



**CK Infrastructure Holdings Limited**

**長江基建集團有限公司**

(Incorporated in Bermuda with limited liability)

(Stock Code: 1038)

**Sustainability Report 2023**



# Seizing Opportunities

for a Resilient Future





**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 a global infrastructure company that 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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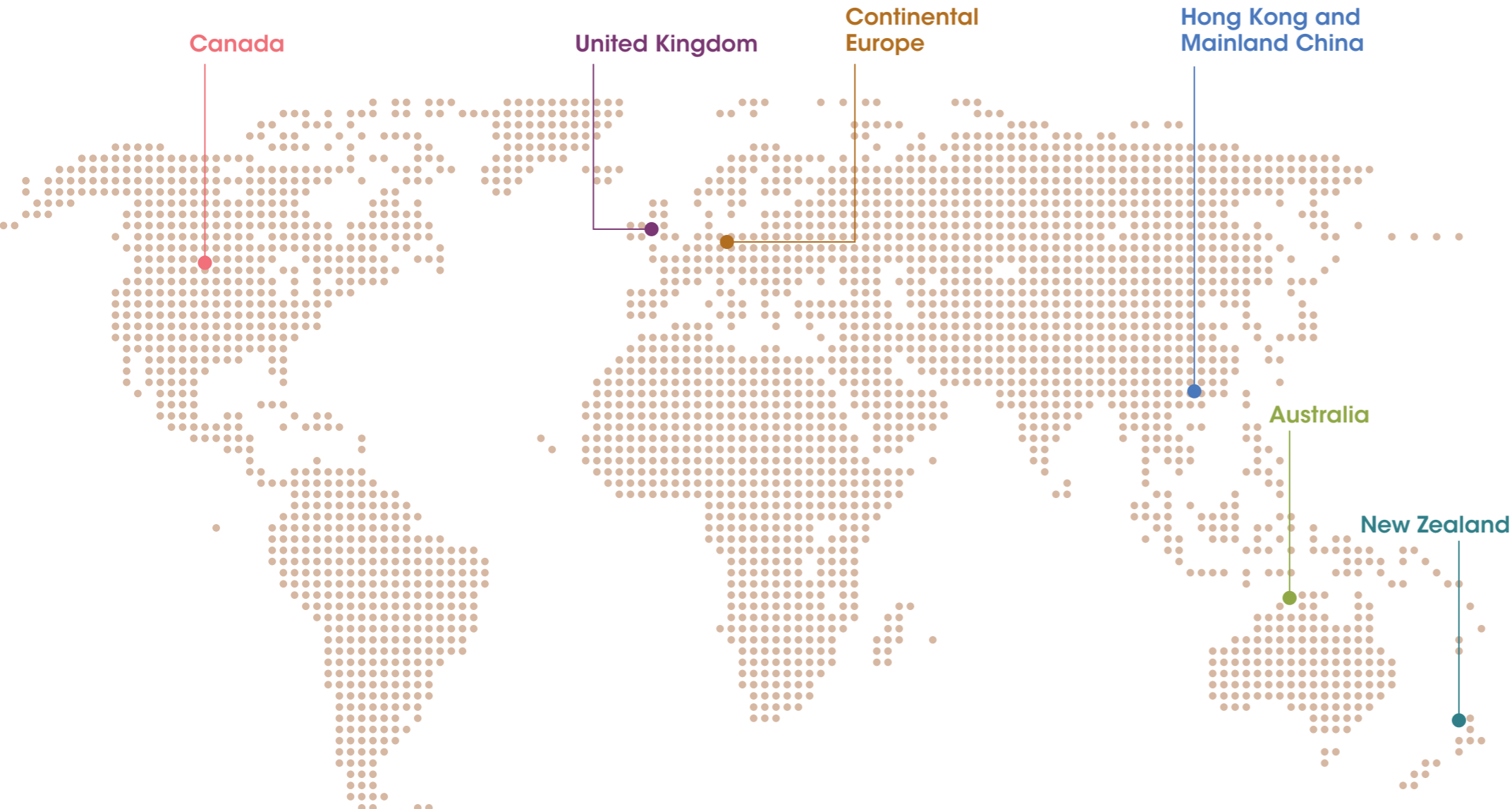
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# Our Business Portfolio

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- Introduction
- CKI's Low-carbon Transition Plan
- Sustainability at CKI
- Governance
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- Canada**
- Canadian Power
  - Park'N Fly
  - Canadian Midstream Assets
  - Reliance Home Comfort

- United Kingdom**
- UK Power Networks
  - Northumbrian Water
  - Northern Gas Networks
  - Wales & West Gas Networks
  - Seabank Power
  - UK Rails

- Continental Europe**
- Dutch Enviro Energy
  - ista

- Hong Kong and Mainland China**
- Power Assets
  - Shen-Shan Highway (Eastern Section), Shantou Bay Bridge and Panyu Beidou Bridge
  - Alliance Construction Materials
  - Green Island Cement
  - Anderson Asphalt

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

- New Zealand**
- Wellington Electricity
  - Enviro NZ



# 1

## Introduction

United Energy, as part of its Electric Avenue program, is rolling out dozens of pole-mounted batteries across the south-eastern suburbs of Melbourne, Australia to store and redistribute locally generated solar power.

## 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 (“DNO”) 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.
- Seabank Power – an electricity generation plant located near Bristol in the South West of England.
- UK Rails – one of the three major rolling stock companies in the UK.

## Infrastructure Investments in Australia

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

- SA Power Networks – 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 of and the Southeast 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 (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 collection, management and disposal services nationwide.

## Infrastructure Investments in Continental Europe

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

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

## Infrastructure Investments in Canada

- 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.
- Reliance Home Comfort – a residential services company under the Household Infrastructure portfolio of the Group.

## 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.

- Shen-Shan Highway (Eastern Section), Shantou Bay Bridge and Panyu Beidou Bridge – toll roads and bridges in Guangdong province.
- 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

## Our Business Portfolio

Employees <sup>1</sup>  
**35,745**

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

Power Network Length  
 over **388,200** km

Gas Pipeline Length  
 over **112,600** km

## Total Power Generation Capacity Mix

Coal: <b>2,950</b> MW	Renewable energy
Natural gas: <b>5,262</b> MW	– Wind: <b>195</b> MW
Oil: <b>617</b> MW	– Solar: <b>15</b> MW
	– Energy-from-waste and others <sup>2</sup> : <b>669</b> MW

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



I am pleased to present this year's sustainability report, highlighting the Group's strategy, visions and achievements to create a more sustainable and better environment. Echoing the Group's solid financial performance in the year, we also see encouraging progresses and achievements in the key sustainability areas. The challenges we face in sustainability are complex and ever-changing, but we believe they are matched by even greater opportunities. The Group is capturing these opportunities proactively to transform potential hurdles into gateways for growth and development.

Our strategy is crafted to address the environmental, social and governance impacts that matter most to the Group, our people, our communities and environments in the short, medium and longer term. We aligned our sustainability strategy with United Nations Sustainable

Development Goals ("SDGs"). The selected SDGs by the Group, which cover a broad range of environment, human and social issues, are interconnected with the material topics which our stakeholders would like us to take actions.

As a global infrastructure player, we recognise the heightened commitments from governments within the jurisdictions we operate, all striving towards aggressive net zero targets in the coming decades. As disclosed in our 2022 Sustainability Report, the Group targets for a 50% reduction in Scope 1 and 2 emissions by 2035 compared to our 2020 levels and is committed to the pursuit of net zero by 2050. The group-wide targets clearly demonstrated that the Group is ambitious to decarbonise as needed. Many of our key infrastructure businesses have set net zero targets well before 2050 and aligned

themselves with science based targets. Good progress on carbon reduction has been made in 2023, with a year-over-year Scope 1 and 2 emissions reduction of 4.8%, putting us on track of our decarbonisation timeline.

The Group is focused to be a responsible facilitator for the energy transition, and we see the growth and investment opportunities that it brings. During this journey, we also take actions to make sure that our customers and communities can enjoy the benefits of the low carbon transition.

This year, we have enhanced the climate disclosures with our first climate scenario analysis, illustrating the climate-related risks and opportunities that stem from the physical and transition impacts of climate change for the Group. Our strategic plans and robust risk management framework ensure that we are well-positioned to navigate the transition to a low-carbon economy while maintaining financial resilience.

Aligned with our climate initiatives, our unwavering commitment to the environment stands firm, with action plans preserving biodiversity, improving waste management, and safeguarding water resources. Aware of the delicate balance of life that we depend on, the Group has reinforced its dedication to environmental stewardship with the establishment of the Biodiversity Policy in February 2024, placing the protection of nature and respect for all lives at the heart of our corporate strategy for sustainable, long-term growth. The Biodiversity Policy applies across the Group's operations and serves as a directive for our collective efforts in nurturing biodiversity. In terms of water conservation, our business units are incorporating water-saving technologies and enhancing monitoring processes, demonstrating a dedication to minimising water use and contributing to the sustainability of our natural resources. Together, these actions highlight the Group's comprehensive dedication to environmental sustainability and its active role in promoting the well-being of the communities we serve.

Moreover, our collective responsibility extends beyond our climate actions to ensure that our journey towards a low-carbon future is inclusive and equitable and uplifts the potential of all people. The Group has been actively working on creating a more inclusive work environment. The establishment of the Workforce Diversity Policy further affirms the Group's

dedication to embedding principles of diversity and inclusion within our workplace, culture, strategy, and processes. Various business units within the Group are implementing diversity, equity and inclusion strategies to promote diversity and address social issues. For instance, our business units in Australia are taking initiatives to support the Aboriginal peoples within the workforce and wider communities, including providing cultural awareness education for our staff and developing partnerships with local indigenous-owned businesses.

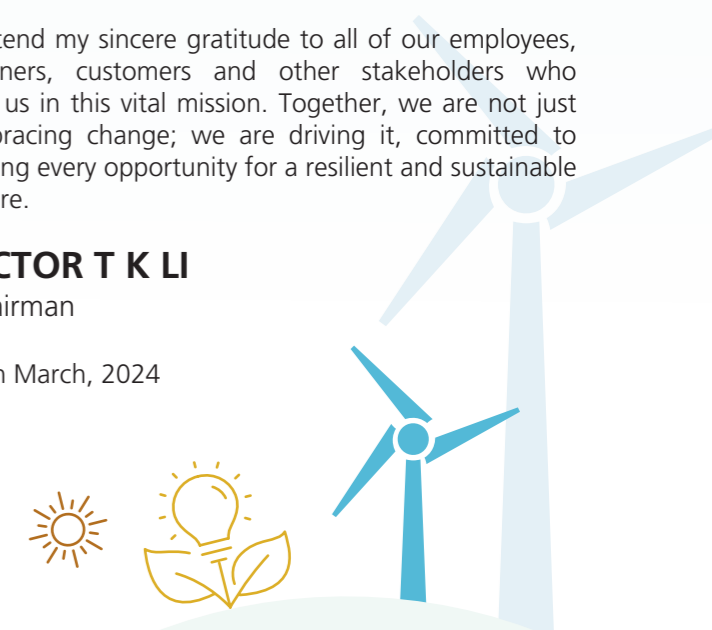
Recognising that the strength of the Group lies in the continual growth and development of our employees, we are investing with purpose in their professional journey. Through comprehensive training programmes, mentorship opportunities, and clear pathways for career progression, we are nurturing a workforce that is not only proficient but also passionate and prepared to excel amidst the complex and fast-paced market changes. The investment in human capital is fundamental to attracting and retaining top-tier talent, a key to the Group's long term success.

As we move forward, we do so with the conviction that our actions today will define the sustainability and prosperity of tomorrow. We are committed to continuous improvement, innovation, and collaboration – aiming for measurable progress in reducing emissions, improving the environment, increasing our engagement with local communities, and continuing to foster a workplace that is inclusive and diverse.

I extend my sincere gratitude to all of our employees, partners, customers and other stakeholders who join us in this vital mission. Together, we are not just embracing change; we are driving it, committed to seizing every opportunity for a resilient and sustainable future.

**VICTOR T K LI**  
Chairman

20th March, 2024





### Environment

- Scope 1 and 2 emission - ↓ 4.8% vs 2022
- Scope 3 emissions - 1,355,741 tCO<sub>2</sub>e, covering the Group's most significant businesses, those that contribute to a total of 85% of our attributable revenue<sup>1</sup>
- 76% attributable revenue<sup>1</sup> covered by ISO 14001 or other EMS certification

### Social

- Lost time injury rate<sup>2</sup> - 0.52
- 32.0 hours training hours per employee
- 93% of our full-time employees received training
- Contributed over 127,000 hours on community investment
- 51% employees covered by OHSAS 18001 / ISO 45001

### Governance

- Established Anti-Harassment Policy in October 2023 and Biodiversity Policy and Workforce Diversity Policy in February 2024
- Published our first TCFD-aligned disclosures

Notes:  
 (1) Percentage of attributable revenue represents the revenue of each business multiplied by the effective interests owned by the Group on 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 turnover for the Group.  
 (2) 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".



## Reporting Period

This Sustainability Report provides an overview of the Group's sustainability strategies, management approach, progress, and highlights during the year from 1st January, 2023 to 31st December, 2023, unless otherwise specified.



## Reporting Boundary

The information disclosed in this Sustainability Report covers the key businesses that are consolidated in the Group's financial statements, including Power Assets (including HK Electric, Ratchaburi Power, Dali Wind Power, Laoting Wind Power and Jinwan Power Plant), Green Island Cement, Alliance Construction Materials, UKPN, Northumbrian Water, NGN, WWU, Seabank Power, UK Rails, SA Power Networks, VPN, AGN, DBP, Multinet Gas Networks, EDL, United Energy, AEO, Wellington Electricity, Enviro NZ, Dutch Enviro Energy, ista, Canadian Power, Park'N Fly, Canadian Midstream Assets and Reliance Home Comfort.

## Reporting Framework

This Report is prepared with reference to the requirements under the ESG Reporting Guide ("ESG Guide") contained in Appendix C2 to The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The report also refers to recommendations from the Task Force on Climate-related Financial Disclosures ("TCFD"). The ESG Guide Content Index and the TCFD Content Index set out on pages 175 to 181 contain information about the extent to which the Group has applied the ESG Guide and TCFD reporting framework and cross-references to the relevant sections in this Report. This Report should be read in conjunction with the Company's Annual Report 2023, which contains a comprehensive review of its financial performance and corporate governance, and also key policies which are



published on the Company's website. For more detailed information on the business units' efforts and achievements in sustainability, please refer to their separate sustainability reports or websites.

## Reporting Principles

The content of this Report follows the ESG Guide reporting principles:

- **Materiality** – We focus on matters that impact business growth and are of importance to our stakeholders. For more information, please refer to "Materiality Assessment" under section 3.1 on page 30.
- **Quantitative** – Information regarding the standards, methodologies, assumptions and/or calculation references, and sources of key conversion factors used for these key performance indicators ("KPIs") is stated wherever appropriate.
- **Balance** – This Report discloses information in an objective manner, aiming to provide stakeholders with an unbiased picture of the Group's overall sustainability performance.
- **Consistency** – Consistent methodologies are adopted when calculating the quantitative KPIs unless otherwise specified. Reasons would be provided for any restating of information published in the Report.

## Language

The Report is available in English and Traditional Chinese versions. If there is any inconsistency among these versions, the English version shall prevail.

## Feedback

We welcome any suggestions, comments and questions regarding our Sustainability Report and sustainability performance. Please feel free to contact us at [sustainability@cki.com.hk](mailto:sustainability@cki.com.hk).



This Report is by default made available to the stakeholders online unless specific requests are received for a hard copy with a view to reducing paper consumption to promote environmental protection.



# 2

## CKI's Low-carbon Transition Plan

The Group keeps pace with international trends concerning climate action, acknowledging the intensified efforts to address greenhouse gas ("GHG") emissions and their impact. The COP28 achieved a landmark agreement among nations on the urgency of global GHG emissions cuts to cap warming at 1.5°C, signalling a potential end to the fossil fuel era and underscoring the need for expedited, equitable transitions to cleaner energy. CKI is in full support of these aims and is diligently pursuing initiatives across its operations to significantly reduce its carbon emissions.

In alignment with these global commitments, our strategy remains steadfast on achieving a 50% reduction in our Scope 1 and 2 GHG emissions by 2035, taking 2020 as our baseline, and we are committed to the pursuit of net zero by 2050. In 2023, we are proud to report a third consecutive year of reduction in Scope 1 and 2 GHG emissions of the group. Our year-over-year GHG emission reduction of 4.8% in 2023 has put us on track with our decarbonisation timeline. Looking ahead, we are focused on the decarbonisation of our business operations, modernising infrastructure with innovative technology, embracing hydrogen use in gas networks, and guiding our customers towards greater energy efficiency. Recognising the magnitude of this endeavour, we have begun establishing a robust framework and are committed to active engagement in all business areas, with a promise to openly communicate our ongoing experiences and developments as we navigate this transition.



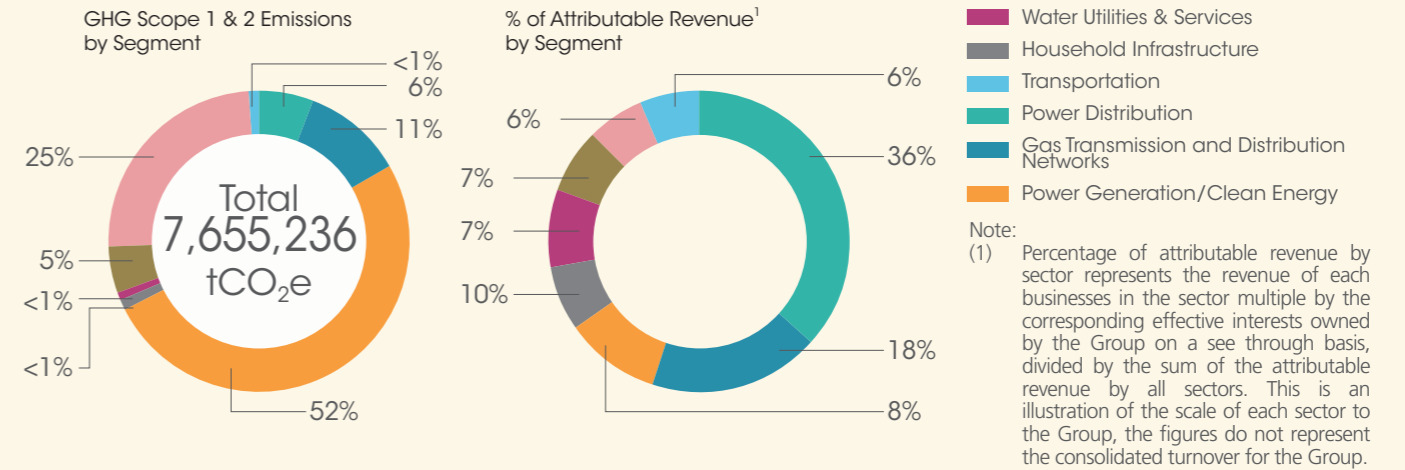
VPN – Beon Energy Solutions was engaged to design, construct, and commission the 245 MW Avonlie Solar Farm, east of Narrandera, New South Wales, Australia. The project commenced operation in March 2023.

# 2.1 CKI's Roadmap to Net Zero

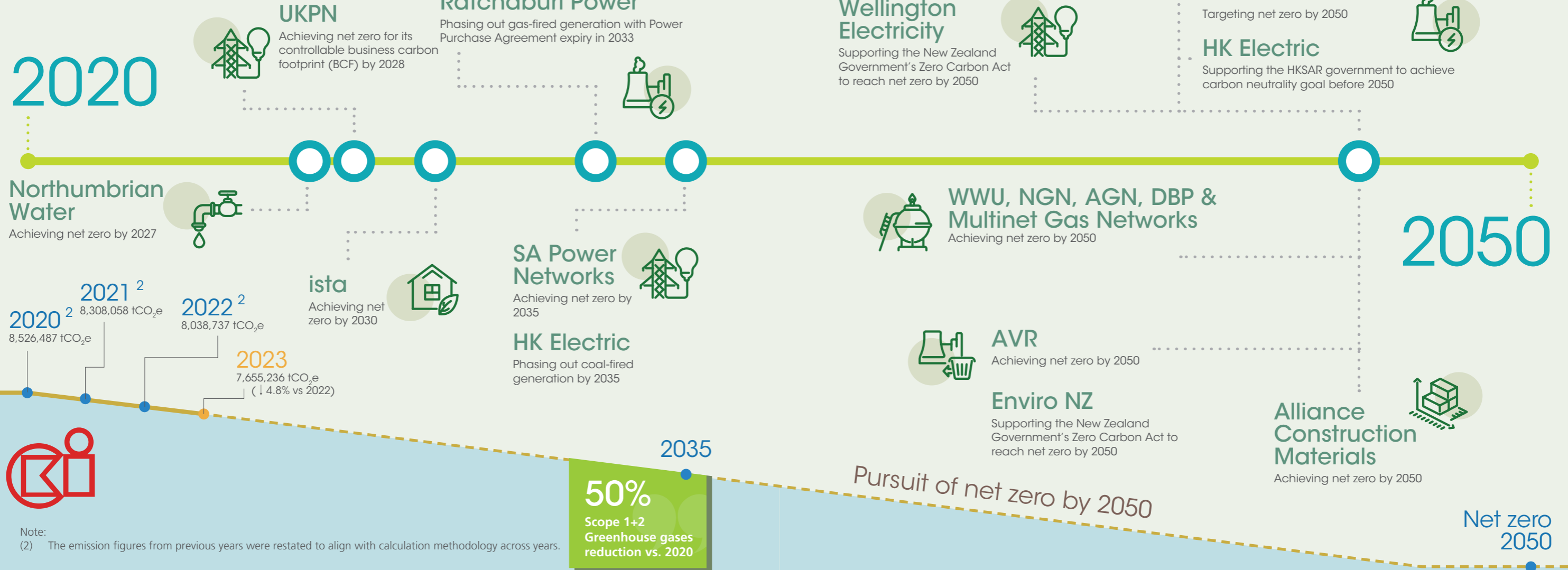
## Our Decarbonisation Ambition

Recognising the energy transition has propelled us towards a more impactful role in global decarbonisation, we are determined to exert directed efforts in our business sectors to drive change. In facilitating the transition to a "net zero" future for our customers, we encourage continuous investments to prepare for the evolving landscape. As technologies continue to advance, there may be new viable solutions to reduce carbon emission across the portfolio. The Group will actively monitor these trends and regularly review our carbon emission reduction plan. In cases where it is difficult to eliminate emissions, including 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.

## Our Performance



## Our Net Zero Timeline



# 2.1 CKI's Roadmap to Net Zero

## Initiatives



# 2.1 CKI's Roadmap to Net Zero

## Key Contribution from key business sectors

### Power Distribution

#### Sector Performance

- GHG Emissions: 424,038 tCO<sub>2</sub>e
- % of attributable revenue: 36%
- – Transmission losses: 1.20%
- – Distribution losses: 5.57%
- System Average Interruption Duration Index (from distribution): 0.71<sup>1</sup>



#### 2023 Sector Highlights

### UKPN

- 36% BCF reduction compared to 2014/15 baseline
- Reduce more than 11,000 MWh in line loss

### SA Power Networks

- Reduced 26% of GHG emissions compared to last year

### United Energy

- 33% reduction for both direct and indirect carbon emissions (Scope 1 and 2 emissions) compared to 2019 baseline
- 723 MW of renewable generation connected to the network

### VPN

- 25% reduction for both direct (Scope 1) and indirect (Scope 2) carbon emissions compared to 2019 baseline
- 2.64 GW of renewable energy generation connected to the networks
- Avonlie solar farm with capacity of 245 MW commenced operation

### Wellington Electricity

- 80% of corporate fleet fully electrified

### Gas Transmission & Distribution Networks

#### Sector Performance

- GHG Emissions: 830,298 tCO<sub>2</sub>e
- % of attributable revenue: 18%
- Gas leakage rate (from distribution): 0.79%



#### 2023 Sector Highlights

### AGN

- Since 2003, a total of 1,500 km of mains have been replaced from the old cast iron material to more reliable polyethylene material to reduce gas leakage

### NGN

- 35% reduction in gas leakage compared to 2013 level, cumulatively reduced approximately 950,000 tCO<sub>2</sub>e of Scope 1 emissions

### WWU

- 3% total shrinkage reduction year-over-year

### Household Infrastructure

#### Sector Performance

- GHG Emissions: 6,310 tCO<sub>2</sub>e
- % of attributable revenue: 10%



#### 2023 Sector Highlights

### ista

- Decarbonise business operations by increasing the percentage of renewable energy
- 73% of electricity consumption currently comes from renewable energy

### Reliance Home Comfort

- Introduced Vehicle Idling Scorecard across operations to encourage employees to reduce vehicle idling time

### Water Utilities & Services

#### Sector Performance

- GHG Emissions: 60,013 tCO<sub>2</sub>e
- % of attributable revenue: 7%



#### 2023 Sector Highlights

### Northumbrian Water

- 90% reduction for operational emissions compared to 2008 baseline
- Procured 100% renewable electricity and 84% renewable gas

### Power Generation / Clean Energy

#### Sector Performance

- GHG Emissions: 3,988,707 tCO<sub>2</sub>e
- % of attributable revenue: 8%
- Carbon intensity: 0.53 kgCO<sub>2</sub>e /kWh of generation



#### 2023 Sector Highlights

### HK Electric

- Aggregate electricity generated from renewable energy sources of HK Electric and its customers increased to over 10 GWh within the year

### EDL

- Commenced commissioning of two new renewable natural gas (RNG) facilities in Ohio, USA
- In 2023, avoided GHG emissions from EDL's five RNG plants in the USA was equivalent to the emissions of over 10,000 passenger vehicles

### Transportation

#### Sector Performance

- GHG Emissions: 5,188 tCO<sub>2</sub>e
- % of attributable revenue: 6%



#### 2023 Sector Highlights

### UK Rails

- Concluded studies on the feasibility and safety of hydrogen-powered trains

### Waste Management

#### Sector Performance

- GHG Emissions: 420,934 tCO<sub>2</sub>e
- % of attributable revenue: 7%



#### 2023 Sector Highlights

### AVR

- The plant in Duiven captured around 39,550 tCO<sub>2</sub>e for reuse in the greenhouse horticultural sector

### Enviro NZ

- Successfully collected 14,300 tonnes of timber originally sent to landfills for further processing to biofuel, effectively reducing carbon emissions associated with the decomposition of organic materials

### Construction Materials

#### Sector Performance

- GHG Emissions: 1,919,748 tCO<sub>2</sub>e
- % of attributable revenue: 6%



#### 2023 Sector Highlights

### Alliance Construction Materials

- Introduced the first electric concrete mixer truck to support construction electrification and green logistics in Hong Kong

### Green Island Cement

- Replaced 25% of total fuel in the precalciner with waste-derived fuels
- Increased sales of low carbon product – Granulated Blast-furnace Slag (GGBS) by 47% year-over-year

Note:  
 (1) The System Average Interruption Duration Index measures the average outage duration for the distribution infrastructure alone and does not include HK Electric, which operates a vertically integrated business that does not differentiate between transmission and distribution power interruptions.

# 2.2 Sustainable Value Creation

As the world embarks on an essential journey towards a zero-carbon economy, the scale of investment required is immense. Our deep investment and operating expertise equip us to capture value and seize opportunities in this crucial phase. At the core of our strategy for sustainable value creation, the Group's management operates with a deep commitment to ESG principles, integrating them into the heart of our operations and investment decisions. We recognise that ESG performance is not merely to satisfy compliance measures but a critical component of long-term value creation.

When the Group is evaluating potential investment opportunities, each potential investment is rigorously assessed using a wide range of criteria, including financial and non-financial aspects. One of the key considerations would be its ESG impact. Examining compliance with laws, labour relations, environmental and social footprints, supply chain integrity, and the overarching capability of its management.

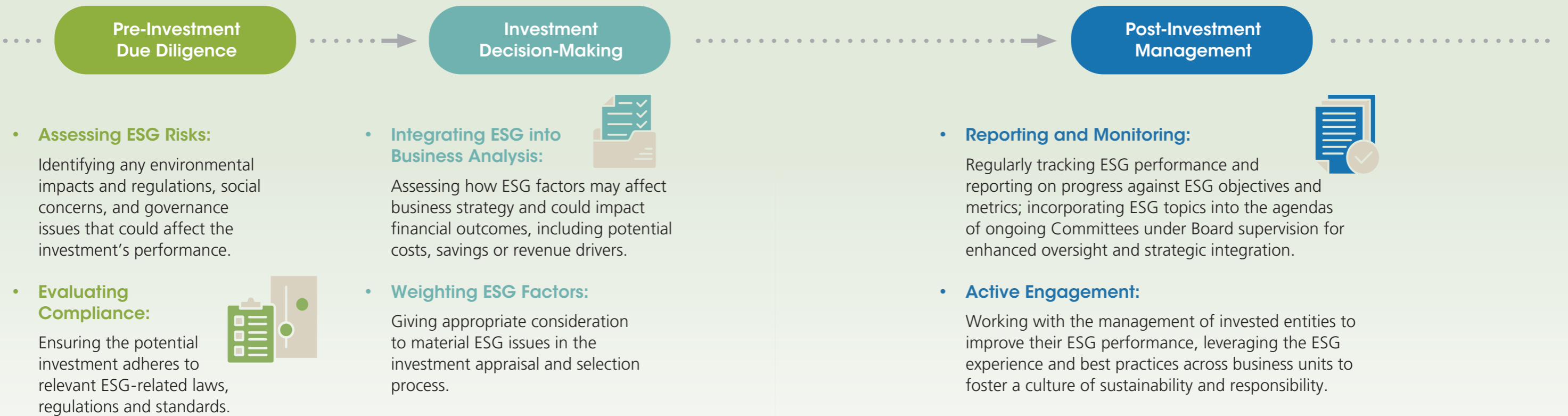
We see huge opportunities in investments towards the energy transition, identifying and pursuing opportunities that help combat climate change and reduce carbon emission. By investing in the energy transition, we are not only contributing to environmental and societal benefits but also positioning ourselves to take advantage of the growing demand for clean and renewable energy sources. Our diverse infrastructure projects around the globe are central to this strategic pivot, ensuring that we are at the forefront of the drive towards sustainability.

## How Our Business Units Are Pioneering a Greener Future

In response to the urgent challenges posed by climate change, green investments are central to our strategic and economic planning. Across our business units, we are channelling substantial capital and operating expenditures into projects that promise not only environmental benefits but also long-term viability and efficiency. In 2023, over HK\$9.3 billion was allocated to comprehensive sustainability programmes focusing on green and transition technology, sustainable transport, asset modernisation and integrity, as well as integrated environmental stewardship.



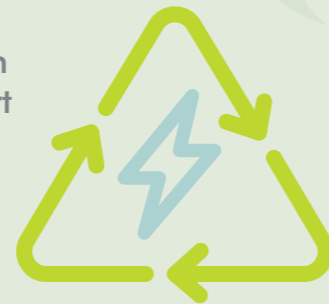
### ESG Integration into our Investment Process





### Green & Transition Technology

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



**Feature Story:**

- HK Electric – Construction of new gas-fired units at Lamma Power Station, HK
- EDL – Renewable natural gas plants for capturing landfill gas at Ohio, USA
- VPN – Solar farm projects of over 100 MW carried out by Beon Energy Solutions

### Sustainable Transport

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



**Feature Story:**

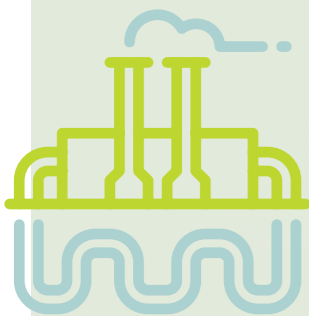
- UKPN – Green recovery programme
- VPN – EV projects to unlock the use of EV in networks
- Enviro NZ – Purchase of hybrid rear loader trucks for greener service

## Total Spending on Sustainable Activities in 2023



HK\$9.3 billion

### Asset Modernisation & Integrity



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.

**Feature Story:**

- NGN – Cutting shrinkage and consumption
- HK Electric – Smart meters and advanced metering infrastructure
- WWU – Replacement of iron gas mains with plastic pipes

### Integrated Environmental Stewardship

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



**Feature Story:**

- SA Power Networks – Proactive climate risk management through bushfire risk analysis and flood response
- Northumbrian Water – Waste water WINEP programme
- Green Island Cement – Construction of clinker shed to improve clinker inventory capacity

3

# Sustainability at CKI

The People



Operating in the current complex environment with continuous evolution and increasing polarisation on industry issues, we believe engagement with our stakeholders will help us find solutions to our shared challenges. The Group is committed to a wide range of stakeholders, including employees, shareholders,

customers, suppliers, the local community, professional institutions, non-governmental organisations, and authorities. Our foremost commitment to sustainability lies in managing our businesses with a sense of responsibility and long-term viability, ensuring integrity and responsibility towards all our stakeholders.

## Sustainability Pillars and Policies

The Group's sustainability strategy is anchored to four pillars, namely, **The Business, The People, The Community,** and **The Environment.** 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.

**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.**

# BUSINESS

**Core Principles:**

- Comply with all relevant and applicable laws and regulations within its operational frameworks.
- Conduct business with uncompromising integrity and safeguard against unfair business practices.
- Commit to the maintenance of good corporate governance practices and procedure and emphasize a quality board, sound internal controls, and transparency and accountability to all stakeholders.

- Enhance long-term return for its shareholders.
- Focus on sustainable development of its businesses and the communities it operates in.

# 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:**

- 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 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.
- Provide a safe workplace for all its employees.

**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.**

# COMMUNITY

**Core Principles:**

- 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.
- Implement internal guidelines and controls on donations and contributions to safeguard stakeholders' and shareholders' interests.
- Encourage employees to play a positive and active role in the community.

# ENVIRONMENT

**Environmental protection is one of the core principles and a central aspect of our sustainable strategies. As a global utility 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.
- Minimise the impact of its business activities on the environment and natural resources.
- Encourage and provide support for conservation and environmental protection programmes.
- Monitor and manage the use of resources, including energy, water and other raw materials.
- Develop and implement environmentally-friendly products and processes with potential commercial applications.

Across the Group, these guiding principles are embraced and executed by individual business divisions, tailored to meet the unique social, economic, and environmental demands of their respective localities. We ensure adherence to these principles and assess their application through regular management evaluations and reporting.

For more information on relevant policies and procedures in place, please refer to the Sustainability Policies and Corporate Governance Policies posted on the Company's website.





## Stakeholder Engagement

The Group acknowledges the importance of engaging and collaborating with stakeholders effectively. Given the diversity of our business operations, we interact with a wide range of stakeholder groups, such as our employees, customers, business partners, suppliers, investors, along with regulatory bodies, government representatives, NGOs, and the broader community. The insights and feedback from these groups are vital, enabling us to address sustainability challenges and seize opportunities with greater agility and informed understanding.

Insights from our diverse stakeholder base aid the Group and its business units in staying attuned to evolving market demands and overarching global sustainability trends. These perspectives are crucial in shaping the Group's sustainability-related decisions, actions, and reporting measures. Over the past years, the Group and the underlying businesses around the globe have conducted regular stakeholder

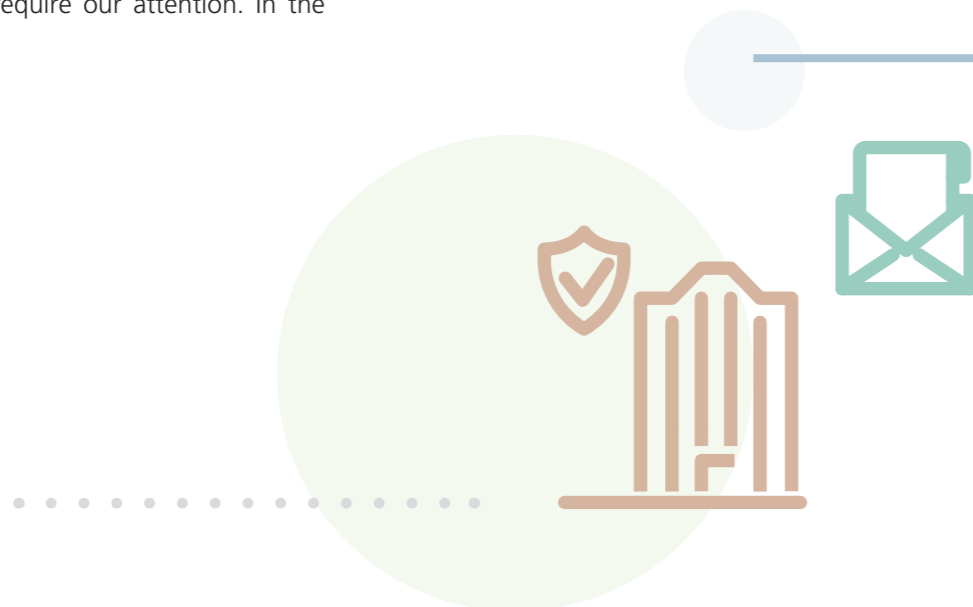
engagements, with results and feedback consolidated into stakeholder engagement reports published on business domains. The stakeholder engagement efforts have translated valuable feedback on ESG matters into tangible initiatives and assisted our businesses in various fields to establish the best strategies to engage with all stakeholders.

Recognising that effective strategy encompasses people as well as technology and processes, we are dedicated to advancing the gender-responsive just transition conscientiously. This progressive concept promotes gender equality and prioritises the social well-being of communities alongside the shift towards a low-carbon economy. By working closely with local authorities and industry coalitions, the Group and its business units are crafting responsible business practices and mapping out potential routes to decarbonisation.

## Materiality Assessment

Stakeholder contributions are fundamental to informing our sustainability strategy. Such insights enable us to pinpoint the critical elements of sustainability issues that require our attention. In the

previous year, we refined our list of material issues, engaging an independent consultant to assist with the process as follows:



## Materiality Assessment Process

<h3>1 Identification</h3> <ul style="list-style-type: none"> <li>Applied a four-part analysis which looked at industry standards, industry peers, ESG ratings and the business units' previous stakeholder engagement results from employees, customers, suppliers, government representations and NGOs.</li> <li>Identified a potential list of material sustainability issues that are considered relevant and important to our business and its stakeholders.</li> </ul>	<h3>2 Evaluation and Prioritisation</h3> <ul style="list-style-type: none"> <li>Engaged with institutional investors and ESG service providers via online survey to gain insight on material issues and alignment with sustainability priorities.</li> <li>Prioritised issues that have a significant impact on the Group's ability to create long-term and sustainable value based on results from stakeholder engagement and desktop research.</li> </ul>	<h3>3 Validation</h3> <ul style="list-style-type: none"> <li>Reviewed and approved the material issues by the Sustainability Committee.</li> </ul>
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Additionally, this year we have undertaken a reassessment of our list of material issues based on desktop research. Our review suggests that the previous materiality assessments are consistent with our present circumstances.

Through the materiality review, twelve sustainability issues were identified as the topics that are most material to our business and are categorised as follows:

<p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>Decarbonisation, Hydrogen Economy and Energy Transition</li> <li>GHG Emissions</li> <li>Preserving the Natural Environment and Environmental Management</li> <li>Innovation and Digitalisation</li> </ul>	<p><b>Social</b></p> <ul style="list-style-type: none"> <li>Occupational Health and Safety</li> <li>Reliability, Asset Integrity and Cybersecurity</li> <li>Customer Services and Helping Customer with Low-carbon Transition</li> <li>Human Capital Management</li> <li>Community Engagement and Investment</li> <li>Supply Chain Management</li> </ul>	<p><b>Governance</b></p> <ul style="list-style-type: none"> <li>Corporate Governance</li> <li>Business Ethics</li> </ul>
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Among the twelve materials sustainability issues, 'Decarbonisation, Hydrogen Economy and Energy Transition', 'Occupational Health and Safety', 'Corporate Governance' and 'Business Ethics' emerge as the foremost areas of focus according to our stakeholders. The prioritisation of these topics underscores a collective awareness of the urgent need for climate action, the significance of employee well-being, the imperative for ethical leadership, and the crucial role of integrity in business practices.

Overall, the materiality results set the focus of this Sustainability Report. They guide the subsequent sections, where we explore the specific actions taken and progress made in these areas over the reporting period. The Report provides a transparent account of our commitments and measures our performance against the backdrop of these material sustainability challenges.

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 the date of this report, 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 ESG 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 2023.

The following is a summary of the major work of the Sustainability Committee during the year of 2023:

1. Reviewed the Group's sustainability objectives, strategies, priorities, initiatives, goals, targets, work progress and highlights for the year of 2022, in consultation with the external professional consultant;
2. Reviewed the compliance of climate-related disclosures which was recommended by the TCFD, and other initiatives, with a view to enhancing the Company's sustainability disclosures and ability to identify and address sustainability-related issues;
3. Considered rating agencies' analyses of the Group's sustainability performance;
4. Reviewed the potential climate-related financial risks and opportunities that might affect the Group;
5. Reviewed the Company's sustainability frameworks and sustainability-related policies, practices and management approach;
6. Reviewed the Company's sustainability report for the year of 2022, prepared in consultation with the external professional consultant;
7. Reviewed the progress of the Group in 2023 towards the sustainability targets and sustainability-related issues, trends and best practices;

8. Considered an introductory review of the exposure drafts of the International Sustainability Standards released by the International Sustainability Standards Board (ISSB) in March 2023;
9. Reviewed alignment for the Group's sustainability targets and goals with the United Nations Sustainable Development Goals (UNSDGs);
10. Considered the plan and preparatory work for the Company's sustainability report for the year of 2023; and
11. Considered revisions of (a) Environmental Policy; (b) Human Rights Policy; and (c) Supplier Code of Conduct.

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. All of the business units have designated members in-charge of sustainability issues with management oversight to support business-level sustainability implementation. Regular discussion of sustainability topics is also conducted during meetings of their boards and/or board-level committees.

In 2023, together with CK Hutchison and Power Assets, the Group hosted the Global Climate Action Conference to share valuable insights and experiences on how to tackle climate change and achieve net zero. Senior leaders within the Group, including the CEOs and other senior executives, share their insights across different climate and environment topics, including decarbonisation, investment in innovation and green technologies, hydrogen and renewable gas development, climate risk management for extreme weather conditions and promoting circular economies. With the ambition to achieve a group-wide sustainability vision, the conference serves as an open platform for our business units to share their sustainability best practices.

The Group formed its CK Sustainability Council in June 2022, intending to create a forum to discuss and debate sustainability topics, facilitate the coordination of responses and initiatives on sustainability and steer sustainability strategy and investor relations across the Group with its portfolio companies. During the year, the CK Sustainability Council conducted 4 meetings in March, June, September and December, and addressed different sustainability-related major items, including understanding the upcoming regulations and their impact on our portfolio companies. Our Sustainability Committee also reviewed and updated sustainability-related policies during the year.

Top-down Strategy

Bottom-up Information Flow

## 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 Mr. Lan Hong Tsung, David and Mr. Paul Joseph Tighe, Independent Non-Executive Directors, and Ms. Eirene Yeung, the Company Secretary, as members.
- Has an overarching role in supporting the Board on matters of sustainability and oversees the implementation of the sustainability initiatives of the Group, including reviewing the related policies and practices, and assessing and making recommendations on matters concerning the Group's sustainability governance, strategy, planning and 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.
- Appointed an external advisor in 2022 to prepare for the adoption of TCFD recommendations. Discussions were also held to explore Group-level target setting feasibility.

As a global infrastructure player, the Group strives to contribute to the UNSDGs 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.



### 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 and Human Rights Policy stipulate our commitment to equal opportunity and value to diversity.

**Launched more than 30 initiatives, such as revising Diversity and Inclusion (“D&I”) Action Plan, during the year to foster a culture of diversity and inclusiveness.**

**Material Issues** Human Capital Management



### 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. The Group commits to managing direct and indirect impacts arising from our operations and increase the use of innovative, clean and energy efficient technology.

**Launched 6 initiatives such as subsidies and concessionary schemes during the year to promote access to affordable energy**

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

**Material Issues** GHG Emission Decarbonisation, Hydrogen Economy and Energy Transition



### 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.

**93% of our full-time employees received training**  
**51% of our employees were covered by OHSAS 18001/ISO 45001-certified Health & Safety Management System**

**Material Issues** Human Capital Management Occupational Health and Safety



### 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 transmission and distribution companies are committed to investing in smart energy solutions**

**Material Issues** Innovation and Digitalisation Decarbonisation, Hydrogen Economy and Energy Transition



### 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.

**76% of the Group’s attributable revenue<sup>1</sup> was covered by the Environmental Management System (“EMS”) certified by ISO 14001 or other relevant EMS certificates.**

**Material Issues** Hydrogen Economy and Energy Transition Innovation and Digitalisation  
Occupational Health and Safety



### 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.

**Purchased electricity consumption – 1,161,511 MWh, which is a 5.5% reduction compared to 2022**  
**Water consumption – 646,858 thousands of m<sup>3</sup>, which is a 6.9% reduction compared to 2022**

**Material Issues** Preserving the Natural Environment and Environmental Management



### 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 – 7,655,236 tCO<sub>2</sub>e, which is a 4.8% reduction compared to 2022**  
**Scope 3 emissions – 1,355,741 tCO<sub>2</sub>e from the Group’s business operations which cover a total of 85% of our attributable revenue<sup>1</sup>**

**Material Issues** GHG Emission Decarbonisation, Hydrogen Economy and Energy Transition

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.

# 3.4 Climate-related Financial Disclosures

The Group is committed to being a responsible owner and operator of critical infrastructure and essential services. Recognising the impact of our operations on the broader ecosystem, we are equally dedicated to enhancing climate resilience and providing high-quality services. Our concerted efforts are aimed at fostering sustainable outcomes that benefit our customers, employees, and communities, while actively contributing to the health of our planet.

Building on our commitment to climate action, we have diligently worked to align with the recommendations of TCFD. In the previous year, we took significant steps by identifying the climate-related risks and opportunities that our Group may encounter. We embarked on our inaugural climate scenario analysis to assess the potential impacts of these factors on our operations.

This year's report showcases the advancements we have made with the completion of the climate scenario analysis and full alignment with the TCFD recommendations. The insights gained from the scenario analysis also 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 latest 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.

## 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 the section "Sustainability Governance". The Board and management provide oversight over

the Group's climate change approach as outlined below:

### Board oversight

- **The Board** has defined clear authority and oversight mechanisms for assessing and managing climate-related risks and opportunities, recognising the importance of climate change impacts on the Group's growth and adaptation strategies.
- The **Sustainability Committee**, which reports to the Board, is responsible for overseeing the Group's sustainable business strategies and performance. It provides guidance on the development and implementation of sustainability initiatives, encompassing climate governance, strategy, planning, and risk management. In 2023, the committee conducted a review of the Group's sustainability plans, as well as the outcomes and insights gained from the climate scenario analysis.
- The **Audit Committee** assists the Board in monitoring climate-related risks. This committee has oversight of the material climate-related risks, as well as an overview of the level and effectiveness of key controls in place to manage the risks, which are reported on a regular basis.

### Management leadership

- The **Sustainability Working Group** is instrumental in implementing and tracking the Group's sustainability strategies, with the support of business unit management. It conducts thorough assessments of climate-related risks and opportunities, and the results are then integrated into the broader annual enterprise risk assessment. This integration ensures that ESG-related risks, including those associated with physical and transitional aspects of climate change, are considered in the Group's strategic decision-making processes. The Working Group is also responsible for providing regular updates to the Sustainability Committee, ensuring a cohesive approach to the company's sustainability and climate governance efforts.

## 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 guide 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.

### Material Climate-related Risks and Opportunities

To demonstrate the resilience of a company to climate change, the material climate-related risks and opportunities are first identified. These material risks and opportunities are then subject to different climate outcomes to analyse their implications under different climate scenarios. The following table outlines a high-level summary of the material climate-related risks and opportunities to which the Group is considered to be potentially significantly exposed.

Type	Climate factor	Description
<b>Physical risks</b>		
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.

# 3.4 Climate-related Financial Disclosures

## Strategy (Cont'd)

### Material Climate-related Risks and Opportunities (Cont'd)

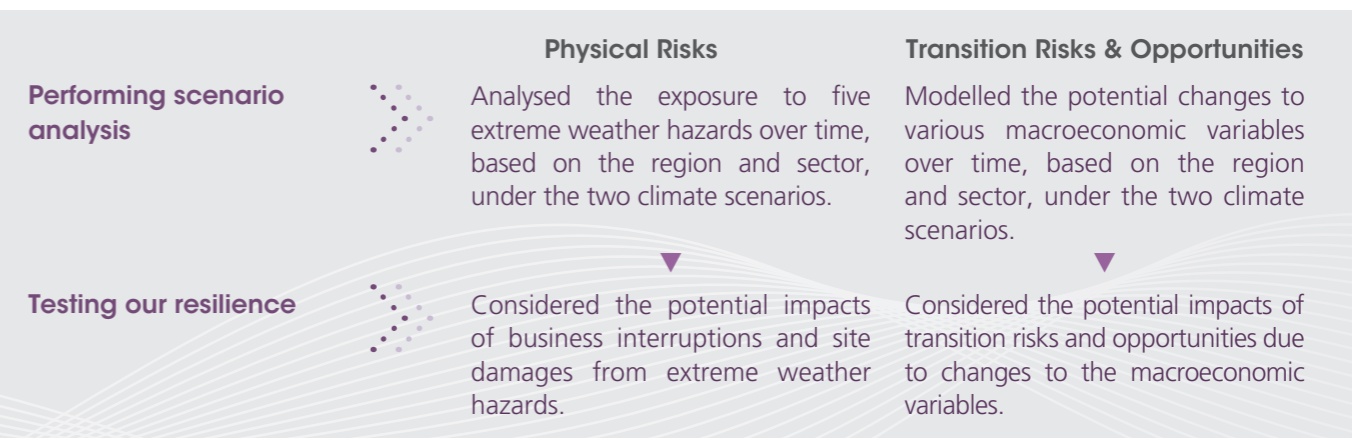
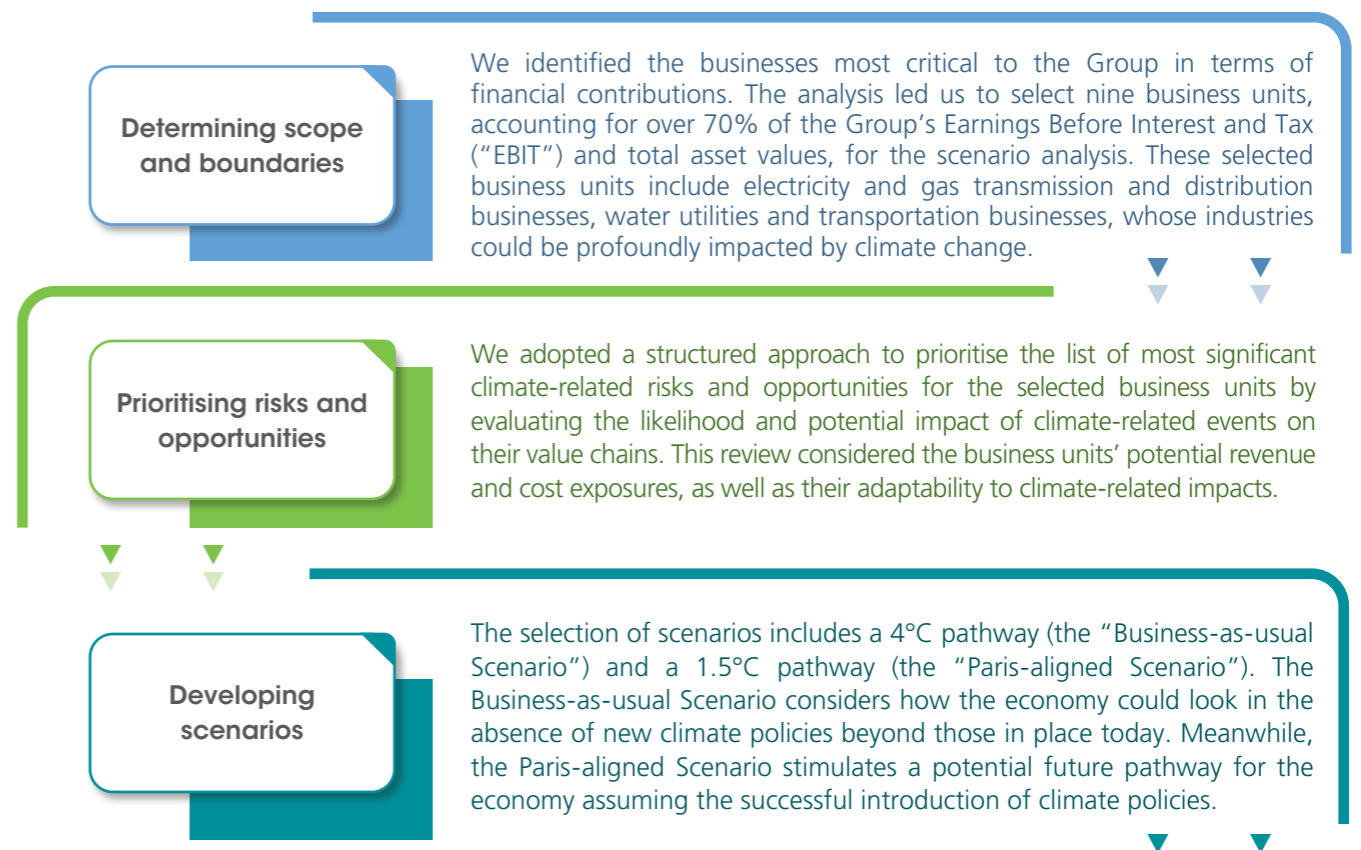
Type	Climate factor	Description
<b>Transition risks</b>		
Market / Technology	Changing Demand for Electricity from the Grid	Reducing electricity consumption in an aggressively transitioning world and introducing solar panels as a local electricity source will reduce demand for electricity from the grid. 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.
<b>Transition opportunity</b>		
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 power generation. Increased demand for green gas sources like green hydrogen and new technologies to meet growing low-carbon transmission and distribution networks and demand for electric vehicle 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.

### Climate 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 have 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.

### Summary of our climate scenario analysis process



# 3.4 Climate-related Financial Disclosures

## Strategy (Cont'd)

### Climate Scenario Analysis (Cont'd)

To inform strategy, we use two scenarios to 2050 to assess the resilience of our businesses against inherent uncertainty. Aligning with the TCFD recommendations, a high-emissions/business-as-usual pathway (4°C scenario) and a stringent pathway striving to achieve a lower-carbon economy (1.5°C scenario) are selected to serve as bookends to adequately consider both physical and transition risks and develop an

understanding of how the key value drivers of our businesses might be affected under different future states. The 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.

### Overview of Scenario Assumptions and Underlying Data Sources

	4°C business-as-usual scenario	1.5°C high-transition scenario
<b>Parameters assumptions</b>		
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 by 2100
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 electric vehicles 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 photovoltaic 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

	4°C business-as-usual scenario	1.5°C high-transition scenario
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

<b>Climate models used and underlying data sources</b>	
Physical	Proprietary physical risk model <ul style="list-style-type: none"> <li>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).</li> </ul>
Transition	Proprietary macroeconomic model <ul style="list-style-type: none"> <li>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 International Energy Agency (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.</li> </ul>

Guided by our strategic planning and risk management approaches, the climate-related risks and opportunities that pose a financially material impact on the Group are detailed below, along with our basis for measuring and responding strategically to each. Using 2021 as the base year, our scenario analysis indicates 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.

**Climate-related scenario analysis serves as a valuable tool to understand potential business**

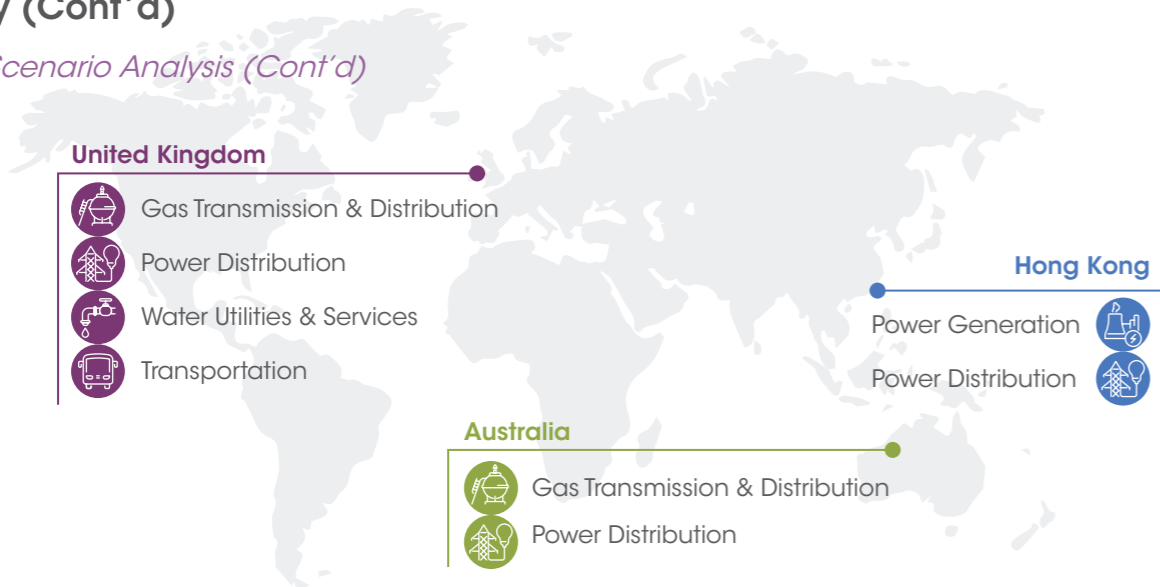
**performance under various future states, helping organisations to develop an understanding of the possible impacts of physical and transition risks and opportunities over time, and to shape strategic responses.**

**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.**

# 3.4 Climate-related Financial Disclosures

## Strategy (Cont'd)

### Climate Scenario Analysis (Cont'd)



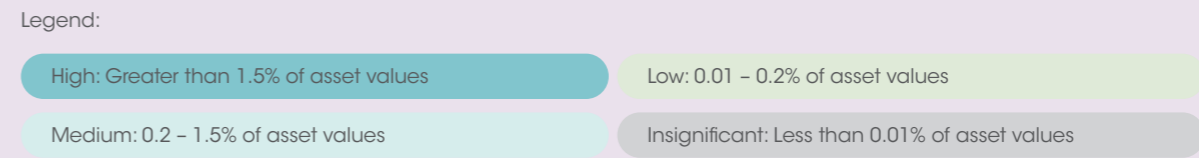
### Determination of the scope and boundaries of scenario analysis

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 sectors and geographical locations. Following the financial materiality review and strategic considerations, five business sectors 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.

### Potential financial impact of assessed 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 considered the potential financial impact from asset damage caused by our exposure to the physical impacts of climate change.

Region	Sector	Scenario	Potential impact across time horizons																	
			Coastal flooding			Riverine flooding			Surface water flooding			Extreme wind			Extreme heat			Forest fire		
			Short-term (1-5 years)	Medium-term (5-15 years)	Long-term (15-30 years)	Short-term (1-5 years)	Medium-term (5-15 years)	Long-term (15-30 years)	Short-term (1-5 years)	Medium-term (5-15 years)	Long-term (15-30 years)	Short-term (1-5 years)	Medium-term (5-15 years)	Long-term (15-30 years)	Short-term (1-5 years)	Medium-term (5-15 years)	Long-term (15-30 years)	Short-term (1-5 years)	Medium-term (5-15 years)	Long-term (15-30 years)
UK	Gas Transmission & Distribution	4°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		1.5°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
	Power Distribution	4°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		1.5°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		4°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		1.5°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Australia	Gas Transmission & Distribution	4°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		1.5°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
	Power Distribution	4°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		1.5°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Hong Kong	Power Generation	4°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
		1.5°C	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High



# 3.4 Climate-related Financial Disclosures

## Strategy (Cont'd)

### Climate Scenario Analysis (Cont'd)

#### Key Observation

##### UK

The results indicated that coastal and riverine flooding is the most likely cause of business interruption for UK-based assets, with capital expenditure also observed to be sensitive to these types of flooding. Among the other risks assessed, none appeared at material levels. However, it should be noted that the modelling for extreme wind does not explicitly account for cyclonic winds, which may also impact UK-based assets, considering the historical windstorms occurred in the UK.

Sector-wise, power distribution and water utilities & services are more significantly affected by flooding. Rising sea level, overflowing rivers, and accumulated rainfall can cause severe water ingress into critical electrical infrastructure and ground-mounted transformers, leading to equipment damage and loss of power supply to customers.

#### 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°C scenario presents a lower risk than that at a 4°C 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. For example, in the UK and Australia, UKPN and VPN have reinforced their substations to withstand a range of flooding events. Meanwhile, in Hong Kong, HK Electric has installed anti-flooding measures at the facilities vulnerable to flooding impacts including transmission and distribution substations near the coastal line and the Lamma Power Station as well as engaging in reliability reviews to ensure preparedness for unexpected events. In addition,



in response to the extreme forest fire in Australia, our business units within Australia, such as SA Power Networks, have implemented comprehensive inspection and patrol programmes to identify and mitigate potential asset defects that could lead to fires. These proactive measures are designed to safeguard our customers' well-being and the reliability of our services in the face of climate hazards.

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.

##### Australia

In terms of business interruption, Australian-based assets have been shown to be sensitive to coastal and riverine flooding, extreme heat, and forest fires. Meanwhile, capital expenditures arising from potential physical risk impacts were found to be mostly related to coastal and riverine flooding.

Sector-wise, power distribution is significantly more affected by forest fires. Gas infrastructure, being predominantly underground, inherently possesses greater resilience to climate risks and is less sensitive to external influences.

##### Hong Kong

The results indicated a higher exposure to surface water flooding compared to other modelled perils. However, it should be noted that the modelling for extreme wind does not explicitly account for typhoon-related events, which could interrupt operations and damage assets. Meanwhile, the potential impact of extreme heat on power generation operations could escalate rapidly under the 4°C scenario in the longer term.

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.

#### Potential impact of assessed 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 is because the 1.5°C scenario is not only more ambitious but also increasingly represents the direction of global policy following the Paris Agreement commitments. It embodies the concerted effort required to drastically reduce emissions and mitigate the most severe consequences of climate change.



# 3.4 Climate-related Financial Disclosures

## Strategy (Cont'd)

### Climate Scenario Analysis (Cont'd)

Risk / Opportunity	Main impact	Relevant sector	Region	Scenario	Potential impact across time horizons			Key Observation
					Short-term (Up to 2026)	Medium-term (2027-2035)	Long-term (2036-2050)	
Changing Demand for Electricity from Grid	Expanding capital investment and revenue growth for power generation and transmission businesses from the increasing demand		Hong Kong	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.
				1.5°C				
			UK	4°C				
				1.5°C				
			Australia	4°C				
				1.5°C				
Changing Demand for Natural Gas	Revenue impact due to operational changes such as downsizing capacity or altering the operation of existing facilities		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.
				1.5°C				
			Australia	4°C				
				1.5°C				
			Hong Kong	4°C				
				1.5°C				
	UK	4°C						
		1.5°C						
Increasing Fuel Costs	Increases in operating expenses <sup>1</sup>		Hong Kong	4°C				Fluctuations in fuel prices significantly affect the business units that consume high volumes of gas and electricity. For the power 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.
				1.5°C				
			UK	4°C				
				1.5°C				
			Hong Kong	4°C				
				1.5°C				
	UK	4°C						
		1.5°C						
Increasing Labour Costs	Increases in operating expenses <sup>1</sup>	All	Hong Kong	4°C				Given the diversity of labour market behaviour across regions, it is likely that economies will experience differing trajectories of rising labour costs.  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.  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.
				1.5°C				
		All	UK	4°C				
				1.5°C				
		All	Australia	4°C				
				1.5°C				
All	UK	4°C						
		1.5°C						
Introduction of Carbon Taxes <sup>2</sup>	Increases in operating expenses <sup>1</sup>		Hong Kong	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.
				1.5°C				
			UK	4°C				
				1.5°C				
			Australia	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	Increases in operating expenses <sup>1</sup>		Hong Kong	4°C				Costs for materials are likely to rise due to higher energy expenses in their production, with material impacts expected to emerge in the longer term.
				1.5°C				
			UK	4°C				
				1.5°C				
Increasing demand for UK Rail Transport	Increases in revenue		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.
				1.5°C				



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.

# 3.4 Climate-related Financial Disclosures

## Strategy (Cont'd)

### Climate Scenario Analysis (Cont'd)

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

By assessing the transition impact under the 1.5°C 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 sectors we invest in are abundant, particularly in the electricity transmission and distribution sector, 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 transmission and distribution grids.

Meanwhile, the transition away from higher-carbon fuels could affect the gas transmission and distribution sector 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 power generation and as a substitute for more carbon-intensive fuels like coal along the transition to renewable energy sources. In Hong Kong, for instance, the offshore LNG terminal jointly developed by HK Electric and another energy utility will facilitate the territory's transition from coal to natural gas for power generation.

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 sector 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 sector.

Other sectors 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.

The trajectory of the shift towards a net zero economy remains highly uncertain and will vary by sector and geography. We are actively supporting our businesses to further develop their decarbonisation strategies through measures such as carbon capture, 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.

## Risk Management

The Group employs a rigorous approach to identifying and evaluating 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.

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. For example, NGN has conducted various survey and is exploring how to use drones and satellite imagery to monitor asset conditions. 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.

## Risk Management (Cont'd)

### UKPN

#### Climate Resilience Strategy

The latest UK Climate Projections (UKCP18), produced by the Met Office and the Environment Agency, were released in November 2018 which provided an updated view on the previous projections from 2009 (UKCP09). The comparison between the two models concluded that UKCP18 had an increased ability to define details within the climate projections when compared to UKCP09, but the main signals around climate change projections remained the same. The Met Office based their UK Climate Projection model (UKCP18) on various future greenhouse gas emissions scenarios, called Representative Concentration Pathways (RCPs), of which RCP8.5 represents the highest emission scenario into 2080-2100. Based on this modelling, we have been working with members of the Energy Networks Association (ENA) to assess the impact of these climate change projections on the electricity network. The RCP8.5 results were chosen by the ENA members as it represents the 'worst case scenario' with the highest greenhouse gas concentrations modelled as part of UKCP18, resulting in a best estimate increase in global mean surface temperature of 4.3°C by 2081-2100.

Through a series of workshops with the Met Office and other ENA members, UKPN has identified and prioritised the weather and climate related hazards which need consideration both now and into the future. The detailed impact of these hazards on our networks and information as to the prevalence of the hazard in the current climate and the future RCP8.5 climate have been described as an output of this work. Eight climate change hazards have been prioritised from this work.

The principal work from these studies has been flood prevention work. UKPN has installed permanent flood protection at 78 sites over the ED1 business plan period and plans a similar number over ED2. In addition, temporary flood protection equipment is available to deploy in emergencies.

Wood pole overhead line designs have been reviewed following Storm Arwen. Current designs are considered adequate for future climate conditions. However, legacy designs were found to be a contributory factor to the extensive disruption experienced by customers in the north of England and Scotland. Ofgem included a re-opener opportunity in the ED2 period to cater for any additional investment that may be required following the publication of the Ofgem and DESNZ Storm Arwen reports.

#### Metrics and Targets

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. We have invested and will continue to invest in renewable energy sources, enhance our energy efficiency, and develop new business models that prioritise sustainability. 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.

Please refer to the sections "CKI's Low Carbon Transition Plan" and "Combating Climate Change" for details of our climate targets and the measurement of progress towards these targets.

### SA Power Networks

#### Proactive Climate Risk Management Through Bushfire Risk Analysis and Flood Response

South Australia's extreme weather events, including bushfires and floods, pose significant risks to both public safety and utility infrastructure. To ensure continuity of services amidst these challenges, SA Power Networks has developed targeted strategies designed to protect local communities and enhance the resilience of its network.

In response to the extreme bushfire risks in South Australia, the company has implemented a comprehensive inspection and patrol program to identify and mitigate potential asset defects that could lead to fires. During the 2022/23 cycle, the company completed an extensive sweep of their network, conducting patrols over 49,800 km to ensure all regions were prepared for the bushfire season. This pre-emptive approach has been instrumental in reducing the likelihood of fire-related outages and enhancing the safety of the communities served by SA Power Networks. In 2023, SA Power Networks invested AU\$45 million in projects specifically aimed at protecting its assets from the impact of climate change and extreme weather events, reflecting a strong commitment to proactive climate risk management.

Additionally, vegetation management near powerlines reduces the risk of bushfire, and also helps the company to provide a safe and reliable electricity supply for customers and communities. The last three years of La Nina weather conditions resulted in significant vegetation growth, and our vegetation management program was required to trim vegetation on 70,911 spans of powerline across South Australia before the commencement of the bushfire danger season.

Facing the challenges of the River Murray flood event, SA Power Networks employed cutting-edge LiDAR technology to map the network and water levels, covering a vast area along the 650-kilometer river route. This initiative allowed for precise risk assessment and management during the crisis. By leveraging detailed digital mapping and data analysis, SA Power Networks effectively managed the flood response, safeguarding both their infrastructure and the well-being of thousands of South Australians impacted by the floods.

#### Our ongoing climate journey

We believe that the actions implemented and integrated into our future business plans will adequately build climate resilience into our business strategy. Nevertheless, we recognise that climate risk and opportunity management is an evolving aspect, and we remain committed to deepening our grasp of the potential impacts that climate transition and physical issues could have on our businesses. As we gain insights from our experiences and integrate the latest in climate science, standards, and best practices, we anticipate ongoing improvements in our processes for assessing, managing, and disclosing climate-related risks and opportunities.



# 4

## Governance

UK Rails is investing in the introduction of new battery powered Very Light Rail vehicles to support rail decarbonisation and introduction of new passenger services.

The Company is committed to maintaining good corporate governance best suited to the needs and interests of the Group as it recognises a robust corporate governance framework is the foundation to effective management, fostering a positive corporate environment, sustainable business development and creating shareholder values.

Accordingly, the Company has adopted and applied corporate governance principles and practices that emphasize a quality Board, sound internal controls, and transparency and accountability to all shareholders.

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.

### Roles of the Board

Accountable to the shareholders under the leadership of the Chairman, Mr. Victor T K Li, the Board leads, directs and supervises the Company's affairs to enable the long-term success of the Company.

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, and ensures the Company maintains effective communication with shareholders and appropriate engagement with other key stakeholders. Under the leadership of the Group Managing Director, the Company's management is responsible for the day-to-day operations of the Group.

### Board Composition

As of the date of this report, the Board consists of fifteen<sup>1</sup> Directors, comprising eight Executive Directors (including the Chairman, the Group Managing Director, two Deputy Chairmen, the Deputy Managing Director, the Chief Financial Officer and two Executive Directors), two Non-executive Directors and five Independent Non-executive Directors. Two Alternate Directors have been appointed. At least one-third of the members of the Board are Independent Non-executive Directors and more than one of them have appropriate professional qualifications, or accounting or related financial management expertise.

The Board, through and by the Nomination Committee, reviews the Board's structure, size and composition at least annually to ensure that the Board has a balance of expertise, skills, experience and diversity of perspectives appropriate to the requirements of the business of the Group and a balanced composition of Executive and Non-executive Directors.

The Company maintains, on the websites of the Company and the Hong Kong Exchanges and Clearing Limited ("HKEX"), an updated list of Directors identifying their respective roles and functions and whether they are Independent Non-executive Directors. The Directors' biographical information and the relationships among the Directors are set out on pages 58 to 65 of the Company's Annual Report 2023 and on the website of the Company.

### Chairman and Group Managing Director

The positions of Chairman and Group Managing Director are held by separate individuals. 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.

The Chairman provides leadership for the Board and ensures effective performance of the duties of the Board and that all key and appropriate issues are discussed in a timely manner. The Chairman encourages and solicits opinions from the Directors and urges for Directors' active contribution to the Board's affairs, and takes the lead to ensure that the Board acts in the best interest of the Company. The Chairman promotes a culture of openness and a constructive relationship between Executive and Non-executive Directors, and encourages Directors with different views to voice their concerns.

Led by the Chairman, the Board and the management of the Company have taken appropriate steps to facilitate effective communication with shareholders and engagement with other stakeholders, and have put in place good corporate governance practices and procedures.

The Chairman leads the Board in fostering the Group's corporate culture in alignment with its purpose, values and strategy set by the Board, to reinforce the Group's vision and pursuit of success.

### Executive Directors and the Executive Committee

Executive Directors are in charge of different business units and functional divisions in accordance with their respective areas of expertise. The management of the Company reports acquisitions of or investments in businesses or projects, and other matters as considered appropriate, back to the Board, and obtains the Board's prior approval before making decisions or entering into any commitments on behalf of the Company.

The Executive Committee is one of the five Board committees established with specific terms of reference. (Details of the other Board committees are provided below under "Board Committees" on pages 57 to 59.) The Executive Committee comprises 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.

For more information, please refer to the Terms of Reference of the Executive Committee and the Corporate Governance Report included in Annual Report 2023 of the Company.

### Board Process

The Board meets regularly and at least four times a year at approximately quarterly intervals. Regular Board meetings in a particular year are scheduled towards the end of the immediately preceding year to give all Directors adequate time to plan their schedules.

Note:

(1) An Independent Non-executive Director retired with effect from 10th February, 2024.

## Board Process (Cont'd)

During the year ended 31st December 2023, the Company held four regular Board meetings (in March, May, August and November of 2023). All Directors attended the AGM of the Company held on 17th May 2023. The attendance record is set out below:

Members of the Board	Board Meetings Attended/ Eligible to attend	Attendance at 2023 AGM <sup>1</sup>
<b>Executive Directors</b>		
Victor T K LI ( <i>Chairman of the Board and Chairman of the Executive Committee</i> )	4/4	1/1
KAM Hing Lam ( <i>Group Managing Director</i> )	4/4	1/1
IP Tak Chuen, Edmond ( <i>Deputy Chairman and Chairman of the Sustainability Committee</i> )	4/4	1/1
FOK Kin Ning, Canning ( <i>Deputy Chairman</i> )	4/4	1/1
Frank John SIXT	4/4	1/1
Andrew John HUNTER ( <i>Deputy Managing Director</i> )	4/4	1/1
CHAN Loi Shun ( <i>Chief Financial Officer</i> )	4/4	1/1
CHEN Tsien Hua	4/4	1/1
<b>Independent Non-executive Directors</b>		
CHEONG Ying Chew, Henry ( <i>Chairman of the Remuneration Committee</i> )	4/4	1/1
KWOK Eva Lee ( <i>Chairperson of the Nomination Committee</i> )	4/4	1/1
SNG Sow-mei alias POON Sow Mei	4/4	1/1
LAN Hong Tsung, David	4/4	1/1
Barrie COOK <sup>2</sup>	2/4	1/1
Paul Joseph TIGHE ( <i>Chairman of the Audit Committee</i> )	4/4	1/1
<b>Non-executive Directors</b>		
LEE Pui Ling, Angelina	4/4	1/1
George Colin MAGNUS	4/4	1/1

Notes:

(1) All Directors attended via video conferencing.

(2) Retired as an Independent Non-executive Director with effect from 10th February, 2024.

In addition to full Board meetings, the Chairman held two meetings with the Independent Non-executive Directors without the presence of other Directors (in May and November of 2023).

### Board Independence

As at the date of this report, five out of the fifteen<sup>3</sup> 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.

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.

Note:

(3) An Independent Non-executive Director retired with effect from 10th February, 2024.

The independence of the Independent Non-executive Directors is assessed according to the relevant requirements under the Listing Rules. Each Independent Non-executive Director is reminded to inform the Company and the Stock Exchange as soon as practicable if there is any change that may affect his/her independence. Each Independent Non-executive Director has provided the Company with an annual confirmation of independence taking into account the factors referred to in Rule 3.13 of the Listing Rules. Independent Non-executive Directors receive fixed fees for their appointments as members of the Board and additional fees for sitting on each Board Committee. None of such fees are based on the performance of the Group. None of the Independent Non-executive Directors are financially dependent on the Group.

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. As reported above, a balanced composition secures strong independence on the Board and the Board Committees. To maintain the desired independence, the Company assesses the independence of the Independence Non-executive Directors periodically on the Board in accordance with the requirements of the Listing Rules.

The Board has conducted an evaluation of its performance for the year 2023, including the aspects contributing to the effective implementation of the mechanism discussed above.

### Commitment, Induction and Professional Development

There has been satisfactory attendance of the Directors at the Company's general meeting, Board meetings, Board Committee meetings and, with respect to

the Independent Non-executive Directors, the meetings between the Chairman and the Independent Non-executive Directors during the year ended 31st December, 2023. The Company considers that the Independent Non-executive Directors manage to make a positive contribution to the development of the Group's strategy and policies through independent, constructive and informed comments.

Shortly before the appointment takes effect, a prospective Director receives a comprehensive induction package comprising a policy handbook containing the Company's corporate governance and sustainability policies and procedures, as well as a guidance book, compiled and reviewed by the Company's external legal advisers, providing an overview of directors' duties and obligations under the Listing Rules and other relevant legal and regulatory requirements.

All Directors are encouraged to participate in continuous professional development ("CPD"). The Company has a long history of organising and providing Directors with tailored CPD training, at the cost of the Company, to enable the Directors to develop and refresh their knowledge and skills on the roles, functions and duties of a listed company director and discharge their duties and responsibilities for the benefit of the Company.

### Board Committees

Five Board Committees, namely Audit Committee, Remuneration Committee, Nomination Committee, Sustainability Committee and Executive Committee, have been established with specific terms of reference. The memberships and terms of reference of the Board Committees are available on the websites of the Company and/or HKEX, where applicable. Board Committees are required to report to the Board on their decisions and recommendations at Board meetings.

## Board Committees (Cont'd)

The table below provides membership information of these committees on which the Directors served as at the date of this report:

Directors	Board Committee				
	Audit Committee	Remuneration Committee	Nomination Committee	Sustainability Committee*	Executive Committee*
<b>Executive Directors</b>					
Victor T K LI	–	M	M	–	C
KAM Hing Lam	–	–	–	–	M
IP Tak Chuen, Edmond	–	–	–	C	M
FOK Kin Ning, Canning	–	–	–	–	–
Frank John SIXT	–	–	–	–	–
Andrew John HUNTER	–	–	–	–	M
CHAN Loi Shun	–	–	–	–	M
CHEN Tsien Hua	–	–	–	–	M
<b>Independent Non-executive Directors</b>					
CHEONG Ying Chew, Henry	M	C	M <sup>1</sup>	–	–
KWOK Eva Lee	–	–	C	–	–
SNG Sow-mei alias POON Sow Mei	M	M	–	–	–
LAN Hong Tsung, David	M	–	–	M <sup>2</sup>	–
Paul Joseph TIGHE	C	–	–	M	–
<b>Non-executive Directors</b>					
LEE Pui Ling, Angelina	–	–	–	–	–
George Colin MAGNUS	–	–	–	–	–

Notes:

\* also comprises other key personnel

C Chairperson of the relevant Board committees

M Member of the relevant Board committees

(1) Appointed as a member of the Nomination Committee with effect from 10th February, 2024 following the retirement of Mr. Barrie Cook.

(2) Appointed as a member of the Sustainability Committee with effect from 10th February, 2024 following the retirement of Mr. Barrie Cook.

### Audit Committee

The Audit Committee comprises four members, all of whom are Independent Non-executive Directors, with more than one of the members possessing appropriate professional qualifications, or accounting or related financial management expertise.

The role of the Audit Committee is to assist the Board in fulfilling its duties through the review and supervision of the Company's financial reporting, risk management and internal control systems and to take on any other responsibility as may be delegated by the Board from time to time. Audit Committee

is responsible for overseeing the Group's financial reporting system, risk management and internal control systems, monitoring the integrity of the Group's financial information, overseeing the relationship with the external auditor of the Company, reviewing the arrangements that the Company's employees may use, in confidence and anonymity, to raise concerns about possible improprieties an ensuring proper arrangements are in place for fair and independent investigations and follow-up actions, and performing corporate governance functions delegated by the Board.

For more information, please refer to the Terms of Reference of the Audit Committee and the Corporate Governance Report included in Annual Report 2023 of the Company.

### Nomination Committee

A majority of the members of the Company's Nomination Committee are Independent Non-executive Directors. The Nomination Committee is chaired by an Independent Non-executive Director, with another Independent Non-executive Director and the Chairman of the Board as members.

The principal responsibilities of the Nomination Committee include reviewing the structure, size, diversity profile and skills matrix of the Board and the independence of the Independent Non-executive Directors and making recommendations to the Board on the appointment or re-appointment of Directors and succession planning for Directors.

The nomination process has been, and will continue to be, conducted in accordance with the Director Nomination Policy and the Board Diversity Policy, which are available on the website of the Company.

For more information, please refer to the Terms of Reference of the Nomination Committee and the Corporate Governance Report included in Annual Report 2023 of the Company.

### Remuneration Committee

A majority of the members of the Company's Remuneration Committee are Independent Non-executive Directors. The Remuneration Committee is chaired by an Independent Non-executive Director, with another Independent Non-executive Director and the Chairman of the Board as members.

The principal responsibilities of the Remuneration Committee include making recommendations to the Board on the Company's policy and structure for the remuneration packages of all Directors and the senior management, making recommendations on the remuneration of Non-executive Directors and, with delegated responsibility, determining the remuneration packages of individual Executive Directors and senior management, with reference to the corporate goals and objectives of the Board resolved from time to time.

For more information, please refer to the Terms of the Reference of the Remuneration Committee and the Corporate Governance Report included in Annual Report 2023 of the Company.

### Sustainability Committee

The Sustainability Committee comprises three Directors, a majority of whom are Independent Non-executive Directors, and the Company Secretary. The Sustainability Committee is chaired by an Executive Director. Other members include two Independent Non-executive Directors and the Company Secretary.

The principal responsibilities of the Sustainability Committee include proposing to the Board on the Group's corporate social responsibility and sustainability objectives, strategies, priorities, initiatives, goals and targets; coordinating with the business units of the Group and ensuring that their operations and practices adhere to the relevant priorities and goals; reviewing and reporting to the Board on sustainability and ESG risks and opportunities; and reviewing emerging corporate social responsibility and sustainability-related issues, trends and best practices that could impact the business operations and performance of the Group.

For more information, please refer to section 3.2 "Sustainability Governance" on pages 32 to 33 of this report and the Terms of Reference of the Sustainability Committee.

## 4.2

# Upholding Business Ethics and Integrity

### ▶ Why It Matters

With regulatory authorities increasing their oversight and imposing stricter rules against unethical corporate conduct, it's critical for all businesses to adopt a comprehensive and proactive stance to prevent bribery and corruption. Our Group works with regulators, third-party contractors, suppliers and customers to provide infrastructure services around the world, with most of them being regulated by the jurisdictions in the area. Despite that, we always stay vigilant and will always take a proactive and holistic approach to avoid any incidents of bribery and corruption. This includes the implementation of thorough anti-corruption strategies, whistleblowing programmes, and staff training tailored to align with both the Group's policies and local regulatory demands.

### ▶ Our Commitment

The Group is firmly dedicated to maintaining the highest ethical principles including integrity, honesty, and transparency in all our operations. We have zero tolerance for any fraudulent or bribery activities and are committed to the prevention, deterrence, detection, and investigation of all forms of fraud and bribery.

The Board is ultimately responsible for ensuring business ethics, which is a fundamental aspect of its corporate governance duties. The Executive Directors support the Board by supervising the Group's adherence to legal and regulatory compliance.

## Our Management Approach

### *Governance Policies*

The Company has established clear policies for our stakeholders to ensure fair competition and ethical business practices. The Employee Code of Conduct (the "Code") defines professional and ethical expectations, addressing conflicts of interest, fair dealings, integrity, corruption, political contributions, personal data protection and privacy, as well as requisite reporting of illegal and unethical behaviour. The Code is applicable across the organisation, and we encourage our non-controlled affiliates to adopt similar standards.

Suppliers and business partners are encouraged to adhere to the highest ethical conduct, supported by our Supplier Code of Conduct. They are required to implement appropriate anti-fraud and anti-corruption policies as well as compliance programmes to verify their compliance with the policies. Relevant anti-fraud and anti-corruption clauses are incorporated into the contracts with business partners and suppliers to ensure that they are fully aware of the Group's requirements.

The Anti-Fraud and Anti-Bribery Policy outlines the Group's zero-tolerance stance against bribery and corruption and assists employees in recognising the circumstance that may lead to or give the appearance of corruption or unethical business conduct. It includes provisions dealing with kickbacks, political and charitable contributions, facilitation payments, gifts and hospitality, and the procurement of goods and services. It is the Group's general policy to avoid any form of donation to political associations or individual politicians.

Other policies relevant to ethics and compliance including:

- Information Security Policy;
- Media, Public Engagement and Donation Policy;
- Policy on Appointment of Third Party Representatives;
- Policy on Handling of Confidential Information, Information Disclosure, and Securities Dealing; and
- Whistleblowing Policy – Procedures for Reporting Possible Improprieties.

### *Communication and Training*

We ensure all employees receive mandatory training on the Code upon joining the Group and are held responsible for its compliance. Various customised training sessions are conducted regularly, focusing on anti-fraud and anti-corruption themes, tailored to specific roles.

Moreover, individual business units within the Group have taken proactive steps to fortify our stance against corruption with tailored educational resources. For example, WWU has revamped its anti-bribery and corruption training materials for new employees and contractors. The newly updated digital training modules, developed throughout 2023, encompass a broader spectrum of unethical practices, including fraud, theft, and tax evasion.

### *On-going Assessment*

We constantly assess our business practices and controls to prevent and combat corruption at both Group and individual business unit levels. Regular risk-based audits are conducted to maintain focus on critical risk areas and ensure effective process controls.



## Our Management Approach (Cont'd)

### On-going Assessment (Cont'd)

At the Group level, an anti-bribery and anti-corruption control assessment is conducted biannually to evaluate the effectiveness of controls for managing bribery risks. At the business unit level, each operating company conducts a risk-based audit to ensure the focus remains on key risk areas. These audits also consider the design and operating effectiveness of processes and controls. Deficiencies with potential for fraud and other corruption would be covered during the audit. As part of the Global Compliance Management, a comprehensive Anti-Bribery and Anti-Corruption Policy has been implemented; and as part of the Compliance Risk Assessment, potential corruption risks have been evaluated and necessary steps of prevention will be defined and implemented.

### Due Diligence

The Group adopts 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/department heads of the business units/operating companies in accordance with the respective guidelines and procedures of the business unit or Group company concerned prior to the engagement of the third party representative.

For more information, please refer to the Policy on Appointment of Third Party Representatives.

### Whistleblower Programmes

All directors, employees and other relevant stakeholders are expected to report any potential violation of the Code or other Group policies. Escalation channels are set up to allow reporting of improprieties or business conduct concerns, with the option of anonymous reporting. All reported incidents are treated confidentially, and informants are protected from any retaliation such as unfair dismissal, victimisation or unwarranted disciplinary action. All breaches are recorded, investigated, and reported to the Board through the Audit Committee, and substantiated violations would result in appropriate disciplinary actions, including termination of employment.

In addition to Group-level processes, each business unit also tailors its escalation processes to its unique operational requirements.

### Risk Management

The Group has put in place an Enterprise Risk Management framework, which is consistent with the COSO (Committee of Sponsoring Organisations of the Treadway Commission) framework, to identify, assess, manage, monitor and control current and emerging risks. This includes a dual approach involving both top-down and bottom-up methods to effectively monitor and manage risks, ensuring long-term business sustainability.

Risk management is integrated into all business and decision-making processes, where striking a sensible balance between risk and opportunity is critical to the longer-term growth and sustainability of the Group's business. It is also a continuous process carried out at all levels of the Group.

In terms of formal risk review and reporting, the Group adopts a "top-down and bottom-up" approach to manage risk exposures which works as follows:

### Managing Risk from the Top-down:

#### The Board and Audit Committee

1. Assess and determine the nature and extent of the risks that the Group is willing to accept in pursuit of its strategic and business objectives; and
2. Ensure appropriate and effective risk management and internal control systems are in place.

#### Key Personnel

1. Oversee the Group's risk profile and evaluate if major risks are appropriately mitigated; and
2. Review and confirm the effectiveness of the risk management processes.

### Managing Risk from the Bottom-up:

#### Risk Management Functions

1. Establish relevant policies and procedures for the Group; and
2. Monitor business units in the implementation of effective risk management and internal control system.

### Operational Level

1. Identify, assess, mitigate and report the risks; and
2. Provision of reports and data relating to emerging risks to 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. Pages 188 to 196 of the Company's Annual Report 2023 provide 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.

## 4.3 Regulatory Compliance

# 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.

# 5

## Environment

We are committed to combating climate change, recognising the need for robust adaptation strategies and proactive engagement in sustainable development. Our initiatives are not just reactive but also transformative, aiming to create a sustainable and resilient future. We understand that tackling the escalating challenges posed by weather extremes is crucial for preserving the delicate balance of our planet.

In our pursuit of sustainability, we embrace the principles of waste management and circularity. The conservation of biodiversity is equally pivotal to our approach, as it is fundamental to ecological balance. In parallel, we steward water resources with care and rigorously control air emissions. Together, these key areas form the foundation of our environmental strategy, reflecting our deep respect for the natural world and our unyielding commitment to protecting it. Our journey is one of continuous improvement, leveraging technology and innovation to minimise our footprint and exemplify environmental stewardship within the biospheres that host our operations.



EDL - Broome Power Station was commissioned in 2008 as part of the West Kimberley Power Project (WKPP), which includes Derby, Halls Creek, Fitzroy Crossing and Looma Power Stations. The power station also acts as a hub for the Broome liquefied natural gas storage facility and the 12.2 km Gas PL72 Pipeline, and the five power stations EDL operates for remote Aboriginal communities in the region.

In the realm of environmental stewardship, we recognise that the natural world is not just a provider but a vital partner whose wellbeing is intricately linked to our own. With a keen awareness of our operations' potential to affect the environment, we give top priority to mitigating any adverse impacts on the natural habitats that surround our sites. Our commitment is to not only minimise impacts but also to foster a positive influence on the communities we serve, ensuring that our business activities contribute constructively to the planet's enduring vitality and abundance.

The Group's Environmental Policy guides our strategy development and business approaches to environmental stewardship. Below are the related strategic priorities emphasised in the policy:



Climate Change Management      Use of Natural Resources      Biodiversity      Pollution, Water Discharges and Waste

- Addressing climate change risks as part of the Group's risk management process.
- Setting up long-term targets to reduce GHG emissions as appropriate, while enacting processes and systems to monitor the Group's carbon footprint.

- Reducing energy and water consumption and waste, managing effluent and facilitating ways to encourage more reuse and recycling in day-to-day operations.
- Encouraging the use of sustainable materials and the adoption of technologies to streamline production and enhance process circularity.

- Conducting operations with a life-cycle approach to land and habitat stewardship.
- Minimising disturbance and mitigating impact in natural landscapes by avoiding operating in areas with high biodiversity value.

- Track, monitor and reduce ozone depleting emissions and other air pollutants within the Group's operations.
- Track, monitor and reduce water consumption and provide water stewardship and security through responsible management and the identification of risks posed by water scarcity.
- Streamline procedures and processes to increase efficiency and reduce consumption of day-to-day operational inputs such as paper, electronic equipment and the like.



# 5.1

## Combating Climate Change



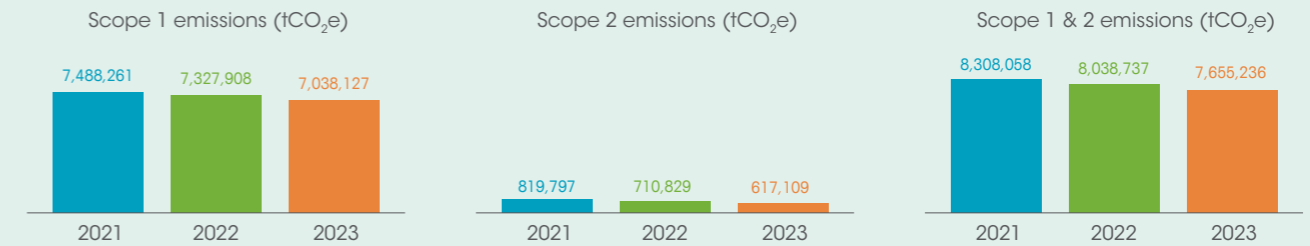
### Why It Matters

According to the International Energy Agency ("IEA"), today, the global average surface temperature has already risen by approximately 1.2°C compared to pre-industrial levels. This increase has intensified typhoons, heat waves and other extreme weather events. At the same time, GHG emissions have yet to peak, signalling that far-reaching and permanent structural changes across society are pressing and paramount. To meet the Paris Agreement's goals of limiting the increase in the global average temperature to 1.5°C above pre-industrial levels, the energy sector, which accounts for about two-thirds of anthropogenic GHG emissions, must be significantly transformed and decarbonised.

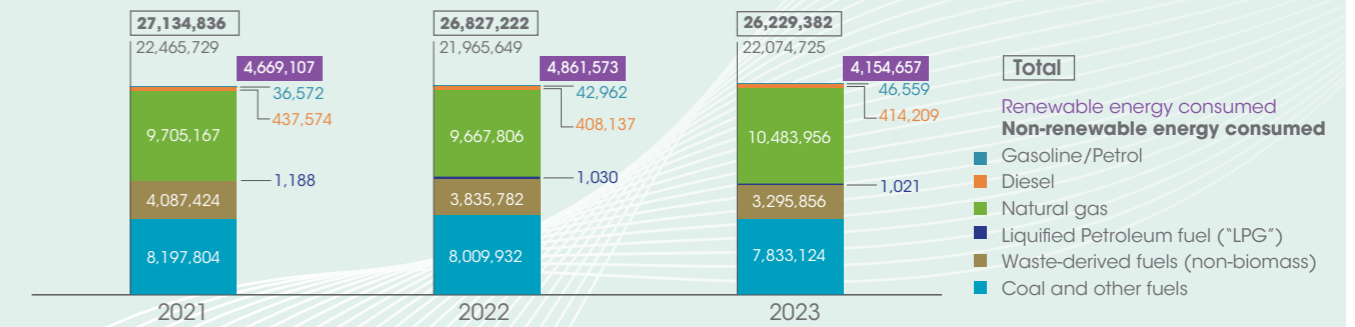
### Our Commitment

The energy sector plays a pivotal role in the shift towards a low-carbon future as the most significant contributor to global GHG emissions. The Group proactively takes part in the combat against climate change by supporting governments' decarbonisation plans and net zero commitments, as well as complying with the regulatory changes that align with these objectives. Our firm stance is reflected by the clear public commitment made in 2021 to phase out coal-fired generation by 2035. We have also set an ambitious target to achieve a 50% reduction in our Scope 1 and 2 emissions by 2035 compared to 2020 levels.

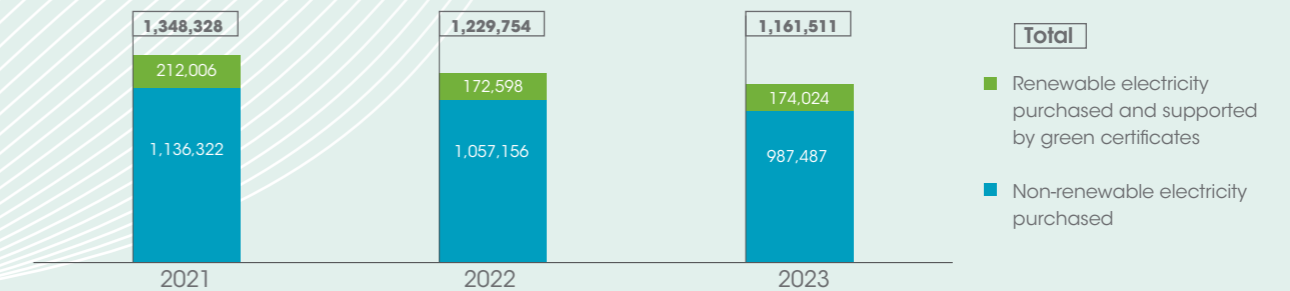
### GHG Scope 1 and 2 emissions (tCO<sub>2</sub>e)



### Energy consumption ('000 kWh)



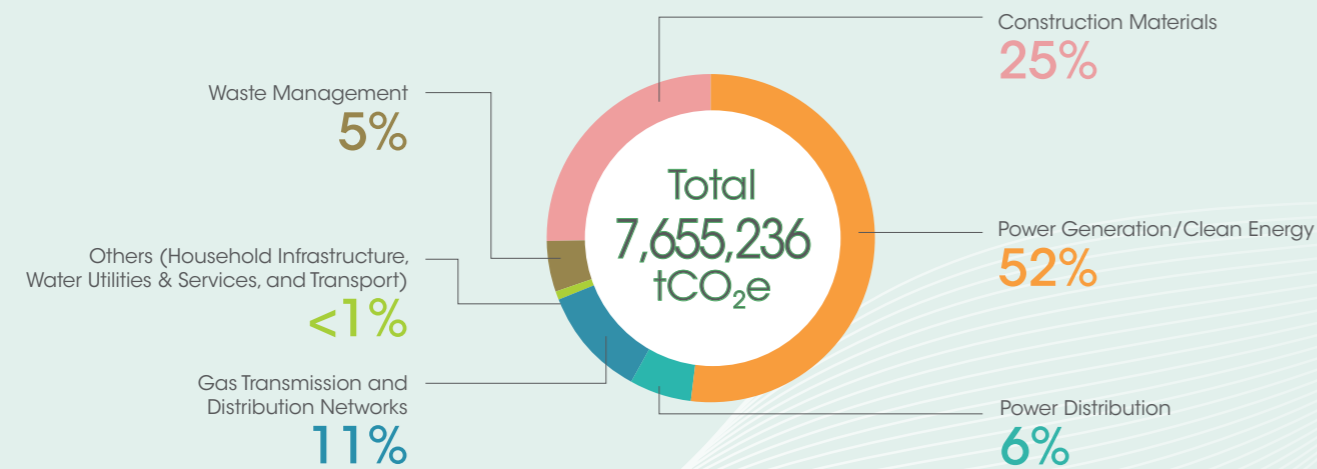
### Purchased electricity for own consumption ('000 kWh)



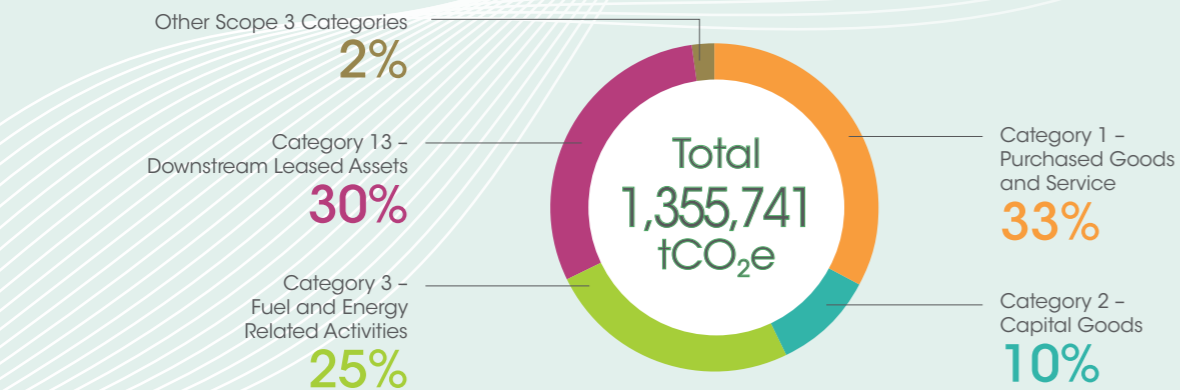
# 5.1 Combating Climate Change

## Our Commitment (Cont'd)

GHG Scope 1 & 2 emissions by key sector



GHG Scope 3 emissions by category



In 2023, we observed a noteworthy reduction in the Group's overall GHG emissions. Our Scope 1 and 2 GHG emissions decreased by 4.0% and 13.2% respectively. The substantial decrease in Scope 2 GHG emissions is due to grid decarbonisation and reduced electricity consumption. Enhanced incorporation of renewable energy into the local electricity grids has led to a decrease in the carbon intensity of the electricity consumed by our operations.

We coordinate with each key sector within our operations and actively deploy a range of initiatives and set clear targets to advance our decarbonisation efforts.

## Key targets and progress

Business Units	Details of Target	Progress
HK Electric	• Increase aggregate electricity generated from RE sources of HK Electric and its customers to over 9 GWh/year by 2023	Achieved
	• Commission the new gas-fired unit L12 in early 2024	On track
	• Complete the full-scale deployment of smart meters by 2025	On track
UKPN	• Achieving net zero by 2028	On track
Northumbrian Water	• Achieving net zero by 2027	On track
Wellington Electricity	• 80% of corporate fleet to be fully electrified by 2023	Achieved
	• 25% reduction in Scope 3 Category 1 and 2 (excluding line losses) emissions by 2025	On track
Alliance Construction Materials	• 2.5% reduction in Scope 3 Category 3 emissions by 2025	On track
	• Reduce 30% of Scope 1 and 2 GHG emissions by 2030 compared to 2018 (SBTi validated)	On track
Enviro NZ	• Reduce landfill emissions by improving gas capture and changes in composition of waste going to landfill	On track
	• Transition to 100% renewable energy	On track
	• Transition of high-emission vehicle fleet to hybrid alternatives	On track

## ▶ Our Commitment (Cont'd)

Key targets and progress		
Business Units	Details of Target	Progress
United Energy	<ul style="list-style-type: none"> <li>30% reduction of both direct (Scope 1) and indirect (Scope 2) carbon emissions (including distribution line losses) based on 2019 baseline by 2030</li> <li>Increase total installed capacity of renewable energy generation on its networks to 800 MW by 2026</li> </ul>	<p>33% reduction compared to 2019 baseline</p> <p>Increased to 723 MW by 2023</p>
VPN	<ul style="list-style-type: none"> <li>30% reduction for both direct (Scope 1) and indirect (Scope 2) carbon emissions (including distribution line losses) based on 2019 baseline by 2030</li> <li>Increase total installed capacity of renewable energy generation on its networks to 4 GW by 2026</li> </ul>	<p>25% reduction compared to 2019 baseline</p> <p>Increased to 2.64 GW by 2023</p>
NGN	<ul style="list-style-type: none"> <li>Transport 100% green gas in network by 2050</li> <li>Achieve carbon negative business operations and net zero Scope 3 emissions by 2050</li> </ul>	<p>On track</p> <p>On track</p>
AGIG	<ul style="list-style-type: none"> <li>Reduce 30% of Scope 1 and 2 emissions by 2030 compared to 2020</li> </ul>	<p>On track</p>
ista	<ul style="list-style-type: none"> <li>Achieving net zero by 2030</li> </ul>	<p>On track</p>

## ▶ Our Management Approach

Our approach to reducing emissions is tailored to the unique demands of each business we oversee, employing a range of practical initiatives that showcase our hands-on expertise. Managing our operations, especially those with a higher carbon footprint, is central to the Group's plan to move towards a low-carbon future. This approach prioritises direct interventions in operations where we can effect significant change, focusing first on areas within our direct control.

### Decarbonising Our Operations and the Wider Community

Decarbonisation stands at the forefront of our strategic priorities, underscored by the pressing imperative to confront climate change and its far-reaching effects. At the Group level, we are leading the charge from the top, working together with our business units and making sure that all our actions are in step with our commitment to sustainability. By doing so, we not only adhere to our corporate ethos but also contribute to the global momentum towards a low-carbon future.

### Key initiatives and contributions from our Business Units

 Power Generation/Clean Energy

#### HK Electric

##### Decarbonising Fuel Mix

HK Electric is also actively pursuing a transition from coal to gas in its electricity generation. Gas-fired electricity currently accounts for about 56% of its total output. With HK Electric gradually increasing the share of natural gas in its generation mix, such expansion will further reduce the carbon intensity of electricity produced.

To ensure the operational viability of the coal-to-gas transition, HK Electric has partnered with another energy utility in Hong Kong to build an offshore Liquefied Natural Gas terminal using the Floating Storage and Regasification Unit ("FSRU") technology. This terminal is crucial to securing the city's green energy future, including strengthening fuel security and cost competitiveness of fuel supply by creating a new channel to receive natural gas from diverse international markets.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

### Decarbonising Our Operations and the Wider Community (Cont'd)

#### Construction Materials



In October 2023, an inauguration ceremony was held to commemorate the first battery-electric concrete mixer truck's commencement of operation in Hong Kong. The adoption of e-mixer truck delivery in the Trunk Road T2 project signified the beginning of the journey towards construction electrification and net zero transportation in Hong Kong.

## Alliance Construction Materials

### Promoting Green Transport in Hong Kong

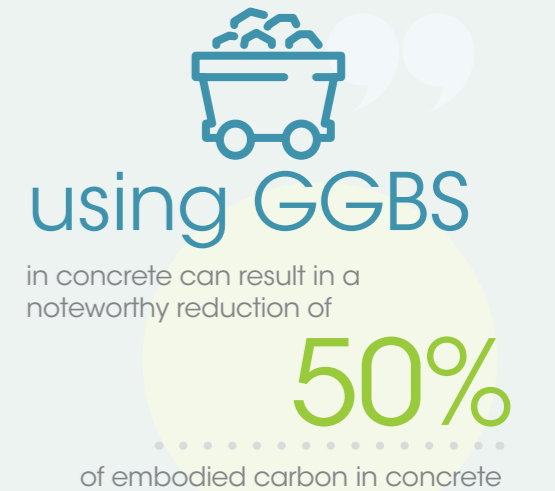
Aligning with the government's ambition to achieve carbon neutrality by 2050, Alliance Construction Materials has been driving the implementation of green logistics in Hong Kong. In February 2023, Alliance Construction Materials introduced the first electric concrete mixer truck in Hong Kong. Promoting the use of the electric truck, which has no tailpipe emissions, is vital to improve air quality and reduce GHG emissions in the construction market. The company kicked off a one-year trial of using a new energy mixer truck for concrete delivery to evaluate its performance, adaptation and challenges in the local construction industry, providing the industries with insightful information for the transition of new energy transportation in future.

#### Construction Materials

## Green Island Cement

### Using Low Carbon Raw Materials

Green Island Cement has been promoting the use of low embodied carbon cementitious material such as Classified PFA and Ground Granulated Blast-furnace Slag ("GGBS") to replace Ordinary Portland Cement ("OPC") in concrete since 2020. It has shown that GGBS is able to reduce embodied carbon in concrete significantly due to its high replacement ratio. Typically, using GGBS in concrete can result in a noteworthy reduction of 50% in embodied carbon, whereas using PFA can lead to a decrease of 25%. Green Island Cement has commissioned the GGBS facility since Q4 of 2020 and is exploring the possibility of expanding GGBS production.



#### Waste Management

## AVR

### Installing Frequency Drivers to Enhance Operational Efficiency

As part of its strategic project initiatives, AVR is installing frequency drivers on the large flue gas fans at the Rozenburg facility to improve control over fan speed and airflow, allowing greater energy efficiency and operational flexibility. This will make the installation more reliable in the long term as the wear and tear on fan components are reduced due to less mechanical strain, leading to lower maintenance costs and improved fan longevity.

#### Power Distribution

## Wellington Electricity

### Evaluating Electrification Capacity

As the New Zealand Government has pledged through the Zero Carbon Act to reach net zero emissions by 2050, Wellington Electricity is taking steps to support decarbonisation. For instance, it has evaluated the available capacity of the residential low-voltage network. The evaluation helps determine whether the network is ready for electric vehicle uptake and the transitioning of residential water heating from gas to electricity. Meanwhile, Wellington Electricity conducted for its business customers an electrification assessment by engaging with companies that use gas or coal to understand the scale and timing of their future electrification projects. Results showed that an estimated 30MW of future electric load needs to be installed over the next ten years to fulfil electricity demands.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

### Decarbonising Our Operations and the Wider Community (Cont'd)



Power Distribution

## UKPN

#### Supporting of Low Carbon Heating at Households

To help UK customers transition away from fossil fuels as fast as possible, UKPN kicked off the NeatHeat project to trial new boiler systems, Zero Emission Boiler ("ZEB"), in 30 homes across London, the South East and the East of England, offering a low emissions solution for homes which may be unable to install a heat pump.

Using the heating systems already present in many UK households, the ZEB charges up when electricity is cheaper or greener, rather than using carbon-intensive solutions such as gas or oil. With a high-density storage core, the ZEB charges up overnight during off-peak, efficiently storing this energy and releasing it whenever the thermostat calls for heat or hot water. Its software will also create a unique heating plan and a charging schedule to enable the most cost-efficient heating for the home.

The trial will allow UKPN to understand the charging pattern of the smart boiler and test optimisation mechanisms that will provide flexibility to the local electricity network and use existing infrastructure more smartly.



Power Distribution

## UKPN and SA Power Networks

#### Phasing out of SF<sub>6</sub>

UKPN is charting a course towards a more sustainable electric grid with the introduction of its first "clean air" Gas Insulated Switchgear (GIS) operating at 132,000 volts. Different from conventional GIS systems that rely on sulfur hexafluoride (SF<sub>6</sub>), a potent greenhouse gas, UKPN's new GIS is SF<sub>6</sub>-free. The system utilises a blend of dehumidified air, consisting of oxygen and nitrogen, which has zero global warming potential. This project is a critical step in UKPN's ambitious plan to reduce the use of SF<sub>6</sub> in new switchgear, extending across all voltage ranges where market alternatives are available. This initiative is also in line with the UK's net zero carbon emissions targets, ensuring that environmental considerations are balanced with the need for maintaining reliable power supplies.

Similarly, SA Power Networks is tackling greenhouse gas emissions by transitioning its passenger and light commercial vehicle fleet to electric vehicles, a move that will decrease emissions and contribute to cleaner transport. In addition, SA Power Networks is developing an SF<sub>6</sub> life-cycle management plan with the goal of accelerating the phase-out of SF<sub>6</sub> insulated assets across its network.



Transportation

## UK Rails

#### Exploring Greener Solutions and Opportunities

In 2023, the company conducted a series of investigations exploring emission reduction opportunities on diesel-fuelled trains, including engine efficiency modifications, replacement of existing cabin heating, ventilation and air conditioning ("HVAC"), dual fuels and alternative fuels.

UK Rails also completed with its study into the feasibility and safety of hydrogen-powered trains and continuous to progress investigations into an upgraded engine to minimise operational emissions. In the coming year, the company is targeting a first-in-class trial on an intelligent engine start-stop system and completing its investigation on opportunities for enhanced HVAC eco mode.



UK Rails continues to explore opportunities to future-proof its existing assets and develop greener solutions.

### Various Business Units – Implementing Electric Vehicles ("EV") Transition Projects

In line with the Group's commitment to minimising the environmental impact of our operations, our business units are implementing various EV transition projects to reduce carbon emissions in their daily operation.



#### HK Electric

Renders a one-stop free service Smart Power EV Charging Solution (SPECS) to assist its customer in applying for the Hong Kong Government's HK\$3.5 billion "EV-charging at Home Subsidy Scheme"

#### NGN

Implemented a comprehensive replacement programme that adheres to a car list exclusively comprised of electric vehicles, plug-in hybrids, and self-charging hybrids.

#### Wellington Electricity

80% of its corporate fleet electrified

#### VPN

Updating the fleet by replacing 6 diesel vehicles with 4 fully electric and 2 hybrid vehicles

#### UKPN

Plans to introduce up to 30 EVs



# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

### Harnessing Clean Energy Sources

Understanding the urgent imperative to address climate change, the Group remains unwavering in its commitment to advancing renewable energy initiatives. At the group level, we channel significant resources and expertise into fostering the growth of clean energy solutions. Our business units are empowered to innovate and implement their own renewable projects, reflecting our collective dedication to this cause.

### Power Generation/Clean Energy

## HK Electric

### Shifting Towards a Low Carbon Fuel Mix

Developing locally distributed renewable energy is one of the key strategies to achieve a decarbonised electricity supply. HK Electric purchases through the Feed-in Tariff ("FiT") Scheme the renewable energy generated by customers at rates higher than the electricity tariff and offers Renewable Energy Certificates ("REC") for customers to offset carbon emissions generated from their uses of electricity and show their support on the development of renewable energy in Hong Kong. Since the roll-out of the FiT scheme, the total capacity of grid-connected customer's renewable energy power system has been about 10.8 MW. Meanwhile, over 29 GWh of zero-carbon electricity generated was subscribed through the purchase of REC since its launch.

HK Electric is also expanding renewable energy capacity at its premises. In 2023, additional PV systems were installed at Lamma Power Station and other premises of the company, which expanded the local solar power generation capacity of HK Electric to around 2.4 MW.

During the year, to help ensure an uninterrupted, clean power supply even during emergencies, HK Electric has newly introduced a green mobile electricity supply system to provide customers with reliable and emission-free energy as temporary relief when the normal power supply is unavailable. The system could also serve as a clean backup power source for large-scale and major events to encourage the gradual phase-out of existing diesel generators.

### Power Generation/Clean Energy

## EDL

### Converting Waste Coal Mine Gas ("WCMG") and Landfill Gas ("LFG") to Renewable Natural Gas ("RNG")

EDL is actively converting LFG to RNG as part of its commitment to mitigate carbon emissions effectively. Through investments in advanced technology, EDL upgrades LFG to RNG, biogas derived from organic matter and processed to meet pipeline-quality standards. RNG is fully interchangeable with conventional natural gas and can be used in natural gas-fuelled industries and vehicles as compressed natural gas ("CNG") or liquified natural gas ("LNG"). The U.S. Department of Energy reports that "on a lifecycle basis, RNG can reduce GHG emissions by 95% as compared to diesel."

EDL also owns and operates a collection of power stations in Australia that run on WCMG. WCMG is a natural by-product of coal mining, where methane gas is released from coal seams. Instead of letting this methane go to waste or causing safety issues during mining, EDL combusts the methane that is captured through the mines' ventilation and drainage system. By using WCMG as a fuel for power generation, EDL provides reliable and affordable energy while significantly reducing greenhouse gas emissions.

### Construction Materials

## Green Island Cement

### Using Alternative Fuels and Raw Materials

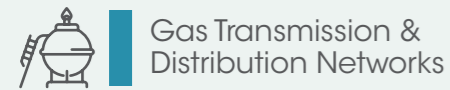
Green Island Cement has implemented two programmes to reduce its reliance on fossil fuel: the Alternative Fuels ("AF") programme and the Bio-coal programme. It has obtained the license to utilise waste-derived fuels, including Rubber-derived Fuel ("RDF"), Wood-derived Fuel ("WDF"), Plastic-derived Fuel ("PDF"), and Polyurethane Reside ("PUR") as alternative fuels, replacing up to 25% of total fuel in the precalciner.

Furthermore, Green Island Cement will establish a woody waste collection framework and bio-coal production facility to address the abundance of woody wastes in Hong Kong. It will convert the woody wastes, such as yard waste and construction timber, into bio-coal with heat values similar to imported coal. This bio-coal will then be integrated into the existing coal fuel system for precalciner and kiln burner use.

Green Island Cement has launched the ShellCem project, which aims to transform oyster shells into a sustainable limestone substitute for cement production. The project is currently seeking funding from the Recycle Fund. By using waste oyster shells, ShellCem promotes sustainable cement production, reduces limestone extraction, and helps address the issue of waste management by minimising the need for landfill space.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd) Harnessing Clean Energy Sources (Cont'd)



Gas Transmission & Distribution Networks

### NGN & WWU

#### Enabling low carbon gas connections

As part of its commitment to facilitating the connection of low carbon gases, specifically biomethane, NGN completed nine prospective connection studies for its customers during 2022/23. These studies outlined a combined total injection capacity of 8,755 standard cubic meters of gas per hour (SCMH). Moreover, NGN successfully finished connecting a new biomethane plant to its gas network, which has a total capacity of 700 SCMh. As of March 2023, NGN connected 20 biomethane production sites to its network with a maximum production capacity of 17,610 standard cubic metres of gas per hour. Collectively, the annual biomethane injection into NGN's network increased by 6.4% to 0.73 TWh, which is enough to meet the energy needs of approximately 61,000 UK households and comprises 1.2% of the network's gas throughput. This use of biomethane has displaced the need for natural gas, resulting in savings of approximately 135,000 tCO<sub>2</sub>e in customer Scope 1 and 3 emissions.

WWU is working with developers to connect and commission a further seven sites, which altogether with the 20 sites would provide heat to 193,000 homes.

Greening the gas network is also a key part of WWU's vision for the future. WWU is committed to establish itself as a leader in the decarbonisation of gas distribution systems by meeting the forecast changes associated with progress to a net zero-ready network. Currently, 20 biomethane sites have been connected to WWU's network, with a capacity to deliver 1.78 TWh of green gas into the network, enough to heat around 150,000 homes.



Power Distribution

### VPN

#### Energy Efficiency Installation at Brooklyn Depot and Innovating Energy Generation in New South Wales

VPN completed the 1.25MW solar panel system installation at its depot in Brooklyn in 2023 to significantly reduce electricity consumption and GHG emissions at the new location. The depot is fitted with energy-efficient fixtures, including LED lighting, battery storage connecting to the solar installations and future-proofing for EV charging facilities for anticipated growth in EV fleet requirements.



VPN completed the construction of the Avonlie Solar Farm in New South Wales. With a capacity of 245 MW, this solar farm has the capability to fulfil the annual energy requirements of around 100,000 households.

#### Preventing Gas Leakage



The Group recognises the critical role that reducing methane emissions plays in the broader context of climate change mitigation and is committed to aligning its practices with global initiatives such as the Global Methane Pledge. Within this framework, our gas transmission and distribution businesses take proactive, targeted actions to detect and seal leaks, enhance monitoring systems, and improve the overall integrity of the gas infrastructure.



Gas Transmission & Distribution Networks

### NGN

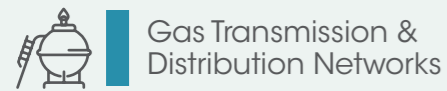
#### Cutting Leakage and Consumption

Methane is a predominant component of natural gas and a potent GHG. Its leakage from the network makes up approximately 90% of NGN's greenhouse gas emissions. As custodians of a precious natural resource, NGN continues to carry out its leakage reduction programme to reduce the amount of gas lost, including installing resilient plastic pipes, adopting sophisticated pressure management technology and adding chemicals to the gas to help prevent gas leakage. The company is in progress to meet its target of reducing gas leakage by 24% between 2021 and 2026. By 2023, a 11% gas leakage reduction is recorded compared to the baseline year.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

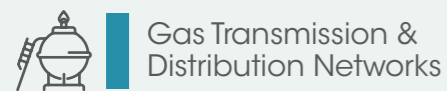
### Preventing Gas Leakage (Cont'd)



WWU

#### Reducing Leakage Emissions

WWU has significantly reduced its leakage emissions, amounting to a 2.7% decrease in annual emissions. This reduction, equivalent to 9,869 tCO<sub>2</sub>e, was accomplished by replacing outdated metallic mains with low-leakage polyethylene pipes and effective pressure management. WWU is also actively replacing its pneumatic controllers, which release gas as part of their normal operation, with low or no emissions options. It has replaced controllers associated with Jetstream regulator control systems at four sites, eliminating the need for venting. This replacement is estimated to reduce over 917 tCO<sub>2</sub>e annually, based on historical gas venting data. Additionally, there are seven more sites scheduled for controller replacement.



AGN

#### Replacing Cast Iron Mains with New Polyethene Material

AGN have made significant progress in 2023 on improving the reliability of their networks for customers, with the completion of the full program for the AGN networks in Victoria. In total, approximately 1,500 km of mains have been replaced from the old cast iron material to a more reliable polyethene material.

The Mains Replacement Program began in 2003 and has spanned 20 years, with the Central Business Districts (CBD) works for Melbourne completed in 2022 and the 2023 (non-CBD) completed in August 2023.

This upgrade in mains pipeline material significantly increases the reliability in gas delivery, reduces emissions (via the leakage of gas) and also means the network is hydrogen-ready.

### Operating in a Resource-saving Manner

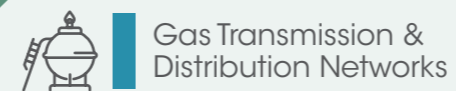
Transitioning to a cleaner and more sustainable energy future is a strategic imperative for the Group, necessitating an intensified focus on energy efficiency to maximise the utilisation of energy resources. At the business unit level, strategic investments in innovative technologies and processes are prioritised to enhance energy conservation. This includes the implementation of advanced energy management systems, the adoption of best practices in energy use, and the pursuit of continuous improvement in operational efficiency through equipment upgrades.



AVR

#### Converting Paper Pulp Residue into Valuable Energy

AVR's thermal conversion plant in Duiven processes around 150,000 tons of paper pulp residue annually from the Netherlands and Germany. Instead of discarding the residue, AVR converts it into heat and electricity, providing sustainable energy to heat homes through a heat network.



NGN

#### Boosting Energy Efficiency of Offices, Depots, and Fleets

Since 2015, NGN has been upgrading its offices and depots, relocating or consolidating facilities to decrease the total number of buildings. The refurbishment programme includes energy efficiency enhancements, such as installing energy-efficient lighting with sensors and providing low-energy electrical appliances like monitors and refrigerators. For instance, the redesign of NGN's main office in Thorpe Park, Leeds, was projected to cut the building's energy use by 28%.

As part of its aim to have renewable energy systems at all locations by 2026, NGN has evaluated its properties and prepared designs and structural plans for rooftop solar PV installations, with installation bids requested in late 2023.

NGN now procures 100% renewable electricity and is considering switching to 100% green gas for its buildings' energy needs. From 2018 to 2022/23, carbon emissions from gas and electricity in offices and depots have dropped by 86%.



UKPN

#### Launching Cleaner Engines Innovation Project

UKPN is advancing its sustainability initiatives by introducing hybrid generators that are compatible with various alternative fuels. Alongside this initiative, UKPN is actively engaging with suppliers to phase out stage IIIa engines from their hire fleet, transitioning to newer models that can deliver a reduction in carbon emissions by about 40% per kWh, while also lowering NOx and particulate emissions.

Furthermore, UKPN has enhanced the transparency regarding the carbon footprint and financial impact of temporary generator use within their operational reports. This includes the incorporation of an internal carbon price, which is intended to mirror the potential costs of carbon offsetting initiatives that contribute to the company's net zero targets.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

### Operating in a Resource-saving Manner (Cont'd)



ista

#### Enhancing Energy Optimisation

ista offers a range of platforms designed to enhance the transparency for its customers regarding their energy data. One such platform is MinuteView, which provides regular updates of energy data with a granularity of 15-minute intervals. These updates are compiled and visualised once a day, typically in the early morning, reflecting the previous day's data. MinuteView helps detect signs of waste or issues and promptly notify customers via SMS or email. It also enables easy comparison of energy data across multiple meters, buildings, or even countries.

Additionally, ista's Eco Trend application ensures customers receive monthly heat and hot water consumption updates. This feature allows its customers to stay informed about their energy usage patterns and make informed decisions to optimise their energy efficiency.

#### Embracing Hydrogen Economy

The Group acknowledges the pivotal role of green hydrogen as a complement to renewable energy sources in diminishing reliance on fossil fuels. Our gas transmission and distribution businesses have been implementing green hydrogen initiatives that align with their specific operational context.



AGIG

#### Introducing Renewable Hydrogen Gas into Australia Network

In support of the Australian state and territory ambitions of being net zero carbon by 2050, AGIG is committed to delivering at least 10% renewable gas across its distribution networks by 2030, with a vision of 100% renewable gas by no later than 2050. During the year, AGIG has proactively partnered with governments and industry to deliver renewable hydrogen projects across the country and the value chain.

#### Expanded the supply of blended renewable hydrogen in South Australia, increasing from 700 homes to nearly 4,000 homes and businesses in Mitchell Park, Clovelly Park and parts of Marion.

This expansion is a significant endorsement of the success of this pioneering project, as it marks two years since it began delivering blended renewable hydrogen to homes in the southern part of Mitchell Park in May 2021, demonstrating the ability of the existing gas network to transport renewable gas to homes and its compatibility with existing gas appliances.



AGIG's HyHome, Australia's first 100% hydrogen-powered home, provides a window into future low-carbon energy solutions for the country.

HyHome, with many of its appliances running off hydrogen, demonstrates the future energy use where natural gas is replaced entirely by carbon-free hydrogen. The showcase reflects a critical step in providing customer choice in the energy transition.



AGIG's Hydrogen Park facility in South Australia.

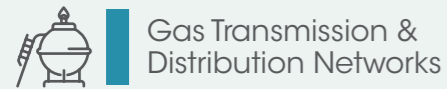
#### Received development approval for the Hydrogen Park ("HyP") Gladstone project, which puts Gladstone on track to become the first gas network in Australia where the entire gas distribution network will supply homes, businesses and industries with a blend of up to 10% (by volume) of renewable gas. The project is now under construction and is expected to blend into the Gladstone gas distribution network in early 2024.

#### Signed arrangement to power a South Australian government two-year hydrogen bus trial. Commenced in August 2023, the trial's hydrogen fuel cell buses are powered by green hydrogen generated at AGIG's HyP South Australia. The bus trial will carry out over 80,000 customer journeys within the first 12 months and save approximately 90 tonnes of CO<sub>2</sub> emissions per year, at a minimum.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

### Embracing Hydrogen Economy (Cont'd)



Gas Transmission & Distribution Networks

WWU

#### Enabling Low-carbon Hydrogen Production and Network Development

WWU is investing £400 million into its gas network from 2021 to 2026 to advance towards net zero emissions. The goal for WWU is to prepare a network by 2035 that is ready for net zero in regions most poised for a switch to hydrogen, with the ambition to transform the entire network by 2040.

High volumes of green hydrogen in the gas network are essential to delivering the net zero system for customers. In order to reduce the cost and impact of green hydrogen production, WWU is partnering with a global hydrogen company to produce innovative electrolyser prototypes. The prototypes will allow less pure water, such as rainwater, storm overflow and industrial process wastewater, to be used as feedstock, reducing input costs and widening the potential locations for green hydrogen production.

Additionally, WWU has announced a feasibility study to evaluate the capability of existing North Wales infrastructure to transport hydrogen as part of its future network planning strategy. The study will provide a detailed assessment of the infrastructure needed to advance opportunities for hydrogen in Wrexham and Deeside. The project will also explore supply and demand scenarios to understand the extent of hydrogen rollout required in the low-carbon future. It will also develop options for changes to the current method for implementing industrial cost-sharing schemes, which allows customers to share the cost of adopting a hydrogen network and could reduce the cost of rolling out hydrogen for industry.

Developing smart injection strategies will also be a signature feature of the project. Injecting hydrogen at strategic nodes along the gas network will allow distribution networks to better control pressure tiers and effectively target early adopters of hydrogen blends. It could reduce operational constraints and increase resilience in the transition to net zero.



Gas Transmission & Distribution Networks

NGN

#### Converting Natural Gas Use to Hydrogen

NGN's H21 North of England project aims to convert 3.7 million homes and businesses from natural gas to hydrogen in the United Kingdom as part of a collaborative effort to decarbonise the country's gas networks. It has set up demonstration homes with 100% hydrogen appliances to showcase the potential of this new technology. The conversion is proposed to begin in 2028 and expand to properties in multiple cities, such as Leeds and York, over the following seven years. By implementing a six-phase plan, an additional 12 million homes throughout the rest of the country could be converted to hydrogen by 2050.



Transportation

UK Rails

#### Investigating Alternative Fuels

UK Rails is actively collaborating with train manufacturers and network operators to investigate the potential of alternative fuels, such as hydrogen, in the rail industry. This collaborative effort explores the feasibility and viability of using alternative fuels as cleaner, more sustainable energy sources for trains. For example, in 2023, it completed a feasibility study on bringing hydrogen passenger trains to the UK, which involved exploring technical and safety requirements.

## ▶ Our Management Approach (Cont'd)

### Digitalising Electricity Networks

The collective push across digitalisation across the Group is enabling more adaptable and robust infrastructures on a larger scale. As each business unit integrates digital solutions, the cumulative effect leads to a smarter, more interconnected energy network, offering enhanced service quality and sustainability for all stakeholders involved.

#### Power Distribution

### VPN

#### Tarneit Neighbourhood Battery Project

VPN is supporting the energy transition in Victoria and at the forefront of integrating distributed renewable energy sources onto its network. This has been driven internally by the “Empower” program which is the company’s response to strategic issues impacting its customers and the networks, integrating solar power, batteries, smart devices, and electric vehicles into its network. This work is a demonstration of the company’s expanding role as a Distribution System Operator (DSO). Throughout the year, innovative steps have been taken, including the installation of grid-size community based batteries and the use of smart meters for system security management.

A standout example of VPN’s commitment to sustainable innovation is the Tarneit Neighbourhood Battery. This 120kW/360kWh battery, launched in February 2023, enhances network reliability and maximises the use of local solar energy, powering around 170 homes during peak times. VPN’s projected investment of AU\$25.7 million by 2026 for network and technology underscores its dedication to environmental and technological advancement.

#### Power Distribution

### UKPN

#### Supporting Electricity Flexibility as DSO

In May 2023, UKPN launched the nation’s first-ever independent DSO to ensure sufficient electricity capacity across its network and to enable cost-effective adoption of low-carbon technologies like electric vehicles, heat pumps, and renewable energy generation. With electricity demand projected to double by 2050, UKPN recognises the critical need for flexible electrical capacity to help the country meet its Net Zero targets. Flexible capacity is provided by customers already connected on the network and comes primarily from low carbon sources. The development and support of flexibility markets are expected to save customers more than £400 million in 2023-2028 by using demand management to meet new capacity needs instead of constructing new infrastructure.

As part of the DSO, UKPN has launched a series of initiatives to support cost – effective decarbonisation of communities it serves and support national objectives:

#### Power Distribution

### SA Power Networks

#### Transitioning to a Flexible Two-way Network

SA Power Networks has released its Draft Regulatory Proposal for the 2025-2030 period, detailing plans to complete the transformation of its network into a “two-way” system, aiding South Australia’s transition to 100% renewable energy. A key aspect of this proposal is the establishment of new systems to enable demand-side flexibility, progressing from existing work focusing on enabling more exports from rooftop solar systems.

With forecasts indicating continued growth in rooftop solar installations, the company expects reverse power flows to surpass the capacity of its network assets at certain times of the year, especially within the low-voltage network. To reduce the need to curtail exports from customer solar systems and ensure a secure electricity supply for all customers, the company intends to introduce “flexible connection” services for both residential and commercial customers.

The proposal outlines the development of new systems and services to accommodate increased connections of customer loads and generation to the distribution network, such solar systems, batteries and electric vehicles. These advancements will enable more dynamic balancing of energy import and export, aligning times of peak solar generation with flexible loads such as electric vehicles and hot-water systems. New value for customers will be realised as they utilise low-cost, renewable generation during the day, and respond to market price and network constraints during times of peak demand.

- Launched new flexibility products that enable domestic customers to provide flexibility. The product launched jointly with Octopus Energy “Octopus Power Ups” enabled 30,000 households in the UKPN region to provide flexibility to UKPN.
- A dedicated team focused on supporting the 133 Local Authorities in its region with their local climate ambitions and local energy plans. Over 80% of the local authorities in the UKPN region have declared climate emergencies and UKPN has responded with a new service to ensure the infrastructure is available in a timely manner to meet the local needs.
- Enhanced customer service provision for the fleet of generators and batteries that are connected in UKPN’s network. There are 10 GW of generation now connected on UKPN’s network that supply local and national demand. UKPN has enhanced its Control Room capability to provide services that maximise available network access for generation customers and minimise constraints.

Working closely the National Transmission and System Operator companies, UKPN has been able to develop digital solutions that enable customers that impacted by upstream issues on Transmission networks to connect faster on the network.

# 5.1 Combating Climate Change

## ▶ Our Management Approach (Cont'd)

### Promoting Carbon Capture and Avoidance

The Group prioritises carbon capture and storage as a key strategy to cut greenhouse gas emissions and combat climate change. Our business units are launching carbon abatement projects to create an impactful approach to carbon reduction.



 Power Generation/  
Clean Energy

EDL

#### 'Green Credit' Revenue

The green credits produced by EDL are traded through local and national carbon markets monetising EDL's ability to abate carbon. This activity underscores EDL's commitment to environmentally sound practices and also demonstrates the tangible financial value of sustainable operations.

EDL produces 'green credits' or offsets through the operation of a large portfolio of landfill gas, waste coal mine gas and renewable energy power stations in Australia, the UK and North America.

 Waste Management

Enviro NZ

#### Timber Waste Carbon Reduction

Enviro NZ's Pokeno timber processing facility exemplifies a robust carbon abatement strategy by diverting up to 20,000 tonnes of timber waste from landfills – an action that significantly reduces carbon emissions associated with the decomposition of organic materials. This diverted timber is repurposed as biofuel, substituting coal in cement manufacturing and thus further mitigating carbon footprints. As of September 2023, a substantial 14,300 tonnes of timber have been processed, reflecting Enviro NZ's proactive approach to reducing emissions and contributing to the circular economy.



 Waste Management

AVR

#### Carbon Capture System

AVR is in the process of implementing carbon capture project at Rozenburg and Duiven as a significant step in its commitment to capture carbon dioxide. The project, with a planned duration until 2028, aims to capture an estimated 320,000 tonnes of carbon, contributing to the reduction of greenhouse gas emissions and promoting environmental sustainability.

 Household  
Infrastructure

Reliance Home Comfort

#### Carbon Offset

Reliance Home Comfort is deeply committed to reducing its environmental impact and has implemented various initiatives to promote sustainable practices. As part of these efforts, it has incorporated ten service vehicles equipped with XL Hybrid Systems. It also partnered with One Tree Planted to plant 22,000 trees across Canada in 2023, effectively supporting the offset of more than 3 times their paper usage. In addition to this, Reliance Home Comfort harvested and diverted 11,886 parts from the landfill.

5.2 



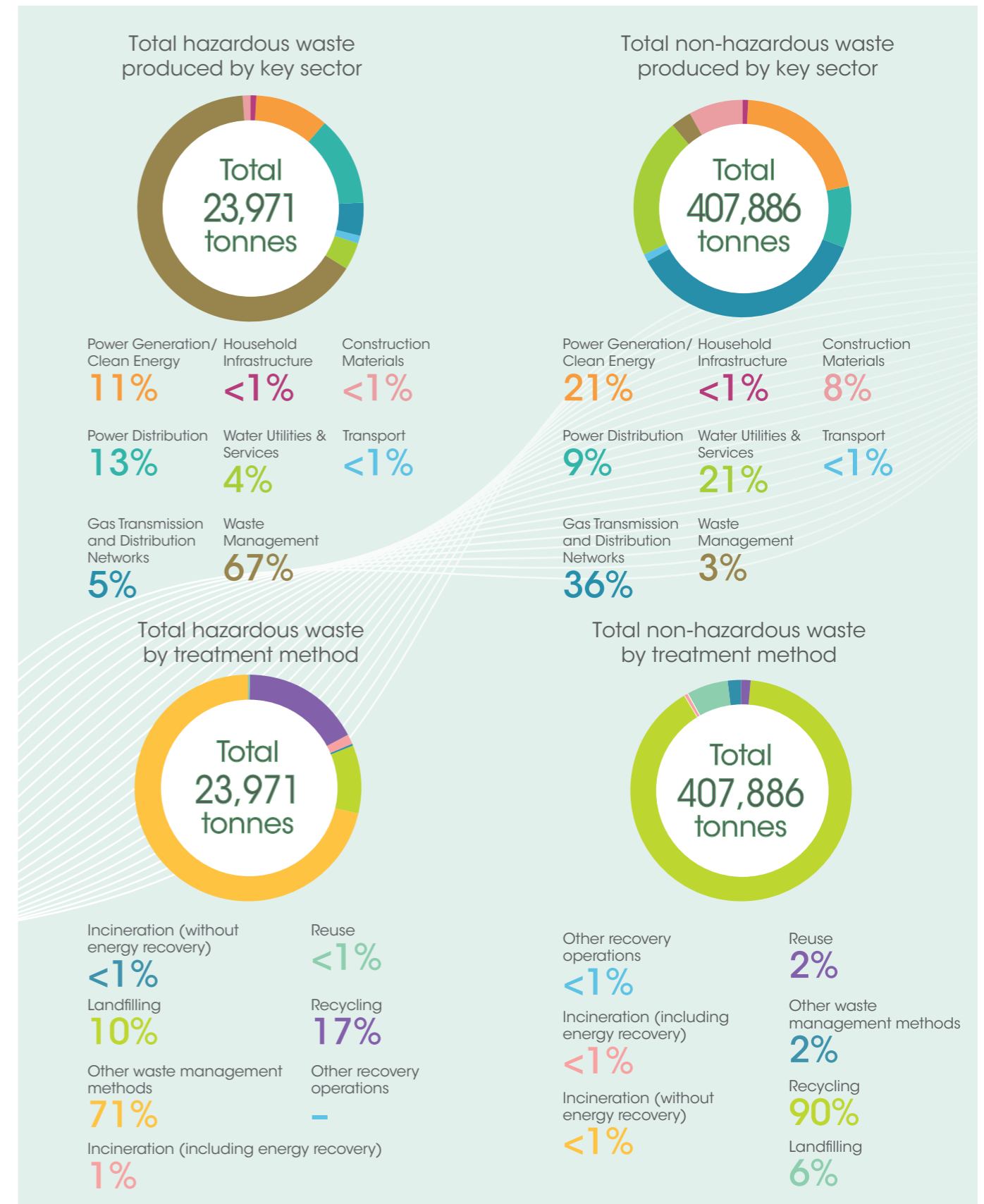
# Promoting Waste Management and Circularity

## Why It Matters

As a global infrastructure company, the Group is dedicated to advancing sustainable practices and earning stakeholder trust through exemplary waste management. Our strategic approach is to elevate waste from being merely discarded to becoming a resource that fuels the circular economy. This transition is essential not only for environmental preservation but also for demonstrating responsible use of finite resources.

## Our Commitment

We endeavour to minimise waste generation and effluent disposal throughout our operations. As a holding company, most of our focus is on working with our business units to reduce waste at the operation level. To demonstrate our commitment to minimising waste footprints, we set waste reduction and recycling targets wherever feasible and have implemented a waste management plan with responsible and efficient waste handling guidelines.





# 5.2 Promoting Waste Management and Circularity

## ▶ Our Commitment (Cont'd)

Key targets and progress		
Business Units	Details of Target	Progress
Alliance Construction Materials	<ul style="list-style-type: none"> <li>Reduce solid waste extracted from plant yard washout to 0.02T/m<sup>3</sup> of concrete produced</li> </ul>	Achieved
NGN	<ul style="list-style-type: none"> <li>Send less than 0.1% of excavation spoil by mass to landfill annually by 2026</li> </ul>	On track
	<ul style="list-style-type: none"> <li>Reduce amount of office and depot waste created by 20% between 2018 and 2026</li> </ul>	On track
HK Electric	<ul style="list-style-type: none"> <li>Use no more than 2.5% virgin aggregate annually by 2026</li> </ul>	On track
	<ul style="list-style-type: none"> <li>Reduce production of ash and gypsum at LPS by 37% in 2024 as compared to 2019</li> </ul>	On track
	<ul style="list-style-type: none"> <li>Reduce total waste generation of its key office premises by 10% in 2025 as compared to 2020</li> </ul>	On track
Reliance Home Comfort	<ul style="list-style-type: none"> <li>Recycle 70% of residential and commercial waste</li> </ul>	Achieved 71% recycling ratio for 2023
UKPN	<ul style="list-style-type: none"> <li>Recycle 80% of office and depot and network waste by 2028</li> </ul>	On track, achieved 71.65% in 2022/2023
	<ul style="list-style-type: none"> <li>Recycle 99.5% of street works waste by 2028</li> </ul>	On track, achieved 99.86% in 2022/2023
WWU	<ul style="list-style-type: none"> <li>Send less than 20% of total excavated spoil materials to landfill by 2026 as compared to 2019</li> </ul>	On track
	<ul style="list-style-type: none"> <li>Send a maximum of 20% waste to landfill by 2026</li> </ul>	On track
Northumbrian Water	<ul style="list-style-type: none"> <li>Achieve zero business waste by 2025</li> </ul>	On track

## ▶ Our Management Approach

The sound management of effluent and waste is essential to our business operations. We proactively explore potential areas of improvement in existing procedures and processes by engaging external parties, such as conducting waste mapping exercises to identify waste streams and facilities. On top of adopting the principle of reducing waste and reusing and recycling resources, several business units are studying how to ingrain the circular economy into their planning and strategy.

### Waste Management

By implementing a holistic approach to waste management, we pave the way towards a sustainable future. This is accomplished by diligently reducing the volume of waste we produce, strategically redirecting materials away from landfills, and optimising the efficiency with which we utilise resources. Such concerted efforts are crucial in shaping an environmentally responsible and resource-conscious society.

### Power Distribution

## SA Power Networks

### Advancing Waste and Recycling Management

SA Power Networks has improved its waste management efforts, achieving a new milestone by increasing its landfill diversion rate from 80% to 88%, meaning that most of the waste generated by the business is recovered, repurposed and recycled. For a business of such scale and complexity, this achievement is not just a reflection of the company's commitment to environmental stewardship but also a testament to its strategic and effective waste management practices.

### Gas Transmission & Distribution Networks

## NGN and WWU

### Excavation Waste Management

NGN is committed to proactively reducing the volume of excavation spoil disposed of in landfills. Annually, it generates an estimated 200,000 tonnes of excavation spoil and has set a target to limit landfill disposal to less than 0.1% of this total by the year 2026. NGN has implemented a robust and comprehensive programme to inform and guide its colleagues and contractors to accomplish this goal effectively. As part of its monitoring and evaluation process, NGN requires its mains replacement and reinstatement contractors to submit monthly reports on spoil disposal, specifically identifying the quantity of spoil sent to landfills. NGN carefully reviews and discusses this data during contract performance review meetings to ensure adherence to the established guidelines and targets.

WWU demonstrates a proactive approach to reducing the frequency and magnitude of excavation activities by employing advanced techniques, such as inserting new PE pipes into existing underground pipelines. It also strives to prioritise the utilisation of recycled aggregate as a preferred backfill material whenever excavation becomes necessary. This strategic approach mitigates the environmental impact associated with resource consumption and effectively reduces the demand for virgin aggregate. In the fiscal years 2021-22 and 2022-23, WWU has employed 27% and 21% recycled aggregate as backfill material, respectively, surpassing its commitment to exceeding a 20% utilisation threshold.

# 5.2 Promoting Waste Management and Circularity

## ▶ Our Management Approach (Cont'd)

### Waste Reduction

Waste reduction strategies are implemented across our business units to systematically decrease the volume of waste destined for landfills, reinforcing our group-wide commitment to minimising environmental impact and prioritising resource conservation.



During the year, EDL launched a waste reduction campaign to minimise the amount of waste sent to landfills globally and reduce carbon footprint.

### Power Generation / Clean Energy

EDL

#### Waste Reduction Campaign

The campaign encourages all EDL personnel to brainstorm waste reduction initiative ideas and then implement them in projects, sites, or offices. Sharing these initiatives also contributes to the cross-pollination of waste reduction ideas across EDL. The campaign includes supporting materials on waste reduction concepts, showcases waste reduction activities across EDL, and encourages participation in the campaign. Initiatives to date have included global PPE recycling, coolant reuse and non-disposable safety glasses.

### Gas Transmission & Distribution Networks

NGN

#### Operational Waste Management

NGN actively collaborates with its contractors and suppliers to minimise waste and landfill disposal. In 2023, it achieved a 22% reduction in office and depot waste compared to its 2018 baseline, aligning with its target of a 20% reduction by 2026. Its landfill disposal stood at 0.15% in 2023 and is on track to achieving its goal of less than 0.1% by 2026. Moreover, it has reached a waste recycling rate of 99.8% during the year.

Furthermore, through strategic investment in innovative digital systems and streamlined processes, NGN has reduced its paper consumption by 73% to 0.8 million in 2022/23 compared to its 2018 baseline of 3 million. This remarkable accomplishment ensures it is on track to halve its paper consumption by 2026.

### Water Utilities & Services

Northumbrian Water

#### Zero Avoidable Waste

Northumbrian Water is committed to protecting the environment and has set ambitious goals to be a leader in the sustainable use of natural resources. One of its key objectives is to achieve zero avoidable waste by 2025. It has made excellent progress towards this target by focusing on eliminating, reusing, or recycling >95% of the waste generated from its operations.

Furthermore, Northumbrian Water is actively developing innovative technologies for resource recovery and collaborating with its supply chain partners and UK Water Industry Research to promote a circular economy in the regions it serves.

### Waste Recycling

Following our efforts in waste reduction, waste recycling also plays a pivotal role in sustainable waste management and the circular economy. This step is essential in addressing the emissions, notably methane, that result from waste disposal.



Enviro NZ's rubbish and recycling truck.

### Waste Management

Enviro NZ

#### Waste Recycling and Organics Diversion Initiatives

At the Hampton Downs landfill, Enviro NZ has adopted an innovative use of recycled crushed concrete for the construction and enhancement of various infrastructure projects, including roads and tip heads. The concrete recovery and processing facility in South Auckland boosts the capability to recycle and repurpose up to 30,000 tonnes of concrete annually, transforming waste into a valuable construction aggregate material.

Furthermore, Enviro NZ has initiated a company-wide effort to promote recycling and organics diversion by ensuring the availability of dedicated bins at each of its branches or facilities. The implementation of recycling bins and services in most offices has already commenced, and a performance tracking system is currently being established. Establishing a performance tracking system will enable Enviro NZ to monitor and measure the effectiveness of its recycling and organics diversion.

# 5.2 Promoting Waste Management and Circularity

## ▶ Our Management Approach (Cont'd)

### Waste Recycling (Cont'd)



## HK Electric and SA Power Networks

### Sustainable Waste Management Practices

HK Electric has implemented comprehensive waste management arrangements during the construction phase of new gas-fired units at LPS. These arrangements are in accordance with the approved Waste Management Plans by the Hong Kong Government's Environmental Protection Department. Proper measures have been taken to prevent, recover, reuse, recycle, store, collect, treat, and dispose of various waste categories. In 2023, its major construction projects generated approximately 39 kT of construction waste, with an impressive 93% reused or recycled for alternative purposes such as public filling. These practices highlight HK Electric's commitment to sustainable waste management and contribute to reducing the environmental impact of its operations.

SA Power Networks Group's operations encompass various waste streams, such as office waste, hazardous waste, and packaging. It prioritises the recovery, reuse, and recycling of these waste streams, resulting in a remarkable landfill diversion rate of 85%, surpassing its 2022 target of 80%. At the same time, bulk recyclables such as paper, plastics, batteries, oil, e-waste, printer cartridges, glass, and metals are either recycled internally or sold to external facilities. Residual dry waste from metropolitan sites undergoes advanced resource recovery processes at the SUEZ-ResourceCo Alternative Fuels Facility, generating a fuel substitute for high-combustion factories.



## VPN

### Recycling of damaged solar panels

The task of recycling bi-facial solar panels presents substantial challenges due to their dual layers of glass, considerable size, significant weight, and specialised chemical composition. To address these challenges, VPN engaged with an Australian-based company that specialises in solar panel recycling, to support efficient processing, high material recovery rates, and uncontaminated output streams.



Over the past two years, approximately 4,500 damaged solar panels from the Avonlie and Sebastopol Solar Farms in New South Wales have been diverted from landfill and processed by this recycling company for material recovery and recycling by VPN.

## Waste Tracking

The Group advocates for rigorous waste tracking to improve waste reduction and recycling strategies. By analysing the types and volumes of waste generated, we pinpoint critical areas for waste minimisation and streamline disposal methods. This approach enhances resource allocation and bolsters our commitment to sustainable waste management.



## UKPN

### Waste Mapping Exercise

UKPN has established an annual commitment to achieving 70% waste diversion from landfill. To help fulfil this commitment, the company undertook a waste mapping exercise to identify various waste streams, the responsible facilities, and the associated waste contractors. This exercise also brought to light potential enhancements to the current waste management practices.

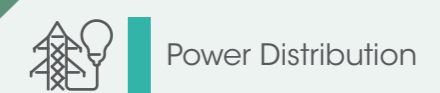
In 2022/23, UKPN achieved a notable reduction in waste, cutting down by 113 tonnes compared to the previous year. Of the total waste produced, only 11.5% was classified as non-recoverable and consequently sent to landfills. The vast majority was effectively diverted, in line with the company's proactive environmental policies, with a significant portion being repurposed through recycling or energy recovery efforts.



## EDL

### Waste Tracking Tools

EDL has rolled out a new waste tracking tool across its North American operations, enabling more accurate accounting of waste figures. This tool establishes ways for the North American Environmental Compliance Team to capture waste data that was previously untracked, reflecting its proactive approach to environmental responsibility.



## VPN

### Waste Mass Balance Analysis

VPN has engaged a contractor to perform an extensive waste mass balance analysis in 2023. This initiative is designed to provide a thorough understanding of the waste generated within the company and its disposal method. The objective of this analysis is to delineate the company's waste streams and explore effective ways to divert materials from landfill.

## 5.2 Promoting Waste Management and Circularity

### Our Management Approach (Cont'd)

#### Waste Education and Training

Fostering a culture attuned to waste minimisation is a cornerstone of achieving sustainable development. Consequently, it is imperative to elevate consciousness and motivate informed decision-making within our operations in relation to waste production and disposal practices.



The waste minimisation workshop was held in collaboration with Lower Hutt City Council in July 2023, successfully engaged staff on the environmental benefits of diligent recycling and waste reduction practices.



#### Wellington Electricity

##### Waste Education

Wellington Electricity conducted a comprehensive waste minimisation workshop for all employees, detailing strategies to reduce, reuse, and recycle both in the workplace and at home.

In addition, the company showcased a segment from the “Wasted New Zealand” series that focuses on recycling, landfill issues, food waste, and wastewater management during the CEO’s presentation in May 2023. Subsequent instalments from the series will be featured in monthly CEO updates to reinforce the waste management education efforts.

To further bolster the waste minimisation education program, Wellington Electricity has reached out to the Hutt City Council for expert talks on waste reduction initiatives. The company also engaged with Enviro NZ, which provided educational presentation materials. This presentation illustrates waste processes and reduction techniques, which Wellington Electricity plans to tailor for its internal staff training.



#### NGN

##### Encouraging Contractors to Protect the Environment

NGN has implemented the “DSP Champions League” initiatives involving all 17 regional gas main replacement contractors. This initiative recognises and rewards contractors based on their monthly performance in various areas, including the environment, and financial prizes are awarded to the top performers at the end of the year.

## 5.3 Conserving Biodiversity

### Why It Matters

Climate change is a leading cause of biodiversity loss today, yet biodiversity itself is our most effective natural defence against climate change. The United Nations has reported that conserving and restoring natural habitats could provide approximately one-third of the climate mitigation required over the next decade. The Global Risks Report 2023 underscores the economic dangers of taking nature for granted, highlighting nature loss and the decline in global biodiversity as two of the top ten risks with the potential to impact economies and businesses.

### Our Commitment

The Group firmly commits to biodiversity and habitat protection throughout the lifecycle of our assets. To fulfil our pledge to return more to the environment than we take, we mandate that all operations and suppliers avoid activities near sites of globally or nationally significant biodiversity. This includes, but is not limited to, World Heritage areas and IUCN Category I-IV protected areas. Should any operational site be situated near critical biodiversity, we employ the mitigation hierarchy – avoidance, minimisation, restoration, and offsetting – to reduce our impact on biodiversity. The Group also pledges to restore land following site closure and has allocated adequate funds to support necessary mitigation and rehabilitation efforts.



## ▶ Our Commitment (Cont'd)

Key targets and progress		
Business Units	Details of Target	Progress
SA Power Networks	<ul style="list-style-type: none"> <li>Developing an Action Plan for Nature and Biodiversity</li> <li>Deploying programme to cover up electrical infrastructure that has high risk of impacting native fauna</li> </ul>	On track
UKPN	<ul style="list-style-type: none"> <li>Identifying and assessing an additional 100 sites for biodiversity enhancement by 2028</li> </ul>	On track
WWU	<ul style="list-style-type: none"> <li>Committed to "no net loss" on designated projects in GD2 and achieving "biodiversity net gain" on impacting work from 2026</li> </ul>	On track
HK Electric	<ul style="list-style-type: none"> <li>Committed to planting 5 trees for every tree cut down</li> <li>Plant at least one more species of native trees or shrubs at Lamma Power Station in 2023 to support biodiversity</li> </ul>	On track
AGIG	<ul style="list-style-type: none"> <li>Setting biodiversity targets by end of 2025</li> </ul>	Completed
NGN	<ul style="list-style-type: none"> <li>Completing natural capital assessment of up to 50 of its sites by 2025</li> <li>Creating 'Homes for Nature' on 250 of its sites by 2026</li> </ul>	On track
EDL	<ul style="list-style-type: none"> <li>Planting of 50,000 additional trees at the UK sites undergoing gas field infrastructure modification</li> </ul>	On track

## ▶ Our Management Approach

The Group is dedicated to avoiding and mitigating negative environmental impacts and incorporates biodiversity considerations into our planning processes. Management oversight of the environmental management strategy, which includes addressing biodiversity issues and overseeing land rehabilitation and closure projects, is a responsibility shared across all business units. Management committees or project managers are dedicated to assessing and managing the associated risks and opportunities. Beyond regular environmental impact assessments, we engage with external experts to develop tailored management plans for sites with high ecological risks.

### Biodiversity Commitments

The Group actively conserves biodiversity to secure natural resources, mitigate supply chain risks, and ensure ecosystem sustainability. We are committed to achieving no net loss and aim for net gains in biodiversity to support these goals.

#### Power Distribution

### UKPN

#### Biodiversity Enhancement and Biodiversity Net Gain

UKPN has maintained its partnership with nine Wildlife Trusts, informing its Environmental Action Plan to bolster biodiversity in its service areas. The company has assessed the biodiversity of 100 substations, with the goal of improving their scores by 30% through focused enhancements.

Throughout 2022/23, UKPN actively supported conservation efforts, involving the restoration of hedgerows and ponds, the installation of nest boxes, meadow improvements, and the eradication of invasive species at select locations.

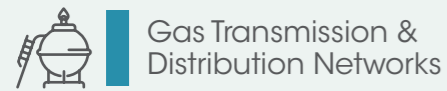
In its 2023-2028 business plan, UKPN pledges to evaluate an additional 100 sites for biodiversity enhancements. So far, 70 potential sites have been identified, with 25 undergoing ecological reviews. These assessments, which establish baseline biodiversity scores using DEFRA's metric, will inform improvement strategies and forecast the expected biodiversity scores after recommendations are implemented.

UKPN has reiterated its commitment to key biodiversity initiatives, including increasing biodiversity potential in new major substation projects, improving biodiversity at existing facilities, and embedding "Biodiversity Net Gain" into its operational practices.

# 5.3 Conserving Biodiversity

## ▶ Our Management Approach (Cont'd)

### Biodiversity Commitments (Cont'd)



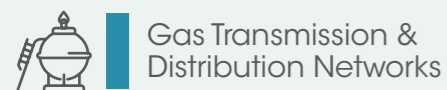
NGN

#### Homes of Nature

NGN carefully manages the vegetation on its asset sites to ensure it does not pose significant fire risks or hinder safe site access and exit. To help promote biodiversity on site, NGN commits to creating "homes for nature" on 250 of its asset sites by 2026. This can involve installing new habitats or changing vegetation management practices to promote biodiversity. Since 2017, NGN has installed Homes for Nature at 84 sites. Examples include fitting bat and bird boxes, leaving felled timber on site as a shelter where animals may hibernate during the winter months, and not cutting the grass during May to enable the growth of wildflowers to aid pollinators.

#### Biodiversity Assessment

Biodiversity assessments, which measure species richness and habitat quality among other factors, provide valuable insights into the biodiversity value of our operations. They help identify potential impacts and guide decision-making to minimise adverse effects and bolster conservation efforts.



NGN

#### Natural capital valuation and ecosystem services assessment

In collaboration with a third-party consultant, NGN has conducted an ecosystem services screening assessment for its sites. The ecosystem services have been incorporated into a bespoke natural capital evaluation tool which provides a technical and financial evaluation for services such as biodiversity and aesthetic appreciation of landscapes as well as carbon sequestration, air pollutants removal, and temperature regulation.

NGN completed baseline natural capital surveys at 30 of its sites in 2021, with repeat surveys completed at the same sites in 2023 and further surveys scheduled for the same sites in 2025.



AGIG and UKPN

#### Increasing Focus on Nature and Biodiversity

In 2023, AGIG participated in a pilot program with the Australian Government's Department of Climate Change Energy, Environment and Water (DCCEEW) that sought to assist organisations with understanding and implementing the requirements of the Taskforce on Nature-Related Financial Disclosures (TNFD). The learnings from this program will assist AGIG in setting biodiversity targets by end of 2025.

Ilketshall Grid, one of the substations operated by UKPN, was selected for biodiversity enhancement in RIIO-ED1. In July 2020, Suffolk Wildlife Trust ecologists assessed the substation and discovered that the pond was filled with reeds, rendering it unsuitable for wildlife. Based on their recommendations, the pond was enrolled in Natural England's district level licensing scheme in February 2021, focusing on restoring it as a breeding habitat for great crested newts. The restoration process involved UKPN's employee volunteers removing trees to increase sunlight exposure, dredging the reeds, reshaping the pond's base, and creating raised banks to provide suitable terrestrial habitats for newts. By April 2022, according to the Habitat Suitability Index, the pond had naturally refilled with water and was rated as "Excellent" for great crested newts. Water quality was excellent, with the presence of invertebrates like great diving beetles and dragonfly nymphs. The pond was then confirmed to be used by great crested newts through eDNA testing. Ongoing monitoring will be conducted under the Natural England scheme.

#### Biodiversity Management

At the Group level, we are committed to a unified approach to managing biodiversity. We proactively assess environmental impacts, implement conservation strategies, and support restoration efforts to address and mitigate biodiversity loss. Our collective focus is on integrating these practices into our core operations to promote ecological sustainability across all areas of our business.

# 5.3 Conserving Biodiversity

## ▶ Our Management Approach (Cont'd)

### Biodiversity Management (Cont'd)

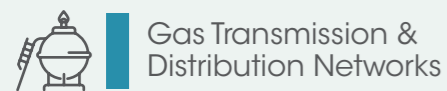


Power Distribution

## SA Power Networks

### Action Plan for Nature and Biodiversity

In 2023, SA Power Networks sought consultancy support to begin the development of an Action Plan for Nature and Biodiversity. Calculating nature loss is complex and measuring the impacts of activities and solutions is still maturing, so the journey will be a gradual and staged one. A key step in the development process was gaining an understanding of the SA Power Networks business footprint, impacts, dependencies, risks and opportunities with respect to nature. This program underscores the company's dedication to biodiversity management and showcases the company's proactive approach to reducing environmental impact through strategic infrastructure modifications.



Gas Transmission & Distribution Networks

## NGN



### Land Remediation and Tree Planting Programme

With approximately 150 sites on the legacy footprint of former coal gas production works, NGN is proactively addressing the challenge of potential ground contamination. The company dedicates £0.5 to £1 million annually to investigate and monitor these sites, ensuring that any significant environmental or human health risks are identified and rectified. When necessary, targeted remediation works are performed to bring the sites up to rigorous environmental compliance standards. This diligent land management practice, with clear annual targets for site assessments and remediations, is transparently communicated in NGN's Annual Environment Report and to the regulator.

In tandem with these efforts, since 2021 NGN has successfully funded the planting of 23,000 trees in urban areas within its service region, contributing to the air quality, aesthetic and ecological enhancement of urban spaces. The programme is set to gain further momentum with a goal of planting an additional 17,000 trees by 2026. The tree planting programme is a strategic effort to foster sustainable development, improve air quality, and make cities greener and more liveable.



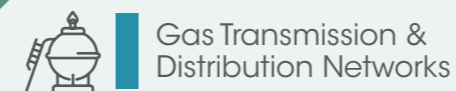
Water Utilities & Services

## Northumbrian Water

### Adaptive Biodiversity Management

Northumbrian Water's commitment to nature includes to the management of their land holdings, with about 40% of lands under conservation management. By integrating farmland into stewardship schemes, collaborating with academia and conservation groups, and engaging in cutting-edge research to protect species such as the Nightingale and Turtle Dove, the company is fostering a thriving habitat for wildlife. The successful ongoing partnership with Essex University, involving bird ringing and habitat studies, highlights the practical impact of the company's conservation efforts.

Northumbrian Water has also made significant strides in its water environment improvements programme, successfully delivering 64.8 km of enhancements and a further 33 km of improvements under planning, keeping pace with the ambitious plan to enhance 250 km by 2025. By focusing on water environment improvements and conservation management, the company ensures that its operations benefit both the community and the natural habitats that surround them.



Gas Transmission & Distribution Networks

## WWU

### Biodiversity Enhancements at Bristol

In collaboration with local ecologists, WWU is actively implementing various Biodiversity Net Gain enhancements at its Bristol Depot, which forms part of the Bristol Wildlife Network Sites. Based on an initial assessment, WWU identified significant potential for enhancing the site's biodiversity, ecosystem services, and amenity value. Extensive discussions with local planning authorities informed WWU's selection of BNG intervention options. The work is currently being executed in harmony with the natural environmental cycles of the site. It includes habitat improvements, such as managing dense scrub areas, planting native trees to create woodland habitats, establishing a thriving 100 m<sup>2</sup> wildlife pond, and preserving valuable resources like a dead wood tree for biodiversity. It also retains a mature sycamore tree and attracts aphids and predators, including ladybirds, hoverflies, and birds.



WWU's Biodiversity Net Gain enhancements aim to establish crucial wildlife corridors within a designated site network in Bristol.

# 5.4 Stewarding Water Resources

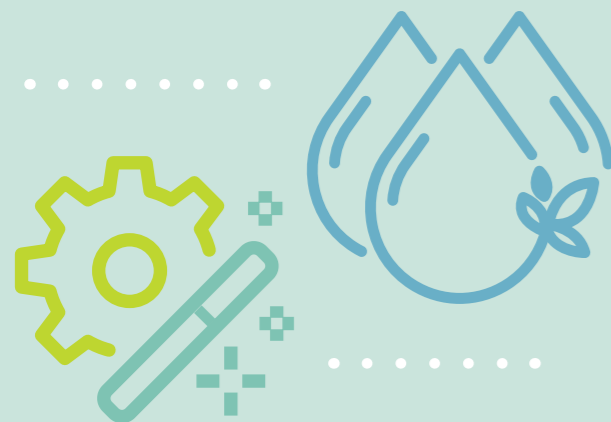


## Why It Matters

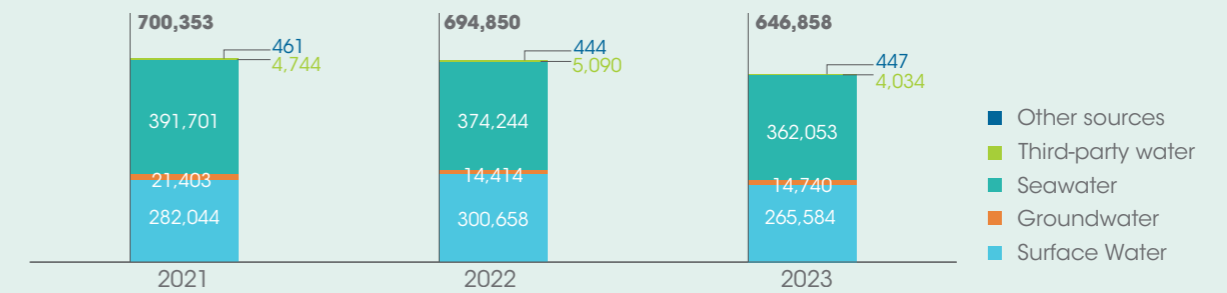
Water resources represent a pivotal axis around which the sustainability of our global operations revolves. With the dual realities of water scarcity and the increasing unpredictability of water supply due to climate change, water risk has emerged as a critical concern for businesses worldwide. Effective management of water resources, therefore, is not an optional endeavour but an imperative – one that demands meticulous planning, innovative conservation strategies, and a commitment to preserving the natural water cycle.

## Our Commitment

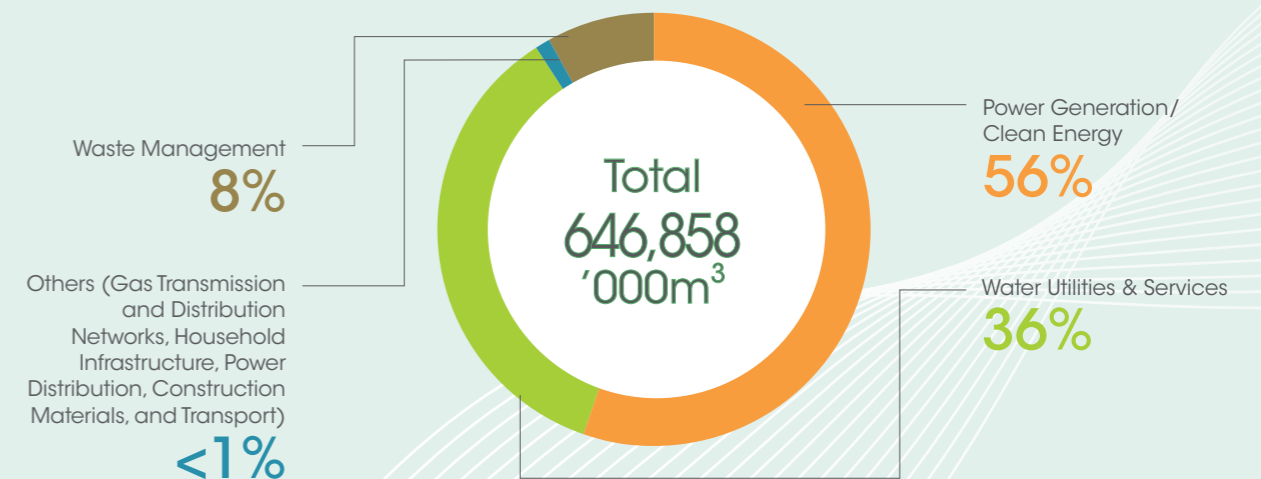
We hold steadfast to the conviction that our operations should contribute meaningfully to the global community. Central to this is our strategic approach to water management, where we consistently work to reduce our water footprint and enhance water use efficiency. Our commitment to safeguarding water resources underscores a deep-rooted dedication to water stewardship.



Water consumption ('000m<sup>3</sup>)



Water consumption breakdown by key sector





# 5.4 Stewarding Water Resources

## ▶ Our Commitment (Cont'd)

Key targets and progress		
Business Units	Details of Target	Progress
Green Island Cement	<ul style="list-style-type: none"> <li>Reduce domestic water consumption to less than 2022 level</li> </ul>	Achieved
Northumbrian Water	<ul style="list-style-type: none"> <li>Reduce water consumption of domestic customers by 5.3% per capita by 2025 as compared to 2019</li> <li>Reduce leakage by 12% and 14.1% in the north and the south respectively by 2025 as compared to 2019</li> </ul>	On track
HK Electric	<ul style="list-style-type: none"> <li>Reduce total water consumption of its key office premises by 1% in 2025 as compared to 2020</li> </ul>	On track
UKPN	<ul style="list-style-type: none"> <li>Reduce 10-15% water consumption at top 6 depots by 2028/2029 as compared to 2018/19</li> <li>Reduce 10% water consumption during the next price control period 2023-2028</li> </ul>	On track

## ▶ Our Management Approach

Committed to providing water stewardship, the Group responsibly manages this finite resource and identifies risks associated with water scarcity. Management-level oversight on environmental topics, including water use, is in place across all business units. Water scarcity is incorporated as a regular part of our risk assessments and business strategy to enable the development of water conservation plans.

## Water Use Reduction

The Group prioritises water conservation, embedding sustainable practices across all operations to ensure long-term resource stability. Each business unit actively implements targeted strategies to reduce water consumption, collectively advancing our commitment to preserving this essential resource.

### Power Distribution

## UKPN

### Enhancing Water Conservation Measures

UKPN is actively reducing water use across its operations. Offices and depots undergoing refurbishment are being fitted with water-saving devices such as push taps, sensor taps, and instant hot water taps to minimise wastage. To ensure thorough oversight, UKPN has also installed Automated Meter Readers at key sites, which enhance the accuracy and frequency of water usage reports. Regular monitoring coupled with these water reduction technologies allows for quick detection and repair of leaks. Additionally, UKPN collaborates with the appropriate water providers to receive constant flow reports, aiding in the prompt identification and resolution of any irregular water usage.

### Construction Materials

## Green Island Cement

### Water Reduction Target

Green Island Cement has set a target to reduce domestic waste consumption to below its 2022 level. To achieve this target, the company has implemented a series of measures, including the collection and reuse of rainwater and treated wastewater. These initiatives not only reduce the reliance on traditional water sources but also demonstrate the company's commitment to promoting eco-friendly practices within the construction material sector.

## Water Use Efficiency

As we chart our course towards a sustainable future, water use efficiency remains a cornerstone of our environmental strategy. Our business units are turning this vision into reality through a series of impactful and practical measures to ensure responsible water management.

# 5.4 Stewarding Water Resources

## ▶ Our Management Approach (Cont'd)

### Waste Use Efficiency (Cont'd)



## Northumbrian Water

### Water Resources Management Plan

In August 2023, Northumbrian Water unveiled its updated Water Resources Management Plan (WRMP24), which outlines the company's strategies to ensure the provision of clear drinking water from 2025 to 2050, even amidst severe drought conditions.

The WRMP24's primary objective is to balance future water demand with supply, pinpointing optimal solutions for impending challenges. A notable ambition articulated in the document is the company's commitment to a 55% reduction in network leakage by 2050, a target that resonates with customer priorities.

Northumbrian Water has evaluated a breadth of supply and demand options to formulate a preferred plan and have considered factors such as extraction limits of raw water, the implications of climate change on water demand and availability, future consumption projections, customer water efficiency initiatives, and leakage reduction. The execution of this plan will position Northumbrian Water to meet projected domestic and commercial water needs over the next 25 years and beyond.

### Water Scarcity and Water-stress Assessment 🔍

Water-stress assessments are crucial for identifying areas with potential imbalances between supply and demand. These insights are instrumental in shaping targeted and effective water management strategies across our operations, ensuring sustainable water use and security.



## HK Electric

### Review of Water Stress Risk for Lamma Power Station

HK Electric has commenced a water stress study for the Lamma Power Station. This study aims to cast a critical eye over the current water resources management practices and benchmark against industry peers.

The initiative will provide insights and actionable recommendations for HK Electric. The goal is to refine and enhance the company's existing water resources management practices.

Complementing this effort, HK Electric will continue to participate in the CDP's water security questionnaire, demonstrating its commitment to transparency and improvement in water-related disclosures.

## Wastewater Management 🏗️

The Group's wastewater management approach integrates efficient and responsible wastewater handling, with a key focus on recycling, to uphold our commitment to environmental stewards. Business units have initiated a series of wastewater management measures to ensure responsible treatment and handling of wastewater.



## Enviro NZ and Alliance Construction Materials



Alliance Construction Material's sewage treatment plant.

### Recycling and reuse of wastewater

Enviro NZ has taken proactive steps to enhance its sustainability practices by incorporating water recycling measures at its landfill sites. The company has constructed stormwater ponds designed to capture runoff, which is then repurposed for various site activities, including truck wheel washes, road cleaning, and dust suppression. Similarly, Alliance Construction Materials has installed wastewater recycling systems across all its production sites. The wastewater recycling systems allow the company to significantly cut down on freshwater usage by treating and reusing water for plant operations and truck cleaning.

Both companies exemplify how incorporating on-site wastewater treatment and recycling can lead to more efficient resource use and a reduced ecological footprint.

# 5.4 Stewarding Water Resources

## ▶ Our Management Approach (Cont'd)

### Wastewater Management (Cont'd)



## Northumbrian Water

### Tackling Pollution from Wastewater Discharge

Northumbrian Water is spearheading efforts to tackle chemical pollution through its active participation in the Strategic Steering Group's (SSG) Chemical task and finish group. Established in March 2023, the SSG is diligently working to mitigate the environmental impact of chemicals released from wastewater systems, treatment facilities, and sewage sludge. The SSG also plays a pivotal role in influencing national policy and potentially shaping future legislation aimed at controlling chemical discharges. Meanwhile, the Chemical task and finish group is divided into three focused working groups, each dedicated to scrutinising sludge treatment, the origin of chemical contaminants, and industrial effluent management, ensuring a comprehensive approach to water quality and pollution control.



Northumbrian Water participated in the SSG Chemical task and finish group to enhance sludge treatment and industrial effluent management.



# 5.5 Controlling Air Emissions

## ▶ Why It Matters

The control and reduction of air pollutants are vital to environmental and public health. These pollutants can cause respiratory and cardiovascular diseases, contribute to smog formation, and lead to acid rain, which negatively affects water quality, soil, and ecosystems. Effective management of such emissions reflects a company's commitment to reducing environmental harm and preserving air quality. Moreover, it supports regulatory compliance and underscores a dedication to sustainable operational practices.

## ▶ Our Commitment

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. 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.

### Air emissions (NO<sub>x</sub>, SO<sub>x</sub> and RSP) at the Group level

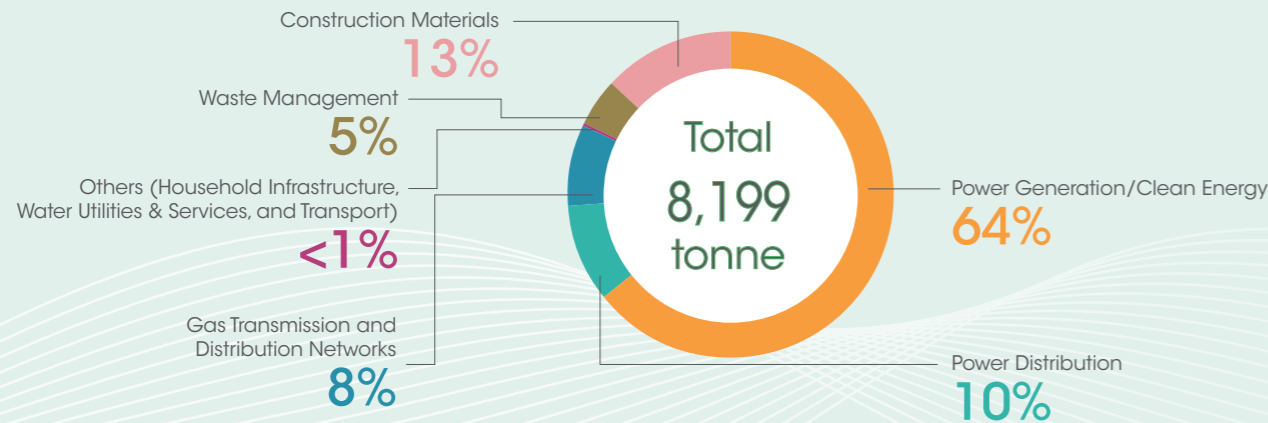


# 5.5 Controlling Air Emissions

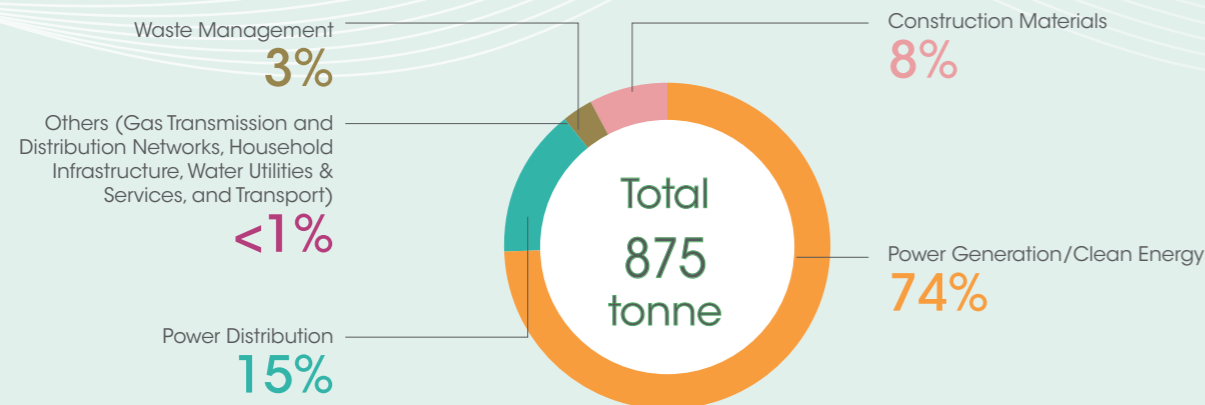
## ▶ Our Commitment (Cont'd)

Air emissions breakdown by key sector

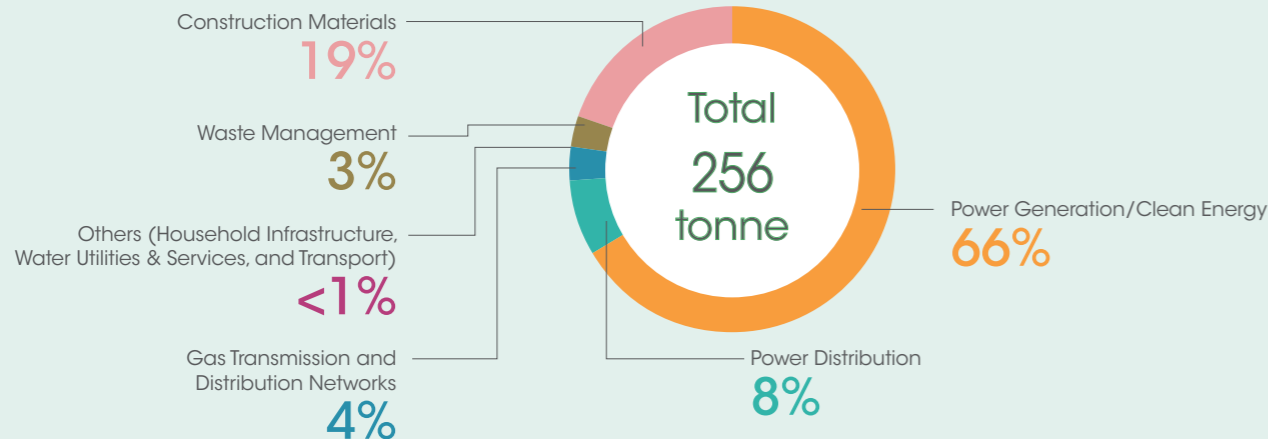
NO<sub>x</sub> Emissions by Sector



SO<sub>x</sub> Emissions by Sector



RSP Emissions by Sector



### Key targets and progress

Business Units	Details of Target	Progress
HK Electric	<ul style="list-style-type: none"> <li>Commission new gas-fired unit L12 in early 2024, with advanced emissions control technology installed for reducing NO<sub>x</sub> emissions</li> </ul>	On track
Green Island Cement	<ul style="list-style-type: none"> <li>Reduce 16.7% of NO<sub>x</sub> emissions (approx. 450 mg/Nm<sup>3</sup>) by 2023 compared to 2019</li> </ul>	Achieved
UKPN	<ul style="list-style-type: none"> <li>Reduce 33% of NO<sub>x</sub> emissions between 2023/24 and 2028/29</li> </ul>	On track

## ▶ Our Management Approach

The Group's management approach to air emissions control and reduction is characterised by a commitment to progressive strategies across its diverse business units. With a clear focus on minimising environmental impact, the Group is actively supporting its business units in implementing emission-reducing technologies and transitioning to cleaner energy sources. By setting specific air emission reduction targets and investing in advanced emissions control systems, the Group is actively contributing to a healthier environment.

### Emissions Reduction

 Power Generation/Clean Energy

## HK Electric

### Promoting Cleaner Energy Generation

HK Electric has implemented various measures to promote cleaner energy generation, including using cleaner fuels such as natural gas and low-sulphur coal with lower ash content. It has also employed emission reduction facilities such as flue gas desulphurisation plants, low-nitrogen-oxide burner systems, and a selective catalytic reduction system. In particular, the selective catalytic reduction system is expected to reduce 90% of NO<sub>x</sub> emissions from gas-fired units.

## 5.5 Controlling Air Emissions

### ▶ Our Management Approach (Cont'd)

#### Emissions Reduction (Cont'd)



## Green Island Cement

### Proactive Emissions Reduction Strategy

Green Island Cement has been proactive in its efforts to reduce air emissions, setting a target to lower NO<sub>x</sub> emissions by 16.7% from the 2019 baseline by 2023. To this end, the company equipped its facilities with low NO<sub>x</sub> burners and a Selective Non-Catalytic Reduction (SNCR) de-NO<sub>x</sub> system in early 2022, aiming to minimise NO<sub>x</sub> formation effectively.

The company has also implemented new continuous emission monitoring system for diligent monitoring and control of PM emissions.

Moreover, in response to new government regulations regarding particulate matter, the company has ensured the full functionality of its electrostatic precipitator, a key component in capturing and removing particulate emissions.



## UKPN

### Minimising air pollution by fleet transition

UKPN is actively engaged in minimising the environmental impact of its operations, particularly in regard to emissions from its power generators. The primary sources of nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM) within the fleet are vehicles and temporary generators, through the combustion of diesel. Throughout the year, UKPN has initiated trials with hybrid diesel-battery generators, which are capable of substantially reducing emissions when compared to conventional diesel generators.

In parallel, for its light commercial vehicles, UKPN is piloting electric vehicles (EVs), with intentions to deploy up to 30 EVs and potentially scaling up to 100 EVs. For the suitable heavy-duty vehicles in their fleet, UKPN is evaluating the use of renewable hydrotreated vegetable oil (HVO) fuel, which could significantly reduce PM emissions.

## 5.6 Regulatory Compliance

## Regulatory Compliance

To ensure that operations across all business units comply with relevant laws and regulations, the Group has established policies and mechanisms to hold individuals accountable. The management is dedicated to staying abreast of the latest regulatory developments and provides training to relevant staff members as needed. We also allocate resources to ensure effective monitoring and detection measures to track regulatory compliance.

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



# Social

We strive to create a safe and rewarding workplace for our employees while leveraging our extensive influence to make a positive difference in society. We hold our connections with employees, customers and communities, and we are dedicated to making a positive impact on society.

We ensure the protection of our employees' rights by fostering strong relationships, promoting human rights, and maintaining a healthy and safe work environment. Moreover, we actively participate in supporting and enhancing the communities in which we operate by attentively listening to their needs and advocating on their behalf.

Recognising the significant importance of achieving a "Just Transition" for the workforce and creating good quality employment opportunities, the Group understands the need to ensure that the shift towards a green economy benefits both the environment and society as a whole. As we continue on our path towards decarbonisation, we are dedicated to improving social well-being through various initiatives that prioritise the protection of human rights throughout our entire value chain.



The triumphant Wales and West Utilities cricket team celebrate their win over National Grid.

# 6.1



## Empowering Employees in the Workplace

### ▶ Why It Matters

Given the extensive scope of our operations, a skilled workforce is essential to delivering our goods and services. In recent years, the rapid growth of the utilities industry has generated a need for IT and data analytics experts who can drive grid modernisation. The potential risks of higher turnover associated with rehiring costs, knowledge loss, and insufficient training and career development pose challenges in attracting and retaining top talent.

According to International Labour Organisation (“ILO”) report on Transforming Enterprises Through Diversity and Inclusion, a more diverse workforce, supported by inclusive cultures, has the potential not only to increase the productivity and performance of individual enterprises but also to contribute to increasing the annual global income growth rate and overcome global talent shortages.

Together with the increasing participation of women in the utilities sector, prioritising diversity and inclusion and advocating for workplace flexibility will be key to enhancing the industry’s ability to meet its workforce requirements and foster a more engaged and diverse team.

Ensuring  
**employee motivation**  
 — is crucial for  
 for the long-term success of the Group’s business.



### ▶ Our Commitment

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, adaptability to change 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.



of employee received training



Training hours per employee



of women in the full-time employee

## ▶ Our Commitment (Cont'd)

Key targets and progress		
Business Units	Details of Target	Progress
EDL	<ul style="list-style-type: none"> <li>25% female in employment across workforce</li> </ul>	Achieved
NGN	<ul style="list-style-type: none"> <li>Gather and report workforce diversity data and produce baseline by 2026</li> </ul>	On track
	<ul style="list-style-type: none"> <li>Focus recruitment methods to encourage applications from diverse background</li> </ul>	On track
	<ul style="list-style-type: none"> <li>Embed effective Colleague Communities and provide executive level support</li> </ul>	On track
Northumbrian Water	<ul style="list-style-type: none"> <li>Reduce gender pay gap to under 7% by 2025</li> </ul>	On track, reduced to 10.5% in 2023
United Energy	<ul style="list-style-type: none"> <li>27% female in employment across the workforce by 2026</li> <li>15% female in management roles by 2026</li> </ul>	On track, female in employment and management roles are 27% and 17% respectively by 2023
VPN	<ul style="list-style-type: none"> <li>25% female in employment across the workforce by 2026</li> <li>22% female in management roles by 2026</li> </ul>	On track, female in employment and management roles are 22% and 23% respectively by 2023
Wellington Electricity	<ul style="list-style-type: none"> <li>Achieve 50:50 gender balance across the business for new employees where possible by Q1 2024</li> </ul>	On track

Awards & Recognitions	
Green Island Cement and Anderson Asphalt	<ul style="list-style-type: none"> <li>Good MPF Employer 5+ &amp; Best All-round Good MPF</li> <li>Caring Company Award 2023-2024</li> <li>Manpower Development Award</li> <li>Happy Company 2023</li> <li>Heart to Heart Company</li> </ul>
Northumbrian Water	<ul style="list-style-type: none"> <li>World's Most Ethical Companies List/accreditation</li> <li>Great Place to Work accreditation</li> <li>Good Business Charter accreditation</li> </ul>
Reliance Home Comfort	<ul style="list-style-type: none"> <li>Top 10 Most Admired Corporate Cultures Award</li> </ul>

## ▶ Our Management Approach

The Group strives to foster a nurturing and empowering workplace that inspires our employees to achieve their utmost potential.

We are committed to offering equal and fair employment and cultivating a workplace environment that promotes respect and inclusivity. Our recruitment process adheres to the strictest guidelines on equal opportunity, and we are committed to providing a work environment that is free from all forms of discrimination on the basis of race, ethnicity, sex, religion, age, and disability. We also enforce anti-discrimination measures in our business operations to respect and promote diversity and inclusion.

To encourage a broader understanding of diversity within our business operations, the Group has established a Diversity Committee comprised of representatives from diverse business units. This committee acts as a liaison, fostering communication and promoting a deeper understanding of diversity among our workforces.

In addition to ensuring equitable employment opportunities, we have implemented a well-structured performance review process and allocated substantial resources to different training initiatives, laying the groundwork for constructive and enduring employee relations. Our employee performance review process encourages two-way feedback and connects our employees' compensation with individual goals and business objectives. Furthermore, we embrace diverse talents and actively engage in recruitment activities, including campus recruitment and apprenticeship programmes, to attract and gather exceptional individuals worldwide.

In order to foster employee engagement and enhance their work performance, the Group prioritises understanding the needs and concerns of our workforce. We achieve this by implementing flexible working arrangements, such as working from home, working flexible hours and part-time working options, for applicable employees across the whole Group, offering flexible benefits schemes and providing various effective communication channels to shape a work environment that encourages employee engagement and inspires their work performance.

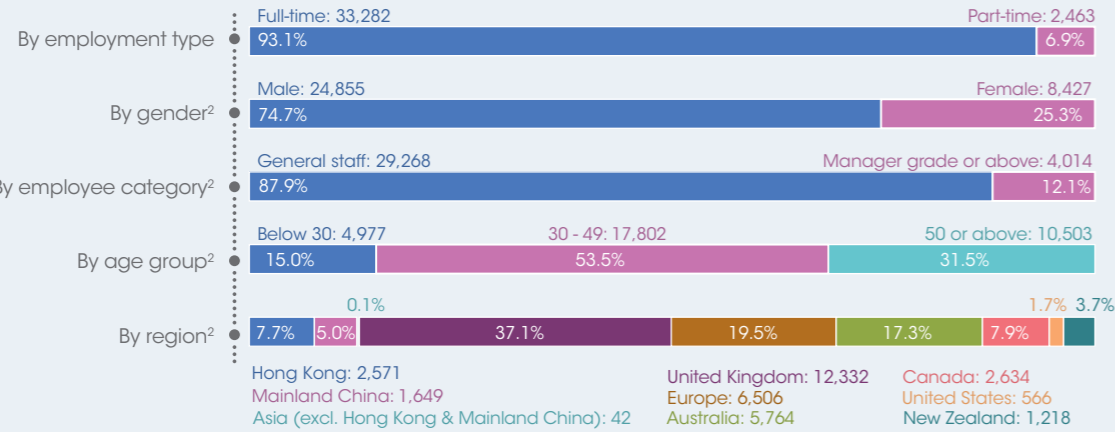
The Group also regularly assesses and reviews our initiatives for developing human capital to ensure they align with our employees' expectations and requirements while positively impacting the company. Moreover, we make substantial investments in our workforce through comprehensive training and development programmes, mentorship opportunities, and career advancement opportunities, aiming to cultivate a highly skilled and motivated team.

By taking a comprehensive approach to human capital development, we strive to attract and retain the best talent while empowering our employees with the expertise and capabilities necessary to propel the company's growth in a dynamic and constantly changing environment.



## Our Management Approach (Cont'd)

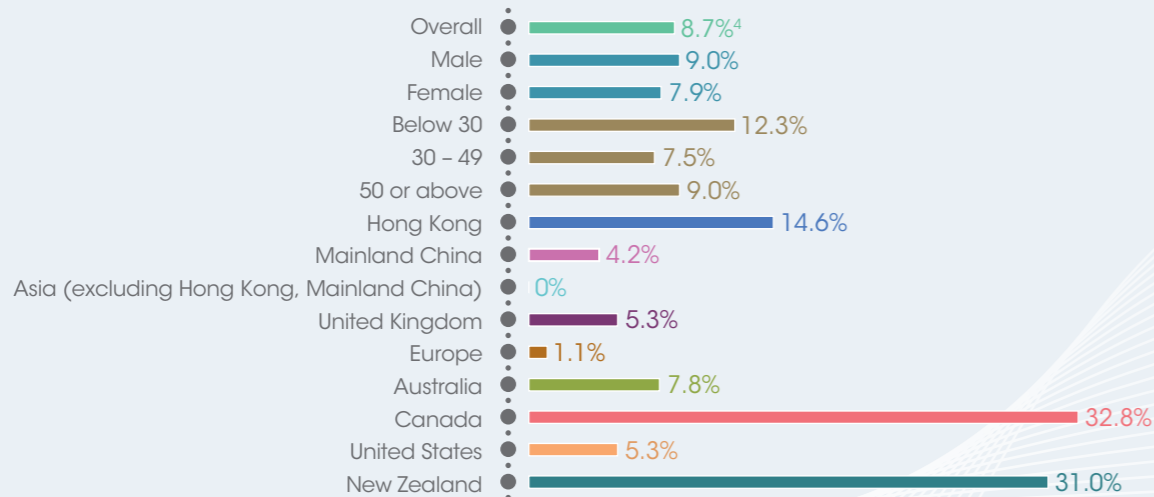
### Employee Profile<sup>1</sup>



Notes:

- (1) In-scope entities only; while Canadian Midstream Assets is excluded, as all the employees are outsourced from Cenovus Energy
- (2) Full-time employees only

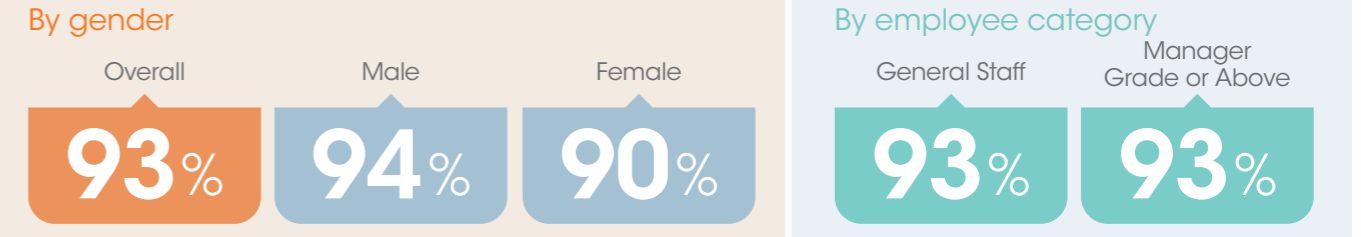
### Employee Turnover<sup>3</sup>



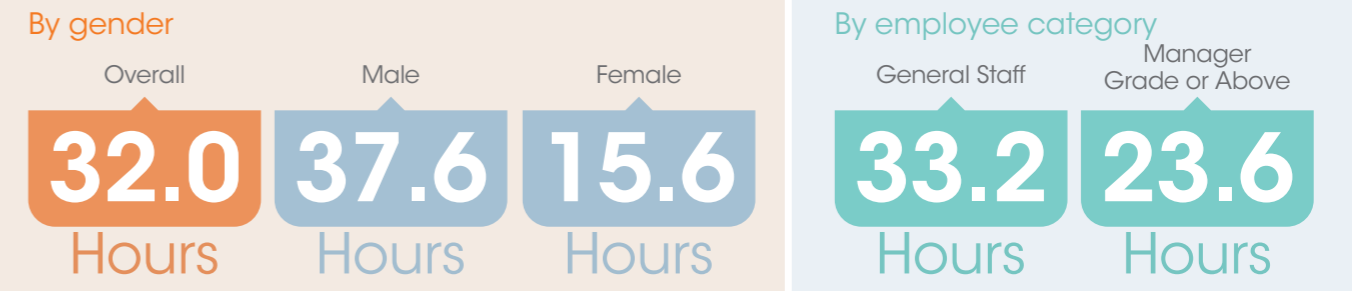
Notes:

- (3) 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%".
- (4) Among the overall employee turnover, 6.8% represented voluntary employee turnover. Voluntary employee turnover refers to the proportion of employees who choose to leave an organisation, such as resignation, retirement, or early retirement.

### Percentage of full-time employees who received training<sup>5</sup>



### Average hours of training per full-time employee



Note:

- (5) 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 year and then multiplied by 100%". The percentage of employees who received trainings may exceed 100%.

## Recruiting and Retaining Diverse Talent

The Group's ability to sustain its competitive position and effectively implement its business strategy largely depends on its ability to attract and retain top talent. We actively collaborate with schools and universities and have implemented diverse recruitment programmes to attract the right talent. The Group also conducts employee engagement surveys to better understand our employees' needs and foster a workplace that promotes talent retention.

### United Energy and VPN

#### Offering a Diverse Pathway for Talented Individuals

United Energy and VPN have been offering the University Graduate Programme annually, a comprehensive three-year programme offering a high level of support, skills and development and career advancement. During the year, United Energy and VPN successfully recruited a total of 14 graduates from different majors, such as engineering and information technology.



United Energy and VPN organised the University Graduate Programme to attract top talent.

# 6.1 Empowering Employees in the Workplace

## ▶ Our Management Approach (Cont'd)

### Recruiting and Retaining Diverse Talent (Cont'd)



ista is currently planning and preparing to implement a New Employer Branding Campaign, which involves the collaborative efforts of the marketing and human resources departments. The campaign is scheduled to be launched in 2023 with the objective to enhance the organisation's brand image and attract top talent.

## EDL and ista

### Enhancing Talent Acquisition Procedure and Brand Image

Throughout the year, EDL enhanced recruitment procedures through the engagement of an external service provider with expertise in talent acquisition and ongoing collaboration with WORK180. This strategic choice was prompted by the surge in EDL recruitment and temporary resource shortages in 2023 and female employment targets. As a result of the improved recruitment procedures, EDL alleviated the strain on internal resources and achieved the target of 25% female in employment across workforce.

## Northumbrian Water and SA Power Networks

### Providing Apprenticeship and Internship Opportunities

Northumbrian Water has partnered with an external provider to establish a robust apprenticeship programme with the primary objective of enriching the skills and capabilities of its employees. The programme encompasses apprenticeships in various fields, including customer service, digital and wastewater operation. It also includes a series of internal and external workshops covering essential topics such as teamwork and communication.

SA Power Networks provides a Summer Vacation Programme for engineering students, a 12-week paid internship programme, for undergraduates studying for a degree in engineering subjects. The Programme is designed to provide invaluable hands-on experience, allowing students to put their theoretical knowledge into practice alongside industry experts. The SA Power Networks Graduate Development Programme provides the opportunity to put theory into practice and supports the transition from university to full-time employment. It includes employment opportunities within the organisation's engineering, asset management, information technology, strategy, innovation and telecommunications departments. Moreover, its apprenticeship programme includes both on and off-the-job training at a dedicated Training Centre. In recognition of its efforts to invest in the next generation, SA Power Networks has been recognised as one of the top employers in Australia by the Australian Association of Graduate Employers 2023 Top 50 Intern Programs.

### Initiatives from other business units:

#### EDL

Ongoing apprenticeship program to attract young people from related academic backgrounds

#### NGN

Annual Apprentices Campaign to offer external candidates the opportunity to join the organisation

#### UKPN

Annual intake of Level 3 Power Network Crafts Person Apprenticeship



## EDL and Reliance Home Comfort

### Investing in Leaders for Greater Future

EDL worked with an external mentoring provider to organise the IGNITE programme, a global training programme focusing on talent development. The programme covers four training sections, including personal coaching and leadership training on communications, with 48 emerging leaders from around the world attending in the past four years. Furthermore, EDL also partnered with an external consultant to organise the Breaking Ground training, which focuses on global frontline leadership development to cover topics such as difficult conversations and behaviour management skills, with the aim of preparing its frontline employees for their future leading roles.

Reliance Home Comfort has launched the ASPIRE programme, which aims to provide its high-performing team members with a unique opportunity to actively pursue management role within the organisation. It is a 12–14-month programme designed to support its qualified team members in reaching their full potential as they aspire to step into future leadership positions. In addition to this, Reliance Home Comfort has two additional programs to support the development of its team members. Firstly, the new Employer Brand (Find your limitless) was implemented to engage existing team members to develop their careers at Reliance Home Comfort and to attract new potential team members, which has proven to be a huge success. Secondly, the Reliance Excellence Leadership program was developed for all managers and directors to embrace and develop skills to enhance both personal, team, and organisational performance overall.

### Initiatives from other business units:

#### UKPN

Leadership Academy for Level 3 and Level 5 leadership and management qualifications



#### VPN

Mid-Senior level talent management pipeline strategy-Identify key talents to provide tailored individual development plans to suit their career prospects and prepare for succession management

#### Northumbrian Water

Aspiring Managers Programme – An ongoing programme for internal colleagues to improve line management capability and overall business performance

#### WWU

Management Development programme – A 2 days training held twice yearly for all newly promoted and externally recruited managers to attend, with materials covering unconscious bias and D&I conversations

# 6.1 Empowering Employees in the Workplace

## ▶ Our Management Approach (Cont'd)

### Fostering a Culture of Continuous Learning

The Group recognises the importance of training and development in fostering employee performance and driving sustainable business growth. We are unwavering in our commitment to being an outstanding employer that values employee development and endeavours to equip all employees with the necessary qualifications and comprehensive training relevant to their respective roles.

## UKPN

### Supporting Colleagues to Obtain Additional Professional Qualifications

Through its Supported Studies programme, UKPN has provided funding for its employees to pursue professional qualifications such as electrical engineering and accounting qualifications. It collaborates with external professional qualification providers to ensure its employees access high-quality education and training. The funding is allocated annually, covering courses from September to July.

## CKI, AGIG and EDL

### Launching Online Learning Platform

In order to equip employees with sustainability-related knowledge at the head office, CKI introduced the ESG training course "Sustainability Essentials for Business" for all colleagues to participate in. The 8-modules online training provided a handful materials on business sustainability, from which colleagues have acquired comprehensive understanding of current ESG pressures on business as well as working plans to integrate sustainability across the CKI group.

In August 2023, AGIG introduced an online learning platform to provide comprehensive professional and personal development training to their entire workforce. With an extensive catalogue of over 9,000 courses, the platform offers employees unlimited access to enhance and refine their professional skills.

During the year, EDL organised the Switch On training programme for all employees and embedded contractors. The interactive sessions, developed by a third-party training provider and facilitated by EDL's Champions, demonstrated to the participants the importance of considering the broader implications of not being focused, slowing down thinking processes and ensuring concentration on the task at hand.

## Wellington Electricity

### Enhancing Employees' Sustainability Awareness

Wellington Electricity implemented an ESG training module for its employees in June 2023. The training module centered on diverse facets of sustainability, aiming to enhance awareness and foster employee comprehension. Participants were educated on the various elements of sustainability, including its advantages and the actions that can be undertaken to prioritise sustainability. A minimum passing grade of 80% was required to complete the course, and the questions were altered for each subsequent attempt. This approach aimed to enhance the staff's knowledge and awareness of sustainability-related matters.

### Initiatives from other business units:

#### UKPN

Online sustainability awareness training course for UKPN staff and contractors made available at the end of 2023

#### WWU

E-learning module "Working with Our Sustainability Strategy" introduced in September 2023

#### Northumbrian Water

Leadership Conference annually organised in November to increase understanding with the business around sustainability activities

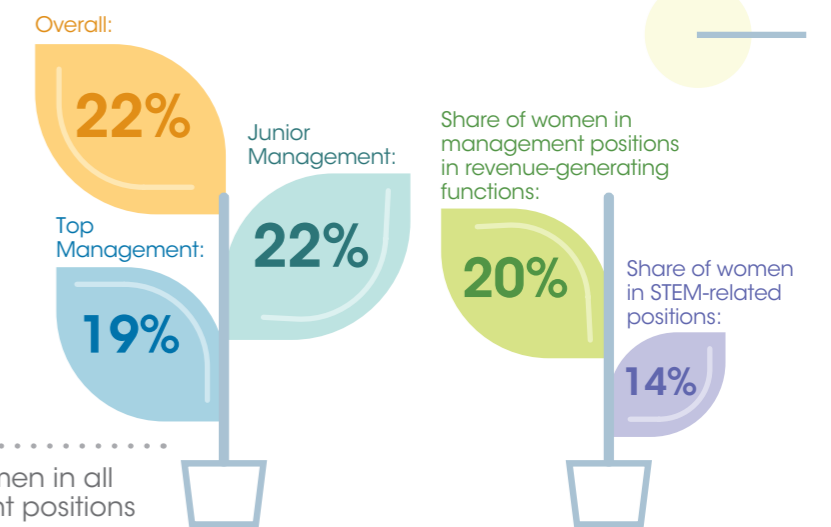
#### VPN

"Our Approach to ESG" e-learning module with content developed internally on ESG topics

### Promoting Diversity and Equal Opportunities

#### Diversity Indicator

The Group is fully dedicated to workplace diversity and strives to create a positive and productive environment free from harassment and discrimination. We actively encourage employee participation in campaigns and network groups that promote inclusivity and gender diversity, such as providing a supportive work environment for our female workforce.



## ▶ Our Management Approach (Cont'd)

### Promoting Diversity and Equal Opportunities (Cont'd)

## AGIG, Northumbrian Water and SA Power Networks



AGIG has implemented various initiatives aimed at fostering gender diversity and creating an inclusive and supportive environment for its employees.

### Fostering a more diverse workplace

In 2023, AGIG was recognised by the Diversity Council of Australia as an Inclusive Employer for 2023-2024. To be eligible as an Inclusive Employer, organisations must show that they are active and committed to inclusion by achieving results that exceed the Australian National Index Benchmark in at least five of the six measures.

The HR department of Northumbrian Water has developed the TIDE Strategy, which stands for "Together for Inclusion, Diversity, and Equity". This strategy outlines its commitment to building a diverse and inclusive workplace and specific targets are

established for each area of diversity. All its employees are expected to actively participate in and support the implementation of this strategy, in which monthly campaign and network group meetings are organised to promote a diverse and equitable workplace.



Northumbrian Water's Women in STEM (WiSTEM) meet on a regular basis to help support and promote opportunities and collaboration.

After launching the SA Power Networks 2022-2025 Inclusion and Diversity (I&D) Strategy and Action Plan last year, the focus in 2023 was to continue the acceleration of its I&D activities. SA Power Networks has a number of activities and initiatives underway or completed in its business that all contribute to inclusion at work, including:

- Implementing gender-diverse interview panels
- Incorporating inclusion as a specific topic in our leadership development programmes
- Conducting field service gender equity workshops
- Designating parent-friendly rooms
- Analysing the internal gender pay gap to ensure inequities are eliminated
- Lodging an inaugural Reconciliation Action Plan with Reconciliation Australia
- Creating a Respect at Work Directive and launching training for all employees.

Throughout the year SA Power Networks celebrated, recognised and contributed sponsorship to a large number of significant dates and events as part of the inclusion and diversity calendar, covering the breadth of I&D issues including mental health, disability, discrimination, identity/gender, LGBTQI+, culture, and social issues.

## UKPN and Wellington Electricity

### Promoting Workplace Gender Diversity

UKPN is committed to promoting gender diversity in engineering and announced several initiatives to empower and support women in this sector. One of these initiatives was partnering with Essex County Council to encourage more young women to consider engineering careers. The event featured an all-female panel of UKPN engineers who inspired and motivated the next generation of female engineers. Additionally, UKPN launched a female engineers development group to address female engineers' specific needs and challenges. This group works towards developing strategies and initiatives to ensure personal and professional growth for women in the company. To further demonstrate its commitment, UKPN has extended its maternity pay and provided its employees with a parental allyship webinar. These efforts demonstrate its dedication to fostering gender diversity and cultivating an inclusive and supportive environment for female employees.

Wellington Electricity prioritises gender diversity in the workplace and is deeply committed to achieving a balanced representation of both genders among its new employees by the first quarter of 2024. In line with this commitment, Wellington Electricity actively collaborates with external recruitment agencies to implement progressive measures to expand the pool of prospective candidates. One such initiative involves utilising employment-focused social media platforms to engage with female-focused groups and forums.

# 6.1 Empowering Employees in the Workplace

## ▶ Our Management Approach (Cont'd)

### Elevating Employees Well-being

The Group strongly prioritises our employees' well-being, as we recognise their pivotal role in fortifying our long-term success. Throughout the year, we have proactively implemented various programmes and initiatives to cultivate a culture of care and support within our organisation.

## AGIG, ista and Seabank Power

### Providing Employee Benefits Package and Initiatives

In December 2023, the Executive Leadership team of AGIG, in collaboration with their People, Safety, and Culture department, implemented an employee benefits package across their organisations. This initiative offered its employees opportunities to maximise their remuneration packages by selecting salary sacrifice options that suited their needs and preferences, such as education courses. It was made available to all employees, ensuring a consistent and inclusive approach to enhancing their overall compensation.

The ista Family Service, in collaboration with an external provider, offers support and information on child day care, school holiday care and nursing care for its employees and their close relatives. Moreover, ista and Seabank Power also provide their employees an allowance for fitness centre memberships to promote a healthy lifestyle.

## NGN, United Energy and VPN

### Fostering Work-life balance Through Flexible Working Policy

NGN values its employees and prioritises promoting work-life balance within the workforce. It has established several policies to enhance its employees' well-being. For example, the Flexible Working Policy is designed to offer its employees flexible working patterns and various family-family initiatives such as maternity and parental leaves are implemented, allowing its employees to apply for additional leave for and absences from work in emergencies or family commitments.

United Energy and VPN have also implemented a Flexible Working Arrangements Policy that fosters a flexible culture and recognises the value of work-life balance. The policy encourages managers to collaborate with employees to establish mutually beneficial flexible working arrangements.

These arrangements encompass a range of options, including flexible working hours, work location, part-time working options and compressed work weeks.



## 6.2

# Maintaining a Safe and Healthy Environment for All

## ▶ Why It Matters

Considering the diverse sectors within which the Group operates, our employees and contractors may be exposed to various health and safety risks. According to the Global Risk Report 2023 published by the World Economic Forum, the post-COVID-19 condition is impacting the occupational status of individuals, contributing to work absences, early retirements, tighter labour markets and a decline in economic activity.

Inadequate safety measures can substantially impact a company's business, including increased operational costs and potential harm to its reputation due to an increased probability of work-related incidents, injuries, illnesses, and fatalities. We are also aware of the potential risks of mismanagement, including those that may arise from inadequately maintained equipment or preventable human errors. Therefore, prioritising health and safety is crucial as proper health and safety measures can avoid most of our operation-associated risks.

## ▶ Our Commitment

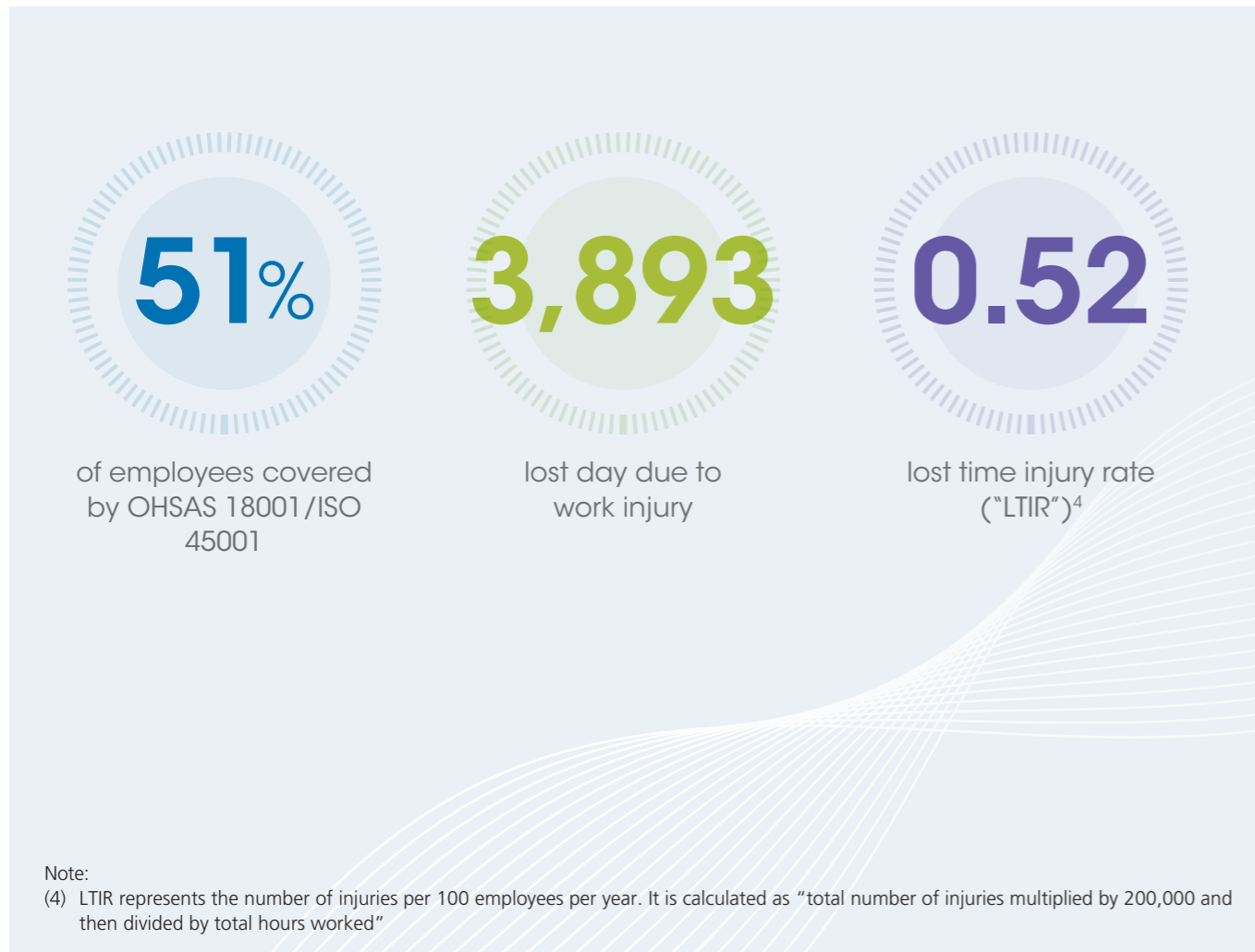
The Group understands that maintaining a safe and healthy work environment is not only a legal requirement, but also a moral obligation. We are dedicated to attaining the most exceptional standards in health and safety throughout our business operation and firmly believe that every employee, contractor and visitor has the right to work in a safe and healthy environment. The Group is firmly committed to promoting health and safety across our operations and consistently strives to improve and monitor the health and safety mechanisms within our business activities. We make every effort to provide our employees, contractors, customers and other stakeholders with a safe and healthy environment when they are at the Group's facilities and premises.

Our top management commitment to health and safety is clearly outlined in the Group's Health and Safety Policy, which provides the framework and sets out minimum requirements on health and safety that each Group business unit shall adopt, subject always to the applicable legal requirement. As stated in our Health and Safety Policy, we are committed to:

# 6.2 Maintaining a Safe and Healthy Environment for All

## ▶ Our Commitment (Cont'd)

- 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 and development 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 this Policy; and
- enforcing the implementation of this Policy with regular reviews and internal audits.



Key targets and progress		
Business Units	Details of Target	Progress
NGN	<ul style="list-style-type: none"> <li>• Deliver mental health training for all colleagues by 2026</li> <li>• Launch a Supplier Code of Conduct which embeds sustainability and achieve 80% of supply chain compliance with the code by 2026, and 100% compliance of contracted suppliers by 2030</li> </ul>	<p>On track</p> <p>On track</p>
United Energy	<ul style="list-style-type: none"> <li>• Achieve 75% employee satisfaction in wellbeing and mental health section of Employee Opinion Survey (EOS) by 2026</li> <li>• Achieve 75% for Inclusion and Diversity index outcomes in Employee Opinion Survey by 2026</li> </ul>	Achieved in 2023 86% employee satisfaction in wellbeing (EOS) and mental health and 89% for Inclusion and Diversity index outcomes
VPN	<ul style="list-style-type: none"> <li>• Achieve 75% employee satisfaction in wellbeing and mental health section of Employee Opinion Survey (EOS) by 2026</li> <li>• Achieve 75% for Inclusion and Diversity index outcomes in Employee Opinion Survey by 2026</li> </ul>	Achieved in 2023 83% employee satisfaction in wellbeing and mental health and 86% for Inclusion and Diversity index outcomes

Awards & Recognitions	
Green Island Cement	<ul style="list-style-type: none"> <li>• OSHC Safety Performance Award</li> <li>• OSH Annual Report Award – Merit Award</li> <li>• "Joyful@Healthy Workplace" Best Practice Award &amp; Mental Health Friendly Organisation Award – Bronze</li> <li>• The Heart Caring Charter</li> <li>• HK Smoke-Free Award</li> </ul>
Alliance Construction Material	<ul style="list-style-type: none"> <li>• OSHC Safety Performance Award</li> <li>• HKCA Proactive Safety Contractor Award</li> </ul>

# 6.2 Maintaining a Safe and Healthy Environment for All

## ▶ Our Management Approach

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 Management Systems ("HSMS") to maintain health and safety working conditions beyond mere regulations. Throughout the year, internal and external audit programmes are conducted across different business units to facilitate continuous improvement and protect our stakeholders from harm.

We also leverage Health and Safety Committees to effectively manage and oversee risk assessments for their respective operations, and they play a crucial role in monitoring and addressing work-related injury risks. Furthermore, we provide role-specific and safety awareness training to improve our employees' health and safety knowledge and understanding.

In addition to demonstrating a solid commitment to the safety of our employees, the Group also strives to ensure safety of our contractors within our operations.

We employ different mechanisms, such as pre-screening contractors based on their safety performance, requiring contractors to comply with baseline health and safety policies and only partnering with approved contractors who demonstrate good health and safety performance in order to further bolster safety performances within the Group. Various trainings and forums are also organised by the Group to ensure all contractors are well-informed about our safety policies and requirements.

Considering the various sectors within the Group's operation, our employees and contractors are exposed to different health and safety risks that could be mitigated through proper management. For example, NGN ensures strict compliance with the regulatory body requirements in the United Kingdom to minimise health issues related to the use of vibratory tools, considering that their employees may be exposed to hand-arm vibrations in their daily work.

The Group places great importance on the well-being of our employees and adopts a holistic approach to address and support their wellness and mental health. Throughout the year, we have taken several steps to support the wellness of our employees. This includes distributing a quarterly well-being newsletter internally and implementing internal wellness-related platforms in specific business units to uphold our employees' health and wellness.

### Health and Safety Risk Assessment

The Group recognises that effective risk management is crucial to maintaining a safe working environment. Therefore, we conduct regular internal and external risk assessments across our operation to identify potential hazards, evaluate associated risks and implement appropriate control measures to mitigate any identified risks.

The training covers various topics, including emerging health and safety-related trends, occupational health, and emergency rescue.

## EDL and VPN

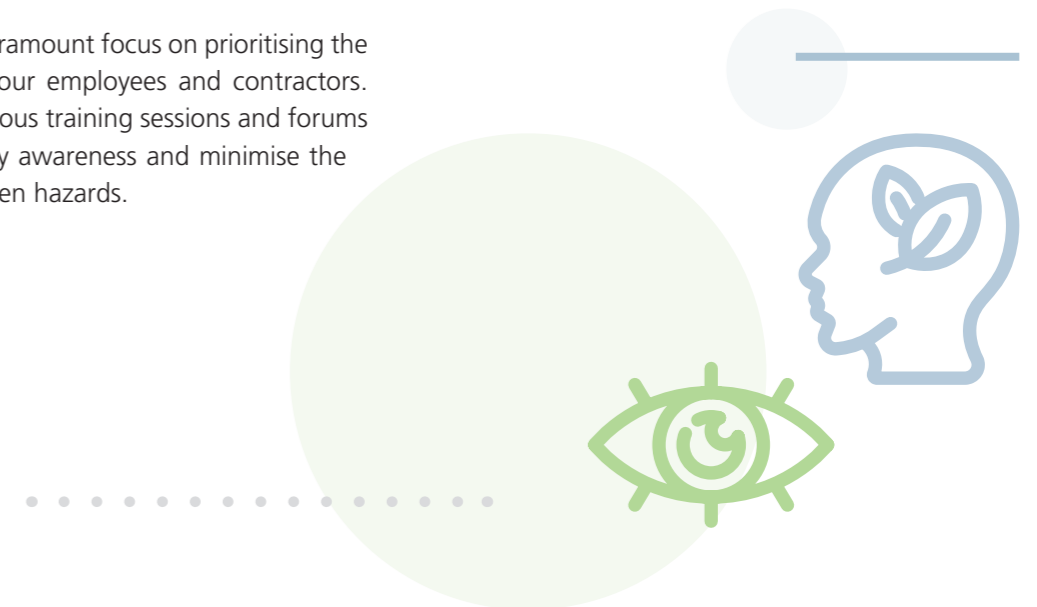
### Regular Risk Assessments through Internal and External Audits

During the year, the global EDL workforce completed internal health and safety audits on its health and management system by desktop research and site-based audits to set minimum requirements for its business operation to adhere to. Its owned and controlled sites are also subject to several external audits on an annual basis, and the type and frequency of audits depend on the location of the site and the relevant jurisdiction. For example, its Broome Gas Pipeline is subject to the Western Australia Department of Mines Industry Regulation and Safety Annual Audit.

To safeguard the health and safety of its operations, VPN undertakes external audits every six months to certify and monitor compliance with ISO 45001 standards. These external health and safety audits are conducted over a three-year period and cover all aspects of VPN's business operations to confirm consistency with best practices and legal requirements.

### Health and Safety Training and Education for Employee and Contractor

The Group places a paramount focus on prioritising the health and safety of our employees and contractors. We have provided various training sessions and forums to increase their safety awareness and minimise the risk of workplace hidden hazards.



# 6.2 Maintaining a Safe and Healthy Environment for All

## ▶ Our Management Approach (Cont'd)

### Health and Safety Training and Education for Employee and Contractor (Cont'd)

## HK Electric, Reliance Home Comfort and Seabank Power

### Employee Training

During the year, HK Electric organised various health and safety training to promote and enhance its employees' health and safety awareness. These included the Health and Safety Forum – "Safety, in an attitude", the safety talk – "Safety, my responsibilities! Let's do it together", and different training programmes such as a web-based training on its Safety Management System illustrated with an animation video, two webinars on "Manual Handling Operations and Prevention of Back Injuries" and "Work and Cardiovascular and Cerebrovascular Diseases" respectively, safety training in demolition works and fire safety ambassador training. It also participated in the "Life First – Walk the Talk 2023" campaign introduced by the Construction Industry Council to enhance safety awareness in the construction industry and raise site health and safety standards.



HK Electric participated in the "Life First – Walk the Talk 2023" campaign.



HK Electric's employees participated in health and safety training aimed at promoting and enhancing their awareness of health and safety practices.

Reliance Home Comfort collaborated with third-party vendors and various branches to organise Health and Safety Days. These events, held in April and December 2023, aimed to raise awareness of occupational health and safety within the workforce. Videos highlighting safety measures and winter driving practices were shared during these events. The successful execution of these initiatives fostered effective team communication and ensured that employees were aware and actively involved in maintaining a safe and healthy workplace. In addition to this, Reliance Home Comfort is actively working on being Workplace Safety and Insurance Board (WSIB) certified.

Seabank Power's intranet-based training database comprises a comprehensive collection of health and safety courses that are mandatory for each employee to complete. These courses encompass various topics, including standard modules applicable to all employees, such as display screen equipment use, and specific courses designed for individual employees, such as confined space working. All employees must complete their assigned courses within the designated calendar year to uphold a productive and healthy workplace.

## HK Electric, United Energy and Wellington Electricity

### Contractor Training

HK Electric's site safety supervision training takes place regularly to ensure the highest health and safety standards. This comprehensive training programme involves HK Electric and the contractors' wardens and operatives associated with the organisation. By including contractors in the training, HK Electric ensures that all individuals working on their projects could have a deep understanding of and commitment to maintaining the highest health and safety standards.



Wellington Electricity's contractors attended the safety breakfast to prioritise health and safety and strengthen a proactive safety culture.

United Energy provides its contractors with the Victorian Electricity Supply Industry ("VESI") skills and training, serving as a fundamental component of its well-established safety systems. This training offers in-depth guidance on vital competencies, which helps adherence to work standards and fostering a deeper understanding of contemporary safety practices. For example, it includes specifications for minimum qualifications, competency assessments, and refresher training requirements for accessing the VESI Electrical Networks.

Wellington Electricity organised two consecutive contractor safety breakfasts in April 2023, aiming to share health and safety improvements and highlighting the outstanding safety performance of its field contractors. It also provided safety, health, and security bulletins and industry learning to all its contractors and conducted site safety visits to further enhance their health and safety awareness.

### Investing in Our Employees' Health and Wellness



We seek to protect our employees' health and wellness and have undertaken various proactive approaches and encompassed different initiatives to promote a supportive work environment. The Group also continuously evaluates and enhances our strategies to ensure our employees are provided with the necessary support to maintain their wellness and thrive professionally.



## 6.2 Maintaining a Safe and Healthy Environment for All

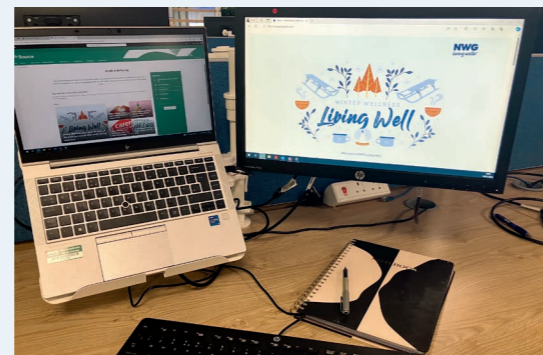
### ▶ Our Management Approach (Cont'd)

#### Investing in Our Employees' Health and Wellness (Cont'd)

## Northumbrian Water and WWU

### Health and Wellness Programmes

Northumbrian Water's internal "Living Well" platform provides employees with excellent digital connectivity to uphold their health and wellness. The HR team regularly updates the platform with ongoing campaigns and exclusive employee offers. Various initiatives are also provided to its employees, such as digital general practitioner, "Mind" assistance programme, well-being webinars, sports and social clubs, flu vaccinations, and bowel cancer support. This dedicated investment in the health and well-being of employees significantly contributes to the desired outcome of reducing sickness absence, as it empowers them to take an active role in their wellness.



Northumbrian's Water Living Well platform has been developed to help employee's health and well-being.

WWU places a strong emphasis on its employees' health and wellness through the implementation of various initiatives. These include the distribution of internal quarterly well-being newsletters and monthly health focus aligned with the health promotion calendar. Regular refresher training for mental health first aiders was also offered to ensure its employees stay updated and equipped with the necessary knowledge and skills to effectively support individuals in need of mental health assistance. WWU also established a health surveillance programme and provided rehabilitation services, such as physiotherapy and functional assessments, to address its employees' physical and mental health needs.

### Working with External Stakeholders to Improve Safety Practices

Collaborating with external stakeholders is vital to the Group's commitment to improving our safety practices. Through open dialogue and sharing best practices, we aim to foster a culture of continuous improvement and ensure the highest level of safety within our operation.

## UKPN

### Mechanisms for Stakeholders to Report Emergencies

UKPN prioritises customer safety by offering robust 24/7 emergency access to its Customer Contact Centre by calling 105 anywhere in the UK. This vital communication channel allows its customers to promptly report any safety concerns related to its network, so that UKPN can take immediate action to protect the members of the public and maintain a safe and reliable network.

UKPN has also established an online portal that provides its customers expert advice on various topics including guidance on power cuts and safety measures, to ensure customer safety and promote a proactive approach to addressing electricity-related concerns.

## 6.3

## Serving Our Customers with Excellence

### ▶ Why It Matters

With a customer base of over 35 million across four continents, the Group recognises that our customers are fundamental to the success of our business. It is important for us to understand our customers' demands, as it empowers the Group to foster robust and long-lasting customer relationships, improve our product quality and achieve or even surpass our service targets.

### ▶ Our Commitment

The Group places the utmost importance on each of our customers, ensuring a dedicated focus on all processes that may impact their experience. Transparency and honesty are keys to customer service, and we firmly believe that open and honest communication with our customers is essential to building trust and fostering a culture of mutual respect and understanding. To ensure the delivery of premium services and products, our business units consider different dimensions of factors and develop various policies about the customer's demands, including:

- **Customer Privacy** – Customer privacy is of utmost importance to the Group, and we strive to uphold the highest standards in safeguarding customer data. To protect customer information, we have implemented robust internal policies, procedures and compliance guidelines that govern the use of customer data throughout our business operations.
- **Customer Service** – The Group places great emphasis on customer service and we actively collaborate with our customers to gain a deep understanding of their needs and enhance their overall satisfaction. To effectively handle customer concerns, we have implemented a comprehensive complaints management process and established various channels for our customers to seek information or assistance.
- **Complaints Handling Policy** – The Group has implemented a comprehensive and streamlined system for handling customer complaints effectively. This includes standardising the procedures and management of complaints and designating responsible individuals within each business unit to address customer concerns. Additionally, the Group has made complaint channels and contact information readily available on our business operations websites, providing our customers with convenient channels to express their complaints and simplifying the feedback process.

# 6.3 Serving Our Customers with Excellence

## ▶ Our Commitment (Cont'd)

### 2023 Performance Highlights



Conducted different activities and measurements, including privacy impact assessments and data protection training, across our business operation

### Awards & Recognitions

UKPN

Best Customer Feedback Strategy at Institute of Customer Service Awards

## ▶ Our Management Approach

### Implementing Strict Privacy Policies

We understand the sensitivity of customer information and acknowledge the need for careful handling. We have established the "Information Security Policy" and "Policy on Handling of Confidential Information, Information Disclosure, and Securities Dealing" to ensure our information and data privacy. Our employees are required to uphold the confidentiality of all proprietary data they may be exposed to, and they are informed that all customer information should solely be used for legitimate business activities. The Group also invests significantly in educating our employees on respecting customer privacy and protecting customer information. For example, we offer various training programmes focused on customer privacy awareness and regularly conduct customer privacy impact assessments throughout our operations. We also actively engage with our customers to understand their needs in order to gain valuable insights into their areas of concern.

## HK Electric

### Privacy Management Programme

HK Electric has implemented a Privacy Management Programme for personal data privacy protection. This comprehensive programme incorporates various measures, including annual personal data inventory reviews and privacy impact assessments. Through these assessments, HK Electric assesses the effectiveness of data handling practices and identifies areas for improvement.

For the privacy impact assessment referred to above, HK Electric established the guidelines for privacy impact assessment, which requires each business unit to conduct privacy impact assessments to identify potential privacy risks associated with its business operations, such as changes to systems, business processes and personal data handling policies to ensure that appropriate risk mitigation measures are effectively implemented.


## Northumbrian Water

### Data Protection Training

All employees of Northumbrian Water receive comprehensive data protection training via e-learning, including annual refresher sessions and induction awareness. Specialised training is also provided to high-risk departments such as the customer directorate and HR to enhance their data protection knowledge and skills. Northumbrian Water also utilises various platforms, including its internal internet and meetings to promote a culture of data protection and privacy awareness among its employees.



▶ **Our Management Approach (Cont'd)**

**Regularly Updating Our Customers on Health, Safety and Environmental ("HSE") Issues** 

To ensure a safe and secure environment for our customers, we implemented a range of measures to consistently provide them with updated information regarding HSE hazards and safety risks associated with our products and services. We have also established various emergency plans and report hotlines that adhere to best practices regarding safety management.

AGIG

**Resilience Workshops**

Every year, AGIG recognises Zero Harm Day – which acts as a reminder to all staff of the importance of ensuring that there are no injuries or illnesses of any kind caused by workplace incidents. The focus for 2023 was Resilience. Registered psychologist, author, and keynote speaker, Mr. Jonathan Lincolne, facilitated live workshops at each of its offices. These sessions explored the practice of resilience and the power of minds. It provided practical tools, and pragmatic ways of thinking that AGIG employees can integrate into their everyday lives. These sessions included break outs into groups to explore hypothetical situations, lessons on controlling perspective and mindset in situations where employees may face challenges or tribulations and take-home messages for staff to refer back to.

SA Power Networks

**Rolled Out Community Media Campaign to Enhance Public Awareness of Electrical Risks and Hazards**

During the year, SA Power Networks continuously rolled out a community media campaign under the theme "You'd be shocked by what you don't know about electricity". The primary objective of this campaign is to heighten public awareness regarding the potential risks and hazards associated with electricity. It also aims to educate individuals on the appropriate actions during emergency scenarios.

**Establishing a Systematic Process for Responding to Customer Inquiries and Concerns** 

We prioritise customer service and strive to address customer inquiries promptly and efficiently. Our systematic process ensures that all customer inquiries are handled consistently and transparently, enabling us to provide our customers with the necessary information for making informed decisions about our products and services. Our business units have also established dedicated customer service teams that receive comprehensive training to address customer inquiries and deliver accurate and up-to-date information proficiently.

AGN

**Launch of Priority Services Programme**

In July 2023, AGN launched their Priority Services Programme for customers in South Australia and Queensland. This important programme delivers additional support to customers on the network who are experiencing vulnerability. A first for Australian network businesses, these new services include gas appliance safety checks, repairs and replacement rebates.

HK Electric

**Corporate Instruction on Complaints Management**

HK Electric implemented a corporate instruction on complaints management in May 2018 to standardise and optimise the handling of customer complaints. This instruction serves as a guiding framework for all its employees and is easily accessible through HK Electric's internal portal. In 2023, the number of complaints continued to remain low at five, which demonstrated HK Electric's unwavering commitment to striving for service excellence.

## 6.3 Serving Our Customers with Excellence

### ▶ Our Management Approach (Cont'd)

#### Implementing a Comprehensive Complaint and Feedback System

To foster long-term relationships with our customers, the Group is dedicated to delivering an exceptional customer experience. This involves actively engaging with customers to gather feedback and enhance our understanding of their expectations. We also ensure all employees are trained to acknowledge our customers' complaints and implement clearly defined procedures to guide them through the complaint handling process.



### EDL

#### Fostering meaningful interactions with customers

EDL's Customer Charter emphasises the significance of engaging with its customers and reflects EDL's unwavering dedication to providing quality service and innovative solutions that exceed expectations. As part of this commitment, EDL actively collaborates with its customers to understand their inquiries and feedback, ensuring a proactive and responsive approach. The charter encompasses four key commitments, including cultivating collaborative partnerships with its customers to create mutual value, fulfilling promises and commitments, continuously striving for improvement and proactively addressing customer needs.



## 6.4

### Embedding Sustainability in Our Supply Chain



#### ▶ Why It Matters

The Group recognises its role as a worldwide investor that has partnered with over 30,000 suppliers in the energy and utility sectors. We are keenly aware of our influence and consistently leverage our extensive knowledge to encourage our suppliers to adopt more sustainable practices.

It is a necessary requirement for our suppliers to share the Group's commitment according to human rights, working conditions, occupational health and safety ("OHS"), non-discrimination, business ethics and environmental stewardship.

The post-COVID 19 era has brought new challenges for the utility sector, particularly in the supply chain. The pandemic has disrupted global trade and transportation, causing shortages and delays in the delivery of essential equipment and materials. Thus, effective collaboration with all stakeholders in the supply chain is a key factor in success and we strive to build a more robust and sustainable supply chain that is better equipped to handle future challenges and maintain the delivery of essential services to the community. In addition, with the trend of globalisation, the Group takes a stand to enhance ways of working and operating sustainably in this ever-changing environment.

#### ▶ Our Commitment

The Group's Supplier Code of Conduct stands as a cornerstone of our commitment, serving as a comprehensive guideline for both our business units and suppliers. We encourage all of them to comply with the items in the Supplier Code of Conduct, as it fosters sustainable practices and enhances performance for the benefit of stakeholders and the communities we serve.

The Supplier Code of Conduct applies to all our business units, products and service providers (i.e., suppliers), and we take various international charters and conventions in its development, including the United Nation's Declaration on Human Rights and the International Labour Organisation Core Conventions.

# 6.4 Embedding Sustainability in Our Supply Chain

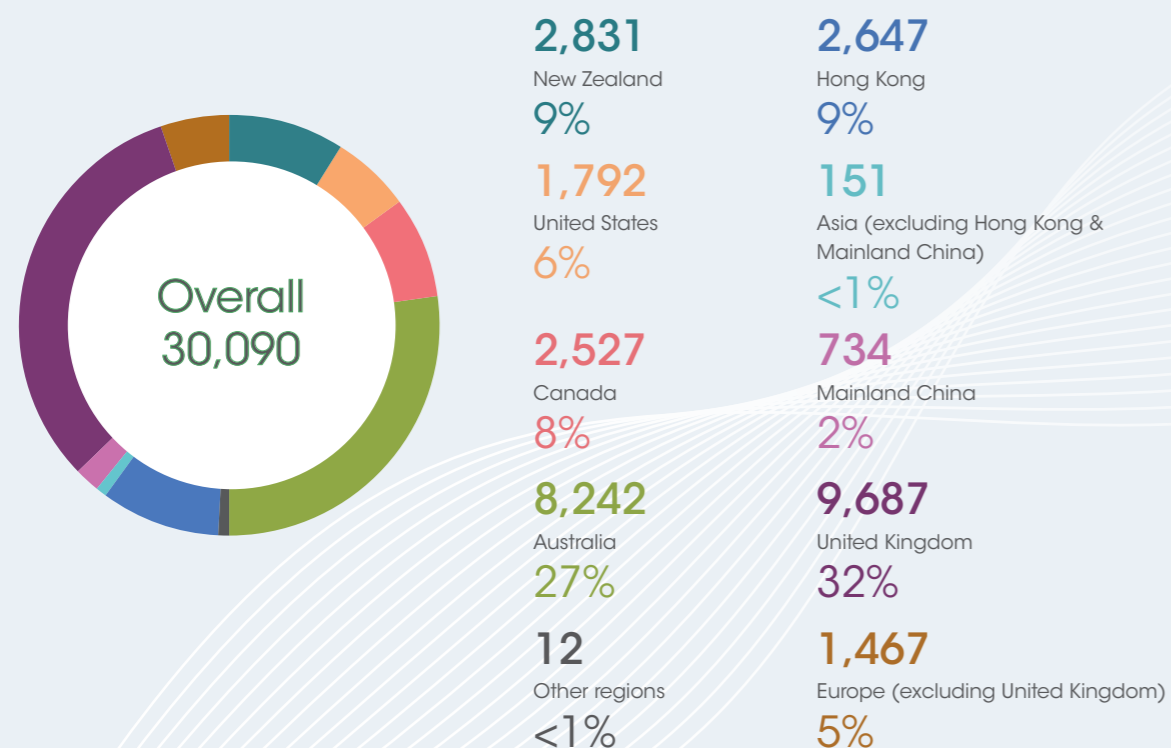
## ▶ Our Commitment (Cont'd)

We have also implemented several other policies that reinforce our commitment to promoting supply chain sustainability, including:

- Human Rights Policy – It highlights the respect and promotion of human rights as a fundamental value of the Group and explains our expectation of business units and suppliers to uphold the principles in our Human Rights Policy and adopt similar policies within their own businesses.
- Modern Slavery and Human Trafficking Statement – Among these obligations, it is the requirement that the Group ensures its contractors and supply chain are free from modern slavery and human trafficking practices. Transparency in business units' and suppliers' approaches to tackling modern slavery is also expected to be maintained in all our business relationships.
- Environmental Policy – States the Group's awareness of the direct and indirect impacts arising from its ability to influence environmental performance within its value chain and in its investments, and how it endeavours to influence suppliers by raising awareness of environmental issues, eco-friendly practices and professional environmental considerations.

## 2023 Performance Highlights

Number of Suppliers by Geographical Region



## ▶ Our Management Approach

The Group acknowledges the potential environmental and social consequences that can arise throughout the supply chain and is dedicated to mitigating these risks through collaborative efforts with our suppliers. ESG-related factors are carefully considered and given significant weight in the assessment process for potential suppliers and contractors.

To cultivate valuable partnerships with our suppliers, regular monitoring, audits, and evaluations are conducted to assess their performance. Our business units have also implemented various approaches to ensure the effective implementation of monitoring systems, with nearly all suppliers participating in the assessment process.



In addition to enforcing our Supplier Code of Conduct, we actively communicate with our suppliers to help improve their sustainability performance. Their engagement is of utmost importance, as they are the closest stakeholders in upholding and adhering to these codes. The Group's business units regularly hold meetings to listen to the voices of our suppliers, fostering an environment that encourages sustainable development within the Group.

We also place significant emphasis on respecting employees' human rights and are committed to combatting modern slavery and human trafficking across our business operations. For example, WWU, as a member of the Slave-Free Alliance, formed three strategy groups during the year to develop tools and promote best practices in supply chain management, training and collaborations to combat modern slavery effectively.

# 6.4 Embedding Sustainability in Our Supply Chain

## ▶ Our Management Approach (Cont'd)

### Supply Chain Management and Assessment Procedures

The Group prioritises implementing robust supply chain management practices to address potential risks and enhance our suppliers' performance. To ensure the practices of our suppliers align with the Group's values and standards, regular monitoring and assessments are conducted to evaluate their performance, promoting transparency and accountability throughout our supply chain.

### AGN, DBP and Multinet Gas Networks

#### Supplier Pre-Qualification Business Ethics Questionnaire

All potential suppliers of AGN, DBP and Multinet Gas Networks must complete the Supplier Pre-Qualification Business Ethics Questionnaire as part of the tender package. The primary objective of this questionnaire is to establish an initial risk rating, commonly referred to as the 'first pass' risk rating, to serve as a basis for determining whether a more comprehensive risk assessment is required for the new supplier admission process.

### Northumbrian Water

#### Supplier Quarterly Review

Northumbrian Water conducted quarterly reviews with approximately 100 suppliers to evaluate and score their performance levels against key performance indicators across various areas. These reviews were overseen by category managers and key business users utilising QBR templates and meeting minutes.

These assessments resulted in the generation of supplier scorecards, which provided valuable feedback on the performance of suppliers to ensure proper oversight and facilitate continuous improvement.

## Enhancing Interaction and Communication with Suppliers

Fostering strong relationships with our suppliers enables the Group to reinforce our commitment to health and safety. Through open communication and collaboration, we proactively engage with our suppliers to share best practices and jointly identify areas for improvement to create a safer working environment across the supply chain.

### UKPN

#### Contractor Safety Forum

In 2023, UKPN hosted two Contractor Safety Forums (April and October) for over 100 of our supply chain partners. The primary objective of this forum was to share, learn and collaborate on health and safety matters and re-emphasise the importance of working safely in executing projects within UKPN's business operation. The forum covered discussions on learning from incidents and enabled its suppliers to understand UKPN's current safety performance and gain insights into its future aspirations.

### UK Rails

#### Project Review Meetings with Suppliers

UK Rails project managers actively engage with its suppliers during project review meetings. These meetings involve internal and external project managers and are held approximately monthly throughout the project delivery phase. During these meetings, the project manager reports on supplier performance and risks to identify emerging risks and issues early and to facilitate proactive management and effective communication within the supply chain.

## 6.4 Embedding Sustainability in Our Supply Chain

### ▶ Our Management Approach (Cont'd)

#### Monitoring and Managing Modern Slavery Risks

The Group maintains an unwavering commitment to proactively identifying and effectively addressing the risk of modern slavery across our supply chain. We uphold ethical principles and integrity, prioritising the implementation and enforcement of robust systems and controls



These reports are subsequently utilised to refresh the organisation's internal dashboard, enabling continuous monitoring of suppliers and the corresponding levels of risk that their suppliers may pose.

## SA Power Networks

### Modern Slavery Questionnaire

During the year, 148 suppliers of SA Power Networks have completed the Modern Slavery Questionnaire provided by the New South Wales Anti-Slavery Commissioner. This comprehensive questionnaire serves as an evaluation tool to assess the level of risk associated with each supplier, considering industry risk, country risk, and the suppliers' responses. As a result, all respondents have been assigned a risk rating in accordance with their respective questionnaire responses.

To evaluate the risk of modern slavery within its supply chain, the Procurement and Shared Services team at SA Power Networks downloads the latest reports on a weekly basis.



## 6.5

# Ensuring Reliability, Asset Integrity and Cybersecurity

### ▶ Why It Matters

With the escalating frequency and complexity of cyber-attacks, coupled with the growing dependence on digital infrastructure, companies face significant challenges posed by cybersecurity risks. According to The Global Risk Report 2023 published by the World Economic Forum, alongside a rise in cybercrime, attempts to disrupt critical technology-enabled resources and services will become more common, with attacks anticipated against the energy industry. The transition to operating in agile work modes and utilising home networks has also contributed to an increase in security incidents on a global scale. Organisations are becoming increasingly exposed to cyber threats, which can have substantial financial and reputational risks if a robust cybersecurity plan is not in place.

### ▶ Our Commitment

The Group is dedicated to implementing industry-leading practices to safeguard our critical corporate information assets and data. This commitment involves strengthening cybersecurity measures and proactively preventing malicious attacks. To achieve this, we have established an Information Security Policy that outlines and communicates the fundamental principles for maintaining information confidentiality, integrity, and availability to be applied across our operations.

As stated in the Information Security Policy, business unit executives are responsible for executing cybersecurity measures to safeguard our systems and data against cyber-attacks and unauthorised access, with several key measures as below:

- installation of internet security/anti-virus software in workstations to prevent attacks from malicious software;
- installation of firewalls to limit data access from the outside network;
- encryption of key business information and personal data; and
- regular security updates on operating systems.

# 6.5 Ensuring Reliability, Asset Integrity and Cybersecurity

## ▶ Our Management Approach

The Group has a dedicated Group Information Security Officer (“ISO”) responsible for establishing and enhancing the information security culture across the Group. Our ISO regularly monitors internal and external information security trends and ensures senior management is informed about information security-related issues and activities impacting the organisation.

The Group’s Audit Committee conducts regular reviews of cybersecurity risks to ensure the effective implementation of mitigation actions. This includes periodic updates to the cybersecurity policy, strengthening cyber protection measures, performing penetration tests to identify and address system vulnerabilities, and conducting internal and/or external audits of application systems.

To enhance the safeguarding of our corporate information assets and ensure the effective implementation of relevant policies and procedures, a number of the Group’s business units have adopted ISO 27001 or other information security standards. It is a leading global cybersecurity standard for information security management systems covering infrastructure support, network support, application maintenance and system operation.

We also collaborate with external entities to strengthen our cybersecurity risk management by conducting external audits, identifying existing gaps and driving additional measures to enhance our cybersecurity management framework. As part of the orientation process, all new hires receive cybersecurity awareness programmes, and we regularly provide refresher training to our current staff to reinforce information security awareness among our employees and contractors.

### Implementing Cybersecurity Measures

The Group adheres to the highest standards of cybersecurity practices to protect our customers’ privacy and our business data. We ensure a comprehensive approach to mitigating risks and effectively responding to potential cyber threats by implementing various strategies to ensure our resilience against cyber threats.

## AGN and Multinet Gas Networks

### Emergency Management and Crisis Management System

The Cyber Incident Response Team of AGN and Multinet Gas Networks oversees the implementation and monitoring of the emergency and crisis management systems. The system includes an annual schedule of simulation exercises, comprising two national crisis simulations, one for transmission operations and one for network distribution, and ten minor exercises conducted each year. These exercises test and refine AGN and Multinet Gas Networks’ response capabilities in emergencies or crises, ensuring preparedness and effective coordination across various operational areas.

Following each exercise, a post-exercise report with recommendations for improvement is prepared and assigned to the responsible action owner, who is accountable for implementing them within a designated timeframe. The progress and completion of these actions are actively tracked within their Audit Risk, Compliance, and Obligations Software system.

## United Energy and VPN

### Cybersecurity Incident Response Plan and Disaster Recovery Test

United Energy and VPN have implemented the “Cyber Security Incident Response Plan,” demonstrating their commitment to enhancing cybersecurity measures within their business operations. This plan provides operational guidelines for effectively identifying and promptly addressing cybersecurity incidents.

Disaster Recovery tests are also carried out by United Energy and VPN to mitigate potential disruptions and for the continuity of business operations. By regularly evaluating their Disaster Recovery plans, United Energy and VPN can identify any weaknesses or gaps in their systems and processes and make necessary improvements to maintain the integrity of their information assets.

## Park’N Fly

### Strengthening Cybersecurity and Protecting Customer Data Privacy

Park’N Fly has taken thoughtful steps to safeguard cybersecurity and data privacy through a variety of initiatives. The new parking app is designed to efficiently collect vehicle-related information, and it gathers personal data such as phone numbers and email addresses only with the explicit consent of customers, ensuring the responsible handling of customer information. Furthermore, it is committed to not storing sensitive customer data such as credit card data.

For ongoing security, Park’N Fly utilises a managed Security Operations Centre to monitor and address threats promptly, supported by regular weekly scans. Its servers and services are securely hosted in an offsite virtual private cloud, which helps prevent unauthorised access. It also conducts quarterly automated tests on its networks, websites, and publicly accessible services to ensure the security practices are consistently upheld.



## 6.5 Ensuring Reliability, Asset Integrity and Cybersecurity

### ▶ Our Management Approach (Cont'd)

#### Strengthening our Cybersecurity Awareness

The Group upholds the highest standards of cybersecurity practices to safeguard customer privacy and protect business data. We employ a comprehensive approach to mitigate risks and respond effectively to potential cyber threats. By implementing various strategies across our operations, we enhance our resilience against cyber threats and maintain the security of our systems and data.

### SA Power Networks

#### Cybersecurity Awareness Strategy and Delivery Plan

SA Power Network has implemented a cybersecurity awareness strategy and delivery plan. This strategy includes regularly disseminating at least one article through electronic media channels every fortnight and quarterly refreshments of posters at various sites. A monthly online awareness session and regular monthly phishing tests are organised for all employees. The primary objective of implementing these comprehensive measures is to enhance its employees' awareness regarding cyber security threats and emphasise users' critical role in preventing them.

### Alliance Construction Materials and WWU

#### Cybersecurity Awareness Training

During March and June 2023, Alliance Construction Materials provided regular online cybersecurity awareness training to all its employees. It was compulsory for every employee to attend the training and complete the quiz. The objective was to equip them with the knowledge and abilities to identify and respond to cybersecurity incidents proficiently.

To foster a strong sense of cybersecurity awareness among its workforce, WWU has implemented mandatory online security awareness training for all employees upon joining the organisation. WWU also invested in an accredited digital suite of online cyber training and staff awareness courses, officially accredited by the UK National Cyber Security Centre that are readily available to all staff members. The primary objective of these initiatives is to enhance staff awareness of cybersecurity risks and equip them with the necessary skills to manage and report such risks effectively.

## 6.6



# Fostering Community Involvement in the Energy Transition

### ▶ Why It Matters

As an international infrastructure company dedicated to constructing a better world, the Group is committed to involving communities in the energy transition. This involvement serves multiple purposes, including raising community awareness and support for the transition, establishing partnerships and ensuring a fair and inclusive transition.

Engaging with communities fosters a sense of ownership and responsibility, leading to a more successful implementation of the energy transition. The Group is responsible for establishing meaningful relationships with local communities, valuing their perspectives and advocating for their needs. This approach ensures that the transition is inclusive and beneficial for all individuals, regardless of their background or circumstances.

By working together with communities, we can collaboratively shape a future that is both sustainable and inclusive for all.

### ▶ Our Commitment

The Group is dedicated to safeguarding the rights of communities and actively contributing to their economic and social success through regular engagement with a wide range of stakeholders. We have continued our efforts in community engagement and implemented a Corporate Social Responsibility ("CSR") Policy to guide our interactions with the communities where we operate. The Group's Sustainability Committee regularly assesses our CSR practices and performance and reports to the Board of Directors for review.

As stated in the Group's CSR Policy, each business unit's management team is responsible for considering relevant CSR initiatives and programmes based on the specific needs of their respective locations. As a whole, our key areas of focus are stated below:

- undertakes a wide range of philanthropic efforts as well as community initiatives that are catered to the needs and benefits of the communities where we operate;
- encourages our employees to play a positive and active role in the communities where they live and work, and in cities and towns around the world; and
- donation and contributions are subject to internal compliance guidelines and controls so as to safeguard stakeholder and shareholder interests.

# 6.6 Fostering Community Involvement in the Energy Transition

## ▶ Our Commitment (Cont'd)



Key targets and progress		
Business Units	Details of Target	Progress
HK Electric	<ul style="list-style-type: none"> <li>Complete at least 200 audits under Smart Power Energy Audit in 2023, particularly for NGOs, schools and SMEs</li> </ul>	Completed
Wellington Electricity	<ul style="list-style-type: none"> <li>Offer commercial EV managed charging service by 2024</li> </ul>	On track
United Energy	<ul style="list-style-type: none"> <li>1,000 participate in energy literacy programmes by 2026</li> </ul>	13,784 customers as at year end 2023
VPN	<ul style="list-style-type: none"> <li>1,000 customers per annum participate in energy literacy programmes by 2026</li> </ul>	14,565 customers as at year end 2023
NGN	<ul style="list-style-type: none"> <li>Provide over £1 million of regulatory and shareholder funding annually to support vulnerable customers and communities by 2026</li> <li>Transport 100% green gas in network by 2050</li> </ul>	Between 2013 and 2021, provided over 15,600 free gas connections and provided £1.9 million funding

## ▶ Our Management Approach

The energy transition encompasses more than just transitioning to cleaner energy sources, it also involves fostering a strong sense of community and collaboration. As a responsible utility company, we recognise that the energy transition's success relies on our communities' active involvement and support. Consequently, we are committed to closely collaborating with our customers, local organisations and stakeholders to establish a shared vision for a sustainable future.

The Group has outlined various initiatives to support and serve our community. We have implemented diverse programmes to support community development, such as providing community funds and grants and establishing partnerships with non-profit organisations to address the needs and enhance the living standards of underprivileged communities.

Given the macroeconomic pressures and the impact of high energy prices, we are concerned about the challenges that hardship families face and their access to affordable energy. In response, we have partnered with local charities and organisations across our operational areas to implement various initiatives. These include one-off subsidies, customer support funds and concessionary tariff schemes to assist vulnerable customers.

We are also dedicated to engaging with the communities in which we operate. Our team has consistently prioritised supporting our customers and maintaining strong connections with local communities. Our business units have established community engagement groups to provide platforms for community interaction. Additionally, various activities are organised to raise awareness about the importance of environmental protection.

The Group also encourages our employees to participate in volunteer activities and contribute positively to the community. To facilitate this, we have offered a range of volunteering opportunities and provided paid days each year to encourage employees to participate in volunteering work.

Through uniting and collaborating, we believe we can work towards a shared vision of creating a more sustainable and resilient landscape that benefits everyone. By fostering a sense of community in the energy transition, we can ensure that each person has a meaningful role and that the transition is inclusive and fair.

### Providing Better Access to Affordable Energy and Enhancing Home Energy Efficiency

The Group has implemented various initiatives to address the challenges faced by customers experiencing hardships and improve their access to affordable energy. These initiatives include educating them about energy-saving practices and enhancing their home energy efficiency. Through these efforts, we aim to empower our customers with the knowledge and tools to reduce energy consumption and lower their energy costs to create more sustainable living environments.

## NGN

### Empowering Youth Energy Independence Through Training Campaign

NGN has launched the "Young People with Energy" programme, aimed to educate and support young individuals between the ages of 16 and 25 in effectively managing their gas and electric expenditures. The primary objective of this initiative is to empower these young people to lower their electricity costs and reduce carbon emissions by raising their awareness of energy efficiency measures. As a result of this programme, 386 young consumers of NGN have already derived substantial benefits, acquiring valuable insights on energy efficiency that enable them to exercise greater control over their energy consumption and expenses.

# 6.6 Fostering Community Involvement in the Energy Transition

## ▶ Our Management Approach (Cont'd)

### Providing Better Access to Affordable Energy and Enhancing Home Energy Efficiency (Cont'd)

#### HK Electric

##### Organising Happy Green Campaign and Installing Smart Meters

HK Electric has initiated the "Happy Green Campaign" to foster awareness and engagement in energy efficiency, renewable energy, and a low-carbon lifestyle. Through various activities, this campaign educates and motivates students and local communities to embrace greener practices. The number of Happy Green Schools increased to 650, with "Other Learning Experience" activities organised for students of different ages, from kindergarten to secondary schools. Together with other activities held in the year, the Campaign attracted more than 100,000 participants in 2023.

HK Electric has been deploying smart meters for customers since 2020, with the initiative set to continue until 2025. As part of the initiative, the HK Electric App was introduced in December 2021. Customers with smart meters installed can access to the "Account-On-Line" Service via the HK Electric App, allowing them to conveniently monitor their electricity consumption data at different intervals such as half-hourly, daily and monthly. The app also offers personalised settings, including the option to receive alerts when consumption reaches a specified percentage of the previous billing cycle. These services enable customers to gain insights into their consumption habits, patterns, and optimise energy usage accordingly.



HK Electric organised interactive activities that actively engage students in promoting greener practices.

#### UKPN

##### Providing Cost of Living Fund for Needed Customers

In response to the Cost of Living crisis, UKPN established the Cost of Living Fund, providing £500,000 extra funding to scale up in-depth support. Through extensive research and engagement, UKPN had identified gaps in existing support systems and strives to promote the expansion of its operations, forging new partnerships and introducing innovative assistance. The vulnerability training provided to its Executive Team Members helped secure senior endorsement of the Cost of Living Fund, resulting in more than double the number of customers receiving in-depth support compared to last year.

##### Implementing Community Development Programmes and Initiatives

The Group is dedicated to fostering strong relationships with the communities in which we operate. We actively encourage our employees to engage in volunteer activities, enabling them to make meaningful contributions to their respective communities. 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.

More than

77,000



young individuals had viewed the campaign content and engaged with student representatives advocating for gas safety

#### Northumbrian Water

##### Educating Students on Water Sustainability

Northumbrian Water has collaborated with local schools to implement educational initiatives focused on raising water awareness among students. Through its Water for Health programme, the Powered by Water project delivers interactive sessions emphasising the benefit of drinking tap water and maintaining proper hydration for children's well-being. Additionally, Northumbrian Water actively encourages school participation in The Ripple Effect programme, designed for 8 to 11-year-olds. This comprehensive training course incorporates informative films, engaging digital games and hands-on activities to deepen students' understanding of the importance of preserving water resources.



In collaboration with local schools, Northumbrian Water has partnered to implement educational initiatives focused on enhancing water awareness among students

#### WWU

##### Organising Game Over Campaign

WWU conducted research and discovered that individuals aged 16-24, particularly young people, require increased awareness regarding the significance of carbon monoxide alarms and regular gas appliance servicing compared to other age groups. In response, WWU organised various events to enhance young people's understanding of gas safety. To specifically target this demographic, WWU expanded its existing 'Game Over' awareness campaign, which focuses on the risks associated with carbon monoxide. Recognising the high participation of young people in gaming, it has launched a digital campaign tailored to computer games to engage with this age group effectively.

Moreover, WWU introduced a student campus ambassador programme as part of its efforts to expand outreach. These ambassadors played a crucial role in developing a collaborative gas network campaign, which proved to be an effective way of reaching out to young individuals. The digital gaming campaign, combined with the involvement of campus ambassadors, resulted in a notable increase in the campaign's reach among the target audience. More than 77,000 young individuals had viewed the campaign content and engaged with student representatives advocating for gas safety.

## 6.6 Fostering Community Involvement in the Energy Transition

### ▶ Our Management Approach (Cont'd)

#### Implementing Community Development Programmes and Initiatives (Cont'd)

#### AGIG

##### Top 40 Best Places to Give Back

AGIG placed 16th in the "Top 40 Best Workplaces to Give back 2023". This is up from 23rd place in 2022.

The Best Workplaces to give back, recognises Australian companies that are going beyond profits to enrich their communities via donating, volunteering, fundraising, charity gift cards, and other pro-social behaviours.



This award recognises the excellence of AGIG's Community Partnership Programme which provides staff with:

- Two paid volunteering days annually;
- Dollar matching for funds raised by them to support charities important to them; and
- Access to funding to support local community causes.

In 2023, AGIG staff volunteered more than 670 hours (an increase from 358.5 hours in 2022) and the Community Partnership Programme invested more than AUD\$524,600.

#### EDL

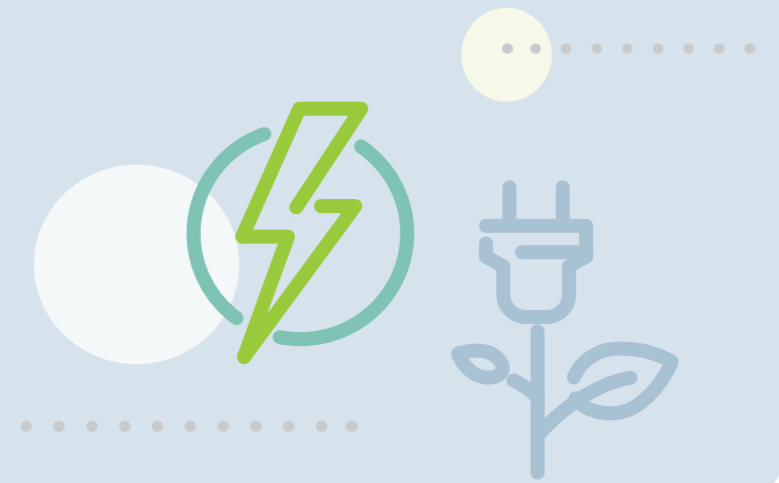
##### Supporting the local communities

EDL has implemented various initiatives in its Innovate Reconciliation Action Plan to support Aboriginal and Torres Strait Islander individuals, communities, and enterprises in Australia. These initiatives encompass cultural awareness and education programs for its staff, procurement opportunities for Aboriginal and Torres Strait Islander businesses, supporting Aboriginal and Torres Strait Islander students, and sponsoring community organisations representing these communities.

## 6.7

### 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.





7

## Annex

Enviro NZ's Hampton Downs Resource & Energy Precinct where gas engines convert landfill gas into electricity. These landfill gas engines can produce over 6 Mega Watts of electricity per hour, which is equivalent to powering approximately 6,000 New Zealand households.

# 7.1 Environmental and Social Performance Indicators

## Environmental KPIs<sup>1</sup>

	Unit	2021	2022	2023
<b>Total power generation mix</b>				
Coal	GWh	n/a	n/a	1,569
Natural gas		n/a	n/a	4,301
Oil		n/a	n/a	31
Renewable energy				
Wind		n/a	n/a	167
Solar		n/a	n/a	14
Energy-from-waste and others		n/a	n/a	1,767
<b>GHG emissions<sup>2</sup></b>				
<b>Total GHG emissions (location-based)</b>	tonne CO <sub>2</sub> e	9,012,393	8,587,495	8,210,274
<b>Total GHG emissions (market-based)</b>		8,308,058	8,038,737	7,655,236
Scope 1 emission <sup>3</sup>		7,488,261	7,327,908	7,038,127
Scope 2 emission (location-based) <sup>4</sup>		1,524,132	1,259,587	1,172,147
Scope 2 emission (market-based) <sup>4</sup>		819,797	710,829	617,109
<b>Total carbon intensity (location-based)</b>	tonne CO <sub>2</sub> e/ HKD million revenue	174	173	164
<b>Total carbon intensity (market-based)</b>		160	162	153
Scope 1 carbon intensity		145	148	141
Scope 2 carbon intensity (location-based)		29	25	23
Scope 2 carbon intensity (market-based)		16	14	12
<b>Biogenic carbon emissions<sup>5</sup></b>	tonne CO <sub>2</sub> e	1,438,080	1,275,010	1,121,305

Notes:

- 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.
- GHG comprise carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and SF6. The data are calculated using location-based and market-based methodology where applicable under regulation. Otherwise, Scope 1 emissions are calculated using the latest available emission factors in line with the Greenhouse Gas Protocol, International Energy Agency's Energy Statistics Manual, UK Government GHG Conversion Factors for Company Reporting, United States Environmental Protection Agency's Emission Factors for Greenhouse Gas Inventories, and Hong Kong Environmental Protection Department's Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings in Hong Kong (2010 Edition). Scope 2 emissions are calculated based on the International Energy Agency's latest available emission factors.
- Scope 1 emission includes emission from fuels processed in sources that were owned and controlled by our businesses for its own use, and fugitive emissions resulted from intentional or unintentional releases, e.g., gas shrinkage for our gas transmission and distribution businesses, methane emissions from venting, hydrofluorocarbons, perfluorocarbons, emissions from the use of refrigeration and air conditioning equipment, and SF6 emissions from industrial processes. In 2023, we have reported the biogenic carbon emissions separately according to the GHG Protocol. The 2021 and 2022 data figures have been restated to align with the updated approach to allow for meaningful comparison of data over time.
- Scope 2 emission includes the emissions from purchased electricity of our businesses for its own use, and emissions associated with the energy losses from distribution grid and the electricity system transmission grid ("network losses") for our electricity transmission and distribution businesses. Network losses are calculated as the difference between the electricity entering the network, and electricity which is used by customers, for which the data are received from the industry taken from meter readings. In accordance with GHG Protocol, the Scope 2 emissions are reported in location-based and market based in 2023. The 2021 and 2022 data figures have been restated to align with the updated approach.
- Biogenic carbon emissions (as defined by GHG Protocol) refers to CO2 emissions from the combustion or biodegradation of biomass.
- Total energy consumption = Non-renewable energy consumed + renewable energy consumed + indirect energy consumption + self-generated energy what are not consumed – sales of energy.

	Unit	2021	2022	2023
<b>Use of energy</b>				
<b>Total energy consumption<sup>6</sup></b>	'000 kWh	20,688,067	20,516,802	19,825,437
Direct energy consumption		19,339,148	19,286,416	18,663,230
<i>i) Non-renewable energy consumed</i>		22,465,729	21,965,649	22,074,725
Gasoline/Petrol		36,572	42,962	46,559
Diesel		437,574	408,137	414,209
Natural gas		9,705,167	9,667,806	10,483,956
Liquified petroleum fuel ("LPG")		1,188	1,030	1,021
Waste-derived fuels (non-biomass) <sup>7</sup>		4,087,424	3,835,782	3,295,856
Coal		7,192,319	6,974,274	6,835,886
Other fuels <sup>8</sup>		1,005,485	1,035,658	997,238
<i>ii) Renewable energy consumed</i>		4,669,107	4,861,573	4,154,657
Wind		857	5,168	5,568
Solar		689	1,331	2,586
Hydro		799	571	848
Biomass		4,592,585	4,784,989	4,084,719
Other renewables		74,177	69,514	60,936
<i>iii) Self-generated energy</i>		76,887	73,712	83,662
Electricity		76,887	73,712	83,662
Heating		–	–	–
Cooling		–	–	–
Steam		–	–	–
<i>iv) Sale of energy</i>		7,872,575	7,614,518	7,649,814
Electricity		6,255,019	5,975,819	6,198,434
Heating		850,788	758,462	568,121
Cooling	–	–	–	
Steam	766,768	880,237	883,259	
<b>Indirect energy consumption<sup>9</sup></b>	1,348,919	1,230,386	1,162,207	
Electricity	1,348,328	1,229,754	1,161,511	
Heating	591	632	696	

Notes:

- Waste-derived fuels (non-biomass) include municipal waste (non-biomass fraction), industrial waste, waste oils, and waste coal mine gas.
- Other fuels include residual fuel oil, lubricants, and other petroleum products.
- Indirect energy consumption refers to purchased energy (electricity and heating) for consumption.

# 7.1 Environmental and Social Performance Indicators

	Unit	2021	2022	2023
<b>Total energy intensity</b>	'000 kWh/ HKD million revenue	<b>399</b>	<b>414</b>	<b>397</b>
Direct energy intensity		<b>373</b>	<b>389</b>	<b>373</b>
Indirect energy intensity		<b>26</b>	<b>25</b>	<b>23</b>
<b>Air emissions<sup>10</sup></b>				
Nitrogen oxides ("NO <sub>x</sub> ") emissions	tonnes	<b>9,057</b>	<b>8,053</b>	<b>8,199</b>
Sulfur oxides ("SO <sub>x</sub> ") emissions		<b>835</b>	<b>868</b>	<b>875</b>
Respirable Suspended Particulates ("RSP") emissions		<b>282</b>	<b>293</b>	<b>256</b>
<b>Use of water</b>				
<b>Total water consumption</b>	'000 m <sup>3</sup>	<b>700,353</b>	<b>694,850</b>	<b>646,858</b>
Surface water		<b>282,044</b>	<b>300,658</b>	<b>265,584</b>
Groundwater		<b>21,403</b>	<b>14,414</b>	<b>14,740</b>
Seawater		<b>391,701</b>	<b>374,244</b>	<b>362,053</b>
Third-party water		<b>4,744</b>	<b>5,090</b>	<b>4,034</b>
Other sources		<b>461</b>	<b>444</b>	<b>447</b>
Water consumption intensity	'000 m <sup>3</sup> / HKD million revenue	<b>13.52</b>	<b>14.01</b>	<b>12.94</b>
<b>Waste production</b>				
Total hazardous waste produced	tonnes	<b>26,915</b>	<b>27,265</b>	<b>23,971</b>
Total non-hazardous waste produced <sup>11</sup>		<b>443,707</b>	<b>413,644</b>	<b>407,886</b>
Total hazardous waste produced intensity	tonnes/ HKD million revenue	<b>0.52</b>	<b>0.55</b>	<b>0.48</b>
Total non-hazardous waste produced intensity		<b>9</b>	<b>8</b>	<b>8</b>
<b>Packaging material</b>				
<b>Total packaging material used for finished products</b>	tonnes	<b>2,570</b>	<b>2,245</b>	<b>2,193</b>
Plastics		<b>5</b>	<b>5</b>	<b>4</b>
Paper		<b>2,565</b>	<b>2,240</b>	<b>2,189</b>

Notes:

(10) Our power generation businesses produced 3 tonnes of mercury emissions in 2023.

(11) Our power generation businesses produced 17,528 tonnes of ash and gypsum waste in 2023.

## Social KPIs<sup>12</sup>

Social KPIs		2021	2022	2023
<b>Number of employees</b>				
<b>Total</b>		<b>32,726</b>	<b>33,761</b>	<b>35,745</b>
By employment type	Full-time	<b>30,552</b>	<b>31,709</b>	<b>33,282</b>
	Part-time	<b>2,174</b>	<b>2,052</b>	<b>2,463</b>
<b>Number of full-time employees</b>				
By gender	Male	<b>23,041</b>	<b>23,755</b>	<b>24,855</b>
	Female	<b>7,511</b>	<b>7,954</b>	<b>8,427</b>
By employee category	General staff	<b>27,407</b>	<b>28,363</b>	<b>29,268</b>
	Manager grade or above	<b>3,145</b>	<b>3,346</b>	<b>4,014</b>
By age group	Below 30	<b>4,433</b>	<b>4,734</b>	<b>4,977</b>
	30 – 49	<b>16,107</b>	<b>16,729</b>	<b>17,802</b>
	50 or above	<b>10,012</b>	<b>10,246</b>	<b>10,503</b>
By region	Hong Kong	<b>2,575</b>	<b>2,592</b>	<b>2,571</b>
	Mainland China	<b>1,689</b>	<b>1,659</b>	<b>1,649</b>
	Asia (excluding Hong Kong & Mainland China)	<b>87</b>	<b>117</b>	<b>42</b>
	United Kingdom	<b>11,584</b>	<b>11,605</b>	<b>12,332</b>
	Europe	<b>5,541</b>	<b>6,031</b>	<b>6,506</b>
	Australia	<b>5,078</b>	<b>5,359</b>	<b>5,764</b>
	Canada	<b>2,395</b>	<b>2,646</b>	<b>2,634</b>
	United States	<b>464</b>	<b>550</b>	<b>566</b>
	New Zealand	<b>1,139</b>	<b>1,150</b>	<b>1,218</b>
<b>Turnover rate for full-time employees<sup>13</sup></b>				
<b>Overall</b>		<b>11.1%</b>	<b>12.9%</b>	<b>8.7%</b>
By gender	Male	<b>10.7%</b>	<b>12.3%</b>	<b>9.0%</b>
	Female	<b>12.4%</b>	<b>14.7%</b>	<b>7.9%</b>

Notes:

(12) The reporting scope was expanded in 2023 to include Power Asset's employees in its Hong Kong office. Hence, the 2021 and 2022 social KPIs were restated to align with the reporting methodology.

(13) 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%".

# 7.1 Environmental and Social Performance Indicators

Social KPIs		2021	2022	2023
By age group	Below 30	17.6%	19.2%	12.3%
	30 – 49	9.9%	11.8%	7.5%
	50 or above	10.2%	11.9%	9.0%
By region	Hong Kong	7.7%	9.8%	14.6%
	Mainland China	4.7%	4.5%	4.2%
	Asia (excluding Hong Kong & Mainland China)	5.7%	0.9%	0.0%
	United Kingdom	6.7%	8.6%	5.3%
	Europe	10.2%	14.5%	1.1%
	Australia	8.5%	10.3%	7.8%
	Canada	37.7%	30.2%	32.8%
	United States	14.7%	23.6%	5.3%
	New Zealand	32.8%	35.9%	31.0%
<b>Work-related fatalities</b>				
Number of work-related fatalities <sup>14</sup>		2	1	2
By employee type	Full-time employees	2	0	1
	Part-time employees	0	0	–
	Contractors	0	1	1
Rate of work-related fatalities (employees)		0.007	0	0.003
<b>Work-related injury</b>				
Number of lost days due to work injury (employees)		3,469	3,204	3,893
Number of lost time injury incidents (employees)		161	175	168
Lost time injury rate (employee) <sup>15</sup>		0.53	0.58	0.52
<b>Health &amp; safety management system</b>				
% of employee covered by OHSAS 18001 / ISO 45001 <sup>16</sup>		48.3%	50.5%	50.8%

Notes:

(14) A full-time UKPN employee sustained severe injuries when attempting to access a link box, which resulted in a footway cover being ejected and striking the employee. Despite immediate hospitalisation, the employee could not recover and passed away in January 2023. Following the incident, the company has immediately emphasised the importance of safety and introduced 'Safety Fundamentals', which are principles focusing on safety leadership, personal responsibility, and strict adherence to rules, to improve workplace safety for all staff.

In a separate incident, a subcontractor's worker of Alliance Construction Materials was found unconscious on the ground after working on a vertical ladder of a truck. He passed away in the hospital a few days after the incident in July 2023. The company took immediate actions, including safety alerts and communication with all drivers, reviewing safety measures, and enhancing existing facilities.

(15) 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".

(16) 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%".

Social KPIs		2021	2022	2023
<b>Percentage of full-time employees who received training<sup>17</sup></b>				
<b>Overall</b>		90.9%	93.7%	93.4%
By gender	Male	94.0%	95.8%	94.3%
	Female	81.3%	87.7%	90.5%
By employee category	General staff	88.7%	92.6%	93.4%
	Manager grade or above	100%	100%	92.9%
<b>Average hours of training per full-time employee</b>				
<b>Overall</b>		24.9	26.2	32.0
By gender	Male	27.9	29.8	37.6
	Female	15.6	15.5	15.6
By employee category	General staff	24.5	26.5	33.2
	Manager grade or above	28.6	23.8	23.6
<b>Number of suppliers</b>				
<b>Total</b>		34,142	32,095	30,090
By region	Hong Kong	3,860	2,559	2,647
	Mainland China	983	786	734
	Asia (excluding Hong Kong & Mainland China)	247	159	151
	United Kingdom	10,687	11,256	9,687
	Europe	1,228	1,433	1,467
	Australia	7,121	7,999	8,242
	Canada	4,995	1,847	2,527
	United States	2,139	3,243	1,792
	New Zealand	2,818	2,798	2,831
	Other regions	64	15	12
<b>Number of complaints received</b>				
Products and services related		273,031	254,146	297,791

Note:

(17) 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%". The percentage of employees who received trainings may exceed 100%.



# 7.1 Environmental and Social Performance Indicators

Social KPIs		2021	2022	2023
<b>Number of employees who received training on anti-corruption/ethics and integrity</b>				
<b>Total</b>		<b>6,349</b>	<b>16,251</b>	<b>21,245</b>
By employment type	Full-time	<b>6,120</b>	<b>15,415</b>	<b>19,928</b>
	Part-time	<b>229</b>	<b>836</b>	<b>1,317</b>
Percentage of full-time and part-time employees who received training on anti-corruption/ethics and integrity <sup>18</sup>		<b>19.4%</b>	<b>48.1%</b>	<b>59.4%</b>
<b>Number of training hours on anti-corruption/ethics and integrity completed by employees</b>				
<b>Total</b>		<b>10,428</b>	<b>13,491</b>	<b>21,873</b>
By employment type	Full-time	<b>10,193</b>	<b>12,982</b>	<b>20,746</b>
	Part-time	<b>235</b>	<b>509</b>	<b>1,127</b>

Note:

(18) 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%".

# 7.2 Hong Kong Stock Exchange ESG Guide Content Index

Mandatory Disclosure Requirements		Section
Governance Structure	A statement from the board containing the following elements: (i) a disclosure of the board's oversight of ESG issues; (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 (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.	3.2
Reporting Principles – Materiality	The ESG report should disclose: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement.	3.1
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.	7.1
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.	7.1
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.	1.4

# 7.2 Hong Kong Stock Exchange ESG Guide Content Index

Subject Areas, Aspects, General Disclosures and KPIs	Section	Remarks
<b>A. Environmental</b>		
<b>Aspect A1: Emissions</b>		
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. 5.1 5.2 5.4 5.5 5.6	<ul style="list-style-type: none"> <li>Corporate Social Responsibility Policy</li> <li>Environmental Policy</li> <li>Supplier Code of Conduct</li> </ul>
KPI A1.1	The types of emissions and respective emissions data. 5.1 7.1	
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). 5.1 7.1	
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 5.2 7.1	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 5.2 7.1	
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them. 2 5.1	
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. 5.2	
<b>Aspect A2: Use of Resources</b>		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials. 5.1 5.2 5.4 5.5	<ul style="list-style-type: none"> <li>Corporate Social Responsibility Policy</li> <li>Environmental Policy</li> <li>Supplier Code of Conduct</li> </ul>
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). 5.1 7.1	

Subject Areas, Aspects, General Disclosures and KPIs	Section	Remarks
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility). 5.4 7.1	
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them. 2	
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. 5.4	
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. 7.1	
<b>Aspect A3: The Environment and Natural Resources</b>		
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources. 5.1 5.2 5.3 5.4 5.5	<ul style="list-style-type: none"> <li>Environmental Policy</li> <li>Supplier Code of Conduct</li> </ul>
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the action taken to manage them. 5.1 5.2 5.3 5.4 5.5	
<b>Aspect A4: Climate Change</b>		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. 3.4	<ul style="list-style-type: none"> <li>Environmental Policy</li> </ul>
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. 3.4	

# 7.2 Hong Kong Stock Exchange ESG Guide Content Index

Subject Areas, Aspects, General Disclosures and KPIs	Section	Remarks
<b>B. Social</b>		
<b>Employment and Labour Practices</b>		
<b>Aspect B1: Employment</b>		
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. 6.1 6.7	<ul style="list-style-type: none"> <li>Employee Code of Conduct</li> </ul>
KPI B1.1	Total workforce by gender, employment type (for example, full or part time), age group and geographical region. 6.1 7.1	
KPI B1.2	Employee turnover rate by gender, age group and geographical region. 6.1 7.1	
<b>Aspect B2: Health and Safety</b>		
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. 6.2 6.7	<ul style="list-style-type: none"> <li>Health and Safety Policy</li> </ul>
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year. 7.1	
KPI B2.2	Lost days due to work injury. 6.2 7.1	
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored. 6.2	
<b>Aspect B3: Development and Training</b>		
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). 6.1 7.1	
KPI B3.2	The average training hours completed per employee by gender and employee category. 6.1 7.1	

Subject Areas, Aspects, General Disclosures and KPIs	Section	Remarks
<b>Aspect B4: Labour Standards</b>		
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. 6.4 6.7	<ul style="list-style-type: none"> <li>Human Rights Policy</li> <li>Modern Slavery and Human Trafficking Statement</li> <li>Supplier Code of Conduct</li> </ul>
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour. 6.4	
KPI B4.2	Description of steps taken to eliminate such practices when discovered. 6.4	
<b>Operating Practices</b>		
<b>Aspect B5: Supply Chain Management</b>		
General Disclosure	Policies on managing environmental and social risks of the supply chain. 6.4	<ul style="list-style-type: none"> <li>Human Rights Policy</li> <li>Modern Slavery and Human Trafficking Statement</li> <li>Supplier Code of Conduct</li> </ul>
KPI B5.1	Number of suppliers by geographical region. 6.4	
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. 6.4	<ul style="list-style-type: none"> <li>Policy on Appointment of Third Party Representatives</li> </ul>
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored. 6.4	
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored. 6.4	
<b>Aspect B6: Product Responsibility</b>		
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. 6.2 6.3 6.5 6.7	<ul style="list-style-type: none"> <li>Employee Code of Conduct</li> </ul>
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons. –	This indicator is not considered material to the Group hence such data are not disclosed.

# 7.2 Hong Kong Stock Exchange ESG Guide Content Index

Subject Areas, Aspects, General Disclosures and KPIs	Section	Remarks	
KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	7.1	
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	–	Our Employee Code of Conduct outlines our commitment to intellectual property rights protection.
KPI B6.4	Description of quality assurance process and recall procedures.	6.5	
KPI B6.5	Description of consumer data protection and privacy, policies and how they are implemented and monitored.	6.3	<ul style="list-style-type: none"> <li>Information Security Policy</li> </ul>
<b>Aspect B7: Anti-corruption</b>			
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.	4.2 4.3	<ul style="list-style-type: none"> <li>Employee Code of Conduct</li> <li>Anti-Fraud and Anti-Bribery Policy</li> <li>Policy on Appointment of Third Party Representatives</li> </ul>
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.	–	No recorded cases of non-compliance with laws and regulations relating to anti-corruption and bribery during the reporting period.
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	4.2	<ul style="list-style-type: none"> <li>Whistleblowing Policy – Procedures for Reporting Possible Improprieties</li> </ul>
KPI B7.3	Description of anti-corruption training provided to directors and staff.	4.2	
<b>Community</b>			
<b>Aspect B8: Community Investment</b>			
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.	6.6	<ul style="list-style-type: none"> <li>Corporate Social Responsibility Policy</li> </ul>
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	6.6	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	6.6	

# 7.3 TCFD Content Index

TCFD recommendations	Section	
<b>Governance</b>		
Disclose the organisation's governance around climate-related risks and opportunities.	<ul style="list-style-type: none"> <li>Describe the board's oversight of climate-related risks and opportunities.</li> <li>Describe management's role in assessing and managing climate-related risks and opportunities.</li> </ul>	3.2 3.4
<b>Strategy</b>		
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.	<ul style="list-style-type: none"> <li>Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.</li> <li>Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.</li> <li>Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</li> </ul>	2 3.4
<b>Risk Management</b>		
Disclose how the organisation identifies, assesses, and manages climate-related risks.	<ul style="list-style-type: none"> <li>Describe the organisation's processes for identifying and assessing climate-related risks.</li> <li>Describe the organisation's processes for managing climate-related risks.</li> <li>Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.</li> </ul>	3.4
<b>Metrics and Targets</b>		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	<ul style="list-style-type: none"> <li>Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.</li> <li>Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks.</li> <li>Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.</li> </ul>	2 3.4 5.1 7.1

## 7.4 Verification Statement



### VERIFICATION STATEMENT

#### Scope of Verification

Hong Kong Quality Assurance Agency (“HKQAA”) conducted an independent verification for the Sustainability Report 2023 (“the Report”) of CK Infrastructure Holdings Limited (“CKI”). The scope of HKQAA’s verification covered the sustainability performance and information of CKI for the period from 1<sup>st</sup> January 2023 to 31<sup>st</sup> December 2023 in providing a limited level of assurance.

The Report has been prepared in accordance with the Environmental, Social and Governance Reporting Guide (“ESG Guide”) contained in Appendix C2 to The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and with reference to the recommendations from the Task Force on Climate-related Financial Disclosures (“TCFD”).

#### Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a limited level of assurance for devising the verification conclusion.

Our verification procedures covered:

- review of the report compilation, stakeholder engagement and materiality assessment processes.
- examination of the raw data and supporting evidence of the selected samples; and
- evaluation of the mechanism for collecting, collating and reporting performance data.

#### Independence

CKI is responsible for preparing the report. HKQAA was not involved in calculating, compiling, or in the development of the Report. Our verification activities are independent from CKI.

#### Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained a limited level of assurance and is in the opinion that, nothing has come to the verification team’s attention that

- The Report has not complied with all the mandatory disclosure requirements and “comply or explain” provisions outlined in the ESG Guide; and
- The Report has not been prepared with reference to the TCFD recommendations for disclosure.

Signed on behalf of Hong Kong Quality Assurance Agency

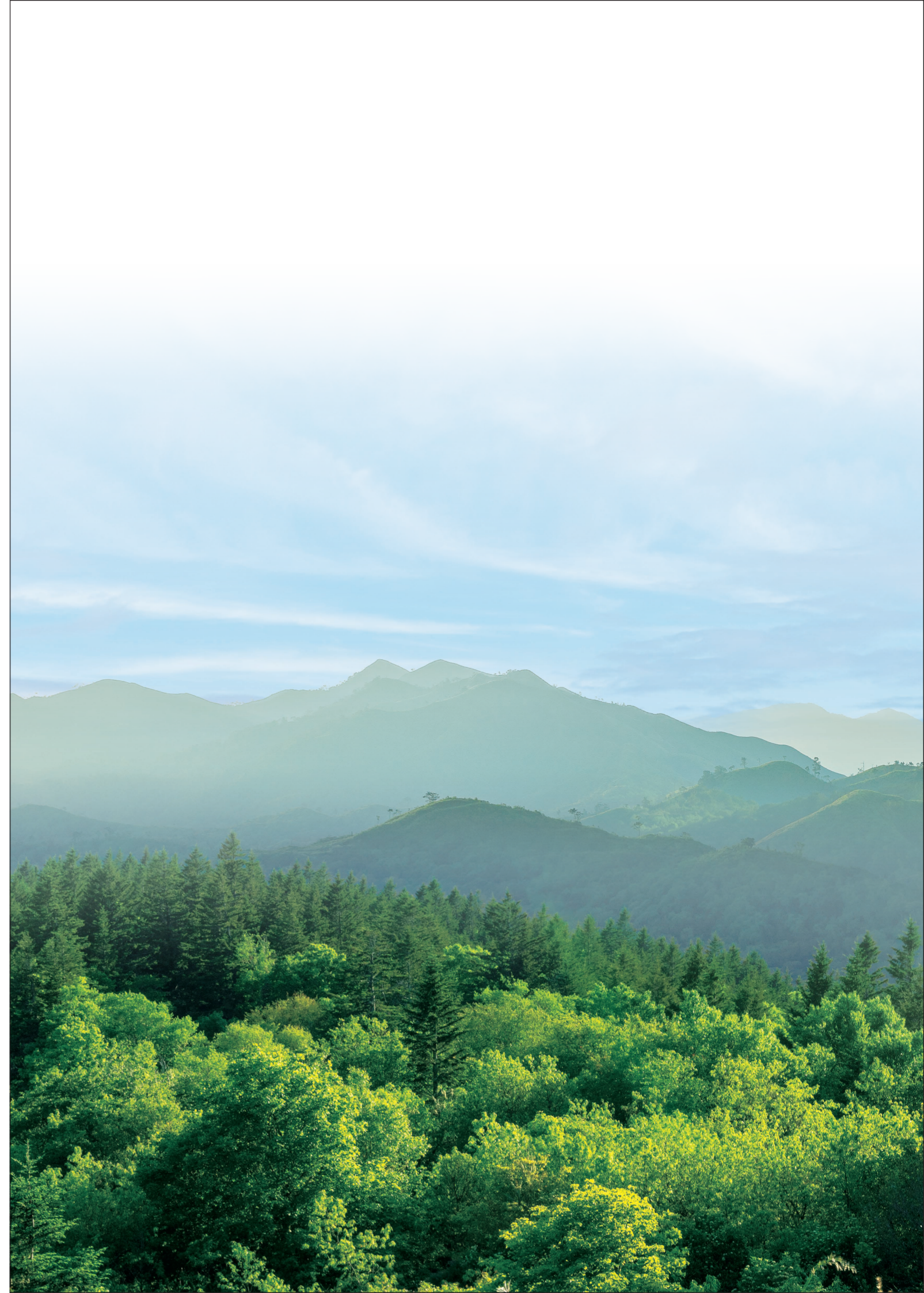
Connie Sham  
Head of Audit  
March 2024

## 7.5 Abbreviations

Abbreviation	Long Form
AEO	Australian Energy Operations
AESCSF	Australian Energy Sector Cybersecurity Framework
AGIG	Australian Gas Infrastructure Group
AGM	annual general meeting of the Company held on 17th May, 2023
AGN	Australian Gas Networks
APIs	application programming interface
AVR	AVR-Afvalverwerking B.V.
BNG	biodiversity net gain
CEO	Chief Executive Officer
Code	Employee Code of Conduct
CPD	Continuous Professional Development
CSR	Corporate Social Responsibility
CSRD	Corporate Sustainable Reporting Directive
D&I	Diversity and Inclusion
DBP	Dampier Bunbury Pipeline
DER	distributed energy resources
DNO	distribution network operator
DSO	Distribution System Operator
EDL	Energy Developments
EHS	Environmental Health & Safety
EMS	Environmental Management System
EMSD	Electrical and Mechanical Service Department
ENA	Energy Networks Association
EOS	Employee Opinion Survey
ESG Guide	ESG Reporting Guide
ESO	Electricity System Operator
ESS	Employee Self-Services
EV	electric vehicle
FIT	Feed-in Tariff
FSCA	Field Services Contractor Application
FSRU	Floating Storage and Regasification Unit
GHG	Greenhouse Gas
GMP	Global Methane Pledge
H&S	Health and Safety
HSE	Health, Safety and Environmental
HSMS	Health and Management Systems
HV-DERMS	High Voltage Distributed Energy Resource Management System
ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change

## 7.5 Abbreviations

Abbreviation	Long Form
ISO	Information Security Officer
KPIs	key performance indicators
LMS	Learning Management System
LPG	Liquefied petroleum gas
LPS	Lamma Power Station
LTIFR	Lost Time Injury Frequency Rate
LTIR	lost time injury rate
LTIs	Lost Time Injuries
LV	low voltage
NDCs	Nationally Determined Contributions
Network losses	Energy losses from distribution grid and the electricity system transmissions grid
NGN	Northern Gas Networks
NGOs	non-governmental organisations
NIST	National Institute of Standards and Technology
NOx	Nitrogen oxide
NZFN	NZ Food Network
OHS	occupational health and safety
PQQ	pre-qualification questionnaire
RAP	Reconciliation Action Plan
RECs	Renewable Energy Certificates
RSP	Respirable Suspended Particulates
SDGs	Sustainable Development Goals
SF <sub>6</sub>	Sulfur Hexafluoride
SOx	Sulfur oxides
SPCF	Smart Power Care Fund
SSP2	Shared Socioeconomic Pathway 2
T&D	Transmission & Distribution
TCFD	Task Force on Climate-related Financial Disclosures
TNFD	Task Force on Nature-related Financial Disclosure
TRIFR	Total Recordable Injury Frequency Rate
UK	United Kingdom
UKPN	UK Power Networks
UN	United Nations
VPN	Victoria Power Networks
WRMP	Water Resources Management Plan
WWU	Wales & West Gas Networks



**CK INFRASTRUCTURE HOLDINGS LIMITED**

12th Floor, Cheung Kong Center,  
2 Queen's Road Central, Hong Kong

Tel: (852) 2122 3133 Fax: (852) 2501 4550

[www.cki.com.hk](http://www.cki.com.hk)

