities vulnerable to climate-related physical risks. | Please refer to the response for Paragraph 30. |
| **Climate-related Opportunities** | |
| **Paragraph 32** | |
| An issuer shall disclose the amount and percentage of assets or business activities aligned with climate-related opportunities. | Please refer to the response for Paragraph 30. |
| **Capital Deployment** | |
| **Paragraph 33** | |
| An issuer shall disclose the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities. | 6.2 |
| **Internal Carbon Prices** | |
| **Paragraph 34** | |
| An issuer shall disclose:<br>(a) an explanation of whether and how the issuer is applying a carbon price in decision-making (for example, investment decisions, transfer pricing, and scenario analysis); and<br>(b) the price of each metric tonne of greenhouse gas emissions the issuer uses to assess the costs of its greenhouse gas emissions;<br>or an appropriate negative statement that the issuer does not apply a carbon price in decision-making. | 6.3.4 |
| **Remuneration** | |
| **Paragraph 35** | |
| An issuer shall disclose whether and how climate-related considerations are factored into remuneration policy, or an appropriate negative statement. This may form part of the disclosure under paragraph 19(a)(iv). | 5.2 |

| Core Content | Section |
|---|---|
| **Industry-based Metrics** | |
| **Paragraph 36** | |
| An issuer is encouraged to disclose industry-based metrics that are associated with one or more particular business models, activities or other common features that characterise participation in an industry. In determining the industry-based metrics that the issuer discloses, an issuer is encouraged to refer to and consider the applicability of the industry-based metrics associated with disclosure topics described in the IFRS S2 Industry-based Guidance on implementing Climate-related Disclosures and other industry-based disclosure requirements prescribed under other international ESG reporting frameworks. | 11.5 |
| **Climate-related Targets** | |
| **Paragraph 37** | |
| An issuer shall disclose (a) the quantitative and qualitative climate-related targets the issuer has set to monitor progress towards achieving its strategic goals, and (b) any targets the issuer is required to meet by law or regulation, including any greenhouse gas emissions targets. For each target, the issuer shall disclose: | |
| (a) the metric used to set the target;<br>(b) the objective of the target (for example, mitigation, adaptation or conformance with science-based initiatives);<br>(c) the part of the issuer to which the target applies (for example, whether the target applies to the issuer in its entirety or only a part of the issuer, such as a specific business unit or geographic region);<br>(d) the period over which the target applies;<br>(e) the base period from which progress is measured;<br>(f) milestones or interim targets (if any);<br>(g) if the target is quantitative, whether the target is an absolute target or an intensity target; and<br>(h) how the latest international agreement on climate change, including jurisdictional commitments that arise from that agreement, has informed the target. | 6.1 |
| **Paragraph 38** | |
| An issuer shall disclose information about its approach to setting and reviewing each target, and how it monitors progress against each target, including: | |
| (a) whether the target and the methodology for setting the target has been validated by a third party;<br>(b) the issuer's processes for reviewing the target;<br>(c) the metrics used to monitor progress towards reaching the target; and<br>(d) any revisions to the target and an explanation for those revisions. | 5.2, 6.1 |

# 11.3 HK Stock Exchange ESG Guide Content Index

| Core Content | Section |
|---|---|
| **Paragraph 39** | |
| An issuer shall disclose information about its performance against each climate-related target and an analysis of trends or changes in the issuer's performance. | 6.1, 8.2 |
| **Paragraph 40** | |
| For each greenhouse gas emissions target disclosed in accordance with paragraphs 37 to 39, an issuer shall disclose: | |
| (a) which greenhouse gases are covered by the target;<br>(b) whether Scope 1, Scope 2 or Scope 3 greenhouse gas emissions are covered by the target;<br>(c) whether the target is a gross greenhouse gas emissions target or a net greenhouse gas emissions target. If the issuer discloses a net greenhouse gas emissions target, the issuer is also required to separately disclose its associated gross greenhouse gas emissions target;<br>(d) whether the target was derived using a sectoral decarbonisation approach; and<br>(e) the issuer's planned use of carbon credits to offset greenhouse gas emissions to achieve any net greenhouse gas emissions target. In explaining its planned use of carbon credits, the issuer shall disclose:<br>(i) the extent to which, and how, achieving any net greenhouse gas emissions target relies on the use of carbon credits;<br>(ii) which third-party scheme(s) will verify or certify the carbon credits;<br>(iii) the type of carbon credit, including whether the underlying offset will be nature-based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal; and<br>(iv) any other factors necessary to enable an understanding of the credibility and integrity of the carbon credits the issuer plans to use (for example, assumptions regarding the permanence of the carbon offset). | 6.1 |
| **Applicability of Cross-industry Metrics and Industry-based Metrics** | |
| **Paragraph 41** | |
| In preparing disclosures to meet the requirements in paragraphs 21 to 26 and 37 to 38, an issuer shall refer to and consider the applicability of cross-industry metrics (see paragraphs 28 to 35) and (ii) industry-based metrics (see paragraph 36). | 11.5 |

# 11.4 TCFD Content Index

| TCFD Recommendations | | Section |
|---|---|---|
| **Governance** | | |
| Disclose the organisation's governance around climate-related risks and opportunities. | • Describe the board's oversight of climate-related risks and opportunities.<br>• Describe management's role in assessing and managing climate-related risks and opportunities. | 6.3.1 |
| **Strategy** | | |
| Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material. | • Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.<br>• Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.<br>• Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | 6.3.2 |
| **Risk Management** | | |
| Disclose how the organisation identifies, assesses, and manages climate-related risks. | • Describe the organisation's processes for identifying and assessing climate-related risks.<br>• Describe the organisation's processes for managing climate-related risks.<br>• Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management. | 6.3.3 |
| **Metrics and Targets** | | |
| Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material. | • Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.<br>• Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks.<br>• Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets. | 6.3.4 |

# 11.5 SASB Content Index

## Electric Utilities & Power Generators

| | SASB Code | 2024 |
|---|---|---|
| **GHG Emissions & Energy Resource Planning** | | |
| (1) Gross Scope 1 emissions | IF-EU-110a.1 | Section 8.2 |
| (2) Percentage of gross Scope 1 GHG emissions covered under emissions-limiting regulations | IF-EU-110a.1 | Currently not reported |
| (3) Percentage of gross Scope 1 GHG emissions covered under emissions-reporting based regulations | IF-EU-110a.1 | 100% |
| GHG emissions associated with power deliveries | IF-EU-110a.2 | Section 8.1 > Modernising and Digitalising Electricity Networks |
| Discussion of long- and short-term strategy or plan to manage Scope 1 GHG emissions, emissions reduction targets, and an analysis of performance against those targets | IF-EU-110a.3 | Section 6.1 |
| **Air Quality** | | |
| Air emissions of the following pollutants: (1) $NO_x$ (excluding $N_2O$), (2) $SO_x$, (3) particulate matter ($PM_{10}$) | IF-EU-120a.1 | Section 8.4 > Ensuring Air Quality |
| (4) lead (Pb), and | IF-EU-120a.1 | Currently not reported |
| (5) mercury (Hg) | IF-EU-120a.1 | Section 11.1 |
| Percentage of each in or near areas of dense population | IF-EU-120a.1 | Currently not reported |
| **Water Management** | | |
| (1) Total water withdrawn, (2) total water consumed; | IF-EU-140a.1 | Section 8.4 > Conserving Water Resources |
| Percentage of each in regions with High or Extremely High Baseline Water Stress | IF-EU-140a.1 | Currently not reported. However, we plan to strengthen the Group's understanding of water stress levels within the context of our business units and operating locations. |
| Number of incidents of non-compliance associated with water quality permits, standards and regulations | IF-EU-140a.2 | Section 8.0 |
| Description of water management risks and discussion of strategies and practices to mitigate those risks | IF-EU-140a.3 | Section 8.4 > Conserving Water Resources |
| **Coal Ash Management** | | |
| (1) Amount of coal combustion products (CCPs) generated, (2) percentage recycled | IF-EU-150a.1 | Section 11.1 |
| Description of coal combustion products (CCPs) management policies and procedures for active and inactive operations | IF-EU-150a.3 | Section 8.4 > Promoting Circular Economy<br>Section 11.1 |
| **Energy Affordability** | | |
| Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers | IF-EU-240a.1 | Currently not reported |
| (1) Number of residential customer electric disconnections for non-payment, (2) percentage reconnected within 30 days | IF-EU-240a.3 | Currently not reported |
| Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory | IF-EU-240a.4 | Section 10.1 |
| **Workforce Health & Safety** | | |
| (1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees | IF-EU-320a.1 | Section 9.3<br>Section 11.1 |
| **End-Use Efficiency & Demand** | | |
| Percentage of electric load served by smart grid technology | IF-EU-420a.2 | Section 8.1 > Modernising and Digitalising Electricity Networks |
| Customer electricity savings | IF-EU-420a.3 | Section 10.1 |
| **Nuclear Safety & Emergency Management** | | |
| Total number of nuclear power units, broken down by results of most recent independent safety review | IF-EU-540a.1 | Not applicable |
| Description of efforts to manage nuclear safety and emergency preparedness | IF-EU-540a.2 | Not applicable |

# 11.5 SASB Content Index

| | SASB Code | 2024 |
|---|---|---|
| **Grid Resiliency** | | |
| Number of incidents of non-compliance with physical or cybersecurity standards or regulations | IF-EU-550a.1 | The Group is not aware of any material non-compliance in this area. |
| (1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days | IF-EU-550a.2 | Section 7.5 |
| **Activity Metrics** | | |
| Number of residential customers served | IF-EU-000.A | Over 12 million customers |
| Number of commercial customers served | IF-EU-000.A | |
| Number of industrial customers served | IF-EU-000.A | |
| Total electricity delivered to: (1) residential customers | IF-EU-000.B | Currently not reported |
| Total electricity delivered to: (2) commercial customers | IF-EU-000.B | |
| Total electricity delivered to: (3) industrial customers | IF-EU-000.B | |
| Total electricity delivered to: (4) all other retail customers | IF-EU-000.B | |
| Total electricity delivered to: (4) wholesale customers | IF-EU-000.B | |
| Length of transmission and distribution lines | IF-EU-000.C | Section 2 |
| Total electricity generated, percentage by major energy source, percentage in regulated markets | IF-EU-000.D | Total electricity generated: Section 11.1 |
| Total wholesale electricity purchased | IF-EU-000.E | Not relevant or material, as our electricity business segment is focused on electricity distribution. |

## Gas Utilities & Distributors

| | SASB Code | 2024 |
|---|---|---|
| **Energy Affordability** | | |
| Average retail gas rate for (1) residential, (2) commercial, and (3) industrial customers, and (4) transportation services only | IF-GU-240a.1 | Currently not reported |
| (1) Number of residential customer gas disconnections for non-payment, (2) percentage reconnected within 30 days | IF-GU-240a.3 | Currently not reported |
| Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory | IF-GU-240a.4 | Section 10.1 |
| **End-Use Efficiency** | | |
| Customer gas savings from efficiency measures, by market | IF-GU-420a.2 | Section 10.1 |
| **Integrity of Gas Delivery Infrastructure** | | |
| Number of (1) reportable pipeline incidents, (2) corrective actions received and (3) violations of pipeline safety statutes | IF-GU-540a.1 | Currently not reported |
| Percentage of distribution pipeline that is (1) cast or wrought iron and (2) unprotected steel | IF-GU-540a.2 | |
| Percentage of gas (1) transmission and (2) distribution pipelines inspected | IF-GU-540a.3 | |
| Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions | IF-GU-540a.4 | 8.1 > Promoting the Reduction & Recovery of Methane and Carbon Dioxide |
| **Activity Metrics** | | |
| Number of (1) residential customers served | IF-GU-000.A | Over 7 million customers |
| Number of (2) commercial customers served | IF-GU-000.A | |
| Number of (3) industrial customers served | IF-GU-000.A | |
| Amount of natural gas delivered to: (1) residential customers | IF-GU-000.B | Currently not reported |
| Amount of natural gas delivered to: (2) commercial customers | IF-GU-000.B | |
| Amount of natural gas delivered to: (3) industrial customers | IF-GU-000.B | |
| Amount of natural gas delivered to: (4) transferred to a third party | IF-GU-000.B | Not applicable |
| Length of gas (1) transmission and (2) distribution pipelines | IF-GU-000.C | Gas pipeline length: over 116,000 km |

# 11.6 Verification Statement

HKQAA
HONG KONG QUALITY ASSURANCE AGENCY
香 港 品 質 保 證 局

**Verification Statement**

**Scope and Objective**

Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by CK Infrastructure Holdings Limited ("CKI") to conduct an independent verification for its sustainability disclosures stated in its Sustainability Report 2024 ("the Report"). The disclosures covered the period from 1st January 2024 to 31st December 2024 and represented the sustainability performance of CKI.

The objective of this verification is to provide an independent opinion with a limited level of assurance on whether the sustainability disclosures are prepared in accordance with the following reporting criteria:

- the Environmental, Social and Governance Reporting Guide ("ESG Guide") set out in Appendix C2 of the Listing Rules of The Stock Exchange of Hong Kong Limited (version effective from 31 December 2023, which remains applicable to annual reports for financial years commencing before 1 January 2025).

The verification team also reviews the disclosures in the Report by making reference to the following disclosure frameworks, as the Report has been prepared with references to:

- ESG Reporting Code (effective from 1 January 2025), including the new climate-related disclosure requirements under Part D of the Code, as a preparatory measure for the next reporting cycle; and
- Sustainability Accounting Standards Board ("SASB") industry-specific standards.

**Level of Assurance and Methodology**

HKQAA's verification procedure has been conducted with reference to the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ISAE 3000") issued by the International Auditing and Assurance Standards Board. The evidence gathering process was designed to obtain a limited level of assurance as set out in the ISAE 3000 by using a risk-based approach.

Our verification procedure included, but not limited to:

- Sampling the sustainability information stated in the Report, e.g. claims and performance data for detail verification;
- Verifying the raw data and supporting information of the selected samples of the sustainability information;
- Interviewing responsible personnel; and
- Checking the internal control mechanism

**Roles and Responsibilities**

CKI is responsible for the organisation's information system, the development and maintenance of records and reporting procedures in accordance with the system, including the calculation and determination of sustainability information and performance. HKQAA verification team is responsible for providing an independent verification opinion on the disclosures provided by CKI for the reporting period. The verification was based on the verification scope, objectives and criteria as agreed between CKI and HKQAA.



HKQAA
HONG KONG QUALITY ASSURANCE AGENCY
香 港 品 質 保 證 局

**Verification Statement**

**Independence**

HKQAA did not involve in collecting and calculating data or compiling the reporting contents. Our verification activities were entirely independent and there was no relationship between HKQAA and CKI that would affect the impartiality of the verification.

**Limitation and Exclusion**

The following limitations and exclusions were applied to this verification due to the service scope, nature of verification criteria, and characteristics of the verification methodology:

I. Our verification scope is limited to examining the raw data or information that transcript into the sustainability disclosures, e.g., Claims and Performance Data stated in the Report. The identified sustainability information may be subject to inherent uncertainty because of incomplete scientific and technical knowledge.

II. Evaluating the quality of execution and implementation effectiveness of the ESG practices, the appropriateness of the assumptions made, and the estimation techniques applied are outside the scope of our verification.

III. The verification of raw data or information is based on the use of a sampling approach and reliance on the client's representation. As a result, errors or irregularities may occur and remain undetected.

IV. Any information outside the established verification period has been excluded.

**Conclusion**

1 Based on the evidence obtained and the results of the verification process, it is the opinion of the verification team that, with a limited level of assurance, nothing has come to the team's attention that the report has not been prepared, in all material respects, in accordance with the ESG Guide set out in Appendix C2 of the Listing Rules of The Stock Exchange of Hong Kong Limited (former version, which remains applicable to annual reports for financial years commencing before 1 January 2025).

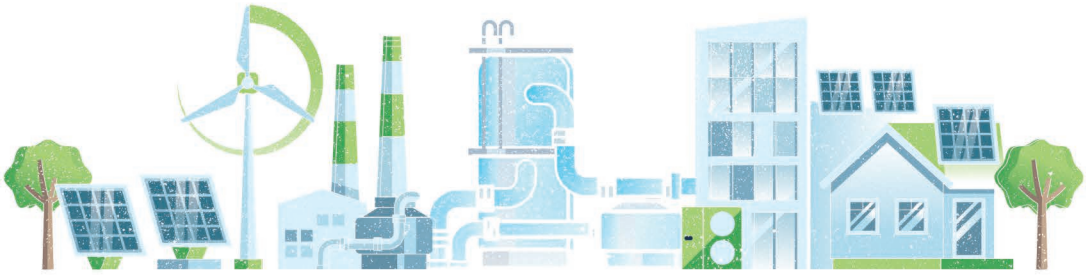
2 The verification team reviewed the Report and considered that the Report has been prepared by making reference to the contents or parts of the contents of the ESG Reporting Code and SASB industry-specific standards.

**Signed on behalf of Hong Kong Quality Assurance Agency**

Connie Sham
Head of Audit
April 2025
Ref: 14942279

# 11.7 Abbreviation

| Abbreviation | Long Form |
|---|---|
| CSRD | Corporate Sustainable Reporting Directive |
| EMS | Environmental Management System |
| EMSD | Electrical and Mechanical Service Department |
| EOS | Employee Opinion Survey |
| HSMS | Health and Management Systems |
| HV-DERMS | High Voltage Distributed Energy Resource Management System |
| ISO | International Organization for Standardization |
| KPIs | key performance indicators |
| LTIR | lost time injury rate |
| Network losses | Energy losses from distribution grid and the electricity system transmissions grid |
| NGOs | non-governmental organisations |
| NIST | National Institute of Standards and Technology |
| $NO_x$ | Nitrogen oxide |
| $SF_6$ | Sulfur Hexafluoride |
| $SO_x$ | Sulfur oxides |
| UK | United Kingdom |
| UN SDGs | United Nations Sustainable Development Goals |
| WRMP | Water Resources Management Plan |



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