

(Stock Code: 1038)



# Empowering a Sustainable Future



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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Remark: Some photos in this Report may feature persons without face masks. Such photos were taken before the COVID-19 pandemic or in non-specified public place or in countries where face masks were not mandated.

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# **OUR GLOBAL PRESENCE**





Our Global Presence







# **INTRODUCTION**



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The wind farm of Dali Wind Power, in Yunnan province, forms part of our renewable energy portfolio in Mainland China.



# 1.1 ABOUT CKI

#### **INVESTMENT IN POWER ASSETS**

The Power Assets Group is a global investor in • UK Rails – one of the three major rolling stock power generation, transmission and distribution, gas transmission and distribution, as well as oil storage and transmission in nine markets spread across four continents - namely the United Kingdom ("UK"), Australia, Hong Kong, Mainland China, the Netherlands, New Zealand, Thailand, Canada and the United States

#### **INFRASTRUCTURE INVESTMENTS IN** THE UK

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 which serves the North East England and provides water supply to certain areas in the 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.
- 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") and Multinet Gas ٠ (members of Australian Gas Infrastructure Group ("AGIG")) - natural gas distribution businesses in the country.
- Dampier Bunbury Pipeline ("DBP") (a member of AGIG) – a principal gas transmission pipeline in the state of Western Australia.

- Energy Developments ("EDL") a renewable and remote energy solution producer with operations globally.
- Australian Energy Operations 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.
- EnviroNZ 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.



#### **OUR BUSINESS PORTFOLIO:**

#### Sustainability Report 2021

#### **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 business 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.

# 1.2 MESSAGE FROM THE CHAIRMAN



I am pleased to share our second annual standalone Sustainability Report entitled *Empowering a Sustainable* Future setting out our sustainability performance and achievement in 2021.

2021 put climate change and energy transition into sharp focus. Following the 26th UN Climate Change Conference of the Parties ("COP26") held in Glasgow, the countries once again reaffirmed the Paris Agreement's goals of limiting the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C.

As core participants in the energy sector, we understand that utilities play a key role in achieving the target adopted by many governments which are parties to the Paris Agreement. The decarbonisation of energy, industry, transport and heating is becoming the centrepiece of the energy transition. More sectors need to be powered by renewable sources and our core businesses are ideally positioned to propel these trends.

Our operating companies have been advancing Our people are behind all these achievements. The programmes to decarbonise the generation portfolio, diversity of our teams - in terms of background, expand renewable energy, modernise and digitalise qualifications and culture - is integral to our success. our electricity networks, propel the development of It will foster creativity, innovation and agility. This hydrogen economy while continuing to deliver reliable year, our Sustainability Report includes our action and affordable energy and services to more customers. plan to continue our work to make meaningful For example, we are conducting a number of pilot progress towards this for all our employees, and the projects to test integrating green hydrogen into the communities we serve. gas grid and partnering with industrial companies to COVID-19, which was and remains a profound global develop industrial-scale hydrogen solutions.

One of our flagship projects during the reporting period is the commissioning of Hydrogen Park South Australia ("HyP SA"), which is Australia's first project to deliver a renewable hydrogen gas blend to customers on the existing gas network. This pioneering project not only marks a significant milestone on our sustainability journey to support the local governments achieving their emission targets, but also turns our vision for a renewable gas future into reality.

The CKI's sustainability journey will continue in the coming years as well. We will continue to play a leading role both by evolving strategies in our existing portfolio companies and investing in the critical new infrastructure that is needed to create the net zero energy systems of tomorrow. Through our infrastructure, we strive to create enduring, sustainable value for all our stakeholders as we chart our path to identify possible decarbonisation pathways to achieve net zero emissions in both the energy we use in our operations and the energy being delivered to our



crisis, also confronted CKI with enormous challenges in 2021. Further improving our safety performance to help protect our employees, contractors and the communities we serve will therefore remain a top priority going forward.

To conclude, I would like to express my profound thanks to our employees, customers, business partners, and other stakeholders who have been participating in the realisation of our strategy and co-operating with us, thus supporting us to build a better, more impactful company and empower a sustainable future for the next generation.

#### VICTOR T K LI

Chairman 16th March, 2022

# 1.3 2021 HIGHLIGHTS

# **1.4 ABOUT THIS REPORT**

#### **Environment**

#### • Coal Phase Out:

• Our businesses in the Organisation for Economic Cooperation and Development ("OECD") countries have fully phased out coal-fired generation in favour of cleaner-burning natural gas in 2021.

• Committed to reducing our

coal-fired generation installed

capacity from about 53% of

our total generation portfolio

in 2016 to about 24% by

2023 and phasing out coal at

all of our business operations

- Net Zero Commitment:
- Several of our operating companies such as HK Electric, SA Power Networks, UKPN, NGN, AGIG and AVR have pledged to support net zero commitments.
- UKPN: first DNO in the UK to have its carbon reduction plan and targets externally verified by the Science Based Targets Initiative ("SBTi").
- Greenhouse Gas ("GHG") Emission Reduction: 12.9% reduction in Scope 1 and Scope 2 GHG emissions compared to 2020.

#### **Social**

by 2035.

- Average training hours 23.2 hours per employee.
- UKPN named the sixth best large company to work for in the UK, and has been in the top 25 for the previous seven years.
- HK Electric set aside HK\$63 million from its three existing fund to promote energy efficiency and to provide relief measures to families and businesses affected by the pandemic.



#### **1.4.1 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, 2021 to 31st December, 2021, unless otherwise specified. 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

#### 1.4.2 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, EDL, United Energy, Australian Energy Operations, Wellington Electricity, EnviroNZ, Dutch Enviro Energy, ista, Canadian Power, Park'N Fly, Canadian Midstream Assets and Reliance Home Comfort.

#### **1.4.3 REPORTING FRAMEWORK**

This Report is prepared with reference to the requirements under the December 2019 updated ESG Reporting Guide ("ESG Guide") contained in Appendix 27 to The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The ESG Guide Content Index set out on pages 101 to 108 contains information about the extent to which the Group has applied the ESG Guide and cross-references to the relevant section in this Report.

This Report should be read in conjunction with the Company's Annual Report 2021, 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 its operating companies' efforts and achievements in sustainability, please refer to their separate sustainability reports or websites.

#### **1.4.4 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 2.1.3 on page 16.
- 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.

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.



# **SUSTAINABILITY AT CKI**



# 2.1 APPROACH TO SUSTAINABILITY

#### THE GROUP'S SUSTAINABILITY PILLARS

Our predominant principle for sustainability is operating our businesses in a responsible and sustainable way whilst remaining transparent and accountable to our stakeholders. The Group is committed not just to its shareholders but also to a wide range of stakeholders, including employees, shareholders, customers, suppliers, the local community, professional institutions, non-governmental organisations and authorities.

#### 2.1.1 SUSTAINABILITY PILLARS AND POLICIES

The Group's overall sustainability approach and priorities are built on four pillars, namely **The Business**, **The People**, **The Community** and **The Environment**. Each pillar is supported by Group-wide policies, leadership at the Group level and collective efforts across its businesses. These four pillars guide the Group in setting the overall direction of its sustainability strategy to integrate sustainability across all operations of the Group. The Group has policies, procedures and guidelines in place to support management in addressing material sustainability issues across the Group, as described throughout this Report.

#### BUSINESS

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

#### PEOPLE

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

## COMMUNITY

- 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

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



Sustainability at CKI

These principles are adopted Group-wide and implemented by each business unit based on local social, economic and environmental needs. The execution and compliance are monitored continuously through regular management reviews 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.



Sustainability Policies



Corporate Governance Policies



#### APPROACH TO SUSTAINABILITY 2.1

# 2.2 SUSTAINABILITY GOVERNANCE

#### 2.1.2 STAKEHOLDER ENGAGEMENT

The Group endeavours to communicate openly and transparently with its key stakeholders to gather their views on the issues that concern them the most. Given the diversity of the businesses, the Group deals with different stakeholder groups including employees, shareholders, customers, suppliers, the local community, professional institutions, non-governmental organisations ("NGOs") and authorities. The Group regularly collects their views through various channels, such as meetings, surveys, seminars and workshops.

The Group uses stakeholders' input to understand the shifting market needs, which in turn helps to inform the Group's decision-making in relation to its sustainability practices, initiatives and disclosures.

The material sustainability issues identified were:

## Environment

## Social

- Combating Climate Change Human Capital Development
- Preserving Natural Environment • Occupational Health and Safety (including biodiversity, water, effluent and waste)

MATERIALITY ASSESSMENT 2.1.3

To succeed and make a positive impact on society, we need to understand and respond to the changing world around us. Our materiality assessment identifies the sustainability issues that are perceived as being most important to our stakeholders and our businesses.

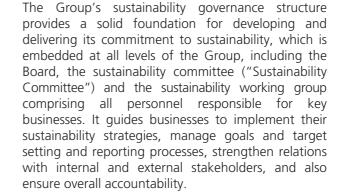
We use outcomes of the materiality assessment to inform our sustainability approach, strategy and reporting. This drives us to focus on the risks, opportunities, issues and impacts that matter most to our stakeholders and which we have the ability to influence.

Our most recent materiality assessment was carried out in 2020 and the results continue to represent the main topics raised by stakeholders. For information on the process, please refer to our Sustainability Report 2020.

Governance

Corporate Governance

- Business Ethics
- (including emergency response)
- Cybersecurity
- Supply Chain Management
- Community Engagement



# **CKI's Sustainability Governance Structure**

Top-down **Strategy** 

#### The Board

- management, performance and reporting.
- Examines and approves the Group's sustainability objectives, strategies, priorities, initiatives and goals, 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. Paul Joseph TIGHE, an Independent Non-Executive Director, and the Company Secretary, as members.
- Has an overarching role in supporting the Board on the 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.
- In 2021, the Sustainability Committee met twice to review the Group's sustainability plans including the progress on target setting.
- 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.

Our operating companies are accountable for executing the Group's sustainability ambitions and for managing relevant risks and performance. Most of them, including UKPN and Australian portfolio companies, have their own sustainability organisation to support their management team, and sustainability topics are regularly discussed by their boards and/or board-level committees.

To align efforts and manage sustainability performance across the Group, we together with Power Assets hosted an annual in-house sustainability conference in March 2022. Executives from our operating companies share best practices, with a view to achieving group-wide sustainability vision.

· Has ultimate accountability for the Group's sustainability strategy,

**Bottom-up** Information Flow

Sustainability at CKI

# **CORPORATE GOVERNANCE**



The Group strives to attain and maintain high standards of corporate governance best suited to the needs and interests of the Group as it believes As at 31st December, 2021 and up to the date of that an effective corporate governance framework is fundamental to promoting and safeguarding the interests of shareholders and other stakeholders and enhancing shareholder value. Accordingly, the Group has adopted and applied corporate governance principles and practices that emphasize a quality Board, sound internal controls, stringent disclosure practices, transparency and accountability.

The Board is responsible for directing and guiding the strategic objectives of the Company and overseeing and monitoring managerial performance.

#### 3.1.1 ROLE OF THE BOARD

Directors are charged with the task of promoting the long-term success of the Company and making decisions in the best interests of the Company.

The Board is led by the Chairman, Mr Victor T K LI, who determines the broad strategic direction of the Group in consultation with the Board members and is responsible for the high-level oversight of management. Management is responsible for the day-to-day operations of the Group under the leadership of the Group Managing Director, with the support of the Executive Directors.

The Board is supported by five board committees, namely, audit committee ("Audit Committee"), remuneration committee ("Remuneration Committee"), nomination committee ("Nomination Committee"), Sustainability Committee and executive committee ("Executive Committee"), with specific terms of reference.

#### 3.1.2 **BOARD COMPOSITION**

this Report, the Board consists of a total of seventeen Directors, comprising eight Executive Directors, two Non-executive Directors and seven Independent Non-executive Directors. Three Alternate Directors were appointed. More than one-third of the Board is made up of Independent Non-executive Directors and more than one of them have appropriate professional qualifications, or accounting or related financial management expertise as required by the Listing Rules. All Directors (including Non-executive Directors) are subject to retirement by rotation once every three years and are subject to re-election in accordance with the Company's Bye-laws and the Corporate Governance Code.

Biographical information of the Directors is set out in the Board and Key Personnel on pages 54 to 61 of the Company's Annual Report 2021. A list setting out the names of the Directors and their roles and functions is also posted on the websites of the Company (https://www.cki.com.hk) and Hong Kong Exchanges and Clearing Limited (https://www.hkexnews.hk).

#### 3.1.3 CHAIRMAN AND GROUP **MANAGING DIRECTOR**

The positions of Chairman and Group Managing Director are currently held by separate individuals with a view to maintaining effective segregation of duties respecting management of the Board and the day-to-day management of the Group's business.

The Chairman is responsible for providing leadership to, and overseeing the functioning of, the Board to ensure that it acts in the best interests of the Group.

The Group Managing Director, with the support of the Executive Directors, is responsible for strategic planning of different business functions and day-to-day management and operation of the Group.

Review of the Board composition is made regularly through Nomination Committee to ensure that it has a balance of expertise, skills and experience appropriate for the requirements of the business of the Company.

#### 3.1.4 BOARD EFFECTIVENESS

Each newly appointed Director received an induction package, which has been compiled and reviewed by the Company's legal advisers, including information on the Group, duties and responsibilities as a director and board committee member under the Listing Rules and relevant regulatory requirements, as well as internal governance policies of the Group. Further information package comprising the latest developments in laws, rules and regulations relating to the duties and responsibilities of directors will be forwarded to each Director from time to time for his/her information and ready reference.

To ensure an appropriate balance of knowledge and experience that allows the Board to fulfil its duty, the Company arranges at the cost of the Company and provides Continuous Professional Development ("CPD") training such as seminar sessions and relevant reading materials to Directors to help them keep abreast of current trends and issues facing the Group, including the latest changes in the commercial (including industry-specific and innovative changes), legal and regulatory environment in which the Group conducts its businesses and to refresh their knowledge and skills on the roles, functions and duties of a listed company director.

#### **BOARD INDEPENDENCE** 3.1.5

The Board, with the assistance of the Nomination Committee, evaluates the independence of Independent Non-executive Directors, whose independence is assessed with regard to the criteria under the Listing Rules. All the Independent Non-executive Directors of the Company have not been involved in the daily management of the Company nor in any relationship or circumstances which would materially interfere with their exercise of independent judgement.

Seven out of seventeen members of the Board are Independent Non-executive Directors. During the year under review, all Independent Non-executive Directors attend to the affairs of the Group through their participation at the annual general meeting, Board and Board Committee meetings and perusal of Board papers. Three out of five committees established by the Board, namely the Audit Committee, the Nomination Committee and the Remuneration Committee are chaired by Independent Non-executive Directors. The Audit Committee comprises of Independent Non-executive Directors only, while the Nomination Committee and the Remuneration Committee comprise a majority of members thereof being Independent Non-executive Directors.

The Company maintains the view that a Director's independence is a question of fact and this is formally recognised in the Board Diversity Policy. The Board is committed to assessing this on an ongoing basis with regard to all relevant factors concerned. Some of these factors include: the ability to continually provide constructive challenge for management and other Directors and to express one's own views independent of management or other fellow Directors and the gravitas inside and outside the boardroom context. These attributes and desired behaviour have been demonstrated by our Independent Non-executive Directors as circumstances require.

#### 3.1.5 BOARD INDEPENDENCE (CONT'D) 3.1.6 BOARD PROCESS

The Board is of the view that a director's independence should not be defined by his/her tenure on the Board. The Board assesses a director's independence on a case-by-case basis with reference to the director's business acumen, experience in related industries, professional qualification, international business exposure and the nature of the businesses of the Company in addition to tenure. A director who has over time gained in-depth insight into the Company's operations and its markets are well-positioned to offer his/her perspective and advice for discussion at the Board. Long serving directors can bring valuable contribution to the Company with their comprehensive understanding of the operations of the Company, in particular the infrastructure businesses which typically have a long return of investment period.

Notwithstanding that six out of seven Independent Non-executive Directors have served the Board for more than nine years, they have continued to bring in fresh perspectives, skills and knowledge gained from their other directorships and appointments on an ongoing basis. Their wealth of skills, knowledge and experience have enabled them to contribute meaningfully and objectively to the Board as Independent Non-executive Directors. The Board considers that the long serving Independent Non-executive Directors' independence from management has not been diminished by their years of service.

In identifying suitable candidates for Independent Non-executive Directors, apart from independence which is one of the key factors, the Nomination Committee also takes into account the Board's composition as well as the various diverse aspects, including gender, as set out in the Board Diversity Policy. The Nomination Committee also reviews on a timely basis any changes in the Directors' professional engagements as well as other directorships or commitments to ensure compliance with the independence criteria and their commitment and devotion to the Board.

The Board currently comprises four female directors, representing approximately 24% of the Board. For the financial year commencing on 1st January, 2022, the Board will consider numerical targets in relation to gender diversity on its Board as required under new Corporate Governance Code.

The Board meets regularly and at least four times a year with meeting dates scheduled towards the end of the immediately preceding year. Between scheduled meetings, monthly updates and other information with respect to the performance and business activities of the Group had been provided to Directors on a regular basis. Whenever warranted, additional Board meetings are held by the Company. Further, Directors have full access to information on the Group and independent professional advice at all times whenever deemed necessary and they are at liberty to propose appropriate matters for inclusion in Board agendas.

In 2021, the Company held four Board meetings with a satisfactory overall attendance of approximately 99%. All Directors attended the annual general meeting of the Company held on 12th May, 2021 ("AGM") and the Board meeting held on the same day.

Taking into consideration the various social distancing measures as strongly advised by the Hong Kong Special Administrative Region Government during the COVID-19 situation, additional precautionary measures were implemented in the interest of the health and safety of the shareholders attending the AGM:

- Shareholders can attend the AGM and vote by means of electronic facilities instead of attending the physical AGM;
- Shareholders were able to submit questions online during the AGM and send questions by email before AGM;
- Attendees were required to wear surgical face masks throughout the AGM and compulsory temperature screening/check before entering into the venue;
- Attendees were required to complete a Health Declaration Form and assigned seats in partitioned meeting rooms at the AGM venue with video link up to ensure appropriate social distancing and facilitate contact tracing; and
- All Directors participated through video conferencing.

#### Members of the Board

#### **Executive Directors**

Victor T K LI *(Chairman)* KAM Hing Lam *(Group Managing Director)* IP Tak Chuen, Edmond *(Deputy Chairman)* FOK Kin Ning, Canning *(Deputy Chairman)* Frank John SIXT Andrew John HUNTER *(Deputy Managing Director)* CHAN Loi Shun *(Chief Financial Officer)* CHEN Tsien Hua

#### Independent Non-executive Directors

CHEONG Ying Chew, Henry KWOK Eva Lee SNG Sow-mei alias POON Sow Mei Colin Stevens RUSSEL LAN Hong Tsung, David Barrie COOK Paul Joseph TIGHE

#### **Non-executive Directors**

LEE Pui Ling, Angelina George Colin MAGNUS

In addition to regular Board meetings, the Chairman held meetings with Independent Non-executive Directors without the presence of other Directors twice in 2021. The Independent Non-executive Directors are encouraged to provide their independent views to the Board.



-	
Attendance at	Attendance
Board Meetings	at 2021 AGM
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1
3/4	1/1
4/4	1/1
4/4	1/1
4/4	1/1

#### 3.1.7 BOARD COMMITTEES

The Board has established five Board Committees: namely, Audit Committee, Remuneration Committee, Nomination Committee, Sustainability Committee and Executive Committee. Each committee is delegated

with authority to deal with specific matters with a view to operating effectively, and giving appropriate attention and consideration to these matters.

The table below provides membership information of these committees on which the Board members serve:

Board Committee Directors	Audit Committee	Remuneration Committee	Nomination Committee	Sustainability Committee*	Executive Committee*
Victor T K LI		М	М		C
KAM Hing Lam					М
IP Tak Chuen, Edmond				С	М
FOK Kin Ning, Canning					
Frank John SIXT					
Andrew John HUNTER					М
CHAN Loi Shun					М
CHEN Tsien Hua					М
CHEONG Ying Chew, Henry	М	С			
KWOK Eva Lee			С		
SNG Sow-mei alias POON Sow Mei	С				
Colin Stevens RUSSEL		М			
LAN Hong Tsung, David	М				
Barrie COOK			М		
Paul Joseph TIGHE	М			М	
LEE Pui Ling, Angelina					
George Colin MAGNUS					

Notes:

\* also comprises other key personnel

C Chairman/Chairperson of the relevant Board committees

M Member of the relevant Board committees

#### 3.1.7.1 Audit Committee

The role of the Audit Committee is to assist the Board in fulfilling its audit duties through the review and supervision of the Company's financial reporting system, the effectiveness of risk management and internal control systems. It regularly reviews the scope, extent and effectiveness of the activities of the Group's internal audit function, the risk management framework (including ESG risks) and the internal control systems, as well as develops and reviews the Company's policies and practices on corporate governance including compliance with statutory and

Listing Rules' requirements. At the Audit Committee meeting held in March 2022, members of the Audit Committee had examined the Company's policies and practices on corporate governance and compliance with legal and regulatory requirements including: Corporate Governance Policies, Anti-Money Laundering Policy, Competition Compliance Policy, Model Code for Securities Transactions by Directors, Privacy Policy and Personal Information Collection Statement and Sanctions Compliance Policy. The Audit Committee, which comprises only Independent Non-executive Directors, is chaired by an Independent Non-executive Director and is comprised of three other Independent Non-executive Directors as members, at least one of whom possess the relevant financial and business management experience and skills to understand financial statements and monitor the corporate governance, internal controls and risk management of the Company.

For more information, please refer to the Terms of Reference of the Audit Committee and the Corporate Governance Report included in Annual Report 2021 of the Company.

#### 3.1.7.2 Remuneration Committee

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

The Remuneration Committee, with a majority of the members thereof being Independent Non-executive Directors, is chaired by an Independent Non-executive Director and is comprised of one Executive Director and one other Independent Non-executive Director as members. Group's sustainable development and ESG risks. For more information, please refer to "Sustainability Governance" on page 17 and the Terms of Reference of the Sustainability Committee.

For more information, please refer to the Terms of Reference of the Remuneration Committee and the Corporate Governance Report included in Annual Report 2021 of the Company.

#### 3.1.7.3 Nomination Committee

The Nomination Committee is responsible for reviewing the structure, size, diversity profile and skills matrix of the Board and independence of the Independent Non-executive Directors and making recommendations on the appointment or re-appointment of Directors and succession planning for Directors. Board on acquisitions of or investments in businesses or projects. For more information, please refer to the Terms of Reference of the Executive Committee.

The Nomination Committee, which comprises a majority of Independent Non-executive Directors, is chaired by an Independent Non-executive Director and is comprised of one Executive Director and one other Independent Non-executive Director as members.

The nomination process is conducted in accordance with the Director Nomination Policy and 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 2021 of the Company.

#### 3.1.7.4 Sustainability Committee

The Sustainability Committee, which is chaired by an Executive Director, with one Independent Non-executive Director and the Company Secretary as members, was set up by the Board to oversee management and advise 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 sustainable development and ESG risks.

#### 3.1.7.5 Executive Committee

The Executive Committee is responsible for reviewing the financial information of the Company, discussing and making decisions on matters relating to the management and operations of the Company including but not limited to financial/treasury planning and strategy formulation, and assessing and making recommendations to the Board on acquisitions of or investments in businesses or projects.

#### 3.2.1 WHY IT MATTERS

Anti-bribery and anti-corruption are important topics **3.2.3.1 Governance Policies** for the industry. As providers of critical infrastructure, utilities have close relationships with government officials as well as suppliers, third-party contractors, and customers. There are potential risks of bribery and corruption in certain parts of the world.

As utilities are heavily regulated, they are subject to investigations and lawsuits by regulatory authorities. We believe it is important to take a proactive and holistic approach to avoid any incidents of bribery and corruption, driven by our own ethos and regulatory obligations. This requires operating companies to develop well-rounded anti-corruption policies and whistleblower programmes as well as training their staff based on the requirements of the Group and local authorities.

#### 3.2.2 OUR COMMITMENT

The Group values and upholds the highest standards of business integrity, honesty and transparency in its overall business activities. The Group has zero tolerance on any form of fraud or bribery, and is committed to the prevention, deterrence, detection and investigation of all forms of fraud and bribery.

The Board holds the overall responsibility for business ethics as an essential part of its corporate governance responsibilities. The Executive Directors assist the Board in overseeing the Group's legal and regulatory compliance efforts.

#### HOW WE WORK 3.2.3

We have formulated relevant policies for our stakeholders to outline our expectations and requirements to ensure fair competition across our business operations.

The Employee Code of Conduct (the "Code") sets out the professional and ethical standards for the Directors and employees of the Company to observe in all business dealings, including provisions dealing with conflict of interest, fair dealing and integrity, corruption, political contributions, personal data protection and privacy, as well as requisite reporting of illegal and unethical behaviour. The Code applies to all subsidiaries and controlled affiliates of the Group, where every Director adheres strictly to the Code including all applicable laws, rules, and regulations within the jurisdictions in which the Group operates. For non-controlled affiliates, employees serving as directors should, to the extent possible, encourage those affiliates to adopt and follow the Code.

Business partners and suppliers of the Group are encouraged to maintain the highest standards of ethical conduct and professionalism in accordance with the 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 procurement of goods and services. It is the Group's general policy to avoid any form of donations to political associations or individual politicians.

Business practices and controls for preventing and combating corruption and other misconducts are Other policies relevant to ethics and compliance continually assessed at both the Group and business includina: unit levels.

- 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.

#### 3.2.3.2 Communication and Training

The Code forms part of the mandatory induction training which all employees attend upon joining the Group. It is the responsibility of every Director and employee (whether full-time or part-time, contract or temporary staff) to familiarise themselves and comply with the Code. During the year, the Group provided a seminar relating to business ethics including anti-money laundering to the Directors to help them keep abreast of current trends and issues facing the Group. Regularly, tailor-made training on specific topics such as anti-fraud and anti-corruption are assigned to employees based on their role and area of responsibility.

For example, AGIG and WWU appointed external training providers to lead the instruction of modules on anti-bribery and anti-corruption, fraud, and other corrupt business practices. Training modules are available to all employees via the internal Learning

Management System (LMS) and are mandatory for new hires in certain teams. HK Electric and SA Power Networks communicated and provided trainings on anti-corruption policies and procedures to the board members and employees regularly. In addition, anti-corruption is also covered as part of the HK Electric, UKPN, WWU and EDL induction process for new employees.

#### 3.2.3.3 On-going Assessment

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. To combat corruption and bribery risks, ista's Corporate Internal Audit and Compliance department monitors the adherence to all relevant external requirements and internal policies. 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.

WWU conducts a risk-based audit to ensure that the focus is on key risk areas. These audits also consider the design and operating effectiveness of processes and controls. Deficiencies with the potential for fraud and other corruption are covered during the process.

#### 3.2.3 HOW WE WORK (CONT'D)

#### 3.2.3.4 Due Diligence

Moreover, 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 engagement of the third party representative.

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

#### 3.2.3.5 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 core business derives its own set of internal escalation procedures to cater to its operational needs.

For example, United Energy provides an independent anonymous 24/7 free service line named Speak-up Anonymous for employees to report on misconduct. To protect employees who report suspected misconduct, United Energy implements a safe reporting mechanism to ensure the confidentiality of anonymous reports.

It is available to suppliers, customers and other third parties. EDL has a Whistleblower Policy, aimed at encouraging internal or external stakeholders to report any misconduct or wrongdoing. Stakeholders can call the confidential, independently managed hotline or approach the Chief Executive Officer ("CEO"), Chief Financial Officer, company secretary, director, or other senior managers to report questionable matters.

#### 3.2.3.6 Risk Management

The Group has in place an Enterprise Risk Management framework which is consistent with the COSO (Committee of Sponsoring Organisations of the Treadway Commission) framework. The framework facilitates a systematic approach in identifying, evaluating and managing significant risks (including ESG risks) within the Group, be they of strategic, financial, operational or compliance nature.

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 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.

#### Senior Management

- 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 Bottom-up:

#### Risk and Control Monitoring 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 systems.

#### **Operational Level**

- 1. Identify, assess, mitigate and report the risks; and
- 2. Provision of reports and data relating to emerging

In terms of a formal review of the Group's internal risks to the Board, through the Audit Committee. control system, each business unit has to perform a risk assessment on a bi-annual basis where the risks Through this "top-down and bottom-up" risk review associated with achieving the business objectives are process, the risks identified in each business unit identified and analysed. It also includes a review of the will be presented in the Group Risk Register, where control mechanism for each risk, and an action plan they are considered significant on a group level. This is put in place to address areas for improvement. The Register, of which the content is confirmed by the Chief Executive Officer and Chief Financial Officer of Group Managing Director and the Chief Financial each business unit need to provide a formal confirmation Officer, forms part of the Risk Management Report to acknowledge the review of their control systems for review and approval by the Audit Committee and highlight any weaknesses. Such confirmations are every half-yearly. The Audit Committee, on behalf reviewed by the Audit Committee, through Internal of the Board, reviews the Report to ensure that all Audit, and submitted to the Board for its assessment. the significant risks are identified and appropriately

#### **REGULATORY COMPLIANCE** 3.3

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

managed. Pages 177 to 184 of the Company's Annual Report 2021 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.

#### 3.2.3.7 Internal Control Environment

The Group's internal control system is embedded in its day-to-day business activities and is carried out at all levels of the Group. The Group has a well-established organisational structure with defined levels of authority and responsibility, as well as reporting procedures.

The Group's governance structure, comprising the Board, Audit Committee, Senior Management, Operational Level, and Risk and Control Monitoring Functions, has been established with defined roles and responsibilities to enhance the Board's ability to exercise proper oversight.

# **ENVIRONMENT**

# Green Energy for a Clean and Sustainable Future

We are aware that a successful transformation to a low-carbon economy will require far-reaching and permanent structural changes across society, and therefore, our operating companies around the world are implementing initiatives to drive the energy transition and making steady progress on the path towards net zero emissions.

EDL's Coober Pedy Hybrid Renewable Power Station in South Australia, comprising 4MW wind generation, 1MW solar generation and 1MW/500kWhr battery.





#### 4.1.1 WHY IT MATTERS

Following the COP26, which was held in Glasgow Our operating companies are investing in green energy from 31st October, to 13th November, 2021, the countries once again reaffirmed the Paris Agreement's goals of limiting the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C. The COP26 also emphasised the need for further action to limit the emissions of methane, one of the most potent GHGs. The Global Methane Pledge, officially launched at the COP26, aims to catalyse global action and strengthen support for existing international methane emission reduction initiatives to reduce global methane emissions by at least 30% from 2020 levels by 2030.

As core participants in the energy sector, we understand that utilities play a key role in achieving the target adopted by many governments which are parities to the Paris Agreement. Our core businesses reflect the key emerging energy trends and enable us to help our customers transition to a low-carbon economy.

#### **OUR COMMITMENT** 4.1.2

and innovative solutions to support the fight against climate change. Currently, several of our business units such as HK Electric, SA Power Networks, UKPN, NGN, AGIG and AVR have pledged to net zero commitments. In particular, UKPN is the first DNO in the UK to have its carbon reduction plan and targets externally verified by the SBTi.

Summary of current net zero or emission targets by our business units:

Business Units	Net zero targets in place	Details of the
NGN	V	Achieve excluding by 2050
Northumbrian Water	✓	Achieve
UKPN	J	Reduce of excluding offset an 2028 usi
WWU	1	Reduce ( zero read
AGIG	1	<ul> <li>10% rer 2030; 10 and 2040</li> <li>Achieve midstrea 2050</li> </ul>
SA Power Networks	1	• Achieve
VPN and United Energy	_	• Reduce 2019
Dutch Enviro Energy	J	<ul><li>Achieve</li><li>Reduce activity le</li></ul>
ista	J	<ul> <li>Achieve by 2030</li> <li>Reduce of 2030 vs.</li> </ul>
HK Electric	1	Reduce     electricity

#### e targets

net zero in operations by 2031 (Scope 1 and Scope 2, ng gas shrinkage) and net zero across the value chain

net zero in operations by 2027

directly controllable emission (Scope 1 and Scope 2, ng losses) exceeding a 1.5°C reduction trajectory and ny remaining residual emission to achieve net zero by sing high quality verified offsets

GHG emissions by 37.5% by 2035 vs. 2020. Be a net ady network by 2035

enewable gas by volume in distribution networks by 00% renewable gas by volume by 2050 at the latest 10 as a stretch target

net zero in Scope 1 and Scope 2 transmission and am emissions and in Scope 3 distribution emissions by

net zero operation by 2035

30% Scope 1 and Scope 2 emissions by 2030 vs.

net zero in operations by 2050 35% fossil CO<sub>2</sub> emission by 2030 over historical level of 2014 – 2018

net zero operations, and selected Scope 3 emissions,

customers' and end users' CO<sub>2</sub> emissions by 10% by 2015

its GHG emissions per kWh 30% derived from ty production by 2022 from a 2005 base-year

#### 4.1.2 OUR COMMITMENT (CONT'D)

Meanwhile, WWU has built the 2050 Energy Pathfinder, which is a simulator for energy systems analysis, enabling interchangeable forecast analysis to assess the feasibility of how different energy mixces would work in practice. For example, users can input information about a region, including population size and growth, and the simulator would model the impact of new housing and demographic growth on generation needs, allowing users to anticipate and respond to changes in energy efficiency scenarios and assess the impact on energy demand and carbon reduction.

EDL is contributing to the Global Methane Pledge launched at COP26 through investments in green gas or renewable natural gas ("RNG"), such as the Wood Road RNG Facility in Michigan, U.S.A. The facility converts around 19,000 tons of methane per year from Granger's Wood Street Landfill into 870,000 mmBtu of pipeline-quality RNG each year, displacing about 29,000 tCO<sub>2</sub>e per year that would have otherwise resulted from combusting comparable fossil fuels.

Nevertheless, the Group is committed to mitigating its environmental impact on climate change, which could affect the Group's businesses, financial conditions and growth prospects. We strive to further strengthen our resilience to climate change both by evolving strategies in our existing portfolio companies and by investing in the critical new infrastructure that is needed to create the net zero energy systems of tomorrow.

In our Environmental Policy, we have outlined our position and principles on managing the direct impact arising from climate change, with several key points as follows:

- address climate change risks as part of the Group's risk management process;
- set up long-term targets to reduce carbon emissions as appropriate, while enacting processes and systems to monitor the Group's carbon footprint;
- incorporate climate change considerations into its business strategies;

- establish appropriate procedures and processes to prevent or minimise the damage that climate change may cause and make use of the opportunities that may arise; and
- reduce, where feasible, the production of greenhouse gases, ozone-depleting emissions and other air pollutants within the Group's operations.

#### 4.1.2.1 2021 Performance

In 2021, our total carbon emissions consisted of 82% Scope 1 emissions and 18% Scope 2 emissions.

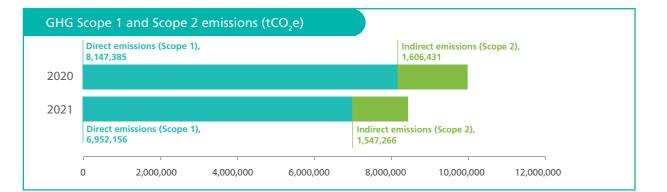
The Scope 1 emissions are direct emission from fuels processed in sources that were owned or controlled by our operating companies and fugitive emissions resulted from gas shrinkage for our gas transmission and distribution companies, which where equal to 6,952,156 tonnes of carbon dioxide equivalents ("tCO<sub>2</sub>e") in 2021, with a 15% decrease from 2020. This is mainly due to overall decrease in the consumption of non-renewable fuel consumed such as diesel and natural gas.

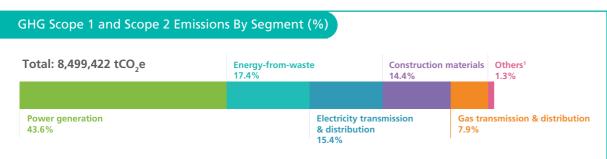


The Scope 2 emissions include the emissions from purchased electricity of our businesses for their own use, and those associated with losses in transmission and distribution networks for our electricity distribution companies. Our operating companies proactively drive a shift to renewable energy through the use of solar panels on-site to power its facilities or purchase of certified renewable energy. These ongoing efforts have helped reduce our Scope 2 emissions by 4% to  $1,547,266 \text{ tCO}_2\text{e}$  when compared to 2020.

Among the Group's GHG emissions, emissions from the power generation business segment accounted for about 44% of the total, followed by energy-from-waste, electricity transmission and distribution, construction materials, and gas transmission and distribution. The remaining business segments, including oil pipeline and storage facilities, water utilities, waste management, transportation, and household infrastructure, contributed to less than 2% of the total GHG emissions.

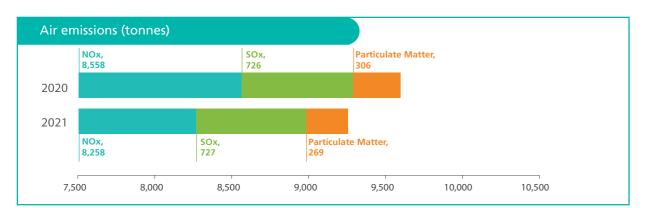
# 4.1 COMBATING CLIMATE CHANGE

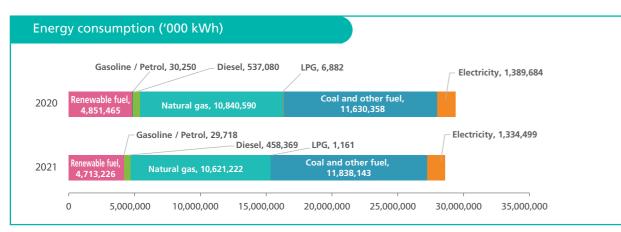




Note:

(1) includes oil pipeline and storage facilites, water utilities, waste management, transportation, and household infrastructure





#### 4.1.3 HOW WE WORK

The transition to a low-carbon economy poses challenges, but also creates opportunities for us to grow our business. By pursuing a corporate strategy that takes climate change into account, we are supporting the global effort to contain global temperature rise and the transition to a low-carbon economy by decarbonising the generation portfolio, modernising and digitising electricity networks, and blending hydrogen into existing gas distribution networks. In addition, our operating companies implement various measures to help customers improve energy efficiency.

#### 4.1.3.1 Enabling Carbon Reduction

Reducing the environmental impacts associated with our businesses is a strategic objective for us. For example, the emissions reductions from adopting carbon capture and storage technologies, blending renewable gas into the existing gas network, and expanding our renewable energy portfolio.

As a leading global sustainable energy producer, EDL's Clean Energy sites across Australia, North America and Europe help its landfill and coal mine customers capture and convert methane into electricity or RNG and collectively deliver abatement of 4 million  $tCO_2e$ . Of which, 2 million  $tCO_2e$  to methane would have



been emitted directly to the atmosphere if it were not for EDL's clean energy service. Furthermore, by converting the captured methane into electricity or RNG, EDL displaces 2 million tCO<sub>2</sub>e from the electricity grids or gas networks.

HK Electric owns and operates a 1.1-MW solar power system and an 800-kW wind turbine. The company also facilitates the development of distributed renewable energy power systems ("REPS") in its supply areas through its Feed-in Tariff ("FiT") Scheme. Its customers can contribute to combating climate change by subscribing the renewable energy generated from these sources and will be presented renewable energy certificates ("RECs") accordingly. In 2021, HK Electric's customers fully subscribed the 5.8 GWh of green electricity generated from the renewable energy sources, avoiding about 4,000 tonnes of their  $CO_2e$  emissions.

Our wind farms at Dali and Laoting, had also generated a total of 213 GWh of renewable electricity in 2021. The renewable energy generated by the two wind farms has cumulatively reduce 207,000 tonnes of carbon emissions.

Through deploying various carbon offsetting measures, our business operations offset 1,149,274 tCO<sub>2</sub>e emissions in 2021.



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# 4.1 COMBATING CLIMATE CHANGE

#### 4.1.3 HOW WE WORK (CONT'D)

# 4.1.3.2 Decarbonising the Generation Portfolio

The Group is committed to reducing emissions of of co GHG and other air pollutants within its operations and supporting the move to a low-carbon future through innovation and adoption of the latest technology and processes alongside environmental friendly energy sources. Our business operations help tackle climate change through the following initiatives:

# Replacing coal-fired generating units with renewable and gas-fired units

Switching from coal to natural gas provides a clean, reliable, and cost-effective way to reduce carbon

60% 7,000 53% 48% 47% 6,000 50% 39% 5,000 36% 40% 32% MM 4,000 28% 30% 24% 3,000 20% 2,000 10% 1,000 0 2017 2019 2020 2021 2016 2018 2022 2023

The Group's timeline on reducing coal-fired generation installed capacity from 2016 to 2023

# emissions. We are committed to reducing our coal-fired generation installed capacity from about 53% of our total generation portfolio in July 2016 to about 24% by 2023. The Group is on track with its decarbonisation plan and has reduced 2,890 MW of coal-fired power generation capacity compared with that of June 2016. Following the coal-to-gas conversion of Sheerness Generating Station in Canada in 2021, it has ended coal power generation in OECD countries with non-OECD countries following suit by 2035.

#### HK Electric: Moving one step closer to carbon neutrality with synchronisation of L11

HK Electric has been migrating to a low-carbon operation through investments in cost-effective green technologies and related facilities. Following the commission of gas-fired unit L10 in 2020, HK Electric took a major step forward in its transition from coal-to-gas generation with the successful synchronisation of a new gas-fired unit L11 in November 2021. Full commissioning is expected in May 2022, and the annual proportion of gas-fired generation will reach more than 50%, allowing HK Electric to retire an older gas-fired unit and two coal-fired units within 2022. HK Electric will commission another new gas-fired unit, L12, in 2023 to further boost the gas-fired generation and gradually phase out the remaining coal-fired units by the early 2030s.

HK Electric is also developing an offshore wind farm with installed capacity of not less than 150 MW located southwest of Lamma Island, targeting for commissioning by 2027, which has the potential to generate around 400,000,000 units of zero-carbon electricity annually.



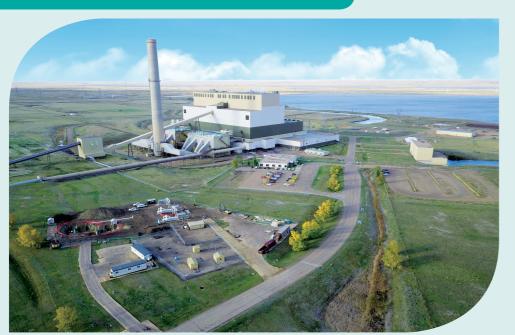
Lamma Power Station provides a safe and reliable supply of green electricity for HK Electric's customers.

#### **COMBATING CLIMATE CHANGE** 4.1

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.2 Decarbonising the Generation Portfolio (Cont'd)

Canadian Power: Advancing the off-coal conversion in Alberta

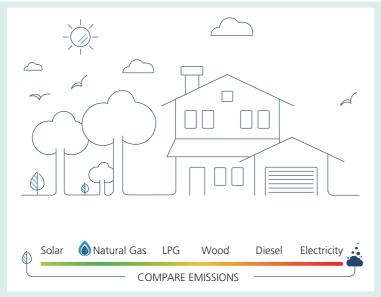


Sheerness Generating Station's gas receiving facilities.

The 800-MW Sheerness Generating Station fully phased out coal-fired generation in favour of cleaner burning natural gas by end of 2021. The transition from coal to natural gas is expected to reduce about 45% to 50% of GHG emission intensity at the station. Emissions of nitrous oxides will also be reduced, while emissions of sulphur dioxide, particulate matter, and mercury will be eliminated, resulting in additional air quality improvements within Alberta.

#### Why natural gas?

Coal-to-gas switching is an integral part of the energy transition strategies. Natural gas is a cleaner alternative to traditional fuels - for example, the use of liquefied natural gas ("LNG") as a lower-emission alternative to diesel and heavy fuel oil in transport. A gas-fired power station also takes much less time to start and stop than a coal-fired plant, so its flexibility makes it a good partner to renewable sources of energy such as solar and wind.



#### Expanding renewable energy portfolio

The Group has been actively looking into suitable investment opportunities in clean energy and providing necessary support, including funding to our investments to expand our renewable energy portfolio. Our operating companies have also launched different initiatives to connect renewable energy to the grid.

HK Electric purchases all electricity generated by customers' grid-connected REPS at FiT rates. In 2021, about 5.8 GWh of zerocarbon electricity was generated by REPS of FiT customers and HK Electric's own REPS and was fully subscribed by HK Electric's customers in RECs to offset their Scope 2 carbon emissions.

Since the successful completion of the Smarter Network Storage project in 2016, which features a 6 MW / 10 MWh lithiumion battery storage facility in Leighton Buzzard, UKPN has connected almost 300 MW of battery storage within five years, with a further 2.2 GW in the pipeline. Battery storage facilities enable system stability by managing electricity demand at peak times and play a key role in connecting renewable energy to the electricity networks. During the year, UKPN has commissioned a 34 MW battery energy storage facility, connecting to the electricity network in Burgess Hill to support renewable energy. The facility is one of the biggest battery energy storage facilities in the UK, capable of storing and releasing up to 34 MW of energy to smooth out the intermittency of renewable energy.

electricity in 2017.



Canadian Power has also acquired its first renewable energy project in Canada in the form of two wind power facilities located in the Okanagan region of British Columbia in 2021. The two wind farms, which consist of 10 wind turbines with a total capacity of 30 MW, sufficient to power approximately 9,000 homes, began operating and generating clean, renewable



Canadian Power's Okanagan Wind power projects, totalling 30 MW of renewable energy capacity.

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.2 Decarbonising the Generation Portfolio (Cont'd)

EDL is also growing our portfolio of world-class wind and solar projects across Australia by investing in hybrid renewable projects for off-grid locations. Hybrid renewable projects utilise renewables such as wind or solar, combined with battery storage and enabling technologies, to minimise or replace traditional energy sources such as diesel or gas.

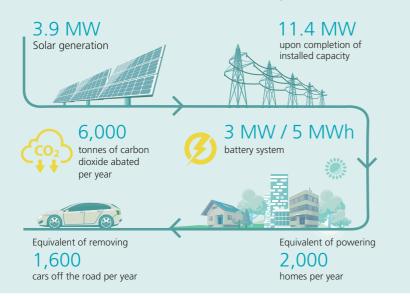
#### EDL: Delivering sustainable energy for off-grid locations

EDL owns and operates the Agnew Hybrid Renewable Microgrid, Australia's largest hybrid renewable energy microgrid and the first in the country to utilise wind generation on a large scale at a mine site. This innovative hybrid renewable power station consists of a 18 MW wind farm, a 4 MW solar farm, a 13 MW battery system, and an off-grid 21 MW gas/diesel engine power plant to deliver renewable energy to the mine without compromising power quality and reliability. In favourable conditions, the power station could deliver up to 85% of the mine's power requirements with renewable energy.

In addition, EDL was contracted in 2021 by the Government of the Northern Territory of Australia to deliver the Jabiru Hybrid Renewable Project to power the remote, off-grid township of Jabiru. The project will integrate a solar farm and battery with a diesel power station to balance sustainability with reliability. Completed in early 2022, the hybrid renewable power station provides Jabiru with at least 50% renewable energy over the long term, helping the remote township transition to a tourism and services hub and contributing to the Northern Territory's 2030 50% renewable energy target.



EDL's new Jabiru Hybrid Renewable Power Station.



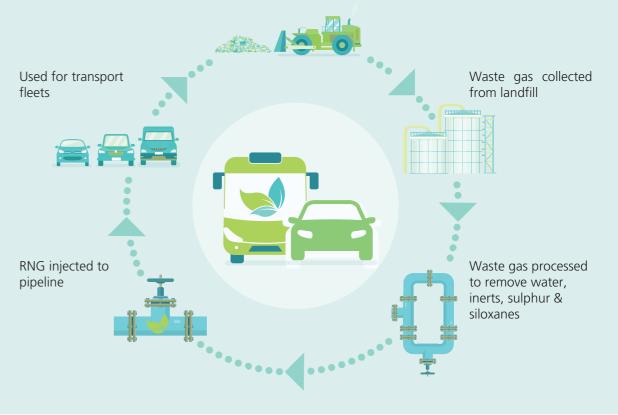
#### EDL: Enabling the RNG energy cycle

EDL is the owner and operator of the Wood Road RNG Facility in Lansing, Michigan. Commissioned in late 2021, the Wood Road RNG Facility is the first of its kind in Lansing, Michigan. EDL, Granger Waste Services, Consumers Energy and BP plc are working together to provide RNG created from local landfill waste.

The RNG facility extracts and converts around 19,000 tons of methane from landfill gas per year from Granger Water Services' Wood Street Landfill into approximately 870,000 mmBtu / year of pipeline quality RNG. Using this RNG instead of natural gas displaces about 29,000 tCO<sub>2</sub>e per year that would have otherwise resulted from combusting comparable fossil fuels.

The RNG produced at the Wood Road RNG Facility is added to Consumers Energy's existing pipeline network for delivery to end users. A portion is taken by BP plc to supply natural gas-powered vehicles across the United States. The RNG is also be delivered for residential, commercial, and industrial use in North America.





EDL's recently commissioned Wood Road RNG Facility.

# 4.1 COMBATING CLIMATE CHANGE

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.2 Decarbonising the Generation Portfolio (Cont'd)

#### Expanding carbon capture and utilisation capacity

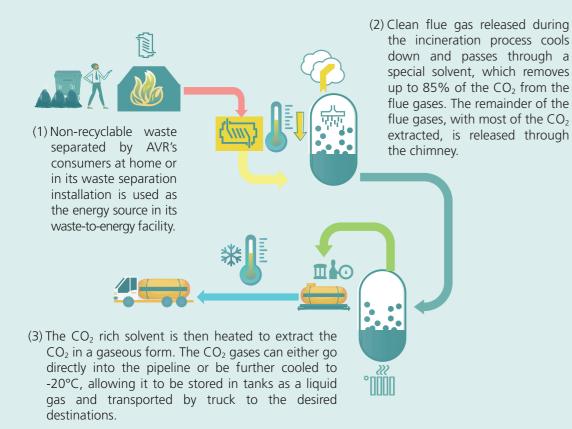
Carbon capture and supply are a key steps towards enabling climate-neutral operations. We continue to investigate ways to maximise the utilisation of captured CO<sub>2</sub> as a useful raw material.

#### AVR: Enabling climate-neutral operations through carbon capture and supply

AVR is on the way to being energy neutral by processing residues and rejects from the recycling industry and turning them into electricity and heat for companies and households. This energy replaces energy that would have been generated by burning gas and coal and prevents the  $CO_2$  emissions from these fossil fuels. AVR also avoids  $CO_2$  emissions by recovering raw materials such as the metals and minerals from bottom ashes, TopCrete from paper sludge processing, and packaging material from the separation plant.

In addition to  $CO_2$  reduction, AVR's Waste-to-Energy Plant in Duiven has included a unique  $CO_2$  capture plant for recovering  $CO_2$  from the flue gases released during incineration of residual waste and using the captured  $CO_2$  as a raw material for sustainable concrete or as a coolant in fire extinguishers. Currently, AVR supplies the captured  $CO_2$  to local greenhouse horticulture companies, which need  $CO_2$  to grow their plants, fruit and vegetables.

#### How does the CO<sub>2</sub> capture plant work?



#### 4.1.3.3 Modernising and Digitising Electricity Networks

Digital technologies and smart networks play a central role in facilitating more reliable, interconnected and distributed power systems. Innovation solutions are needed to help connect more renewable energy and enable new technologies like battery storage and virtual power plants.

# UKPN: Creating matrix-like simulation to enhance energy capacity and accommodate more low carbon technologies

UKPN's Envision project is developing a software-based machine learning tool to model demand and enhance the visibility of the low voltage network – analysing how power is flowing through the network to where demand for electricity is high and at what times of the day. As more renewable energy sources connect to the network, having exact data and forecasting tools allows UKPN to plan ahead and invest strategically to more efficiently manage the network and connect more low-carbon technologies such as electric vehicle ("EV") chargers and heat pumps. The Envision project is a key step to widening network flexibility and building a smart grid that enables cleaner, greener energy resources to connect quicker and at a lower cost. It is anticipated the Envision project can help release almost 70 MW of electricity capacity by 2028, which is equivalent to providing 1,371 new rapid electric car chargers.



UKPN's GBP2,000,000 machine-learning tool could unlock energy capacity equivalent to 1,371 new rapid electric car chargers by 2028.

#### **COMBATING CLIMATE CHANGE 4** 1

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.3 Modernising and Digitising Electricity Networks (Cont'd)

SA Power Networks: Upgrading the voltage management systems to facilitate more solar generation



SA Power Networks is upgrading voltage management systems to support about 790,000 of South Australia's 900,000 electricity customers.

As part of its ongoing Enhanced Voltage Management programme, SA Power Networks has completed upgrading the voltage management systems at about 138 major substations supporting about 790,000 (80%) of South Australia's electricity customers. As South Australia has more than 300,000 customers with solar systems capable of generating about 1,800 MW of energy, the deployment of new voltage control measures helps regulate voltage levels throughout the day and year to facilitate more solar generation on the electricity distribution network. For example, during those periods of high solar export in the middle of the day, the voltage management systems can keep the volts down to ensure customers can continue to export their excess power to the grid.

SA Power Networks will continue to develop and implement a range of mitigation and adaptation initiatives to facilitate the uptake of renewable energy sources within the electricity network to reduce the GHG emissions stemming from distribution line losses. These initiatives also align with SA Power Network's goal of doubling the amount of solar power on the network by 2025 and ultimately achieving net zero emissions by 2035.

#### 4.1.3.4 Blending Hydrogen into Existing **Gas Distribution Networks**

and biomethane are new energy solutions that are key to the decarbonisation process.

Since August 2021, NGN has started blending up to 20% of hydrogen into its existing natural gas Renewable and carbon-neutral gases such as hydrogen network at Winlaton as part of a trial project run by HyDeploy, with approval from the Health and Safety Executive in the UK. The project is expected to last around 10 months and is a vital step towards using As a member of the Hydrogen Council, Power Assets is working actively with industry peers along the entire hydrogen in the public gas networks. HyDeploy is production chain and policymakers to demonstrate and a pioneering hydrogen energy project designed to promote hydrogen as a reliable, clean and safe fuel for help reduce carbon emissions in the UK and reach achieving the net zero targets set by various jurisdictions. the government's net zero target for 2050. Results By blending and ultimately replacing natural gas with from the HyDeploy projects will be submitted to the renewable gas, the existing infrastructure can be used to government to help form policies about the future of supply renewable gases, enabling a smooth transition to hydrogen gas blending.



NGN, in partnership with the fellow gas distribution network company Cadent and the UK's government Department for Business, Energy and Industrial Strategy, has built the UK's first demonstrator homes with appliances fueled entirely by hydrogen.

Meanwhile, WWU has regulatory approval for injecting bio-substitute natural gas containing up to 1% hydrogen into its existing gas network in Swindon. Injecting gas with up to 1% hydrogen into the existing gas network will reduce the carbon emissions by up to 5,000 tonnes. This is also an important milestone in demonstrating the use of an existing safe and reliable gas network in the UK to transport hydrogen.

a low-carbon future.

As we move towards making networks hydrogen ready, we are replacing the old pipelines of our gas distribution networks. NGN, WWU and AGIG have replaced 496 km, 329 km, and 415 km of old gas pipelines respectively during 2021. Replacing old gas pipelines also helps reduce fugitive emissions of methane from the networks, improve the reliability of gas supply and lower the public risk associated with gas leaks.

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.4 Blending Hydrogen into Existing Gas Distribution Networks (Cont'd)

#### AGIG: Taking active steps to sustainable gas delivery

In 2021, AGIG commissioned the HyP SA, which is Australia's first project that produces renewable hydrogen gas for injection into the network. At HyP SA, renewable hydrogen is produced using a 1.25 MW polymer electrolyte membrane electrolyser, which uses renewable electricity to split water into hydrogen and oxygen. The renewable hydrogen is blended with natural gas at volumes of up to 5% and supplied to nearby homes via the existing gas network. By supplying a 5% hydrogen blend to around 700 homes in the network, it reduces about 10 tonnes of carbon emissions annually. These emissions reductions will help lay the foundation for much larger emission reductions in the future as hydrogen blending expands into other parts of the South Australian gas network.

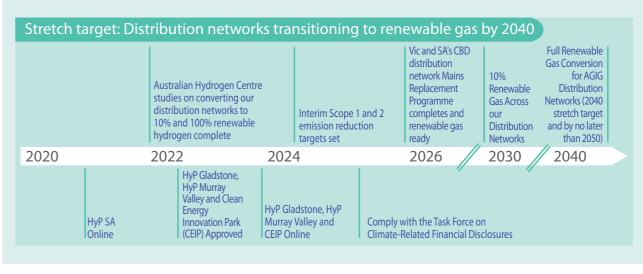
Following the success of HyP SA, Hydrogen Park Gladstone ("HyP Gladstone") is planned to commence in the latter half of 2022. HyP Gladstone will be Australia's first renewable hydrogen production facility to deliver a 10% renewable gas blend to around 770 homes and businesses via the existing gas network.

In addition to HyP SA and HyP Gladstone, AGIG is working on its third renewable hydrogen project, Hydrogen Park Murray Valley ("HyP Murray Valley"), which will be located alongside North East Water's West Wodonga Wastewater Treatment Plant ("WWWTP"). With a 10 MW electrolyser, there is an opportunity for the project to use water from the WWWTP and renewable electricity from the local electricity distribution network to produce renewable hydrogen. The renewable hydrogen will be blended with natural gas at volumes of up to 10% for supply into the existing gas networks across Albury and Wodonga to more than 40,000 homes and businesses. AGIG is also working with North East Water to assess if the oxygen produced via the electrolysis process can be utilised in the wastewater treatment processes.



Artist impression of the HyP Murray Valley production facility.

AGIG is targeting 10% renewable gas by volume by 2030, and offering 100% renewable gas to new home estates by 2025. Aligned with Australian State and Territory ambitions of achieving net zero by 2050, AGIG aims to fully decarbonise its distribution network by 2040 as a stretch target and by no later than 2050.



#### Northumbrian Water: Leading the way in green energy production for the water industry

Northumbrian Water has made major investments to upgrade and purify biogas into biomethane, which can be directly injected into the national gas grid. Northumbrian Water's sludge treatment centres at Howdon and Bran Sands sites currently process 100% of the sewage sludge arising from within its operating region, using an advanced anaerobic digestion ("AAD") process. The raw biogas produced by the AAD process at the Howdon and Bran Sands typically contain 61% methane with the remainder comprising CO, and trace amounts of other gases. Subsequently, CO, and other unwanted components are removed to produce purified biomethane that is suitable to be injected directly into the grid, providing green renewable energy to the homes and businesses in the local regions. The two plants together are expected to provide renewable gas at a rate equivalent to around 134,500 MWh per year, which is making a significant contribution towards Northumbrian Water's target of being carbon neutral by 2027.



Northumbrian Water's Sludge Treatment Centre at Howdon.

# 4.1 COMBATING CLIMATE CHANGE

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.4 Blending Hydrogen into Existing Gas Distribution Networks (Cont'd)

#### WWU: Injecting Green Gas into its gas network

To promote the entry of renewable gases like hydrogen and biomethane into the gas network, WWU encourages local developers who are considering building anaerobic digestion plants or other facilities to submit enquiries on connecting their gas facilities to WWU's network. After receiving enquiries and confirmation from the gas producers, WWU will carry out a capacity study to evaluate suitable network connection points and whether there is available capacity to take in the gas. If entry of renewable gas into the existing gas network is feasible, the gas producers will be required to submit a proposal to WWU and carry out a series of assessments to ensure compliance with industry regulations. After obtaining relevant approvals and completing the required testing of the gas facilities, the gas producers will have permission to inject gas into WWU's network.

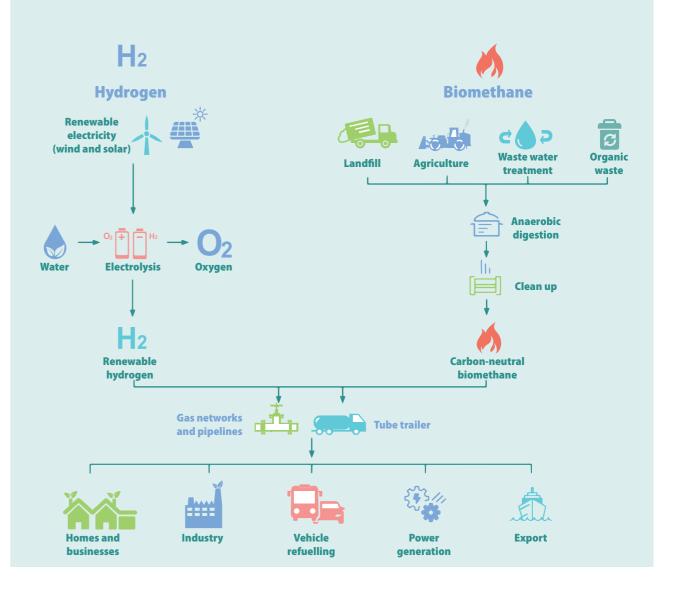


WWU's green gas site.

WWU is committed to playing its part to help the UK get to net zero carbon emissions by 2050. Currently, WWU has 48 power stations connected to its network to support renewables like wind and solar power, while 20 green gas sites are injecting renewable gas to power over 150,000 homes. WWU is also participating in the industry-wide Hydrogen Grid Research and Development Programme to plan the transition of the UK's gas networks to transport hydrogen. WWU has also taken part in the Hydrogen Village Project in the UK and carried out an initial scoping exercise in 2021 to identify possible locations for a trial hydrogen village. The initial scoping selected the village of Sully in the Vale of Glamorgan, South Wales, as the trial location. The trial project will review primary hydrogen production from biomethane, additional hydrogen production from existing hydrogen facility, and the readiness of WWU's network. WWU will also engage with 1,600 customers in the trial area on hydrogen conversion of their appliances.

#### What is renewable gas?

Activities involving renewable gas focused on the development of green hydrogen and biomethane. Green hydrogen does not contain any carbon and is produced using water and renewable electricity, meaning the process is carbon-free. Meanwhile, biomethane harnesses the energy potential from organic materials such as agricultural waste and sewage, supporting the circular economy.



# 4.1 COMBATING CLIMATE CHANGE

#### 4.1.3 HOW WE WORK (CONT'D)

#### 4.1.3.5 Helping Customers with Energy Efficiency

Investing in energy efficiency remains a cornerstone in energy transition, as it acts as a brake on peak demand and mitigates the need for additional infrastructure. We continue to support governments in different jurisdictions to turn into smart cities by rolling out smart meters, providing adequate EV charging facilities, and educating the community on sustainability, energy efficiency, and renewable energy. Under HK Electric's Smart Power Services, various programmes have been put in place to educate customers about energy efficiency. In 2021, HK Electric completed 210 free energy audits for non-residential customers, subsidised 108 building for implementing energy efficiency enhancement projects, and organised 350 educational and promotional activities on combating climate change and adopting a low-carbon lifestyle.

#### UKPN: Supporting the transition to decarbonised heat by analysing energy efficiency trends

In order to reach net zero by 2050, major infrastructure decisions need to be made to support the uptake of low-carbon technologies. UKPN's Heat Street project is a first-of-its-kind research to help communities map out their net zero carbon future at street level. The project carried out a study reviewing a broad range of energy efficiency measures, options for decarbonising heat, uptake modelling and the impact on the UKPN network. UKPN also hosted workshops with local councils, businesses, academics and consumer groups to ensure the study accurately reflected the current market and emerging trends regarding energy efficiency and low carbon heating technologies. The full report of the Heat Street project was released in June 2021.

The project took a data-driven look into the future to help local authorities and community energy groups forecast and plan for the deployment of energy efficient and low-carbon heating solutions. The findings from this project also provided an opportunity for UKPN to support the deployment of energy efficiency measures to reduce the cost of network reinforcement associated with the electrification of heat to 2050.



UKPN has published a report on the Heat Street project, the aims of this study was undertaken to strengthen UKPN's understanding of the role of DNOs in facilitating the decarbonisation of the heat sector and to inform UKPN's heat strategy.

#### 4.1.3.6 Understanding Climate-related Risks and Opportunities

Climate change is a priority topic and one of our strategic drivers, as it can directly affect the sustainability of our business. Reflecting the Group's commitment to climate-related disclosures, we are planning to align our disclosures following the recommendations from the Task Force on Climate-Related Financial Disclosure ("TCFD") to

Governance	Inadequate management of consubstantial losses for the Group Committee was established sustainability issues including cl
Strategy	Action on climate change is e our Environmental Policy. As de we have developed the follow capitalise on those opportuni portfolio, modernising and digit existing gas distribution networ
Risk Management	The Group is exposed to risks ecosystem to adapt to climate physical threats in specific co associated with climate change Group has operations may be drought, heat waves leading to as severe tropical cyclones and These climate-related risks are The identification, assessment a in our Enterprise Risk Managen and bottom-up approaches to effective manner, including ma- levels. More details are available
Metrics and Targets	The Group has a long-term decarbonising our generation global warming, and reduce t is embracing the hydrogen ec- operations for zero-carbon rea 2050.

develop, monitor, and disclose climate-related metrics and targets, financial impacts and strategies. The following provides an overview of how we manage climate-related risks and opportunities referencing the four thematic areas of the TCFD recommendations. We will continue to review and conduct studies on this matter to improve our management approach and disclosures.

climate change and its associated risks can lead to oup. To enhance our governance, the Sustainability as a Board committee, overseeing the Group's climate-related issues.

embedded in our business strategy and reflected in detailed in the section "Combating Climate Change", wing strategies to address climate-related risks and nities arising from it: decarbonising the generation nitising the electricity network, blending hydrogen into orks, and helping customers with energy efficiency.

is related to extreme weather events, failure of the te change and natural catastrophes that can cause ountries and regions as well as economic hazards ge transition. The countries and regions in which the be vulnerable to water stress, prolonged periods of o wildfires, or physical effects of global warming such a flooding.

e reviewed regularly by the Sustainability Committee. and management of these risks are also incorporated ement framework. The framework provides top-down to identify and manage the Group's key risks in an material emerging risks at corporate and business unit ale in the Company's Annual Report 2021.

m plan in place to address climate change by n portfolio to reduce GHG emissions, help slow the physical impacts of climate change. The Group conomy with business plans in place in some of its eadiness in 2035 to achieve a carbon-free vision for

#### 4.2.1 WHY IT MATTERS

Preserving biodiversity is extremely important to the electric utility industry, and in ecologically sensitive areas such as North America or the European Union, utilities are subject to extensive environmental impact assessments and checking by the local regulators for project approval.

the surrounding ecosystem are subject to the scrutiny of regulators. Therefore careful project planning, design, and operation is a must for the Group to minimise its impact on the local ecosystem and biodiversity.

#### 4.2.2 OUR COMMITMENT

The possible negative impacts of existing assets and infrastructure projects such as power plants, transmission towers and wires, and hydroelectric on Preserving the natural environment is an integral part of our Environmental Policy. Below are the related strategic priorities emphasised in the policy:

Climate Change Management	Use of Natural Resources	Biodiversity
• Addressing climate change risks as part of the Group's risk management process.	<ul> <li>Reducing hazardous and non-hazardous waste, managing effluent and facilitating ways to encourage more reuse</li> </ul>	• Conducting operations with a life-cycle approach to land and habitat stewardship.
• Setting up long-term targets to reduce carbon emissions as appropriate, while enacting processes and systems to monitor the Group's carbon footprint.	<ul> <li>and recycling in day-to-day operations.</li> <li>Encouraging the use of sustainable materials and the adoption of technologies to streamline production and operation processes.</li> </ul>	<ul> <li>Minimising disturbance and mitigating impact in natural landscapes by avoiding operating in areas with high biodiversity value.</li> </ul>



#### 4.2.3 HOW WE WORK

#### 4.2.3.1 Environmental Management System

CKI is implementing an Environmental Management System ("EMS") with the aim of contributing to the "environmental pillar" of the company's sustainability

Business Units	No. of facilities with ISO14001 or other EMS certificates	No. of external environmental audit(s) conducted during 2021
NGN	13	1
WWU	1*	2
Seabank Power	1	4
SA Power Networks	1	1
VPN	16	10
EDL	52	22
Ratchaburi Power	1	1
HK Electric	3	3

Note:

The ISO14001 accreditation of WWU covers all business activities and sites within the UK.

#### 4.2.3.2 Efficient Operation

#### Use of renewable energy

As part of UKPN's science-based target commitment, all of its purchased electricity used in office buildings and substations have been on 100% renewable tariff since 2018. In addition, UKPN set a target of 16% GHG emission reduction by 2023 as compared to development. This EMS serves to ensure continual environmental improvement, monitor compliance with relevant laws and regulations, fulfil supply-chain requirements, promote staff environmental awareness, and increase financial savings resulting from resource saving and cost reduction. Most of our operating companies have an EMS, and details by company are provided below.

2014/2015. During the reporting period, UKPN had achieved this target with a total reduction of 30.9% in their business carbon footprint in March 2021 against the baseline year of 2014/2015. To support delivery of the UK government's net zero commitment, UKPN set a new target to reduce 25% GHG emission by 2028 as compared to 2018/2019, and also became the first electricity DNO to have its carbon reduction plan and targets verified by the SBTi.

#### 4.2.3 HOW WE WORK (CONT'D)

### 4.2.3.2 Efficient Operation (Cont'd)

#### Use of renewable energy (Cont'd)

Northumbrian Water has used 100% renewable energy since April 2019. This has saved Northumbrian Water 82 kT CO<sub>2</sub>e.



Northumbrian Water's electric fleet support the business in its ambitious goal to be carbon neutral by 2027.

Since 2015, NGN has been undertaking a programme of refurbishing our portfolio of offices and depots. As part of this refurbishment programme, NGN has incorporated measures to improve property energy efficiency, including energy efficient lighting and lighting sensors, and the provision of energy-efficient electrical equipment such as monitors and refrigerators. For example, NGN calculated the design for the refurbishment of its head office at Thorpe Park, Leeds to reduce the building energy consumption by 28%. Its carbon emissions associated with gas and electricity usage in our offices and depots has reduced from 2,304 tCO2e in 2018 to 1,250 tCO2e in 2020/21 (-46%). Also, NGN has purchased 100% certified renewable electricity since 2018. The renewable energy has been sourced from wind farms and accounts for approximately 90% of NGN's total electricity consumption.

Alliance Construction Materials has installed solar photovoltaic ("PV") systems to increase the application of renewable energy. So far, two out of five concrete batching plants have now been installed with solar PV systems.



Alliance Construction Materials' solar PV systems.

rooftop solar panels and has fully commissioned a 980 kW rooftop solar farm spreading over eight ancillary 2,000 MWh of power input from the grid.



Ratchaburi Power's rooftop solar panels.

Jinwan Power Plant has installed a second steam supply pipeline to Gaolan Industrial Estate. Its steam capacity will increase by 10% from 2022, whereby the thermal overall efficiency can be further improved.

Ratchaburi Power is facilitating the building of buildings during the year. The renewable energy supplied to the station's auxiliary power system can reduce about

> In addition, the Group had purchased a total of 204,668,000 kWh of renewable energy supported by green certificates, contributing to about 15% of the total electricity consumption. The renewable energy purchases drive reductions in our emissions and help protect us from rising energy costs.

#### 4.2.3 HOW WE WORK (CONT'D)

#### 4.2.3.2 Efficient Operation (Cont'd)

#### *Key targets and progress*

Business Units	Targets	2021 Status
HK Electric	• Reduce 5% energy consumption in key office premises by 2025 as compared to 2020	On track
UKPN	• Reduce 10% energy use in top six buildings by 2021 as compared to 2018/2019	Achieved
Reliance Home Comfort	Reduced 16 litres per 100 kilometres gasoline consumption of 2020 by 2021	Achieved
Alliance Construction Materials	<ul> <li>Reduce 15% fuel intensity liter per km travelled by 2030 as compared to 2019</li> <li>Reduce 5% average embodied carbon per cubic meter concrete produced by 2030 as compared to 2019</li> </ul>	On track

#### 4.2.3.3 Protecting Biodiversity

It is part of our Environmental Policy to protect the biodiversity and habitats in the area around our projects. We seek to minimise and mitigate the impact of our developments before we begin a project, and continually monitor the potential impact of operating projects on biodiversity.

HK Electric has established planting programmes at Lamma Power Station which promote the cultivation of trees and shrubs, and also benefit local wildlife.

Safeguarding biodiversity is also an important objective of environmental impact assessment studies that are completed in the course of all major development projects. During the implementation phase of the projects, HK Electric undertakes environmental monitoring and audit programmes to ensure that recommended mitigation and remedial measures are fully implemented. HK Electric, together with CLP Power, have established a Marine Conservation Enhancement Fund and Fisheries Enhancement Fund under the Hong Kong Offshore LNG Terminal Project. This Fund supports scientific research, promotes environmental education, and supports the local finishing industry, amongst other biodiversity-related activities.

WWU has a long-term ambition to achieve biodiversity net gain ("BNG") by 2039, with an interim goal of achieving no net loss on designated products within 2021 and 2026. In conjunction with this, WWU has also embedded BNG principles into WWU's policies, strategies, and everyday business activities. Additionally, WWU is looking to implement biodiversity and ecosystem enhancements into its long-term assets.

To ensure the integrity of the network, WWU is sometimes required to remove trees that present risks to its pipelines and local communities. However, the company recognises that this has a negative impact on biodiversity and, therefore, is committed to addressing this impact by collaborating with stakeholders within Wales and the South West to support afforestation across the network in long-term managed schemes, in which five trees will be planted for every tree cut down.

UKPN has formed a steering group of environmental experts with members from National Parks and Areas of Outstanding Natural Beauty ("AONBs") in its distribution area to assess and prioritise future schemes on the undergrounding of overhead power lines.

The committee reviews the impact of overhead lines on landscape character, visual amenity, landscape features, and whether undergrounding will improve the setting of a heritage asset or other historical features and biodiversity. The assessments allow UKPN to prioritise and invest in schemes to replace overhead power lines with underground cables. By removing overhead power lines from National Parks and AONBs, UKPN helps restore the natural environment in British countryside.



Reliance Home Comfort planted approximately 10,000 trees through a partnership with One Tree Planted, a non-profit organisation dedicated to global reforestation. This offsets 100% of their customer paper billing, as well as all printed marketing materials. Reliance Home Comfort plans to continue increasing the number of trees planted annually to combat climate change and restore wildlife habitats.

Canadian Midstream Assets has replaced the protection of the main pipelines crossing the Battle River. The selected bioengineered design achieved an equivalent level of scour protection while significantly increasing the value of the aquatic habitat throughout the entire footprint of the crossing using natural materials such as cobble, gravel, and boulders and utilised native vegetation to reclaim the banks and floodplains. In addition to providing scour protection, the objective was to create a micro-ecosystem that provided overwintering, spawning, and cover habitat for aquatic life and promoted increased biodiversity within the project footprint.

#### 4.2.3 HOW WE WORK (CONT'D)

#### 4.2.3.4 Water Management

Water is a basic and irreplaceable natural resource in many of our activities. Based on the water risk framework of the World Resources Institute's publication on financial risks from water constraints on power generation, we currently have no production plants/sites located in water-stressed areas, and our operations are considered low risk. In 2021, our total water consumption was 688,000,000 m<sup>3</sup>, with majority of water drawn from seawater and surface water. The 2021 figure is slightly higher than 2020, which is mainly contributed by the increase in seawater consumption at Jinwan Power Plant for unit cooling due to increase in power generation. Despite this, we have devised a plan for water conservation that includes reusing wastewater and rainwater at our power stations, adopting water-efficient appliances in our premises and preserving water quality by reducing discharge.

HK Electric has devised plans for the conservation of water, including reuse of wastewater and rainwater at its Lamma Power Station, adopting water-efficient appliances in the premises, and preserving the water quality by reducing discharge.





As part of the wastewater zero discharge scheme commenced in 2021, Jinwan power plant is undergoing the testing and commissioning of its modified coal pulveriser pyrite system, which utilises a dry cleaning process instead of flushing water to reduce the amount of effluent produced. When the system is fully commissioned in 2022, the annual effluent discharge can be reduced by 60,000 tonnes.

Jinwan Power Plant has also implemented the following additional waste water recovery measures:

1. To save energy and reduce unnecessary withdrawal and discharge of sea water for condenser cooling in winter time, the circulating water pump discharge headers for power generating units have been connected up so as to allow three pumps to support two units from

#### Key targets and progress

Business Units	Targets	2021 Status
HK Electric	Reduce 1% town water consumption in key office premises by 2025 as compared to 2020	On track
UKPN	• Set an internal target to identify largest water users at occupied sites and reduce water consumption by 10% to 15%	On track

#### 4.2.3.5 Waste Management

Another strategic objective of our Environmental Policy is the sound management of waste and effluent. We integrate circular thinking into business strategies through responsible raw material sourcing, efficient production processes and product design.

#### *Reduce, reuse and recycle*

To minimise the use of single-use plastic and other non-recyclable waste, UKPN has conducted a thorough review of its suppliers' plastic usage pattern to better understand its overall supply chain's waste impact. As November to March without scarifying the overall thermal efficiency.

2. Installed the flue gas duct bypass rotary evaporator technology to deal with the difficult wastewater collected from the desulphurisation plant and demineralised water treatment plant to attain wastewater zero discharge target. The system not only can eliminate the discharge of 20 m<sup>3</sup> of wastewater per hour but also enhance the efficiency of the electrostatic precipitator.

Since 2020, DBP has installed flow meters on registered groundwater extraction bores to provide an overview of the volume and location of water being consumed. This information allows the company to assess its water consumption data and improve water efficiencies.

a part of this process, UPKN also reviewed its personal protective equipment ("PPE") supplier to replace plastic packaging with recycled alternatives, which eliminate the plastic wastes from over 7,300 PPE items per year.

Examples of our non-hazardous waste management initiatives include:

 HK Electric has established a green purchasing policy and green purchasing guidelines, which set out the principles to be followed in conducting purchasing activities and selection of commodities from suppliers.

#### 4.2.3 HOW WE WORK (CONT'D)

#### 4.2.3.5 Waste Management (Cont'd)

#### Reduce, reuse and recycle (Cont'd)

- NGN implements an excavation spoil recycling programme and provides its contractors with the necessary knowledge, advice, and training, enabling almost 219,000 tonnes of excavation spoils (>99.9%) to be diverted from landfill during 2020/2021. Recycling excavation spoil also supports a circular economy by providing feedstock for the local production of recycled aggregates, which are purchased by NGN for reinstatement of its excavations.
- NGN promote the use of recycled aggregates as an alternative to virgin aggregate for reinstatement of the excavations in highways and private properties, and has set an annual target to use no more than 17,000 tonnes of virgin aggregate each year. Between 2013/2014 and 2020/2021, annual virgin aggregate usage

by NGN and its supply chain reduced by 64%, from 37,862 tonnes to 14,740 tonnes, meaning NGN used 11% of virgin aggregate only in its reinstatement works during 2020/2021.

- DBP has implemented the "Containers for Change Programme", which is an extension of its existing co-mingled recycling programme and focuses on the collection of eligible containers for a refund of AU\$0.10. More than 10,000 plastic bottles were collected in 2021, and all money raised was donated to local charities. In 2021, a programme to re-classify odorant waste (incinerated carbon pellets) from non-hazardous/non-toxic waste to general waste was undertaken in consultation with specialist waste contractors. Re-classification of this waste stream represents a step change in the way DBP manages waste.
- Alliance Construction Materials reuse more than 3,000 tonnes of waste material annually by extracting aggregates and sand from its concrete batching plant washout.



Green Island Cement has won the Hong Kong Green Awards 2021 under a category of Green Management Award – corporate and manufacturing sector (Gold prize) organized by Green Council.

- Green Island Cement continued to minimise their consumption of natural resources through the use of recycled industrial by-products such as fly ash and bottom ash generated from coal-fired power plants, gypsum from the desulfurisation process of power plants, slag from metal refining works and waste glass bottles as production materials for cement manufacture. As of today, more than 60% of their raw materials are coming from these eco-friendly sources. Green Island Cement has launched a low-embodied carbon cement product - Ground Granulated Blast Furnace Slag to the local market in 2021. It helps to improve concrete durability in addition to reduce carbon footprint. The relevant Slaggrinding Plant utilising waste heat from the cement kiln was commissioned in 4th guarter of 2020.
- EnviroNZ takes compostable material in waste and diverts it to compost that can be sold. This, in turn, saves over 30,000 tonnes of organic material a year from landfill and makes it available for beneficial reuse.
- Reliance Home Comfort has established waste & recycling targets for all their branches to reduce waste sent to landfills and increase recyclables. This includes harvesting parts from inoperable

#### Key targets and progress

Business Units	Targets	2021 Status
HK Electric	• Reduce 37% of ash and gypsum production by 2024 compared to 2019	On track
UKPN	Recycled 97% of street works spoil	Achieved
NGN	• Dispose of less than 13,000 tonnes of excavation spoil to landfill annually by 2021	Achieved
	Reduce 20% office and depot waste consumption of 2018 by 2026	On track
	Use less than 17,000 tonnes of virgin (primary) aggregates in reinstatement annually by 2021	Achieved
SA Power Networks	<ul> <li>Reduce ≥75% of total waste disposed to landfill compared to 2020</li> </ul>	Planning

equipment. In addition, Reliance Home Comfort recycled 6,951 metric tonnes of materials and is in the process of eliminating all single-use cups, lids and cutlery etc. across all its locations.

NGN has completed an innovative land contamination remediation project at its high-pressure gas site in Keswick in 2021. The project recovered 7,500 litres of contaminated water and coal tar from a buried tank located beneath live gas infrastructure on a small congested site by utilising a bespoke down-hole pumping system, which incorporated a heating system to mobilise stubborn contaminants. The recovered waste was safely disposed of offsite by specialised contractors. The project has also won the Best Remediation of a Smaller Site in the 2021 Brownfield Awards.

NGN has also installed an on-site multi-stage wastewater treatment system to process the contaminated water generated from dismantling and decommissioning two gas holders in Leeds and Blyth. Across these two projects, a total of 29,500 m<sup>3</sup> of contaminated water was successfully treated prior to discharge to the local sewer network. The on-site wastewater treatment system also avoided hundreds of road tanker journeys to dispose of this contaminated water.

#### **REGULATORY COMPLIANCE** 4.3

#### HOW WE WORK (CONT'D) 4.2.3

#### 4.2.3.6 Reducing Air and Fugitive **Emissions**

To reduce emissions of sulphur dioxide ("SO<sub>2</sub>"), nitrogen oxides ("NO<sub>v</sub>") and respirable suspended particulates ("RSP") from the operations, HK Electric consumes cleaner fuels such as natural gas and low-sulphur coal and implements advanced emissions reduction systems such as flue gas desulphurisation plants and low-nitrogen-oxide burner systems for its remaining coal-fired units. The new gas-fired units at Lamma Power Station feature advanced emissions control technology known as Selective Catalytic Reduction. Combined with other efficiency enhancements, this technology will contribute to reducing the emissions of greenhouse gases and other air pollutants.

ista has implemented a 10-year plan to switch over its entire fleet of vehicles to electric cars, and replace business trips, anywhere where possible, with digital alternatives.

NGN has implemented a rolling programme of replacement of its commercial vehicles such that no vehicle in its fleet will exceed six years in age or 90,000 miles. In addition, each vehicle is fitted with telematics to enable monitoring of driving habits to promote safe and fuel-efficient driving.

UKPN has the lowest leakage rate of the DNO Groups in the UK at 0.09% of total sulphur hexafluoride ("SF<sub>c</sub>") service. Examples of initiatives adopted by UKPN include:

- Collaborating with research organisations, such as the Electric Power Research Institute, and industry partners to develop and implement a quick and easy leak-sealing technology that is not dependent on manufacturer availability and drastically reduces the time between leak detection and repair.
- Monitoring innovation space for the development of rapid SF<sub>6</sub> leak detection technologies and adopting them once they are proven to be safe and technically acceptable.
- Researching the practicality and cost-effectiveness of installing SF<sub>6</sub> leak detection sensors on electrical equipment with smaller amounts of gas, such as Ring Main Units, to facilitate faster responses to smaller leaks.

We regard compliance with laws and regulations as one of our top priorities and we follow established policies and accountability mechanisms to ensure regulatory compliance in various aspects of our operations. Group management is committed to staying abreast of the latest regulatory developments and providing all necessary training for relevant personnel. We also dedicate extensive efforts 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**



AGIG encourages all employees to work harmoniously together. Across the AGIG offices there are active social clubs so that employees have ample opportunity to get to know each other.

# We are a responsible employer, business partner and community member.

We strive to provide a safe and rewarding workplace for our employees, and aspire to be an attractive employer.



# 5.1 HUMAN CAPITAL DEVELOPMENT

#### 5.1.1 WHY IT MATTERS

The attraction, retention and development of talent are essential for the Group's long-term development. The risk of increased turnover and associated costs of rehiring, loss of intellectual and human capital attrition may pose threats to the ability to attract and retain talent. In recent years, the rapid evolution of the utilities business has led to new demand for employees with the IT and data analytics skills necessary to modernise the grid. There are also risks of operational disruptions from labour strikes which may negatively impact utilities services to customers.

At the same time, through revisiting the recruitment process and focusing on diversity in the workplace, we can improve our recruitment and retention strategies to attract the right talent. With the increasing participation of women in the utilities sector, focusing on diversity is likely to improve the industry's ability to meet its workforce needs.

#### 5.1.2 OUR COMMITMENT

The Group's success through excellence depends on the performance of its employees at every level. The values the Group inculcates in its employees are candour, courtesy, and ability to deal with change and respect for humanity, personal dignity and privacy. As stated in our Corporate Social Responsibility Policy, we are committed to:

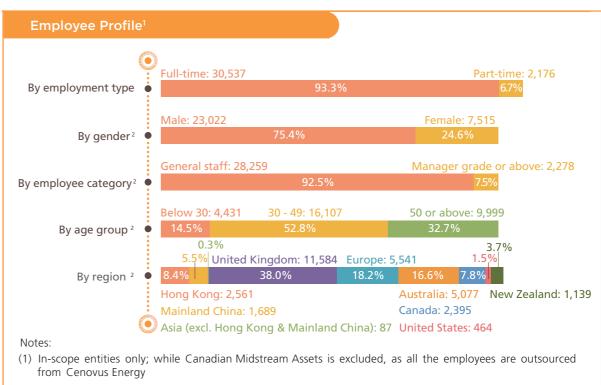
- providing a positive work environment that values the wide-ranging perspectives inherent in our diverse workforce and fostering individual growth and achievement of business goals;
- providing a positive work environment where people can grow, and offering a wide range of training and development programmes 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.



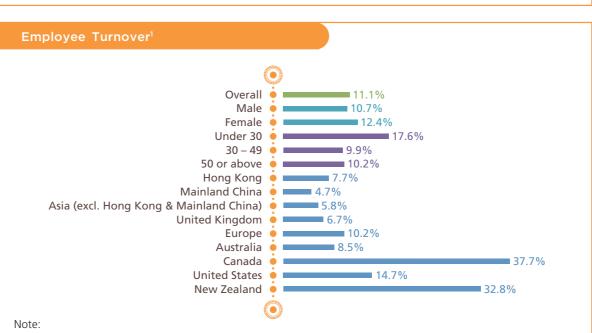


WWU has scooped the 'Best In-house' HR team in the CIPD Wales Awards 2021.

#### 5.1.3 HOW WE WORK



(2) Full-time employees only



(1) Turnover rate refers to full-time employees of the in-scope entities (excluding Canadian Midstream Assets) only, which is calculated based on the employee departures during the year, divided by the average total number of employees as at 31st December, 2021.

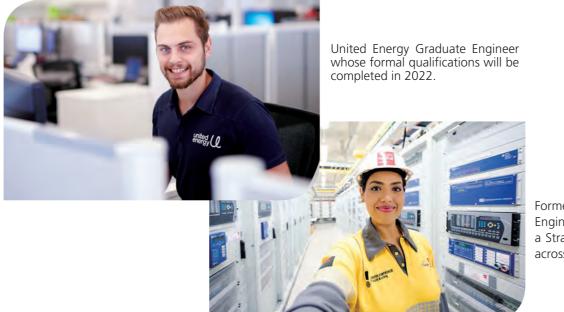
#### 5.1.3 HOW WE WORK (CONT'D)

#### 5.1.3.1 Recruit and Retain Diverse Talent

Our recruitment, hiring and performance appraisal processes form the foundations of positive, long-term employee relations.

#### Targeted recruitment

United Energy and VPN also have a graduate engineer recruitment programme that is aimed at those who have completed and graduated from electrical engineering in the university. Through this recruitment initiative, we have been able to secure a strong and substantial pipeline of future talent and capability.



Former female Graduate Engineer now working as a Strategy Asset Engineer across the VPN business.

Northumbrian Water is committed to diversity across all aspects of its business, which has extended to an inclusive representation on the national Energy and Utilities Skills Board at CEO and operational levels. The support received from and the influence we input into the Energy and Utilities Skills network assists Northumbrian Water to continue to drive awareness of career opportunities within its sector. This committee has a focus on recruiting and representing women and Black, Asian and minority ethnic communities ("BAME"). The promotion of these career opportunities is illustrated through industry-leading job boards.

Reliance Home Comfort has efficiently utilised technology to recruit talent for its business. This has been predominantly executed through social media platforms: LinkedIn and Indeed. These platforms are useful methods to optimise recruitment practices to better attract candidates. In conjunction with recruitment, a strong social media presence will assist Reliance Home Comfort in creating a stronger brand and reputation in the marketplace, which will in turn generate more social media traffic for the business, as well as increase the number of applicants to the advertised jobs. Reliance Home Comfort also partnered with Pride at Work Canada, an organisation that helps create safe, more inclusive workplaces, recognising the skills of lesbian, gay, bisexual, transgender, gueer/guestioning, and two-spirited individuals, and supports the Black Business and Professionals Association to address equity and opportunity for the Black Community in employment.

As an additional measure to reinforce employees' Flexible working sense of belonging and commitment, WWU has Maintaining flexible working arrangements to ensure a introduced a flexible benefits scheme, allowing productive and positive workplace is the core element employees to choose additional benefits alongside of our business. A number of our business units have their standard benefits packages for example implemented formal frameworks to enable employees' colleagues can opt to take out private medical care, flexible working arrangements, including both working gym membership, dental insurance, and etc. Every hours and location. These business units include year, WWU improves this offering with additional Canadian Power, ista, Park'N Fly, Reliance Home benefits in response to employees' feedback. We seek Comfort, SA Power Networks, Seabank Power, to protect the wellbeing of our staff by encouraging a UK Rails, United Energy, VPN and Wellington Electricity. healthy work-life balance.

Following this, various business units - AVR, AGN, DBP, Multinet Gas, NGN and HK Electric - have also established flexible work policies to provide employees with flexibility in working hours and location.

Flexible working arrangements required enhanced technological support. To facilitate this, Canadian Power, AGN, DBP and Multinet Gas implemented remote access software, providing employees with a platform to maintain flexible working conditions and good work life balance.

NGN offers several generous family-friendly policies to encourage a positive and healthy work-life balance amongst its employees. These policies consider the individual's specific circumstances, including but not limited to job duties, time served with the company, personal circumstances, family commitments, health etc. Besides, there are flexible leave entitlements include maternity and paternity leave, maternity and paternity adoption leave, career breaks, dependents leave, parental leave, carers leave and sick leave etc.

#### Talent retention

To retain talent, we provide competitive compensation packages, and eligible employees are entitled to additional incentives for their contributions to the company's growth, profitability, and other goals.

In addition, AGIG launched an Employee Benefits Handbook providing employees with clear understanding of the benefits associated with working at AGIG. Benefits include supported professional development, additional annual leave days, monthly health and wellbeing initiatives and access to Employee Assistance Programmes.

#### Performance review and appraisal

Our employee performance review process connects employee compensation with individual goals and aligns performance with business objectives and outcomes, creating a win-win situation for the employees and the Group.

HK Electric applies a robust, fair, and transparent annual performance review where all employees are formally appraised as part of an annual salary review progress. Employee performance is appraised regularly and remuneration is distributed in accordance with its pay-for-performance policy, which focuses on employee competencies and contributions to its business. In order to stay competitive, HK Electric conducts an annual review of its remuneration packages with reference to comparable organisations in relevant fields.

ista is working on a new remuneration model for all sales representatives and sales managers. The negotiations with the general works council are almost completed, so that the new remuneration will be applied from 2023 onwards.

#### 5.1.3 HOW WE WORK (CONT'D)

#### 5.1.3.1 Recruit and Retain Diverse Talent (Cont'd)

#### Strategic workforce planning

We have implemented strong strategic workforce planning, which is a long-term method aimed at the strategic alignment of an organisation's human capital with its business direction.

To maintain a positive and productive workforce, UKPN monitors trends in employee movements monthly. Following this monitoring process, UKPN produces a monthly report that includes employee turnover, predicted retirements, and departures by job category and employment type (i.e. permanent and fixed-term workers) and tracks this against overall manpower targets. These reports also include workforce targets based on the metrics from the employee data discussed above and then predicted by work volume. The executive management team reviews these monthly reports on a quarter basis.

#### 5.1.3.2 Training and Development

The professional growth of our people is essential to the growth of our business. We invest heavily in training to keep our people abreast of the latest developments in the industry and enhance their knowledge and performance. Training programmes are developed by respective business units to provide the most relevant learning experience that suits employees' specific needs.

The Group ensures that all our skilled staff members are professionally trained and suitably qualified for their roles. Furthermore, the Group and most of its business units conduct various employee development programmes to suit their specific business needs and run rigorous leadership development programmes for eligible employees to enhance the succession planning needs.

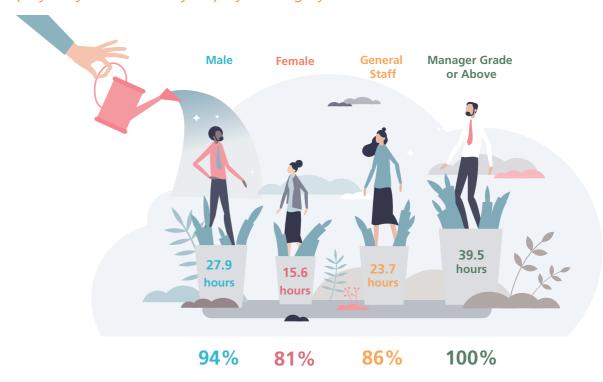
#### Job-specific training

To continuously support the growth and engagement of its employees, AVR has expanded the variety of refresher courses and coaching projects it offers to encourage its employees, with specific attention given to leadership skills.

EnviroNZ has also implemented various training programmes to support the growth and continuous improvement of its staff. These programmes include safe and efficient driving programmes, machine operation, driver and machine operator upskilling etc.

In 2021 we provided 760,007 hours of training and development for full-time employees.

Percentage of Employees Who Received Training<sup>1</sup> and Average Hours of Training Per Employee by Gender and by Employee Category



#### Note:

(1) Full-time staff including terminated employees who left the Company during the reporting period. Percentage of employees who received training = number of employees trained in the category / total workforce of the category at the end of the reporting period x 100%. The percentage of employees trained may exceed 100%.

#### Succession Planning

Employees at every level globally are provided with EDL has implemented a global training programme opportunities to develop themselves as leaders. for emerging leaders within its organisation called the IGNITE Emerging Leaders Programme. Coupled Following the launch of its First Line Manager's with this is the Breaking Ground programme, which is aimed at potential leaders within the Global Frontline leadership group, to support them in developing key leadership skills.

traineeship in 2016, WWU has continued to allow employees to apply for and partake in this traineeship on a secondment basis. Those employees who join this programme undergo a six-month experience period before they return to their original grade. The aim of this programme is to improve the skills, confidence and knowledge of the employees.



UKPN's engineer. To maintain a positive and productive workforce, UKPN monitors trends in employee movements monthly.

Social

#### 5.1.3 HOW WE WORK (CONT'D)

#### 5.1.3.2 Training and Development (Cont'd)

#### Succession Planning (Cont'd)

ista is currently working on a new development programme for future managers. The programme will initially be rolled out in Germany and is then expected to be adopted for other countries.



ista's technicians.

ista has established an internal LEADership programme which is targeted at international managers who sit below the Country Manager in rank. For example, this programme may apply to operations managers, sales managers, project managers and employees who are progressing into their first managerial role. This programme provides theoretical and practical training in leadership, whilst also offering an opportunity to exchange views, experiences and feedback with other employees.

## *Graduate traineeship / apprenticeship programme*

United Energy and VPN have a Summer Vacation Programme, a 12-week intern programme designed to provide undergraduate students the opportunity to seek work experience within the business. The campaign aims to promote women in engineering.



Two new female apprentices from VPN's Ballarat depot successfully applied for roles in 2021.

NGN has also launched a Social Mobility Pledge campaign, which supports apprentices who may not have achieved the education standards due to financial hardships. NGN will work closely with schools and colleges to encourage STEM (Science, Technology, Engineering, Mathematics) related career opportunities by offering mentoring, work experience placements and apprenticeships.

EnviroNZ is exploring internship programme opportunities in partnership with Auckland University. Due to the disruption of COVID-19, the framework for an internship programme is in the design phase and will be ready for deployment in 2023.

#### Support for degree programmes and certification

UKPN has initiated a Supported Studies programme, which includes funding for professional qualifications, including electrical engineering and accounting. There were 3,102 employees have benefited from the programme so far.

Through a structured performance and career conversation process, UK Rails supports various training and development programmes. These include an internal mentoring programme, lunch and learns, sponsoring higher education studies for railway engineering and professional qualifications.

United Energy and VPN provide education assistance for employees who are undertaking external study programmes, including MBA, diploma/Bachelor's degrees and CPA etc.

### 5.1.3.3 Diversity and Equal Opportunity

Having a diverse and inclusive workforce can provide different perspectives on how we conduct our business, and ultimately benefits our business performance. We strive to provide an equal-opportunity work environment that is free from harassment and discrimination and promotes unbiased decision-making. SA Power Networks launched a digital apprenticeship targeting increased focus on females in STEM roles, especially those from disadvantaged backgrounds. This programme began recruitment in February 2021 and had its first intake in June 2021.

We enforce an anti-discrimination policy and have zero tolerance for harassment in any form. All employees, irrespective of race, gender, or religious beliefs, receive equal opportunities and our recruitment and promotion processes are based purely on performance. A Diversity Committee comprising representatives from different business units has been established in many of our business units around the world to raise awareness of diversity among the workforce.

### Key diversity and equal opportunity achievements in 2021

EDL	<ul> <li>Launched Workplace Gender Equality Agency Pay Equity Ambassador Programme</li> </ul>
UKPN	<ul> <li>Ranked 16th in the National Equality Standard accreditation, Inclusive Top 50 UK Employers List – third place as the UK's most inclusive employer, and awarded Platinum by Investor in People</li> <li>Maintained Accreditation under the UK National Equality Standard – 2020</li> </ul>
NGN	<ul> <li>Joined up with EU Skills and the Energy Networks Association         <ul> <li>EDI (equality, diversity and inclusion) committee groups</li> </ul> </li> </ul>
UK Rails	<ul> <li>Commissioned an expert third party to conduct an anonymous Let's Talk About Inclusion survey and an employee workshop. These helped UK Rails gather employee perspectives, including what inclusion looks like when they get it right and examples of desired behaviours to support an inclusive environment.</li> </ul>

### Promoting diversity in the workplace



SA Power Networks' recruitment and training strategies increased focus on females in STEM roles, especially those from disadvantaged backgrounds.

AVR contributed positively to society by its workforce-for-refugees programme, which has enabled AVR to provide job vacancies to five Syrian refugees.

Park'N Fly has embedded diversity and inclusion into this workforce by employing mentally challenged workers for its Vancouver office.

#### 5.1.3 HOW WE WORK (CONT'D)

#### 5.1.3.3 Diversity and Equal Opportunity (Cont'd)

#### Training and guidance regarding diversity

EDL has launched Diversity and Inclusion training for its Brisbane and Perth offices, which is delivered to employees through an online training portal. In addition, EDL undertook several initiatives under its Reconciliation Action Plan ("RAP") to support Aboriginal and Torres Strait Islander ("ATSI") individuals, communities and businesses in Australia. This included procurement opportunities for ATSI businesses, partnership with Career Trackers and Career Seekers to support ATSI students, and sponsorship of ATSI community organisations.

EnviroNZ has launched a Managing Discrimination and Grievances training programme for all new managers to support them in effectively managing discrimination issues and thus minimising grievances.



EDL employees in its Brisbane office, celebrating International Women's Day.

#### Diversity monitoring

UKPN has established a Diversity and Inclusion ("D&I") dashboard, which includes action plans to increase visibility and engagement on diversity and inclusion initiatives.

NGN is collaborating with The Equal Group, a UK-based consultancy firm focusing on diversity and inclusion in the workplace, to ascertain and combat NGN's current diversity and inclusion challenges. To date, NGN has developed an Inclusion and Belonging Strategy document that, along with defining NGN's approach to Inclusion and Belonging also sets short- and long-term targets for the NGN business.

#### 5.1.3.4 Two-way Communication

The Group always strives for effective, open, two-way communication and various effective communication channels have been put in place.



UKPN's field workers.

To better understand the perspectives of its employees, UKPN conducts an annual engagement survey. This survey is deployed in September/October of every year and requests that participants provide a score out of 1,000 and a related satisfaction rating. The survey covers eight aspects, which are: My Manager, Leadership, My Company, Personal Growth, My Team, Wellbeing, Fair Deal and Giving Something Back. UKPN have achieved the highest standard of 3-Star accreditation for two consecutive years.

UKPN have achieved the highest standard of 3-Star accreditation for two consecutive years. NGN has launched an Inclusion and Belonging Steering Group, which is made up of colleagues from across the business including senior management and representatives from NGN's employee communities (including lesbian, gay, bisexual, transgender, ethnic

UKPN has established a Trade Union Working Group specifically focused on diversity and inclusion in 2021. This working group holds forum meetings once a quarter and works to engage and obtain feedback from relevant trade unions.

SOCIAL

minorities, women, parents and carers, and disability group members). This group works to identify areas of improvement for NGN in terms of diversity and inclusion. This could be through supporting employees who feel underrepresented and establishing and reviewing policies to develop the diversity and inclusion elements of NGN further.

#### 5.2.1 WHY IT MATTERS

Due to the nature of the operations, our business units are exposed to a range of health and safety risks. If appropriate safety measures are not in place, the possible occurrence of work-related incidents, injuries, diseases and deaths can add to a company's costs and cause damage to its corporate's reputation. Therefore, creating a safe and well-supervised working environment is of utmost importance in the business units' day-to-day operations.

#### 5.2.2 OUR COMMITMENT

The Group is committed to offering a safe and secure environment for its employees, contractors, customers and other stakeholders when they are at Group facilities and premises. We encourage a company-wide safety culture where everyone is responsible for making every workday healthy and safe from our top management and throughout the Group.

The commitment of top management to health and safety issues is formalised in the Health and Safety Policy, which is based on the following key principles:

- 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.

#### 5.2.3 HOW WE WORK

#### 5.2.3.1 Health and Safety Management System

Well-established Health and Safety Management Systems ("HSMSs") have been adopted in different business units to ensure compliance with local regulatory requirements. For example, HK Electric, UKPN, WWU, Seabank Power, SA Power Networks, VPN and AVR have safety management systems in place that conform to international standards ISO45001 or OHSAS 18001 to protect their employees, customers, contractors, and the public by conducting their businesses in a safe and socially responsible manner.

To identify improvement opportunities across the HSMSs, internal and external audit programmes, varying in scope and frequency, are undertaken across all business units throughout the year, including AVR, EDL, AGIG, HK Electric, SA Power Networks, Seabank Power, UKPN, VPN and WWU,

#### Health & safety committee

To ensure we maintain a safe working environment, we leverage safety committees to review and address our work-related injury risks.

HK Electric has a Health and Safety Board which is chaired by the Managing Director. The main mandate HK Electric closely monitors its Lost Time Injury figures. of the Health and Safety Board is to oversee the As a part of this process, all incidents are investigated implementation of health and safety policies. This thoroughly to determine their underlying causes includes any necessary contingency plans, which are and formulate remedies and related precautionary regularly reviewed to ensure they are effective and measures to prevent recurrence. align with management's expectations.

SA Power Networks has established an internal Corporate Work Health and Safety ("WHS") Committee. This WHS Committee reports directly to the Audit Committee and Board as needed. SA Power Networks has established a formal process to monitor health and safety throughout its business. This includes an internal audit and an Occupational Health and Safety ("OHS") health check across all potential safety risks. In this financial year, SA Power Networks completed six OHS health checks and four detailed internal audits. Coupled with these internal monitoring periodic review of SA Power Networks every three to five years, with regular surveillance monitoring.

UKPN regularly reports hazards and injuries through an internal monitoring system, the AIRLine system. The AIRLine system is available to all employees to report any hazards, defects, near misses and injuries – they can also phone it through to the AIRLine call takers to record their incident. A daily automated report is systems, Return to Work South Australia conducts a issued to all safety professionals across the business to provide visibility of all incidents logged in AIRLine from the previous day. In addition, various reports Other operating companies with Board or are published, including the UKPN PowerNet - SHE management-led committees responsible for the (safety, health and environment) Performance Reports health and safety issues include Green Island Cement, which gives an overview on key trends and safety Alliance Construction Materials, Anderson Asphalt, performance. There are also various reports available EDL, Northumbrian Water, United Energy, UKPN, UK to the business via the intranet which all safety Rails, VPN, WWU and Wellington Electricity. advisors across the business use regularly to monitor performance and compliance.

UK Rails also has an external Safety Panel that oversees the work of this management-led committee to ensure its effectiveness. The Panel meets on a quarterly basis and is chaired by an independent industry expert.

#### Performance monitoring and measurement

Reliance Home Comfort is focused on best practices that reduce its Total Recordable Injury Frequency and Preventable Motor Vehicle Accidents, and are proud to be recognised by the Workplace Safety and Insurance Board for their commitment to workplace health and safety

#### 5.2.3 HOW WE WORK (CONT'D)

## 5.2.3.2 Emergency Preparedness and Crisis Management

Our goal is to create a controlled work environment where our people and assets are safe and our operations have minimal impact on the environment and project area communities. We have plans and processes in place to help prevent and prepare for, respond to, and recover from potential emergencies such as fire, oil and chemical spills, typhoons, flooding, emergency evacuations, rescues from confined spaces and heat-stroke treatment.

#### *Emergency response plans*

Emergency Response Plans ("ERP") are in place for most of our operating companies, including AGIG, Green Island Cement, Anderson Asphalt, AVR, EDL, United Energy and Wellington Electricity etc.

UKPN has implemented emergency preparedness procedures to establish a framework for command, control, coordination and communications in response to any business-related incidents. These incidents will be assessed and handled by managers or specific incident management teams. UKPN's procedure and incident management procedures are reviewed by UKPN's Organisational Resilience Leadership Team, which seeks to learn from incidents and test their procedures and plans through example incidents with the aim of continuous improvement of their preparedness and incident response procedures where gaps arise. UKPN invites the UK's Government Emergency Planning College to conduct a baseline review of UKPN organisation's resilience process, an assessment of the maturity of its planning and development in leadership and culture, strategy and governance, risk management processes, incident and crisis management and business continuity planning.

AGN's ERP is designed to ensure everyone involved in emergency response is familiar with notification, mobilisation and escalation procedures, as well as individual roles and responsibilities. The ERP defines and provides guidance on the appropriate response to emergency events (unplanned events) such as loss of containment, fire, explosion, sabotage or civil disturbance across Transmission and Network operations as well as the wider energy sector. It provides a reference guide for AGIG's comprehensive approach to emergency management and aligns with the requirements outlined in applicable Australian Standards.

VPN has established a crisis management team to respond to any unforeseen crisis. This includes responding effectively to minimise the consequence of the event, establish control and manage objectives, while remaining flexible, scalable and adaptable. VPN expects that its crisis management team will be able to safeguard and care for its staff, and customers whilst still upholding a strong positive reputation.

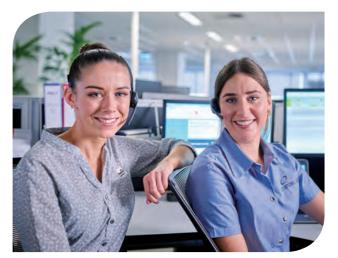
# Mechanisms for stakeholders to report emergencies

WWU has established a national hotline for all members of the public to report any gas emergencies should they arise. WWU monitors the success of this hotline through the response time to answer calls, which is reported monthly. WWU aims to answer 90% of calls within 30 seconds. Between January and December, 2021 WWU exceeded this goal and answered 91.39% of calls within 30 seconds.



WWU has established a national hotline for all members of the public to report any gas emergencies should they arise.

VPN has established a similar 24/7 Contact Centre, which is available to external stakeholders to report or obtain information regarding any power-related queries. Coupled with this, VPN's website provides extensive and detailed information, with a real-time interactive outage map to allow customers to track any electricity outages. Following these two mechanisms, customers can also subscribe to VPN's SMS service to receive individual-specific outage advice, including but not limited to outage notifications, outage progress, expected restoration times and outage completion etc.



VPN's customer service team in its 24/7 Contact Centre.

Alliance Construction Materials formed a community liaison group in Tsing Yi, where its major concrete plants are located. The main purpose is to provide a platform to receive concerns and complaints from the local community that can then be voiced and reported to management through the Risk Management Steering Committee Meetings.

#### Regular training

EDL conducts Emergency Management and Crisis Management Awareness training to ensure senior managers are well-positioned to respond swiftly to emergencies and crises. The annual review of the Crisis Management and Business Continuity Planning Programme updates materials and process documents. Training scenarios and business-relevant emergency response scenarios are delivered to executives, senior leaders, and support workers to further build capability and resilience.

Seabank Power regularly tests its ERP and adjusts accordingly if needed. Seabank Power achieves this through practising ERP for initiating site-wide emergency evacuation/roll call and site-wide toxic release/roll call alarms. These mock emergencies include all employees, contractors and on-site visitors present at the time of the drill.

### 5.2.3.3 Hazard Identification and Risk Assessment

We are committed to rigorously managing the risks associated with hazardous processes, such as those with the potential to result in catastrophic fires, explosions, and sudden release of toxic materials.

Health and safety monitoring systems and formal audit programmes are established in Power Assets. Audits on the safety management system at the corporate level, Transmission and Distribution Division-level and Generation Division-level are conducted not less than once every 12 months by Registered Safety Auditors to ensure all necessary safety regulations/requirements are strictly followed.

EDL continues to improve its hazard identification and risk assessment system which is managed through various avenues. The first is the Shared Analysis Management ("SAM") System, which operates across its business to provide a hazard and incident management recording and reporting process. In conjunction with this, EDL has a requirement to record incidents, hazards and assurance events into the SAM system, which supports EDL to identify trends and establish mechanisms to control hazards and avoid safety incidents.

#### 5.2.3 HOW WE WORK (CONT'D)

#### 5.2.3.3 Hazard Identification and Risk Assessment (Cont'd)

EDL's Global Health and Safety Team completes a range of desktop and site-based research on health,

safety and environment ("HSE") audits. The scope includes auditing according to the HSMSs, which sets the minimum requirements to which individuals and sites must adhere. EDL also engages an external expert to conduct an internal audit of EDL's HSMSs during the year.



EDL's Global Health and Safety Team runs several hazard identification initiatives, including the 'Take 5' programme.

The sites EDL owns and controls are subject to several annual external audits. These audit sites include the following: the Victoria LFG Pipeline, Victoria Power Station, Broome Pipeline and Maitland LNG Facility. EDL may commission external specialist technical audits on various plants and equipment as part of risk assessments or reviews, including hazardous area audits and grid compliance audits. Further, a Global Health and Safety Systems Audit began in 2021 and various recommendations from the audit will be implemented during 2022.

WWU has an effective approach to the identification of hazards/risks and controls that adopts the Health and Safety Executives five steps to risk assessment. WWU operates a number of risk registers at high level that filter down to individual and specific task risk assessments that supports the teams undertake a dynamic risk assessment when they arrive at site.



EDL provides regular fire safety training for its employees.

All risk registers and assessments are reviewed annually/quarterly respectively and adopt known best practice and technological advances at the time of review. All risk assessments are completed using a collaborative approach with persons from all parts the business including management, operational field staff and trade union safety representatives. SA Power Networks has established a strict process to ensure hazardous risks are reported and addressed. This process includes OHS health checks (approximately six per year), as well as detailed internal audits, which ensures all safety risks are observed on a periodic basis. Following this, an insurance company conducts an external audit of the safety and injury management systems every three to five years. A consultancy firm is also engaged for certification and monitoring of compliance with ISO45001.

Northumbrian Water's safety, health and environment team carries out monthly assurance visits on high risk sites. These visits are documented and the resulting actions are tracked closely and shared with the Executive Leadership Team. Northumbrian Water aims to conduct 14 of these visits a month. All members of the Executive Leadership Team carry out a minimum of 12 leadership safety visits each year.

#### 5.2.3.4 Asset Integrity Management

EDL has a Global Asset Management Strategy ("GAMS") that defines how EDL manages its global production assets through their lifecycle to achieve



VPN responded to more than 400 faults and over 250 fallen wires to restore power to more than 120,000 customers during the weather event in June 2021.

various objectives, including maintaining the integrity of the physical assets under its operational control; satisfying all relevant legal, regulatory, company and commercial obligations; and continually monitoring, reviewing and improving the ongoing performance and reliability of EDL assets. GAMS also supports the establishment of associated risk management, lifecycle management, and effective asset governance, and guides the development and implementation of site/equipment asset management plans and inspections, testing and maintenance schedules. Further, there is a fortnightly and monthly review process by operations leaders and the executive team.

UK Rails has strong standards and processes in place that promote and continuously assess asset safety and safe working practices of its suppliers. For maintenance activities, supplier is required to observe high standards of safety and have monitoring, inspection and enforcement in place.

#### 5.2.3 HOW WE WORK (CONT'D)

#### 5.2.3.5 Contractor Safety Programme

We continue to collaborate with our contractors to develop and implement innovative solutions for improving health and safety performance to ensure we are prepared for the increase in work programmes associated with our growth projects.

#### Pre-screening of contractors for safety performance and risks

HK Electric employs a number of mechanisms to manage the safety performance of its contractors. To this end, HK Electric requires contractors to demonstrate a commitment to high standards of health and safety and take the necessary steps to safeguard the health and safety of all their employees and the public. For example, every contractor should aim for zero fatal accidents, dangerous occurrences and reportable incidents. HK Electric requests contractors to submit their safety plans within 28 days after contracting with HK Electric.

Seabank Power operates a stringent process to ensure all contractors engaged meet an adequate safety standard. All potential suppliers must submit a Supplier Information Form, which includes statistics on their health and safety activities. Seabank Power also requested a copy of potential contractors' health and safety policy to ascertain their suitability. To this end, the returned forms are reviewed by the Contract Officer and only contractors with good health and safety performance are approved.

UKPN requires all its external contractors to comply with baseline health and safety policies. To verify this, UKPN monitors the performance through inspection, audit and performance review meetings.

#### Monitoring contractor safety performance

AGN and Multinet Gas monitor service providers through its internal HSE Policy and Safety Management System, which are reviewed annually and validated by regular on-site audit checks.



AGN and Multinet Gas monitor service providers through its internal HSE Policy and Safety Management System.

The branch managers and the health and safety Seabank Power conducts regular health and safety committee members of Park'N Fly will conduct a training through its intranet which is compulsory for all employees. The training includes display screen monthly safety inspection at all branches to identify any potential safety hazards. equipment use and specific courses for individual employees such as confined space working.

Seabank Power's priority is to ensure contractors accept and apply comparable health and safety standards. To achieve this, Seabank Power carries out numerous job freeze audits on approved contractors, companies' working on site. For example, this includes asking these contractors a series of standard questions that assist in determining the contractor's safety management knowledge. The results from these interviews are then scored; those who do not meet the minimum threshold undergo further site induction training.

#### *Contractor training*

EDL aims to ensure all contractors are aware of its safety policy and system requirements by requiring them to complete a suite of training courses before they begin any work.

UKPN requires all contractors to complete the Worker Accreditation Programme ("WAP") every three years Following UK COVID-19 legislation and guidance, NGN monitors compliance through site-based audits to ensure their competency levels remain up to date. This process is monitored through refresher courses, using checklists based on COVID-19 risk assessments. training, knowledge tests, safety visits and operational Seabank Power has added a COVID-19 element to audits. The latest WAP cycle was completed in its emergency management system. This includes December 2021, with all operational contractors comprehensive COVID-19 procedures and risk passing the required threshold. Any contractor who assessments that have been established to safeguard fails to meet these requirements will be removed as a against and minimise potential infections and related service provider. risks that could arise because of COVID-19. The procedures are regularly reviewed.

#### 5.2.3.6 Promotion of Occupational and **Psychosocial Health**

SA Power Networks has implemented a dedicated COVID-19 internal communication mechanism to Our employees' health and safety is our top priority. ensure employees are provided with up-to-date This is especially true in the face of the COVID-19 information regularly. This has included information pandemic. regarding working from home, health and wellbeing and COVID-19 risk management. The information provided through this internal website is in line with HK Electric also conducts regular health and safety directions provided by the health authority of South Australia.

#### Regular health & safety training

training to enhance health and safety awareness. The health and safety training includes forums, health talks, webinars and safety guiz.

#### Wellness and mental health

Wellness and mental health are at the forefront of our employee engagement. We believe that this extends beyond mere awareness to include mental toughness and resilience training to support our employees, especially during the various COVID-19 enforced lockeddowns. For example, we offered various virtual fitness sessions to our employees working from home. In conjunction with virtual programmes, we continued to offer our regular health checks through our medical insurance providers. The company also promotes employee wellbeing and health through a wide range of activities, including organising online classes and providing health tips to its employees on their own physical and emotional health (i.e. work-life balance).

#### COVID-19 Response

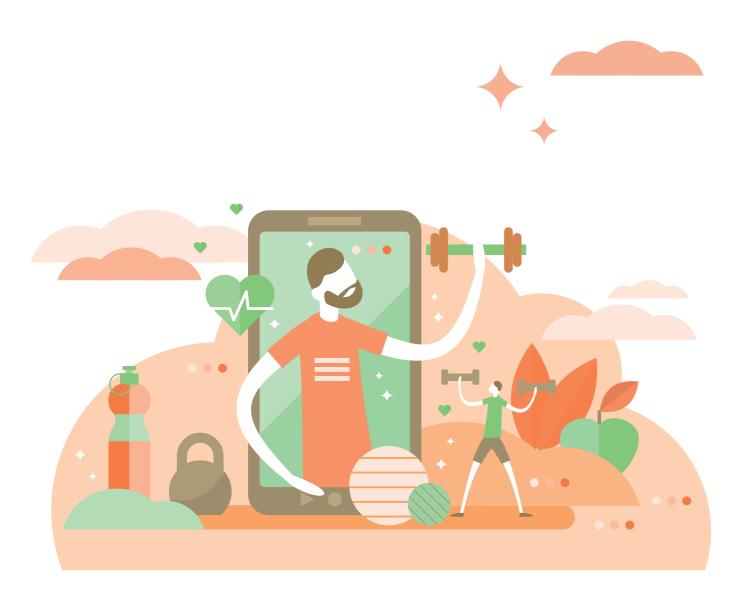
### 5.3 CYBERSECURITY

#### 5.3.1 WHY IT MATTERS

Cybersecurity risk is an increasingly common business threat and can pose immense challenges to companies. Over the years, cyber-attacks have continued to proliferate, escalating in frequency, severity and impact. Organisations will face high monetary and reputational risks if there is no appropriate cybersecurity plan. As the utilities sector digitalises, it also becomes more vulnerable to cybersecurity threats, increasing its exposure to cyber-attacks.

#### 5.3.2 OUR COMMITMENT

The Group seeks to protect its critical assets and data from cyber-attacks and ensure that there are adequate and effective cybersecurity defences to protect corporate information assets and critical infrastructure. The Group also established an Information Security Policy, which defines and helps communicate the fundamental principles for information confidentiality, integrity and availability to be applied across the Group.



#### 5.3.3 HOW WE WORK

#### 5.3.3.1 Cybersecurity Measures

We are committed to the protection of our people, assets, reputation and brand through securely-enabled operations.

HK Electric employs a System Operations Cyber UKPN operates a company-wide campaign branded Security Incident Response Plan to characterise "Security Matters" to communicate awareness and classify reportable cybersecurity events related material across multiple channels, such as the intranet, to system operations. Continuing from this, HK email, Yammer, digital noticeboards, and user Electric has established a cybersecurity management briefings, covering the cyber, physical and personnel framework to address all technical, regulatory and aspects. An online training cybersecurity course is managerial aspects of cybersecurity on an ongoing mandatory for all employees. basis. This framework is based on a defence-in-depth At AGIG, cybersecurity e-learning is mandatory for all strategy and focuses on ensuring the confidentiality, employees and must be completed every two years. integrity and availability of all critical infrastructure and information assets. Within this framework, multiple SA Power Networks offers vocational educational technology security layers have been deployed and programmes in cybersecurity. Training programmes integrated with different cybersecurity processes to are delivered by registered training organisations enable HK Electric's employees to identify, protect, and nationally accredited qualifications are credited. detect, respond to and recover from cybersecurity New employees are assigned mandatory e-learning incidents. modules on cybersecurity information when they join the company. The mandatory e-learning is also Further, HK Electric conducts regular audit for HK supported by an ongoing phishing campaign to test Electric Customer Information System to ensure the staff awareness.

Further, HK Electric conducts regular audit for HK Electric Customer Information System to ensure the relevant information security control and processes are continually monitored, reviewed and improved, and that they conform to ISO27001 security standard. This standard is a leading cybersecurity standard globally for information security management systems.

EDL engaged an external consultant to conduct a thorough review of its cybersecurity and information management systems, in which the current cyber and information systems are reviewed against two national security practices, the NIST framework 800-53 and the Australian Energy Sector Cybersecurity Framework.

This review provided EDL with a comprehensive understanding of the current cybersecurity controls in both the IT (Information Technology) and OT (Operational Technology) environments. Further, this review also provided key recommendations on how best to improve EDL's cybersecurity and information systems. United Energy and VPN have completed an external penetration test to better understand any potential exposure or leakage of internal systems and confidential/sensitive information. This was executed as a part of their cyber assurance programme.

### 5.3.3.2 Employee Training



SA Power Networks offers vocational educational programmes in cybersecurity to relevant employees.

### 5.4 SUPPLY CHAIN MANAGEMENT

#### 5.4.1 WHY IT MATTERS

As a global investor in energy and utility-related businesses with over 30,000 suppliers, the Group is aware of the broader influence it has and can use its purchasing power to encourage suppliers to make their operations more sustainable.

We require all businesses in our supply chain to share our commitment in terms of human rights, working conditions, OHS, non-discrimination, business ethics and environmental stewardship.

During the pandemic, effective collaboration with all stakeholders in the supply chain is critical to our growth and success. The supply chain disruption resulting from COVID-19 poses tremendous pressure on our operational efficiency across all functions of supply chain management. In addition, with the trend of forming more business collaborations and partnerships globally, the ways of working and operation are required to change in response to the dynamic industry environment.

#### 5.4.2 OUR COMMITMENT

The Supplier Code of Conduct underpins our commitment, serves as a guideline for all our business partners and suppliers, and encourages compliance with items in the Supplier Code of Conduct so as to bring broader improvements in sustainability practices and performance for business partners and suppliers and the communities the Group serves.

It applies to all our business partners and products and service providers (i.e. suppliers).

The content of this Supplier Code of Conduct has been developed taking into consideration a number of international charters and conventions such as the United Nation's Declaration on Human Rights and the International Labour Organisation Core Conventions.

Several other policies also support our commitment to promote supply chain sustainability, including:

- Human Rights Policy Highlights the respect for human rights as a fundamental value of the Group and explains our expectation on business partners 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 Reiterates the Group's zero-tolerance against modern slavery and its commitment to preventing modern slavery and human trafficking. It is expected that business partners and suppliers share the same value with the Group, complying with the relevant laws, regulations and reporting requirements. Transparency in business partners' 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 impact 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.

#### 5.4.3 HOW WE WORK

#### 5.4.3.1 Supplier Screening and Selection

The Group is aware of the environmental and social impacts that may ensue along the supply chain, and is committed to minimising such risks in its collaborations with suppliers. ESG-related factors form an important part of the assessment process and have a due weighting in our consideration of potential suppliers and contractors.

HK Electric requires its suppliers and contractors to Prior to engagement AGIG screen contractors using register under the Company's Recognised Tenderers a robust pregualification process to ensure adequate Register ("RTR") before tendering for the Company's induction, training and supervision is provided so major contracts. Suppliers and contractors must that workers can carry out duties without risk to submit the required information in relation to their themselves, their workmates or the environment. environmental, health and safety policies. HK Electric's AGIG's HSE Policy and Safety Management System Code of Practice for Suppliers includes provisions on is designed to endorse, enforce and adhere to its ethical standards, human and labour rights, health and risk management tools to manage HSE risk through safety and environmental protection for contractors ongoing identification, communication and control of and suppliers to follow. workplace hazards.

In conjunction with RTR, HK Electric has also established additional practices for specific work. For example, **Evaluation** the environmental, health and safety performance of Regular monitoring, audits and evaluations are carried trench work contractors is closely monitored through a out to assess the performance of our suppliers. merit and demerit system.

Regular audits have been conducted by ista to check UKPN employs various mechanisms to assess its suppliers through a pre-gualification platform whether ista's Supplier Code is being observed. ista's Supplier Code contains the minimum requirements Achilles Utilities Vendor Database ("UVDB"). As an for social, environmental and governance standards. industry-recognised risk management framework, It is based on the principles of the OECD, the core Achilles UVDB provides a fair, open and transparent means of supplier selection for potential tender conventions of the International Labour Organization, opportunities. New suppliers are granted access to the principles of the UN Global Compact and the requirements of the UK Modern Slavery Act. During the guestionnaire and audit protocols in the public domain of Achilles UVDB Verify. This platform includes the year, the strategic and preferred supplier were assessed via the supplier rating database and supplier a pre-qualification check for suppliers which ensures relationship management tool. that suppliers of goods, works and services meet our required levels of health, safety, environment, quality, SA Power Networks employs a centralised supplier construction design and management, capability, onboarding team to streamline the induction of new ethics, diversity and inclusiveness, and commercial and and existing suppliers. This team has established financial stability standards.

All UKPN suppliers must be registered with Achilles as a minimum standard of pre-qualification. In addition, suppliers undertaking "High Risk" activities on UKPN's behalf must comply with additional pre-qualification and approval procedures before commencing any work. High Risk activities include working on electrical networks, working in confined spaces and working on UKPN's assets, etc.

# 5.4.3.2 On-going Monitoring and

system controls to segregate duties and all suppliers' information is audited daily. This allows the elimination and mitigation of any actual or perceived risks in supplier engagement and a consistent onboarding practice of all SA Power Networks' suppliers.

UK Rails requires all safety-critical suppliers to go through a due diligence process and be included on an approved critical suppliers' list before contracting. Once a contract is in place, suppliers' safety performance and any potential safety issues are continuously monitored. This also helps UK Rails in identifying outliers from normalised performance, which are then discussed with suppliers to assess opportunities for improvement.

### 5.5 COMMUNITY ENGAGEMENT

#### 5.4.3 HOW WE WORK (CONT'D)

#### 5.4.3.3 Communication

In addition to enforcing our Supplier Code of Conduct, we actively communicate with our suppliers to help improve their sustainability performance.

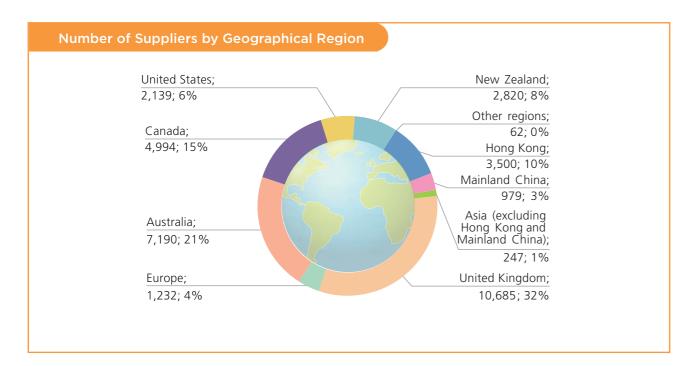
Northumbrian Water hosts a virtual supplier engagement event two to three times annually. The aim of this event is to introduce prospective suppliers and innovation to Northumbrian Water stakeholders to target and address specific challenges and themes in the business.

Northumbrian Water also partnered with British Water to educate supply chain vendors on best practices in relation to how best to procure for innovation as well as opportunities to become more involved with Northumbrian Water. This included collaborative workshops and sharing knowledge of innovation (1) methods, challenges and opportunities. This event was extremely successful and was attended by 36 suppliers and over 200 British Water members.

UKPN believes supply chains have a critical role at the heart of the future energy landscape, enabling the transition to a net zero carbon economy. To this end, UKPN has created an e-book to further enhance its relationship with its supply chain vendors. The purpose of this book is to highlight future challenges which UKPN may face and turn them into opportunities for us all. The e-book also outlines what RIIO-ED21 means for the supply chain in the future and provides a forum for suppliers to inform UKPN's business strategy. In 2021, UKPN engaged with over 1,000 suppliers.

Note:

RIIO-ED2 is the price control for the electricity distribution network in the UK, where network companies take power from the transmission network and deliver it at safe, lower voltages to homes and businesses. The price control runs for five years, from 2023-2028.



#### 5.5.1 WHY IT MATTERS

As a utility services provider, we are in a good position to deliver added value to local communities. It is important for us as a corporate citizen to recognise the different views and experiences of others and balance the conflicting stakeholder demands. Corporates also need to be able to measure the effectiveness of engagement and investment programmes in order to provide insights for more targeted community initiatives in the future.

#### 5.5.2 OUR COMMITMENT

We are committed to respecting the rights of communities and contributing to their economic and UKPN believes it has a social responsibility to support social progress by interfacing with a multitude of the 980,000 households affected by fuel poverty in stakeholders on a regular basis. Our Corporate Social London, the South East and East of England, which Responsibility Policy guides our interactions with the have been exacerbated by the COVID-19 pandemic. communities in which we operate. From development through operations, we engage local communities UKPN expands its partnerships with local organisations and charities every year. In 2021, UKPN worked with

# Energy

to share information and ensure our projects have a positive impact on the community. 32 fuel poverty partners on over 39 projects and provided services to 841,205 customers, saving them 5.5.3 HOW WE WORK an estimated total of GBP5,700,000 in electricity tariff payment. In addition, UKPN delivered in-depth, 5.5.3.1 Better Access to Affordable personalised support to 13,845 households in rural communities, saving them a total of GBP2,700,000, with an additional GBP19,500,000 to be realised over Providing affordable electricity for customers is critical the coming years. to supporting local economies.

HK Electric established a Smart Power Care Fund to promote energy efficiency and low-carbon living. For example, eligible households may apply for a one-off subsidy up to HK\$5,000 for replacing household electrical appliances with more energy-efficient models and appliances.



HK Electric established a Smart Power Care Fund to promote energy efficiency and subsidise low-carbon living.

Many of these fuel poverty projects were funded by UKPN's Power Partners community fund, which provides approximately GBP300,000 worth of grants each year to a total of 41 community projects across the East, South East of England and London to combat fuel poverty, support people in vulnerable circumstances and make community buildings warmer and cheaper to heat. The fund is administered in partnership with a leading energy justice charity, the Centre for Sustainable Energy.

NGN supports customers living in fuel poverty through various initiatives. NGN aims to assist 1,000 customers a year to become more financially resilient to energy costs and provide them with access to cheaper sources of energy.

#### COMMUNITY ENGAGEMENT 5.5

#### 5.5.3 HOW WE WORK (CONT'D)

#### 5.5.3.2 Customer Relationship **Management**

As a global investor in companies in energy generation, transmission and distribution and working with the spectrum of fuels including coal, gas, renewables, waste and oil across four continents, the Group currently serves a total of over 19,000,000 customers.

The Group aims to achieve excellence in customer satisfaction by continually improving our services and achieving or even exceeding service targets.

The Group uses various mechanisms to measure customer satisfaction levels and monitor feedback to understand customer perceptions and implement the appropriate corrective actions.

NGN supports relationships with customers through a wide range of activities and measurements. Alongside its regulated Customer Satisfaction Survey and benchmarking through the Institute for Customer Service, NGN actively monitors and improves the speed and quality of response to customer complaints through its NGN's Complaints Handling Standard, which is published on its external website.

NGN is a member of the Considerate Constructors Scheme, which is a UK-wide independently audited scheme to support construction organisations deliver exceptional levels of customer service.

UKPN continues to be ranked in the top utility providers in the UK according to the Institute of Customer Service's UK Customer Satisfaction Index. UKPN was the first DNO to be featured in this national customer service index. These top rankings are supported by the 2,000 customers who rated UKPN's services. UKPN has maintained an "Excellent" Trust Pilot rating score of 4.9 out of 5, a UK utility first, which further solidifies its quality service.

For our operating companies around the world, customers have various channels available through which to make a complaint or request information. We constantly monitor the feedback received in order to understand the customer's perception and any ongoing critical issues and to implement the appropriate corrective actions. During the year, we have received 6,928 product and service related complaints.

#### 5.5.3.3 Community Consultation

We take community concerns about our activities seriously. To better respond to the demands of the communities we serve, we regularly engage with stakeholders to listen to their needs and gain insight into areas of concern. Our integrated approach ensures that we can identify and address specific issues, always taking into consideration the diversity of economic, social and cultural situations in which we operate.

EDL has a RAP which demonstrates that it is committed to meaningful relationships with ATSI (Indigenous Australian) stakeholders, both externally and within the business among employees, particularly in the remote communities where it operates. The RAP



EDL CEO James Harman welcomes students from CareerTrackers, an organisation that provides career pathways for Aboriginal and Torres Strait Islander university students.

SA Power Networks consults with community groups and internal and external stakeholders through various engagement opportunities, including the Community Consultative Panel.

Wellington Electricity regularly engages with rural communities on various issues, including vegetation control. Wellington Electricity believes that enhanced cooperation with residents through direct communication is the most productive method to resolve concerns and issues.

Committee was formed in mid-2019 and comprises EDL's Australian personnel, including ATSI employees. It focuses on relationships with, respect for, and opportunities with ATSI people.

### 5.5.3.4 Community Investment

The Group also supports the economic and social growth of the local communities in which it operates, in accordance with the specific commitments specified in the Corporate Social Responsibility Policy.

In 2021, HK Electric expanded the scope of its Smart Power Care Fund to facilitate the purchase of energy-efficient kitchen, laundry and water-heating equipment and appliances by small and medium enterprises in a range of sectors as well as NGOs delivering education and community care services. Together with the distribution of dining coupons again, more than 300 small and medium businesses and 40,000 underprivileged families benefited directly from this round of relief measures.

#### 5.5.3 HOW WE WORK (CONT'D)

#### 5.5.3.4 Community Investment (Cont'd)

NGN has partnered with another electricity company to launch the Community Partnering Fund, which provides grants of up to GBP10,000 to support COVID-19 recovery schemes and other essential projects. The fund has GBP50,000 available, with grants ranging from GBP1,000 to GBP10,000. Eligible projects need to be not-for-profit and have to focus on one or more of the following: COVID-19 recovery, tackling fuel poverty, promoting energy efficiency or gas safety in the home, or promoting STEM-related subjects. Previous projects have included an education initiative in Yorkshire to support BAME young women and a South Asian community radio station in Leeds, to name a few.

Reliance Home Comfort and its Team Members donated over CAD865,000 to United Way to help create opportunities for everyone in Canadian communities to live a better life and donated used mobile devices to assist Canadian National Institute for the Blind's Phone it Forward programme.

Northumbrian Water supports the community and specifically children learning from home during the pandemic by donating hundreds of laptops and computers to its local communities. These laptops and equipment enabled pupils to continue with online

learning, complete assignments and projects and keep in virtual contact with their teachers and fellow classmates. Further, Northumbrian Water has also donated 100 4G dongles to the Northern Powerhouse Laptops for Kids campaign to help support pupils with homeschooling.

#### 5.5.3.5 Engaging Community in Our **Green Efforts**

HK Electric injects HK\$5,000,000 annually into the Smart Power Education Fund to promote energy efficiency and conservation, renewable energy and low-carbon lifestyles. Supported by the Fund, HK Electric's Happy Green Campaign organised various education activities on the theme of "Decarbonisation: Our New Mission", including the "Green TV" on social media and online platforms to promote decarbonisation and related actions to combat climate change and contribute to Hong Kong's goal of achieving carbon neutrality by 2050.

In August 2021, United Energy announced Australia's largest rollout of community-based batteries. United Energy, "Electric Avenue" programme will install 40 batteries (30 kW) on power poles over the next 18 months, each with the capacity to service an average of 125 homes. When complete, the fleet of batteries will be able to store the electricity needed to support 5,000 homes as part of an AUD11,000,000 investment in new energy technology.



United Energy's "Electric Avenue" battery program – Australia's largest rollout of community-based batteries.

UKPN is working with local councils in Cambridge, reduce the level of fuel poverty in its networks through Norwich and London to identify EV charge point black "consumer surgeries" that allow vulnerable residents spots in their areas and considering wider societal to understand energy efficiency better. UKPN has benefits from EVs such as improved air quality. By helped more than 845,638 customers save more than sharing data and expertise, the local authorities GBP48,700,000 through its energy efficiency advice, and UKPN will develop a blueprint for collaborative with an additional 16,509 customers saving more than GBP4,500,000 through face-to-face personalised working to identify charge point blackspots and, eventually, those communities will achieve the support. charging infrastructure that they need. In 2021, UKPN AVR holds annual community events where it provides has identified 283 potential locations, which would tours and information regarding the AVR business bring charge points within 5 minutes' walk of nearly and plans for the future. These events aim to create a 100,000 people and GBP2,000,000 of environmental better understanding of environmental awareness. benefits. UKPN works proactively with third parties to



AVR's annual community event.

#### **REGULATORY COMPLIANCE** 5.6

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; (ii) health and safety, advertising,

labelling and privacy matters relating to products and services provided and methods of redress; and (iii) nor did we identify any incidents relating to the use of child or forced labour.

# SOCIA





### 6.1 ENVIRONMENTAL PERFORMANCE INDICATORS

Environmental KPIs <sup>1</sup>	Unit	2020	2021		
GHG emissions <sup>2</sup>					
Total GHG emissions <sup>3</sup>		9,753,816	8,499,422		
Scope 1 emission <sup>₄</sup>	tonne CO <sub>2</sub> e	8,147,385	6,952,156		
Scope 2 emission <sup>5,6</sup>		1,606,431	1,547,266		
Total carbon intensity	tonne CO <sub>2</sub> e/	202	168		
Scope 1 carbon intensity	HKD million	169	137		
Scope 2 carbon intensity	revenue	33	31		
Use of energy <sup>7</sup>					
Total energy consumption		29,268,309	29,061,968		
Direct energy consumption		27,896,625	27,725,702		
i) Non-renewable energy consumed					
Gasoline/Petrol		30,250	29,718		
Diesel	- '000 kWh	537,080	458,369		
Natural gas		10,840,590	10,621,222		
Liquified petroleum fuel ("LPG")		6,882	1,161		
Coal and other fuels <sup>8</sup>		11,630,358	11,838,143		

#### Notes:

- (1) Environmental KPIs in this data table are calculated using the equity method. We only include data in the report for 2021 that were confirmed by end of March 2022. If significant changes occur after preparation of this report, they will be updated in the following year's publication. Any discrepancies between (i) totals provided and the sum of the numbers presented; and (ii) percentages provided and the associated numbers throughout the Report are due to rounding.
- (2) The 2020 data figures have been restated in line with update on the energy consumption data.
- (3) GHG emissions comprise carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride. The data are calculated using local / 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 ("IEA")'s Energy Statistics Manual, United States Environmental Protection Agency's Emission Factors for Greenhouse Gas Inventories and Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings in Hong Kong (2010 Edition). Scope 2 emissions include the emissions associated with electricity purchased and are calculated based on the IEA's latest available emission factors.
- (4) Scope 1 emission includes emission from fuels processed in sources that were owned or controlled by our businesses for its own use. It also includes fugitive emissions resulted from gas shrinkage for our gas transmission and distribution companies, including AGN, Multinet Gas and NGN.
- (5) Scope 2 emission includes the emission from purchased electricity of our businesses for its own use. It also includes the emission from energy losses from distribution grid and the electricity system transmission grid ("network losses") for our electricity distribution companies, including UKPN, SAPN, VPN, Wellington Electricity and United Energy. 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.
- (6) In 2021, we have updated our approach of calculating Scope 2 emission by adopting market-based approach where applicable, which uses supplier-specific emission rate, to better reflect emissions from electricity purchased by our operating companies. Otherwise, grid-average emission factors based on the IEA's latest available emission factors are adopted. The 2020 data figures have been restated to align with the calculation methodology of 2021 data figures to allow for meaningful comparison of data over time.
- (7) The 2020 data figures have been restated to reflect update on the non-renewable energy consumed and also to report the indirect energy consumption associated with electricity purchased only. Network losses are not considered as indirect energy consumption.
- (8) Coal and other fuels include anthracite, residual fuel oil, jet kerosene, lubricants, municipal waste (non-biomass fraction), industrial waste and waste oils. The 2020 data figure has been restated in line with re-categorisation of the direct energy consumption by reporting biomass under renewable energy consumed.

Environmental KPIs <sup>1</sup>	Unit
ii) Renewable energy consumed	
Wind	
Solar	
Hydro	
Biomass	
iii) Self-generated energy	
Electricity	
Heating	
Cooling	′000 kWh
Steam	000 KVVN
iv) Sale of energy	
Electricity	
Heating	
Cooling	
Steam	
Indirect energy consumption	
Electricity	
Heating	



2020	2021
Not reported	2,406
Not reported	438
Not reported	414
4,851,465	4,709,969
Not reported	5,092,271
Not reported	850,186
Not reported	-
Not reported	159,557
Not reported	5,028,409
Not reported	850,186
Not reported	-
Not reported	159,557
1,389,684	1,336,266
1,389,684	1,334,499
-	1,767



### 6.1 ENVIRONMENTAL PERFORMANCE INDICATORS

### 6.2 ESG GUIDE CONTENT INDEX

Environmental KPIs <sup>1</sup>	Unit	2020	2021	
Total energy intensity		607	575	
Direct energy intensity	'000 kWh / HKD million revenue	578	548	
Indirect energy intensity		29	27	
Air emissions				
NOx emissions		8,558	8,258	
SOx emissions	tonnes	726	727	
RSP emissions		306	269	
Use of water <sup>9</sup>				
Total water consumption		646,624	688,000	
Surface water		289,002	270,975	
Groundwater	4000 3	19,058	20,314	
Seawater	- '000 m³	333,420	391,701	
Third-party water		3,758	3,541	
Other sources		1,386	1,469	
Water consumption intensity	'000 m³/ HKD million revenue	13.40	13.61	
Waste production				
Total hazardous waste produced	toppoo	47,655	25,376 <sup>10</sup>	
Total non-hazardous waste produced	tonnes	304,074	280,158	
Packaging material				
Total packaging material used for finished products		2,949	2,570	
Plastic	tonnes	3	5	
Paper		2,946	2,565	

Mandatory Discle	osure Requirements	Section	Remarks
Governance Structure	<ul> <li>A statement from the board containing the following elements:</li> <li>(i) a disclosure of the board's oversight of ESG issues;</li> <li>(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</li> <li>(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.</li> </ul>	2.1 2.2	
Reporting Principles – Materiality	<ul> <li>(i) the process to identify and the criteria for the selection of material ESG factors; and</li> <li>(ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement.</li> </ul>	1.4 2.1.2 2.1.3	
Reporting Principles – Quantitative	Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable).	1.4 6.1	
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.	1.4 6.1	
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.	1.4	

Notes:

(9) In 2021, we have recategorised the total water consumption by reporting water withdrawal from different sources including surface water, groundwater, seawater, produced water and third-party water. The 2020 data figures have been restated to align with 2021 data figures to allow for meaningful comparison of data over time. The total water consumption increased by 6% year-on-year largely due to increase in the consumption of seawater for unit cooling at Jinwan Power Plant.

(10)The total amount of hazardous waste decreased by 47% compared with 2020. This is mainly due to update on the definition of hazardous waste for EnviroNZ, in which the hazardous waste tonnages reported in 2020 had been reclassified to non-hazardous waste in 2021.

Appendix

Subject Areas, A	Aspects, General Disclosures and KPIs	Section	Remarks
A. Environment	al		
Aspect A1: Emis	ssions		
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.	4.1 4.2 4.3	<ul> <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.	4.1 6.1	
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).	4.1 6.1	
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	6.1	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	6.1	
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	4.1	
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.	4.2	
Aspect A2: Use	of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	4.1 4.2	<ul> <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 and per facility).	4.1 6.1	

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 and per facility).	6.1	
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	4.1	
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	4.2	
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	6.1	
Aspect A3: Th	e Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	4.2	<ul><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.	4.1 4.2	
Aspect A4: Cl	imate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	4.2	Environmental Policy
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.	4.1 4.2	

Subject Areas, A	spects, General Disclosures and KPIs	Section	Remarks
B. Social			
Employment and	d Labour Practices		
Aspect B1: Empl	oyment		
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.	5.1 5.6	Employee Code of Conduct
KPI B1.1	Total workforce by gender, employment type (for example, full or part time), age group and geographical region.	5.1	
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	5.1	
Aspect B2: Healt	th and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	5.2 5.6	Health and Safety Policy
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	5.2	two work-related fatalities during the Reporting Year 2021; whereas one in 2020 and two in 2019.
KPI B2.2	Lost days due to work injury.	5.2	3,448 lost days due to work injury
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	5.2	

Subject Areas,	Aspects, General Disclosures and KPIs	Section	Remarks
Aspect B3: Dev	velopment and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	5.1	
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management and middle management).	5.1	
KPI B3.2	The average training hours completed per employee by gender and employee category.	5.1	
Aspect B4: Lab	oour Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	5.6	<ul> <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.	-	
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	_	



# Appendix

Subject Areas,	Aspects, General Disclosures and KPIs	Section	Remarks
<b>Operating Prac</b>	ctices		
Aspect B5: Sup	pply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	5.4	<ul> <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.	5.4	
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.	5.4	Policy on Appointment of Third Party Representatives
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	5.4	
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers and how they are implemented and monitored.	5.4	
Aspect B6: Pro	duct Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	5.5 5.6	Employee Code of Conduct
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.
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	5.5	
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.	5.5	

Subject Areas, As	spects, General Disclosures and KPIs	Section	Remarks
KPI B6.5	Description of consumer data protection and privacy policies and how they are implemented and monitored.	_	Information Security Policy
Aspect B7: Anti-c	corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	3.2	<ul> <li>Employee Code of Conduct</li> <li>Anti-Fraud and Anti-Bribery Policy</li> <li>Policy on Appointment of Third Party Representatives</li> <li>No recorded cases of non-compliance with laws and regulations relating to anti-corruption and bribery during the reporting period.</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.	3.2	
KPI B7.2	Description of preventive measures and whistle-blowing procedures and how they are implemented and monitored.	3.2	<ul> <li>Whistleblowing Policy – Procedures for Reporting Possible Improprieties</li> </ul>
KPI B7.3	Description of anti-corruption training provided to directors and staff.	3.2	





Subject Areas, Aspects, General Disclosures and KPIs		Section	Remarks
Community			
Aspect B8: Community Investment			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	5.5	Corporate Social Responsibility     Policy
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture and sport).	5.5	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	5.5	

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