SUSTAINABILITY AT CK HUTCHISON

Reporting on what matters

Stakeholder engagement

Understanding stakeholder views is crucial to defining a strategy that has the interests of society and the environment at heart. The outcomes of stakeholder engagement have been instrumental in setting the Group's ongoing sustainability strategy development.

As the Group has a diverse range of businesses and operates globally, maintaining a close dialogue with key stakeholders in each industry and geographical jurisdiction is critical when making business decisions and considering their potential sustainability impact.

The Group has a broad range of stakeholders that are engaged on a regular and ongoing basis through a variety of channels such as meetings, liaison groups, panel discussions, workshops and surveys, in order to understand their views and better meet their expectations. These include:

- Employees;
- Customers;
- Suppliers and business partners;
- Shareholders and bond investors;
- Banks and creditors;
- Governments and regulators;
- Local communities; and
- Non-government organisations.

Regarding investor engagement, the Group conducts an annual sustainability investor outreach in order to take a pulse of investor concerns and expectations. During 2021, the Group contacted a selection of its debt and equity investors and held one-to-one calls with the portfolio managers and sustainability team members in order to solicit their feedback to be used as an important input to the Group's ongoing sustainability strategy development and disclosures. The consistent feedback received across all investors interviewed was that they wanted to understand the Group's climate action strategy better; as key readers of this report, and as a top priority for the Group, an expanded section on this topic is provided.

The Group also recognises that ESG rating agency assessments are important inputs in how its investors assess the Group's sustainability efforts. With multiple ratings agencies in existence, each with different sets of criteria and assessment frameworks, the Group used feedback from its sustainability investor outreach to prioritise focus on two agencies: Sustainalytics and MSCI. Active engagement and specific disclosures against each of the agencies frameworks is essential to showcase the Group's efforts and to meaningfully influence scores. Throughout 2021, the Group dedicated significant efforts to engaging with these agencies to understand their methodologies and tailor disclosures accordingly in order to reflect more accurate representation of the Group's efforts.

Materiality assessment

Each of the Group's core businesses faces different sustainability challenges and therefore requires an individualised and tailored approach to sustainability impact assessment and prioritisation.

The Group's materiality assessment is an iterative process that is updated with new information and emerging trends by way of a three-step process: identification, prioritisation and validation.

1. Identification:

- Identified potential sustainability issues relevant to the Group referencing:
  - Material issues covered in industry-specific materiality frameworks such as the Global Reporting Initiative ("GRI") Standards and the Sustainable Accounting Standards Board ("SASB") Standards;
  - The SDGs as well as the resources contained within the Blueprint for Business Leadership on the SDGs;
  - ESG rating agency reports; and
  - Research on emerging issues and global socioeconomic trends.

2. **Prioritisation:**
- Worked with core businesses to consider material issues with regard to their influence on business success;
- Issued questionnaires and conducted one-to-one interviews with relevant stakeholders to understand the importance of these issues to them; and
- Prioritised issues that have a significant impact on the Group's ability to create long-term and sustainable value.

3. **Validation:**
- Reviewed and approved the material issues with the Group's core businesses, cross-departmental Sustainability Working Group and the Sustainability Committee.

Group Sustainability Framework and material topics

Figure 1 outlines the Group's Sustainability Framework, including four pillars and nine goals, alongside their related material topics.

How these goals are achieved and how these material topics are impacted across the Group will differ depending on the nature of the business sectors and geographies in which each core business operates. While this report is focused on material information, further detail on how each goal is being addressed can be found in the sustainability section of the Group's corporate website, which is updated regularly to take account of the most current developments.

Four goals have been prioritised as Group-wide focus areas for 2021-2022, including:
1. Take action on climate change;
2. Offer customers sustainable products and invest in and embrace innovation to achieve transformational impacts;
3. Create great places to work; and
4. Take all steps to protect employees and support communities and other stakeholders through the pandemic.

While the goal – Take all steps to protect employees and support communities and other stakeholders through the pandemic – is not a perpetual goal as in the case of the others, it has been individually listed given the significance of the pandemic and to ensure maximum focus as the world continues its recovery.

Progress and strategies to address each of these four goals in respect to each of the four core businesses are outlined in a traffic light assessment in Table 2, and are discussed in the next section.

Figure 1: Group Sustainability Framework and material topics

	Group goals	Material topics	Mapping to the SDGs
Environmental	Take action on climate change	• Decarbonisation • Climate risk and resilience	7 AFFORDABLE AND CLEAN ENERGY; 13 CLIMATE ACTION
Environmental	Protect natural resources	• Biodiversity protection • Sustainable water management • Pollution prevention	6 CLEAN WATER AND SANITATION; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 14 LIFE BELOW WATER; 15 LIFE ON LAND
Environmental	Promote a circular economy	• Responsible raw materials sourcing • Resource efficiency in system and product design	2 ZERO HUNGER; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Social	Create great places to work	• Attraction and retention • Talent development • Inclusion and diversity • Employee relations • Health and safety	3 GOOD HEALTH AND WELL-BEING; 4 QUALITY EDUCATION; 5 GENDER EQUALITY; 8 DECENT WORK AND ECONOMIC GROWTH; 10 REDUCED INEQUALITIES
Social	Invest in developing thriving and resilient communities	• Community investment and engagement • Social and economic inclusion • Human rights	3 GOOD HEALTH AND WELL-BEING; 4 QUALITY EDUCATION; 10 REDUCED INEQUALITIES
Social	Take all steps to protect employees and support communities and other stakeholders through the pandemic	• Employee, customer and community health and wellbeing • Targeted community contributions to support the needs of the vulnerable	3 GOOD HEALTH AND WELL-BEING; 8 DECENT WORK AND ECONOMIC GROWTH
Governance	Embed rigorous and effective governance	• Transparent and effective corporate governance	8 DECENT WORK AND ECONOMIC GROWTH; 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Governance	Operate responsibly and with integrity	• Business ethics and integrity • Data privacy and cyber security	8 DECENT WORK AND ECONOMIC GROWTH; 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Sustainable business model innovation	Offer customers sustainable products and invest in and embrace innovation to achieve transformational impacts	• Sustainable product innovation • Sustainable sourcing • Product and service safety and quality	7 AFFORDABLE AND CLEAN ENERGY; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 11 SUSTAINABLE CITIES AND COMMUNITIES; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 13 CLIMATE ACTION; 14 LIFE BELOW WATER; 15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

SDG 17 underpins all nine goals and is essential to accelerating impact.

Table 2: 2021 progress on priority sustainability goals

Goals		Ports		Retail		Infrastructure		Telecommunications
1. Take action on climate change								
Set a short-term target aligned to the science, ideally validated by the Science Based Targets initiative (SBTi).	🟡	Engaged a third party expert to assist with target re-assessment against the SBTi framework and understand next steps.	🟢	Set new targets covering scope 1, 2 and 3. These targets are pending validation by the SBTi.	🟡	Work to develop a division-wide target is underway; targets are already in place at the business-level. UK Power Networks and Hong Kong Electric have both had their targets validated by the SBTi.	🟢	Set new targets covering scope 1, 2 and 3. These targets are pending validation by the SBTi.
Assess the pathway to net-zero.	🟡	Engaged a third party expert to help develop a net-zero transition pathway.	🟡	Work is underway to assess the pathway.	🟡	While a division-wide plan is still underway, nine of the Group's Infrastructure businesses have already committed to net-zero.	🟢	CKHGT has set a target to reach net-zero in operations (scope 1 and 2) by 2040. Recognising the importance of incorporating scope 3 also in this ambition, it will be further expanded to do so, and CKHGT will further seek validation by the SBTi on this long-term net-zero ambition.
Calculate scope 3 emissions.	🟡	Currently calculating its scope 3 footprint.	🟢	Calculated scope 3 emissions for the first time in 2021.	🟡	Scope 3 figures are calculated by some of the businesses and work is underway to expand this reporting.	🟢	CKHGT calculated its scope 3 footprint for the first time in 2021.
Report on progress using the Taskforce on Climate related Financial Disclosures (TCFD) framework.	🟢	During 2021, the Group developed its first TCFD-aligned report. TCFD gap analyses and work to align reporting at the division-level are also commonplace at the business level. There is further work to be done to enhance this TCFD reporting by incorporating scenario analysis and calculating the financial impacts of climate change.						
2. Offer customers sustainable products and invest in and embrace innovation to achieve transformational impacts								
Assess and expand sustainable product and service offerings and communicate benefits to customers.	🟢	The Group has identified three key areas of opportunity that it is delivering business solutions in and that it will continue to invest in as key value drivers, including solutions that help drive: the net-zero transition; a circular economy and sustainable sourcing; and a more inclusive and diverse world.						
Track the following Key Performance Indicators ("KPI"): • Revenue generated from sustainable business opportunities; and • CAPEX spend on sustainability.	🟡	While the Group has studied its sustainability-related CAPEX spend, further work will be completed to mature this analysis and align this work to the relevant regional Taxonomies in development such as the evolving European Taxonomy.						
3. Create great places to work								
Develop inclusion and diversity goals.	🟡	While inclusion and diversity is being prioritised by all businesses, further work is to be completed to set division and Group-level goals. Detail on how each division is addressing inclusion and diversity is presented on pages 54-55, 68, 70-71, 118-119 and 148-149						
Track the following KPIs: • Gender split of employees in managerial positions; • Gender split of employees in executive management; • Gender split of newly hired employees; and • Average years employed by the company by gender.	🟢	Data collection embedded now in HR data collection processes for tracking and developing improvement plans.						
Present action plans to track and improve employee engagement, short-term and long-term.	🟢	All business HR teams shared their employee engagement plans with Head Office.						
4. Pandemic response								
Employees: Keep employees safe; provide employees with the tools and support to successfully work from home; support employee wellbeing. Customers: Protect the health and wellbeing of customers. Communities: Maintain focus to supporting healthcare services globally and the needs of the vulnerable.	🟢	While this work can never be described as "completed", the Group ensured each division was dedicated to this aim. Detail on how each division is addressing this goal is discussed throughout this report.						
Other Group goals								
Build sustainability incentives plans by linking sustainability goals to performance metrics and compensations schemes.	🟡	In 2021, WINDTRE introduced a new plan to link 10% of management's short and long-term compensation to its 2030 sustainability objectives. Further work is underway to link sustainability to performance objectives and incentive schemes across the Group.						
Develop a Group-wide sustainability employee engagement plan, enabling cross-business synergies, beginning with a global sustainability champions network.	🟢	A Group-wide global sustainability network was created in 2021 and was used as a way to encourage collaboration opportunities as well as to disseminate Group-level information regarding new objectives and plans. Awareness raising sessions from external experts on science-based target setting, TCFD reporting and inclusion and diversity were also held.						
Every core business to have its own sustainability reporting which follows the Group's sustainability goals and priorities.	🟡	CKHGT will develop its first Sustainability Report in 2022-2023 to complete the full spectrum of Group reporting.						
Roll out a Group-wide Sustainability Data Management System for enhanced active monitoring and preparation for externally-audited data.	🟢	In 2021, the Group selected FigBytes as its chosen data management platform. The platform will be launched across the Group in 2022.						
Expand disclosures to meet criteria set out in key reporting frameworks (e.g. TCFD) and ESG rating agency frameworks.	🟢	Again, while this work will be an ongoing process that cannot be marked as "completed" the Group is satisfied that it has continued to expand it's disclosures and actively engage with ESG ratings agencies which has resulted in performance improvement of the Group's ratings.						

🟢 Completed 🟡 Work underway 🔴 Not yet started

Priority goal 1: Take action on climate change

The Group believes that urgent and sustained action is required to address the climate emergency and to meet the goal of the 2015 Paris Climate Agreement. With the current decade being critical, there is no choice but to accelerate action to limit global warming. Responding to climate change means not only addressing climate-related risks, but also opportunities. As the world transitions towards net-zero, the Group's businesses are positioning themselves to be at the forefront of helping its customers, communities, businesses and governments achieve their climate ambitions.

Targeting leading practice

In 2020, the Group identified four action plans for its business divisions to undertake during 2021 and 2022. Progress is summarised in Table 3. The ultimate aim of these actions is to ensure the Group is taking a science-aligned and leading practice approach to its climate strategy.

Using the findings from the work completed during 2021, the Group is prioritising developing a short-term and long-term Group-level target during 2022.

Division-level progress

The Ports division has been working to develop new short and long-term targets as well as develop a scope 3 footprint; this work will be completed during 2022. In the meantime, it has set in place global targets with a particular focus to scope 1 emissions, which account for 62% of total scope 1 and 2 emissions, including:

- Reduce diesel consumption per Twenty-foot Equivalent Unit ("TEU") by 30% by 2030 versus a 2020 baseline; and
- Reduce GHG emissions intensity (kgCO_2e per TEU) by 20% by 2030 versus 2020.

While the Ports division is currently working on its long-term climate transition plan, it is nevertheless positive about a net-zero future for its ports and has mapped out transition opportunities that are well underway.

During 2021, the Retail division worked alongside a carbon expert to develop its science-based targets, which are pending validation by the Science Based Targets initiative. These new targets include:

- Reduce scope 1 and 2 emissions by 50% by 2030, versus a 2018 baseline;
- Reduce scope 3 emissions from purchased goods and services and upstream transportation and distribution by 58% per dollar Economic Value Added by 2030, versus a 2018 baseline; and
- 33% of suppliers by GHG emissions covering purchased goods and services and upstream transportation and distribution will have science-based targets by 2027.

The Infrastructure businesses have already developed net-zero transition pathways which are summarised in Table 4. Work is underway to consolidate progress and plans to develop one set of division-wide targets.

CK Hutchison Group Telecom ("CKHGT") worked with a third party expert to develop its science-based targets, which are also pending validation by the Science Based Targets initiative. These targets include:

- Reduce scope 1 and 2 emissions by 50% by 2030, versus a 2020 baseline; and
- Reduce scope 3 emissions by 42% by 2030, versus a 2020 baseline.

Table 3: Snapshot of division-level progress against climate change actions

Actions	Ports	Retail	Infrastructure	Telecoms
Set a short-term target aligned to the science, ideally validated by the Science Based Targets initiative	◔	✓	◔	✓
Assess the pathway to net-zero	◔	◔	◔	✓
Calculate scope 3 emissions	◔	✓	◔	✓

Table 4: Infrastructure net-zero targets

Business	Targets
Australian Gas Infrastructure Group	10% renewable gas by volume in distribution networks by 2030; 100% renewable gas by volume by 2050 at the latest and 2040 as a stretch target.
Dutch Enviro Energy Holdings B.V. (which owns AVR-Afvalverwerking B.V. (AVR))	Achieve net-zero in operations by 2050.
ista	Achieve net-zero in scopes 1, 2 and selected scope 3 by categories 2030.
Northumbrian Water	Achieve net-zero in operations by 2027.
Northern Gas Networks	Achieve net-zero in operations by 2031 (excluding gas shrinkage) and net-zero across the value chain by 2050.
SA Power Networks	Achieve net-zero in operations by 2035.
UK Power Networks	Achieve net-zero for directly controlled operational emissions (excluding network losses) by 2028.
Wales & West Utilities	Deliver a net-zero ready gas network by 2035.
HK Electric	Achieve carbon neutrality before 2050.

CKHGT has committed to net-zero in operations (scope 1 and 2) by 2040. It will also be working to incorporate scope 3 emissions into this long-term target, as well as having it further validated by the Science Based Targets initiative.

During 2021, CKHGT worked with a carbon consultant to develop its first scope 3 footprint. With scope 3 emissions accounting for 74% of its footprint, and 84% of total scope 3 emissions attributable to purchased goods and services and capital goods, this spotlights the importance of supplier engagement, particularly with handset suppliers.

GHG emissions reduction performance

In 2021, the Group reduced its total scope 1 and 2 emissions by 10.3% versus 2020, and 17.8% versus 2018. These savings have been enabled by efforts in generating and procuring renewable and other clean energy, continuing to phase out coal-fired power generation, transitioning to sustainable transportation and implementing energy efficiency measures.

The Retail, Ports and Telecommunications divisions, however, all experienced increases in their scope 1 and 2 emissions in 2021 versus 2020 (5.4%, 5.4%, and 1.3% respectively) due to retail stores reopening following long periods of lockdowns, supply chain pressures leading to above-average increases in port throughput, and an increase in traffic needs of the network during the pandemic with more people working and connecting from home. While there is expected stabilisation in 2022, these increases highlight the importance of measures that can help decouple GHG emissions from business growth, for example the combined need of utilising electric vehicles with 100% renewable electricity that keeps GHG emissions at zero no matter the extent of business activity.

Accounting for 82% of total scope 1 and 2 emissions, the Infrastructure division is the most critical part of its overall net-zero transition pathway. Nevertheless, the Ports, Retail and Telecommunications divisions are in their own right large businesses with sizeable footprints, which also require maximum focus.

Figure 5: Scope 1 and 2 GHG emissions performance (tCO_2e)

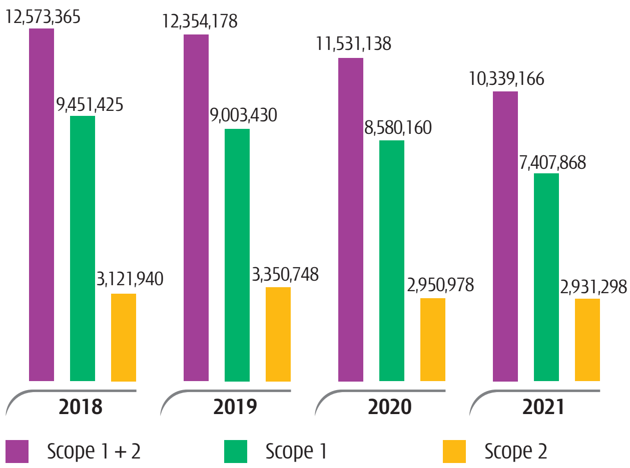
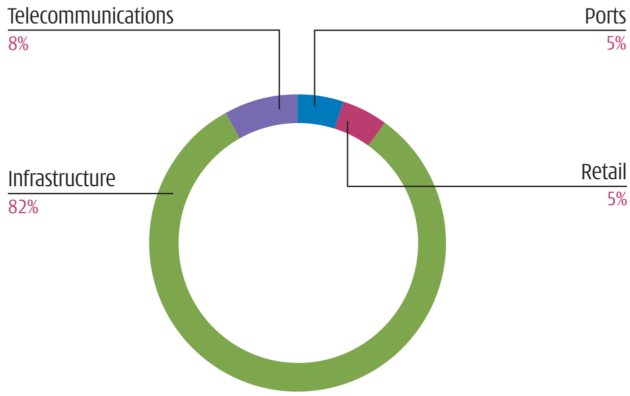


Figure 6: Group breakdown of scope 1 and 2 emissions



Net-zero transition opportunities

While the Group is still undertaking a more detailed analysis of its division-level targets and plans before finalising its Group-wide targets, it nevertheless has in place a strategy to address its most important areas of focus.

The Group has identified 10 net-zero transition opportunities based on current business expectations and structure for achieving transformational change over the long-term, addressing both adaptation and mitigation including :

1. Renewable and other clean energy;
2. Transitioning high-carbon assets;
3. Sustainable transportation;
4. Energy efficiency;
5. Circular economy & design;
6. Climate adaptation;
7. Finance and investment;
8. Supply chain engagement;
9. Collaboration, partnerships & advocacy; and
10. Carbon offsets.

Aside from influencing the impact of the Group's own footprint, the Group's businesses are also playing pivotal roles in enabling significant GHG emissions reductions in other industries and growing value-creating business solutions to address the net-zero transition.

The overarching approach the Group has taken is to not wait for every issue to be resolved and for every term to be defined before setting out its climate transition action plan, but instead ensure that it advances significantly every year and that it is transparent to all stakeholders as it progresses.

The Group is also tracking spending in these areas to ensure sufficient investment is dedicated to enabling progress.

Interconnectivity with other sustainability challenges

In considering the Group's approaches to net-zero, it also acknowledges climate change's interconnectivity with other environmental challenges such as biodiversity loss and environmental pollution. These must be addressed together to create the most meaningful progress.

It is important that the opportunities presented by a net-zero future are open to everyone. Given the sheer scale of change that is needed, it is fundamental to address new forms of inequality that may arise. Studies show that public understanding of low-carbon technologies is generally low, particularly among vulnerable customers, which may create new forms of exploitation. To address this, the Group's businesses are working closely with regulators and governments, and in doing so helping to engender public awareness and trust in net-zero, a critical component to meeting decarbonisation ambitions.

Table 7: Net-zero transition opportunities

Transition opportunity	Strategies
Renewable and other clean energy	• Invest in and grow the Group's renewable energy portfolio. • Transition gas networks to hydrogen. • Connect market-leading levels of renewable energy to the grid. • Increase the procurement of renewable electricity. • Adopt carbon capture and storage where relevant to waste-to-energy operations.
Transitioning high-carbon assets	• Phase out coal-fired power generation globally by 2035.
Sustainable transportation	• Scale up electric and hybrid-electric vehicles and infrastructure. • Lead the way in being first-adopters of hydrogen vehicles and equipment.
Energy efficiency	• Exhaust all feasible options for energy efficiencies. • Embrace digitalisation and innovation to transform distribution networks, increase grid flexibility and decrease distribution losses. • Be a leader in innovation in 5G, IoT applications and smart city solutions.
Circular economy & design	• Reduce, reuse and recycle all forms of waste. • Design products and systems with circular economy principles in mind.
Climate adaptation	• Protect the Group's people and assets and be ready for a changing climate. • Conduct periodic climate risk assessments of high-risk assets. • Protect biodiversity to restore healthy ecosystems and further strengthen adaptation.
Finance and investment	• Continue to align capital expenditure in line with a net-zero pathway.
Supply chain engagement	• Further develop supplier engagement policies. • Develop scope 3 emissions reductions targets.
Collaboration, partnerships & advocacy	• Partner with peers, customers, government and other relevant organisations to accelerate the transition.
Carbon offsets	• Reducing the Group's direct carbon footprint is the first priority. Carbon offsets can help to neutralise residual emissions attributable to the Group that are not possible to eliminate.

It is important to note that the potential scale of impact is based on the Group's current business structure, availability of opportunities and technologies, as well as anticipated future policy environments, which are all subject to change from forces outside of the Group's control. The Group will endeavour to provide updates as these evolve and as new opportunities become available.

1. Renewable and other clean energy

Renewables are at the centre of the net-zero transition. Exceptionally high capacity additions are becoming the new norm, with renewables expected to account for 90% of new power capacity expansion and 30% of electricity generation globally in 2021, according to the International Energy Agency.

While renewable energy is derived from sources that can naturally replenish themselves, such as from the wind and sun, clean energy more broadly encompasses all carbon-eliminating energy sources that also prevent pollution, including adopting technologies like carbon capture and storage. While renewable energies may be the preferred option in terms of impact, much work is to be done before they can be solely relied upon. Further, the enormity of the climate crisis is great enough that there is no time in the short-term to wait for silver bullet solutions; all available technology must be availed of in order to enable the transition.

As a generator, facilitator and consumer of renewable and other clean energy, this opportunity is the most significant net-zero transition opportunities for the Group.

In terms of renewable energy generation, this primarily relates to the Group's Infrastructure division which is taking significant steps in both generating renewable and other clean energy, as well as investing in new opportunities to grow this portfolio.

In 2021, the Group was responsible for generating 6,405GWh of renewable and other clean energy which enabled over five million tonnes of avoided CO_2 emissions, or the equivalent of over taking one million petrol-powered passenger cars off the road for an entire year.

Victoria Power Networks installing rooftop solar panels

The Group also plays a significant role in facilitating the renewable energy transition through enabling renewable energy grid connections via the Group's electricity distribution networks. A critical component of this is the deployment of distributed energy resources which are small-scale electricity supply or demand resources, such as rooftop solar photovoltaic units that are interconnected to the electric grid. UK Power Networks, SA Power Networks, Victoria Power Networks and Hong Kong Electric have connected over 14GW of distributed energy resources to the grid, with plans to significantly grow this in the short-term. For example, SA Power Networks has the highest penetration of distributed solar of any gigawatt-scale energy system in the world and it is working on doubling its solar capacity in the next five years.

Hydrogen is considered a significant future opportunity to the Group, particularly to the gas networks that are actively piloting projects and readying their networks for the future of hydrogen.

Australian Gas Infrastructure Group delivered Australia's first project that produces green hydrogen for blending with natural gas at volumes of up to 5% and supply to nearby homes via the existing gas network. Its next project looks to blend up to 10% renewable gas to supply around 770 homes and businesses throughout an entire city's existing gas network, another Australian-first. With its partners, Northern Gas Networks has launched the world's first 100% hydrogen testing facility. It is also piloting a 20% blend of hydrogen in a local gas supply in the village of Winlaton in the North East of England.

In an industry-first partnership, UK Rails has signed a Memorandum of Understanding with Alstom, Britain's leading train manufacturer and maintenance provider. Through this, UK Rails will explore the technical and commercial feasibility to build the UK's first-ever, brand-new hydrogen fleet. In 2021, UK Rails entered into an agreement with H2 Green, a hydrogen network operator, with a view to develop low-cost and reliable green hydrogen supply solutions for the UK railway. This partnership will help determine the production and refuelling infrastructure required to support wide-scale deployment of hydrogen-powered rolling stock fleets.

The Ports division is also actively entering this space through the work underway at Freeport East (centred on two of its ports) and its aims to be a centre of excellence for green hydrogen and wind power generation. At its peak, the project is expected to produce 1GW of green hydrogen, 20% of the 5GW target in the UK's Ten Point Plan for a Green Industrial Revolution. Among many other uses, the hydrogen produced will be used to power port infrastructure and equipment.

Table 8: Renewable and other clean energy generated by the Group's businesses

Renewable and other clean energy source	Installed capacity (MW)	Generation in 2021 (MWh)	Emissions avoided p.a. (tCo_2e)
Biogas*	435	2,092,387	2,735,243
Solar	7	11,955	1,865
Wind	182	485,380	356,291
Green hydrogen	1	628	272
Waste coalmine gas	298	1,413,133	1,224,327
Waste-to-energy**	170	532,000	261,700
Renewable heat and industrial waste heat	390	1,870,000	422,000
Total	**1,483**	**6,405,483**	**5,001,698**

Note:

* Biogas produces both electricity and renewable natural gas. The MW's installed capacity and MWh's generated in 2021 includes the renewable natural gas converted from MMBTU's.

** 54% of the energy output was classified as renewable (biomass origin) and was certificated with Guarantees of Origin.

Renewable electricity procurement
Aside from generation, renewable electricity procurement is also important under this opportunity. The Group's preference for renewable electricity procurement follows the technical screening criteria set out by RE100, the global initiative which brings together the corporate sector in driving 100% renewable electricity uptake. In order of preference, these criteria include:

1. Self-generation from owned facilities (on or offsite);
2. Purchase from on-site installations owned by a supplier;
3. Direct line to an off-site generator with no grid transfers;
4. Direct procurement from offsite grid-connected generators e.g. power purchase agreement ("PPA");
5. Green electricity products from an energy supplier (e.g. Green Tariffs);
6. Unbundled energy attribute certificate ("EAC" or "certificates") purchase;
7. Default delivered renewable electricity from the grid, supported by certificates; and
8. Default delivered renewable electricity from a grid that is 95% or more renewable and where there is no mechanism for specifically allocating renewable electricity.

While many of the higher order options do not exist for all in-country, the Group encourages its businesses to start with the available options and work towards higher impact options as more possibilities become available. Currently only 20% of electricity is renewable electricity, with the majority of procurement in Europe. Nevertheless, there is ongoing progress being made towards the preferred options. For example, Northumbrian Water's 1,886 sites are all powered by renewable electricity. This means that 87,000 tonnes of CO_2 emissions are eliminated every year, 30% of which is powered by a 10-year PPA with the Race Bank offshore wind farm off the coast of Norfolk.

The Group is exploring the potential for collaborative energy procurement through combined PPAs across core businesses enabling new renewable energy being added to the grid, while ensuring a stable and long-term supply of green energy and driving down costs for the Group through economies of scale.

The Group has also hired a Head of Sustainability Services Products and Services with deep expertise in energy markets, renewable energy and energy management. Part of the CKH Innovations Opportunities Development team, a centralising function for innovation and cross-fertilisation of opportunities across the Group, this role has the specific aim of identifying collaboration opportunities and disseminating knowledge of renewable energy markets within the Group.

2. Transitioning high-carbon assets

As of 2021, the Group's businesses in OECD countries have fully phased out coal-fired generation and the Group is committed to phasing out coal-fired generation in remaining non-OECD countries by 2035. To date, coal-fired generation installed capacity has reduced from 53% in 2016 to 32% in 2021.

Table 9: Coal to gas conversion plans

港燈 HK Electric	Following the commissioning of a gas-fired unit (L10) in 2020, HK Electric took another major step forward in its transition from coal to gas-fired generation with the successful synchronisation of another new gas-fired unit (L11) in November 2021. HK Electric will also commission another new gas-fired unit (L12) in 2023 and gradually phase out the remaining coal-fired units by the early 2030s.
CANADIAN POWER HOLDINGS INC.	The 800 MW Sheerness Generation Station fully phased out coal-fired power generation in 2021, which will effectively reduce GHG emissions from Canadian Power's 200 MW stake by 45-50%.

3. Sustainable transportation

While this opportunity applies across all businesses, this is most impactful to the Ports division where transportation, including both mobile and stationary vehicles and equipment, accounts for 80% of a typical port's scope 1 and 2 emissions footprint.

While transportation needs vary from port to port, important equipment necessary across all ports is described in Table 10, including how the Group is investing in converting this equipment from diesel to electric and hybrid alternatives (with a preference for electric).

In a port environment, converting a brownfield site from diesel to electric is a lengthy process which takes significant time, planning and investment to trial and roll out the equipment and supporting infrastructure including the maintenance support, while maintaining ongoing operations. Further, often electric and hybrid alternatives are not yet fully offered in the market, which is a regular barrier for many of the Group's operations. While significant progress has still been made, further leaps in technology are required, as well as a consideration to lead-times and depreciation cycles. Table 10 highlights where the Ports division has been also scanning the market and acting upon options being offered by the market.

Table 10: The Ports division's near-term sustainable transportation rollout

Equipment	Total units	Total electric	Total hybrid units	Capital expenditure ("CAPEX") committed and planned for 2021 & 2022
Rubber-tyred gantry cranes (RTGC)	1083	382	178	Thailand: 8 electric RTGCs Pakistan: 11 electric RTGCs UK: 17 electric RTGCs Egypt: 12 hybrid RTGCs Mexico: conversion of 20 diesel to electric RTGCs; 3 new electric RTGCs; 3 hybrid RTGCs Poland: conversion of 4 diesel to electric RTGCs Panama: conversion of 15 diesel to electric RTGCs = US$110 million of CAPEX investment
Straddle Carriers (SC)	226	0	8	Netherlands: 20 hybrid SCs Bahamas: 10 hybrid SCs Spain: 6 hybrid SCs = US$37 million of CAPEX investment
Automatic Guided Vehicle (AGV)	362	0	85	Netherlands: 77 hybrid AGV = US$49 million of CAPEX investment
Reach-stacker (RS) and Empty Container Handler (ECH)	418	0	0	The Ports division is scanning the market for options. More recently some electric and hybrid versions have been launched and the Group is evaluating these products.
Internal tractors	1639	6	0	Until recently there were no viable alternative options other than diesel for port-appropriate tractors. However, with recent market launches, a large-scale global rollout of electric tractors is underway including the following short-term plans: UK: 48 electric trucks. Thailand: 9 manual electric trucks & 9 autonomous electric trucks. Oman: 14 electric autonomous trucks. Mexico: 18 electric trucks. = US$14 million of CAPEX investment

The scale of impact of this opportunity is of course inherently intertwined with the uptake of renewable electricity, where the full positive impact is only achieved if the electrons supplying the electricity are generated from zero-carbon energy sources. This therefore highlights the need to drive progress simultaneously in both the electrification of infrastructure as well as striving for higher levels of renewable electricity.

The Group's businesses are not only rolling out their own electric fleets but also enabling the widescale rollout of electric vehicles and helping to solve challenges that will come with millions of new electric vehicles and chargers being connected to the network. UK Power Networks' forecasts suggest between 1.6 and 2.7 million electric vehicles could be powered through its three networks by 2028. To meet this rapid increase, UK Power Networks is innovating to meet the technical challenge of an unprecedented large-scale shift to electric transport. UK Power Networks' comprehensive Electric Vehicle Strategy outlines the partnerships underway to develop, test and deliver technical and commercial solutions that facilitate the rapid uptake of electric vehicles and the whole systems approach planned to maximise the utilisation of its existing electrical infrastructure.

The Group is also playing an important role in the modal shift to rail. The European Commission's Sustainable and Smart Mobility Strategy, published in December 2020, calls for "decisive action to shift more activity towards more sustainable transport modes", aiming to increase rail freight transport by 50% by 2030, among other goals.

The favourable geographical location of the Ports division's terminals means that Hutchison Ports is well placed to develop multi-modal feeder hubs and railway networks connecting containers to and from its seaports to more inland destinations.

A key part of Hutchison Ports BEST's strategy when taking over and transforming its terminal in Barcelona, has been to make it one of the gateways to the European market by leveraging train lines and building its surrounding hinterland. Rail traffic at the terminal has increased significantly in recent years, going from 3% of full import and export container traffic to 21% in 2021, saving an estimated 37,614 tons of CO_2 emissions versus road transport. Hutchison Ports ECT has also significantly invested in becoming an established starting point and terminus for rail transport in Europe including a 16-track rail terminal.

Facilitating the modal shift is central to UK Rails' strategy. With over 75% of its rolling stock already electric, as well as new innovations being developed in hydrogen and battery technologies to increase the potential for zero-emission trains, UK Rails is well-positioned to be a partner of choice along the journey to net-zero. Its Revolution Very Light Rail, developed jointly by UK Rails and a consortium of organisations, is also being developed to help boost connectivity and mobility effectively in remote and rural areas due to greater ease of track installation in comparison to setting traditional rail tracks.

Class 331 Electric Regional Train owned by UK Rails

4. Energy efficiency

According to the International Energy Agency, energy efficiency represents more than 40% of the GHG emissions abatement needed by 2040, and that currently existing cost-effective technologies are sufficient to double global energy efficiency. Moving towards a sustainable transition pathway means not waiting for technology solutions further down the track but also focusing on how the existing system can be transformed.

One of the greatest challenges an energy network must face with respect to GHG emissions reduction relates to inherent losses in energy systems, termed "losses" or "leakages". While there are many efforts the Group's gas and electricity network distribution businesses take, such as ongoing pipe and mains replacement, technical losses are an unavoidable consequence of energy distribution. Further, the extent of GHG emissions generated will also rely on how the throughput energy is generated, be it from fossil-fuel based or renewable sources. While the decision of throughput energy for the Group's pure distribution networks is outside of its direct control, they are taking every available step to ready their networks for a transition to renewable and other clean energy sources.

Implementing demand-side flexibility is one way to address the challenge of energy losses by enabling customers to reduce or shift their electricity usage during peak periods in response to time-based rates or other forms of financial incentives. This flexibility also enables electricity distribution networks to use this resource as an option for balancing supply and demand, reducing losses, and ensuring a secure, sustainable and affordable electricity system. It can help soften peaks in demand and fill in the troughs, especially at times when more renewable energy is available. UK Power Networks has led in this approach to flexibility since 2018, when it became the first network operator in the UK to commit to a radical "Flexibility First" approach to cater for new connections, which has saved connecting customers GBP72.6 million over the period of 2016-2020.

Digital technologies are transforming the energy efficiency landscape for the Group's businesses. In recent years, energy management systems have also become smarter, integrating external data sources such as weather conditions and traffic patterns. Leveraging artificial intelligence, these advanced systems can forecast energy demand as well as improve response capabilities.

The Telecommunications division is addressing this opportunity through its ongoing development of 5G connected technologies, which are enabling vast efficiencies across industries. For example, the Telecommunications division is collaborating with Hutchison Ports Port of Felixstowe to deploy 5G to enable the remote-controlled operation of port equipment which results in operational efficiencies, GHG emissions reduction and a safer work environment.

Through ista's data-based suite of digital solutions for smart property management, ista enables residents and owners of buildings to take control of their energy consumption. In Germany alone, 3.7 million tonnes of CO_2 are saved every year thanks to reductions made in the annual heating cost bills enabled through ista's solutions. The Group's businesses are also benefiting from ista's services. For example, A.S. Watson UK has partnered with ista to undertake energy audits and training to better identify energy efficiencies and behaviour changes in-stores, distribution centres and offices. It is also leveraging ista's "MinuteView" platform which assists in forensically examining energy management and identifying opportunities for energy consumption reduction.

In terms of facilities management, common energy management solutions being availed of across the Group include lighting upgrades to energy-efficient LED lighting, constructing or retrofitting facilities to be more energy efficient, implementing energy management solutions for active monitoring and procuring equipment certified as energy efficient.

5. Circular economy & design

While circular economy approaches are most commonly associated with reducing waste and driving greater resource productivity, it is also a vital lever in the net-zero transition. By eliminating waste, the GHG emissions associated with the production of those previously produced materials are eliminated. And by keeping products and materials in use, embodied energy is retained instead of producing new materials and products, which generates even more greenhouse gases.

As the largest global health and beauty retailer, circular economy approaches are fundamental to A.S. Watson's sustainability objectives. As part of becoming a signatory to the Ellen MacArthur Foundation's New Plastics Economy Global Commitment, the first in its sector to do so, it has committed to:

- 100% of plastic packaging being reusable, recyclable, or compostable by 2025 (including Own Brand product packaging, eCommerce parcels and in-store carrier bags). Status: 46.6% achieved.
- 20% recycled plastic content in Own Brand packaging by 2025. Status: 6.8% achieved.

The Retail division is also helping customers reduce disposable packaging through its reuse and refill programmes. Examples include:

- Working with brand partners such as Proctor and Gamble and L'Oréal to introduce in-store product take-back and recycling schemes for hard-to-recycle packaging;
- Introducing refill counters and providing options for customers to bring their own containers to supermarkets instead of using disposables;

- Launching a city-wide plastic bottle container collection programme in Hong Kong by installing reverse vending machines in public spaces to encourage the public to recycle more; and
- Collecting used laptops from customers and the public after which they are repaired and donated to low-income families.

The Infrastructure division's role in contributing to a circular economy is best exemplified by its waste management and processing facilities. EnviroNZ has been scaling up its organics infrastructure so it can play a bigger role in New Zealand's fight against both organic waste as well as climate change. The business achieved a milestone in October 2021, with the completion of a three-year project to expand its Hampton PARRC organics processing facility. It has doubled its capacity to process green waste and food scraps from its customers and can now handle up to 24,000 tonnes per annum. Rather than this waste ending up in landfill, it is now turned into nutrient-rich compost for residential and commercial use, enabling the reduction of approximately 3,500 tonnes of CO_2 emissions.

AVR has used its expertise in smart incineration to turn 2,266,000 tonnes of unrecyclable waste into valuable new resources used by its surrounding community including process steam, district heating, and electricity, among other materials, all of which enabled 926,700 tonnes of avoided CO_2 emissions in 2021.

Other highlights from the division include:

- ista focuses on the full lifecycle of its meters and heat cost allocators integrating circular economy approaches into every aspect from design, to product takeback and recycling. Its leasing model means that together with its in-house expertise to ensure these products are maintained for their maximum lifecycle, the business also ensures they are recycled through specialist, certified recyclers;
- UK Rails is working on a new business solution which looks to extend the life of assets by repurposing passenger trains into freight-carrying units. In addition, end-of-life trains can be up to 92% recyclable, and once a train needs to be scrapped, UK Rails works with carefully vetted suppliers to ensure maximum recyclability;
- Northumbrian Water has committed to creating zero avoidable waste by 2025. This will mean eliminating, re-using or recycling 90% of waste from its operations, and working with partners to contribute to the circular economy in their regions; and
- Northern Gas Networks has collaborated with the industry to drive new standards and procedures for recycling construction waste created during the installation and maintenance of new pipes. Now less than 0.14% of its construction spoil is going to landfill and it has reduced its use of virgin aggregate by over 76%.

A refill station at one of Watsons Hong Kong stores

The Telecommunications division has implemented take-back programmes across its operating markets. For example, **3** Sweden's take-back programme enables customers to return their used devices by free return post, which are then cleared of data and refurbished to be on-sold as second-hand phones. By using the take-back programme customers are given discounts on their subscriptions or can choose to donate the discount savings to the Swedish Childhood Cancer foundation.

6. Climate adaptation

While needing to do everything possible to eliminate GHG emissions and slow the pace of global warming, it is also essential to adapt to the unavoidable consequences of climate change so the Group's employees and assets are protected. Adaptation therefore means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimise the damage. Interlinked with this is the importance of biodiversity protection as protecting and restoring healthy ecosystems can further strengthen adaptation (and mitigation) capabilities.

In 2021, to further assess the physical impacts of climate change, Hutchison Ports commissioned a global climate risk assessment of its ports. Each port was assessed against a set of climate risks looking at both severity and likelihood of the event occurring. The assessment resulted in a hierarchy of most exposed ports by type of climate risk. A shortlist of ports have been identified for further detailed assessment given the potential for multiple climate hazards with elevated risk factors over the long-term.

With similarly large assets to be protected from the elements, the Infrastructure businesses have also been taking proactive steps to both further understand and protect their assets against the impacts of climate change. Northumbrian Water has delivered a multi-award winning scheme in Killingworth, North Tyneside, which worked to reduce flood risk in times of heavy rain protecting thousands of homes in the surrounding areas, as well as improving water quality and the surrounding biodiversity.

Looking at the effects of storms, UK Power Networks' Storm Resilience project developed an advanced tool that combines network data, historic fault data and live weather forecasts to predict the number of faults that could occur in an area of the network. This project is examining how the business handles storms to a new level by combining data science with improved customer service by ensuring enough engineers are on standby when severe weather is predicted.

The electricity distribution businesses in Australia are particularly at risk from bushfires which are exacerbated by rising temperatures. They therefore invest millions every year to reduce the risk of bushfire and loss of power supply in communities. Activities include undergrounding power lines and installing high technology covers over power lines to protect them from extreme weather. To further reduce fire risk, Victoria Power Networks uses advanced Light Detection and Ranging technology to continually improve the accuracy of scanning and detection of vegetation growing near power lines. Rapid Earth Fault Current Limiters are also being installed in substations, providing additional protection for 15,500 kilometres of its network. Acting like a giant safety switch, this work provides additional protection to the community by reducing voltage levels within milliseconds to mitigate fire risk if a tree strikes power lines or if lines hit the ground.

Powercor installation of Rapid Earth Fault Current Limiters

7. Finance and investment

Finance and investment is critical to addressing climate change because large-scale investments are required to significantly reduce GHG emissions in line with the goals set out by the Paris Climate Agreement, as well as adapt to the current and future effects of climate change.

Studies from the World Bank estimate the world would need to make infrastructure investments to the tune of US$90 trillion by 2030 to transition to the green economy. However, it also found that investment unlocks significant economic opportunities with every investment of US$1, on average, yielding US$4 in economic benefits.

The Group looks to continue to play a leading role both by evolving strategies in its existing businesses and by investing in the critical new infrastructure that is needed to create the net-zero energy systems of tomorrow. This investment strategy has been identified as one of four key long-term development strategies for the Infrastructure division and is exemplified by Canadian Power's acquisition of two wind farms in Okanagan in June 2021, marking Canadian Power's entry into renewable energy generation.

In 2021, the Group issued its debut Green Bond of EUR500 million guaranteed notes due 2033 with its first allocation and impact report to be released before November 2022. The Group's Sustainable Finance Framework and second party opinion is also available here.

8. Supply chain engagement

Analyses thus far of division-level carbon footprints reveal that scope 3 emissions account for between 70%, and sometimes in excess of 90%, of a business' total carbon footprint, with purchased goods and services from suppliers counting for a dominant source of scope 3 emissions. The businesses are therefore continuing to add and assign additional weight to sustainability criteria in their procurement policies and processes, among other supplier engagement opportunities.

The Group is guided by its overarching Supplier Code of Conduct, but this is further developed at the business-level where detailed direction is given to suppliers that is relevant to their industries and geographies.

The Retail division dedicates significant resources to ensure that the thousands of products it puts on its store shelves are responsibly sourced and manufactured. During 2021, 584 factories were audited under A.S. Watson's sustainable supply chain programme. It also implemented a new Supplier Code of Conduct including consistent expectations for minimum standards of ethical, social and environmental practices. Lack of support or violations of the Code will result in consequences as severe as terminating the trading relationship or suspending such operations until compliance is achieved.

Partnering with supply chain expert organisations and helping to upskill suppliers and support them in improving practices is important to the Group. In 2021, Wales & West Utilities, one of the Group's Infrastructure businesses, became a member of the Sustainability Supply Chain School providing its supply chain partners with free learning opportunities across a wide range of sustainability topics. **3** UK has recently partnered with EcoVadis, the global leader in independent supply chain sustainability ratings, to support its understanding of its supply chain practices across a broad range of sustainability topics.

9. Collaboration, partnerships and advocacy

Transformational impact does not happen in a silo. Across the core businesses, the Group is working with customers, peers, regulators, governments, NGOs, academia and others to drive innovation and promote collaboration in advancing the net-zero transition. Some of these impactful partnerships are outlined in Table 11.

While partnering with external organisations ensures the Group is getting access to the best advice and also sharing its expertise with others to accelerate impacts, the Group equally has a wealth of internal expertise that enables significant opportunities for collaborations both within and across divisions; examples of such collaborations are explored throughout this Report.

Table 11: External partnerships to advance net-zero

FREEPORT EAST Felixstowe Gateway 14 Harwich	The Port of Felixstowe is working with a consortium of partners to develop Freeport East into a green hydrogen hub for the UK, including Felixstowe Dock and Railway Company, EDF Energy R&D UK Centre Ltd, NNB Generation Company (SZC) Limited and Cranfield University. In 2021, the Port of Felixstowe was announced as one of the beneficiaries of the Department for Transport's Clean Maritime Demonstration Competition which will include a study detailing how Freeport East can become both a net-zero port and a net-zero energy hub for third parties and adjacent region.
New Plastics Economy Global Commitment	A.S. Watson is a member of the New Plastics Economy Global Commitment, led by the Ellen MacArthur Foundation, an organisation widely considered as the foremost thought leader in building a circular economy.
Gas Goes Green	Wales & West Utilities and Northern Gas Networks are part of Gas Goes Green, a collaborative industry programme that aims to transform the UK's network into a world-first net-zero gas grid.
Australian Hydrogen Centre	Australian Gas Infrastructure Group is a founding member of the Australian Hydrogen Centre which brings together industry and government to deliver detailed feasibility studies of blending 10% green hydrogen into towns and cities, and ultimately a 100% renewable gas future.
Water UK	In 2020, Northumbrian Water joined with water utilities across the UK to launch a plan to deliver a net-zero water supply for the UK by 2030, saving an estimated 10 million tonnes of GHG emissions.
Australian Government Australian Renewable Energy Agency	SA Power Networks collaborates closely with the Australian Government to realise its aim of having 100% renewable electricity by 2030. To achieve this aim requires a whole-systems approach working closely also with the Australian Energy Market Operator, the state's transmission network operator, Electranet, among other technology partners such as Tesla where is it is collaborating to develop the world's largest Virtual Power Plant.
GSMA	The Telecommunications division is an active member of the GSM Association's ("GSMA") Climate Action Working Group which includes operators from across the industry that are working together to move the mobile industry towards net-zero carbon emissions by 2050 at the latest, and a member of the Circular Economy for Devices working group which is seeking to promote circularity across the devices value chain.
#LowCarbonPledge	**3** Ireland signed up to the Business in the Community Low Carbon Pledge along with over 60 of the largest businesses in Ireland committing to setting science-based targets by 2024.

The Li Ka Shing Foundation

Another source of collaboration and innovation for the Group is its access to the extensive philanthropic network and portfolio of innovative companies in which early stage investments have been made by the Li Ka Shing Foundation through Horizons Ventures. Mr Li Ka-shing, the Group's founder and Senior Advisor, is well known as a leading investor in innovation and disruptive technologies. Over time, the Li Ka Shing Foundation has developed one of the world's most extensive portfolios of investments that address many of the pressing sustainability challenges of today. Among many investments, the Li Ka Shing Foundation has been a significant backer of the following start-ups that seek to address challenges in the net-zero transition:

- ZeroAvia, working to develop zero-emissions aviation;
- Syzygy Plasmonics, developing a platform for cost-efficient localised production of green hydrogen; and
- Soil Carbon Co, developing technology to increase crop yields as well as the carbon capture and sequestration associated with major grain crops.

The Group partners with portfolio companies sponsored by the Li Ka Shing Foundation to use its business to act as incubators and spring boards for these innovations, for example, distributing Impossible products and Perfect Day ice cream through PARKnSHOP.

10. Carbon offsets

The Group's current focus is not to purchase offset credits as a first step in reducing GHG emissions, but instead focus first on taking all available steps to reduce the Group's direct GHG emissions footprint. Carbon offsets are utilised where it is not able to directly mitigate emissions. Where this strategy is implemented at the business level, the Group will also keep track of international standards and industry practices to ensure it is aligned with leading practice approaches to the purchase of offset credits.

Priority goal 2: Offer customers sustainable products and invest in and embrace innovation to achieve transformational impacts

The Business & Sustainable Development Commission estimates that sustainable business models in support of the SDGs could open up economic opportunities worth up to US$12 trillion and increase employment by up to 380 million jobs by 2030. This therefore suggests that business opportunity and impact on the SDGs are not mutually exclusive, but rather they go hand in hand. In other words, business cannot thrive unless people and planet thrive.

The Group is increasingly observing that consumer trends are changing in favour of more sustainable products and services. While there are also many external consumer studies that prove this, the Group's own Retail brands' customer surveys also evidence how their customers are prioritising sustainability. For example Superdrug's 2021 customer survey, which measures brand values and customer connection, revealed that 47% of respondents consider how ethical a beauty or personal care brand is before buying its products, serving as an important reminder to the significance of communicating the business' "Doing Good Feels Super Good" sustainability branding.

While there are many ways in which the Group helps to address the sustainability concerns of its customers, there are three particular opportunities in which it is growing business solutions, including those that help drive:

1. The net-zero transition;
2. A circular economy & sustainable sourcing; and
3. A more inclusion and diverse world.

Solutions to drive the net-zero transition

As already explored in detail in the previous section, the Group is at the forefront of delivering innovation and breakthrough progress that is helping its customers drastically cut their GHG emissions. While these efforts are serving to reduce both their direct and indirect carbon footprints, the net-zero transition is a significant opportunity which can act as a lens for new product development and value creation. Aligned to the 10 net-zero opportunities discussed in the previous section, Table 12 summarises how the Group's businesses are investing in new business models and solutions in order to be brands of choice.

Table 12: Summary of business opportunities

Renewable and other clean energy generation	• Freeport East, centred upon the Port of Felixstowe and Harwich International Port, aims to be a green hydrogen hub and net-zero port, helping its customers to achieve zero emissions while docked at the port. • Northern Gas Networks, Wales & West Utilities and Australian Gas Infrastructure Group are among the first to deliver real-world trials to prove how the existing gas networks in the UK and Australia can be converted safely and affordably to 100% hydrogen. They have long-term aims to transition their gas networks to zero-carbon networks. • The Group's networks are innovating to enable industry-leading levels of renewable energy to be connected to the grid through distributed energy resources. • In addition to its commitment to net-zero by 2027, Northumbrian Water is already the first water company in England to successfully turn 100% of its sewage sludge into renewable energy through advanced anaerobic digestion. • EDL and AVR helped their customers to abate close to five million tonnes of GHG emissions in 2021 across a large portfolio of landfill gas, waste coal mine gas and waste-to-energy sites globally.
Sustainable transportation	• To achieve its aim to be the preferred partner for a sustainable supply chain, Hutchison Ports is delivering an expansive electrification conversion programmes to its ports, installing mobile shore power and offering increasing rail solutions to further reduce its customers' footprints. • With over 80% of its rolling stock already electric, as well as new innovations being developed in hydrogen and battery technologies to increase the potential for zero-emission trains, UK Rails is well-positioned to be a partner of choice on the journey to net-zero.
Energy efficiency and smart city solutions	• The Telecommunications division is increasingly offering digital solutions and 5G connected technologies to enable vast efficiencies and GHG emissions reductions for its customers. • CKDelta, the Telecommunications division's data innovation business, has built expertise in understanding how all the elements of the electric vehicle ecosystem interact and is positioned to help other market participants in this complex rollout including power distributors, charge point operators, urban planners, and payment solutions providers. • WINDTRE has a business goal to be the "smart partner of 100 smart cities" delivering Italy's cities with 5G-connected innovation to drive energy efficiency and smart mobility, among other areas. • ista is one of the world's leading companies in providing products and services for greater energy efficiency, specialising in smart metering and billing solutions. • Reliance Home Comfort offers a menu of Green Home Solutions including energy efficient heat pumps, smart thermostats, and tankless water heating systems that can create efficiencies of up to 96%.

Solutions to drive a circular economy & sustainable sourcing

The Retail division has a responsibility to ensure its products are thoughtfully designed and sourced to reduce waste and material consumption while increasing durability, reusability, and recyclability. As already discussed, circular economy approaches are inherently intertwined with the net-zero transition, however given the importance of the opportunity it has been separately listed.

Design and procurement considerations to circularity also go hand-in-hand with considerations to where and how raw materials are being sourced. Questions such as "Does this packaging come from legally-logged forests?" and "Did this product unwittingly contribute to modern day slavery?" are among those that no retailer cannot ignore, no matter how far removed they are from the direct source of those impacts. Customers are demanding more from the brands that they chose to spend their money with and are becoming more conscious of the impacts of their purchasing decisions.

To make meaningful progress, the Retail division, as already discussed, has committed to packaging targets that relate to making packaging more reusable, recyclable, and/or compostable. It has also committed to:

- 100% of its Own Brand paper packaging being made exclusively from sustainable sources (i.e. recycled content or certified as being from responsibly-managed forests) by 2030. *Status: 46.6% achieved.*
- 100% of Own Brand purchase value from countries identified as high-risk being assessed for social and environmental compliance. *Status: 95% and 65% assessed, respectively.*

To communicate the sustainability benefits of the products it offers, be they clean beauty products or sustainably-certified seafood, the Retail division has developed a number of product lines and platforms that enable customers to shop according to their sustainability values and preferences. For example, Sustainable Choices, a filter and labelling mechanism, was launched by Watsons in 2020 to provide customers choice in four categories: Clean Beauty; Refill; Better Ingredients and Better Packaging. In 2021, it added a further 1,600 Sustainable Choices products both in-store and online in close collaboration with brand partners such as Johnson & Johnson, Procter & Gamble, Reckitt, Shiseido and Unilever.

In addition to take-back programmes across markets, the Telecommunications division is also developing more sustainable accessories and packaging. In 2021, **3** UK, **3** Ireland, **3** Denmark and **3** Sweden launched a range of sustainable mobile accessories with dbrammante1928. **3** UK and **3** Denmark also launched 100% plant-based and compostable phone cases made by A Good Company.

Solutions to drive a more inclusive and diverse world

In 2015, Superdrug commissioned research focusing on the views of women of colour on high street beauty shopping. The research revealed that 70% of black and Asian women did not feel that the high street catered for their beauty needs, and over a third felt there wasn't enough guidance and advice available in high street beauty stores. To tackle this issue Superdrug launched the #ShadesofBeauty campaign in 2016 including a dedicated microsite with over 110 products and 55 new darker toned foundations. Superdrug also held meetings with the UK's largest makeup brands, resulting in Maybelline, L'Oréal and Revlon launching an additional 23 shades in response to this engagement.

In March 2021, Superdrug commissioned a further study surveying 1,000 individuals across the country from black and mixed-heritage backgrounds honing in on representation in publicity and marketing. Among many other important insights, the survey found that 35% do not currently feel represented when they shop for health and beauty products in high street beauty retailers and 86% reported that beauty retailers should make their advertising campaigns more inclusive. This research resulted in Superdrug committing to a range of actions including increasing black and mixed-heritage representation at all levels of the customer experience from the brand owners of the products sold, to representation at the store level, on to website and in social media imagery.

While today's digitally-connected way of life brings many benefits, it also results in forms of exclusion. Many services are now exclusively offered only through the internet and therefore not having the skills or access can become major life hurdles. Further, increased working and learning from home as a result of the COVID-19 pandemic has further widened the gap for those who lack the digital know-how or access to connectivity due to living in remote locations.

This issue can particularly affect rural populations where a major drawback may be a lack of coverage. Without it, running a business, staying connected, and getting around can be all the harder. **3** UK is working with the UK Government and several other mobile operators on a GBP1 billion project called the Shared Rural Network to bring guaranteed coverage to 280,000 premises and 16,000 kilometres of roads in rural areas across the UK. Once completed, 95% of the UK will have reliable 4G coverage.

3 Ireland has been working with the Arranmore Business Council on the island of Arranmore, five kilometres off the coast of Donegal, Ireland to create a more connected island and enable societal and economic development. Prior to this, the lack of connectivity had restricted the population's ability to establish and grow a business, as well as maintain the population to sustain their unique culture and way of life. Among many initiatives, **3** Ireland helped equip the island's Digital Hub with superfast connectivity and bandwidth to facilitate effective remote working and state-of-the art conferencing facilities.

Priority goal 3: Create great places to work

The long-term success of the Group depends on the dedication and engagement of its teams as well as attracting the best talent in an increasingly competitive jobs market.

The Group aspires to be an employer of choice through competitive remuneration packages, continuous professional training, and rewarding and inclusive working environments.

Listening to employees is fundamental. Employee engagement is carried out in different ways depending on the business with engagement surveys conducted at least bi-annually, and supplemented with ad hoc surveys to address discrete events and trends, for example understanding employee health and wellbeing during the pandemic.

Targeted learning and development programmes address everyone from senior management to line level employees. Ensuring employees are prepared as the future of work changes, the Retail division launched the Digital Gym in 2021 with the aim of upskilling team members through learning modules that range from developing digital basics to more advanced digital skills to keep pace with the digital transformation. Employees in the Ports division also have the opportunity to retrain in the latest smart port technologies. For example, crane operators are being trained in autonomous crane operations; to date, 431 new operators have been trained across eight autonomous remote-controlled crane centres globally.

The Group also aims to create a pipeline of future talent by inspiring young people to consider careers within the diverse industry segments of the Group and it does this through internship programmes, career days and encouraging management to present at universities.

Starting from 2020, the Group dedicated particular focus to efforts in developing its approaches to inclusion and diversity and ensuring continued focus on employee engagement, particularly as employees return to workplaces following two years of social distancing and lockdowns.

The overall split of total employees is relatively balanced across the Group, 47% male/53% female. However, for the Ports, Telecommunications and Infrastructure divisions, these businesses continue to face structural barriers of these industries being traditionally male-dominated. They are therefore taking steps to change traditional models of working in an effort to make their industries more inclusive.

Diversity and inclusion at Hutchison Ports UK

Advancing technology in port automation and remote-controlled connectivity offers significant benefits in enabling more inclusive ports. For example, in a traditional crane operation, drivers may experience physical stress to their back, neck and shoulders. In a remote-controlled crane operation, drivers can have a better quality of workplace wellbeing from a remote-controlled crane centre. This less physically demanding work environment also opens up opportunity to a more diverse talent pool. Due to an increased focus on improving the diversity of its workforce, Hutchison Ports UK has begun to see the positive results of its inclusion and diversity strategy including a significant increase in the percentage of job applications from women. In 2021, 15.8% of applications received were from women, compared to 9.6% in 2020.

To do its part in encouraging more diversity in the technology sector, **3** Ireland launched a partnership with Trinity College Dublin in 2021 to fund 25 new **3** Ireland Scholarships for Women in STEM over five years and two **3** Ireland Trinity Access Teacher Fellowships for three years. To further embed a culture of inclusivity, WINDTRE linked gender diversity in hiring and pay practices to executive compensation (among other sustainability criteria) for the first time in 2021.

3 Denmark has set a gender diversity target of 40% female representation across its business, as well as individual gender diversity targets for retail stores, telesales and customer management teams. To support the achievement of these targets, specific initiatives have included a review of the recruitment process with job descriptions and postings amended to motivate a broader applicant pool, as well as changes to applicant screening and interviews.

While there is much work to do, that will take dedicated and sustained efforts, the Group is proud of several businesses that are being recognised for their leadership in inclusion and diversity. In 2021:

- WINDTRE and Superdrug were recognised in the 2021 Financial Times' Diversity Leaders index. This is the third year running that Superdrug has been recognised;
- WINDTRE was further awarded the 2021 Award for Best Employer for Women by Istituto Tedesco di Qualità e Finanza and La Repubblica;
- **3** Ireland was awarded the Gold accreditation by Investors in Diversity, with only five organisations to have achieved the Gold standard in Ireland;
- **3** Austria was awarded the equalitA seal of quality for its work to promote gender equality;
- UK Power Networks was ranked 10th in the Inclusive Top 50 UK Employers 2022 list;
- Northumbrian Water was awarded Inspiring Employer of the Year 2021 by the Inspiring Females Awards 2021; and
- AVR was recognised by the Social Entrepreneurship Performance Ladder in 2021 for its efforts to match disadvantaged candidates to job positions within its organisation, as well as encourage its suppliers and contractors to do the same.

Priority goal 4: Take all steps to protect employees and support communities and other stakeholders through the pandemic

The COVID-19 crisis has had devastating socio-economic consequences globally. While global recovery will be long, and will require every section of society to do its part, every core business is focused on taking all steps possible to protect employees and support communities, among which are the Group's customers, as well as other stakeholders.

2020 Group efforts to support employees focused on emergency response efforts such as distributing masks daily to its employees, ensuring workplace sanitising measures, and conducting temperature checks and onsite rapid COVID-19 testing. While these activities have become part of business as usual, Group focus in 2021 also centred on helping employees adapt to the "new normal" and transitioning back to workplaces as restrictions loosened. Due to the impacts of two years' of lockdowns, the Group has also focused on supporting health and wellbeing, particularly mental wellness.

To celebrate the 180th anniversary of A.S. Watson, teams globally celebrated this milestone by theming it as "The Year of Love". This year spotlighted the gratitude shared for all colleagues, customers, community members and business partners that have been part of the division's successes over the years, together with the hard work, dedication and resilience required throughout the pandemic. Through internal and external communications campaigns, the theme of gratitude was made the focal points of attraction and retention initiatives as well as customer and community engagement. The global ASW Heroes campaign also sought to further celebrate employees for their hard work and dedication through a global recognition programme.

The bi-annual ASW global employee engagement survey held in 2021 revealed notable increases in both score and response rate versus pre-pandemic levels indicating positive results as to how the Group has maintained high engagement levels during the pandemic.

At the beginning of 2021, ASW conducted a Mental Wellbeing Survey to understand what support its people needed as they transitioned back to the office. Following the results from the survey, A.S. Watson launched a pilot to train Mental Health First Aiders in Asia and Europe through a three-day accredited course provided through Mental Health First Aid England. These representatives from the People teams globally could then offer the appropriate and necessary support to colleagues in need.

Watsons Malaysia store

While many industries were able to transition their employees to working from home, many of the Group's employees remained at the frontline during the entire pandemic moving shipping containers, fixing power lines, maintaining network equipment, working in essential stores, and supporting their communities. The businesses therefore needed to find new ways of protecting the safety of employees, while ensuring millions of customers globally continued to receive critical and essential services. A key step taken by Northumbrian Water in protecting the safety of employees was the introduction of its in-house developed COVID-19 60 Second Check Tool for field teams to enhance safety before beginning jobs. The app follows a simple hierarchy of control that guides employees on what to do in their daily activities to keep them and their colleagues safe. After the initial launch, the tool was adopted enthusiastically by field teams with close to 66,000 checks carried out in only 10 months.

Recognising that many of the Group's customers were facing worrying and uncertain times due to the financial fallout from the pandemic, the Group's energy distribution network businesses sought to reorient their vulnerable customer programmes to address the impacts of the pandemic and introduce new forms of support. For example, Northern Gas Networks' Community Partnering Fund, which provides grants for grass roots projects, now has a "recovery from COVID-19" category, and has recently provided grants for schemes ranging from a community fridge project to funding a support centre that helps those in need to purchase essential household items. Northumbrian Water is also working with independent debt charity StepChange, which provides free, expert debt advice and solutions for anyone looking to reduce arrears and re-schedule payments to ease debt problems.

The Telecommunications division continued to support its customers and communities with connectivity to enable remote working and study. **3** Ireland launched a Data for Schools programme, providing 15,000 free SIM cards with unlimited data to schools in Ireland for distribution to families and students to help with home-schooling and connectivity during lockdowns. WINDTRE extended its EduTime initiative, supporting under-25 customers to study remotely with 50GB of data at no cost. **3** UK worked with the UK Government's Oak National Academy to zero-rate access to its online classroom and resource hub and it also collaborated with the UK's Department for Education's Get Help with Technology programme to provide the most disadvantaged children across England with unlimited data allowing them to continue with their education online until the end of the school year. Recognising the difficulties faced by many small businesses as they worked to rapidly digitalise their business models and enable their employees to work from home, **3** Austria participated in the government initiative Digital Team Austria. Through this initiative, **3** Austria provided several thousand companies with high-performance, free Internet access during the pandemic.

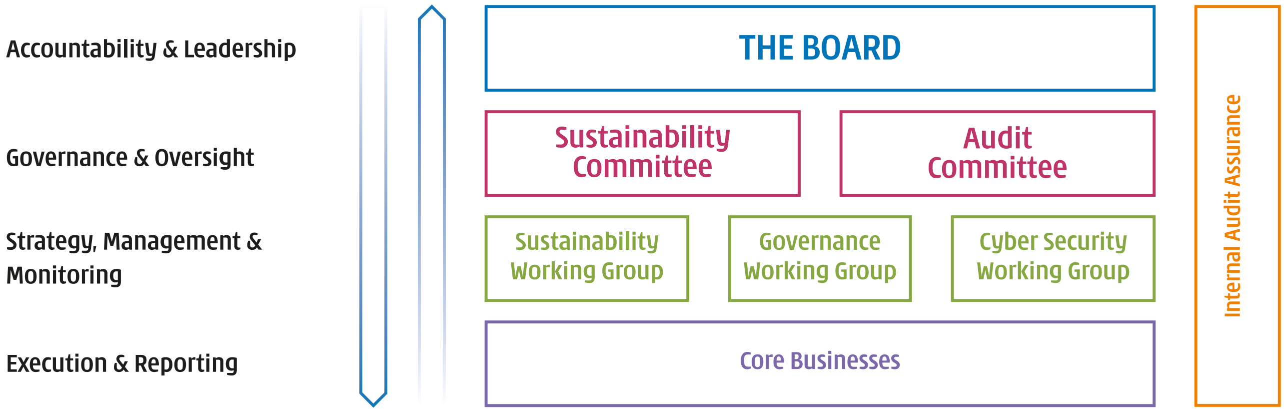
Governance

The ways in which the Group manages its sustainability impacts and acts on its governance-related goals – Embed rigorous and effective governance; and Operate responsibly and with integrity – are detailed in this section. This section should also be read in conjunction with the Corporate Governance Report included in the 2021 Annual Report for further detailed information regarding the corporate governance framework and practices.

The Group adopts a rigorous and effective sustainability governance structure, which integrates the governance of sustainability issues under its overall corporate governance structure and provides a solid foundation to ensure sustainability is embedded at all levels of the Group, with Board as well as management oversight.

Accelerating progress on its climate action strategy has been one of the Group's priorities during 2021. As part of the ongoing efforts to align the climate action strategy to leading practice frameworks, the Company has leveraged the TCFD recommendations to provide more detailed insight to the Group's climate-related governance structure, strategy, risk management, and metrics and targets which are disclosed in a separate standalone TCFD report accessible from the Group's corporate website.

Figure 13: Group sustainability governance structure



The Board

The Board has ultimate accountability for the sustainability strategy of the Group, as well as its management, performance and reporting with the support of the Sustainability Committee and the Audit Committee which play complementary roles in sustainability management. Directors are charged with the task of promoting the long term sustainable success of the Company and making decisions in the best interests of the Company with due regard to sustainability considerations.

The Board examines and approves the sustainability goals, objectives, policies and frameworks and reviews progress towards their implementation and achievement.

The Sustainability Committee and the Audit Committee report to the Board on sustainability risks and opportunities, which the Board examines and reviews with the committees periodically, as well as their impact on business strategy and new investments.

Board diversity

As at 31 December 2021, the Board comprised 18 directors, including seven Executive Directors, four Non-executive Directors and seven Independent Non-executive Directors. The Nomination Committee, chaired by Dr Rosanna Wong, an Independent Non-executive Director, with the Chairman Mr Victor T K Li and Independent Non-executive Director Mr Vincent Cheng as members, is responsible for reviewing the structure, size, diversity profile and skills matrix of the Board. The Group values the benefits of a diverse Board that possesses a balance of skill set, expertise, experience and perspective. Appointment of Directors is based on attributes that the selected Director will bring to the Board. Gender diversity of the Board stands at a 28%, including five females out of 18 Directors, a relatively high level amongst companies listed on The Stock Exchange of Hong Kong Limited.

Sustainability Committee

The Sustainability Committee, elevated as a Board-level committee in 2020, is chaired by Mr Frank Sixt (Group Finance Director and Deputy Managing Director), with Ms Edith Shih (Executive Director and Company Secretary) and Dr Rosanna Wong (Independent Non-executive Director) as members.

The key responsibilities of the Sustainability Committee are to make recommendations to the Board on the Group's sustainability goals, objectives and strategies. It oversees, reviews and evaluates actions taken by the Group to progress its sustainability priorities and goals. The Sustainability Committee also reviews and reports to the Board on sustainability risks and opportunities, and assesses emerging sustainability issues and trends that could impact the business operations and performance of the Group. Moreover, it considers the impact of the Group's sustainability initiatives on its stakeholders and advises the Board on external communication, disclosure and publications as regards to its sustainability performance.

The Sustainability Committee met two times in 2021. During these meetings, the Sustainability Committee focused on reviewing progress against the actions the Group committed to in the 2020 Sustainability Report. Given the heighted attention of the Group to accelerating progress on its climate strategy, particular focus was paid to assessing the progress of GHG emissions reductions target setting and alignment to science-based methodologies. The Sustainability Committee also reviewed and approved the 2020 Sustainability Report which was published in June 2021.

Foundational policies, including the Group-wide Sustainability Policy, serve as the ultimate guiding principles for the Group and detail the commitments of the Group to its stakeholders and the environment.

Table 14: Links to Group sustainability and governance policies

Sustainability policies	Governance policies
• Sustainability Policy • Environmental Policy • Health and Safety Policy • Human Rights Policy • Modern Slavery and Human Trafficking Statement • Supplier Code of Conduct	• Anti-Fraud and Anti-Bribery Policy • Board Diversity Policy • Code of Conduct • Director Nomination Policy • Information Security Policy • Media, Public Engagement and Donation Policy • Policy on Appointment of Third Party Representatives • Policy on Personal Data Governance • Policy on Securities Dealings and Handling of Confidential and Price-sensitive Inside Information • Whistleblowing Policy • Shareholder Communication Policy

Audit Committee

The Audit Committee maintains oversight of the effectiveness of the financial reporting, risk management and internal control systems of the Group, and is responsible for reviewing the policies and practices of the Group on corporate governance including compliance with legal and regulatory requirements per the Audit Committee Terms of Reference.

Sustainability Working Group

Supporting the Sustainability Committee is the Sustainability Working Group, comprising two Executive Directors as Co-Chairs, as well as other senior executives from key departments that influence the material sustainability impacts of the Group.

Governance Working Group

To assist the Audit Committee and the Sustainability Committee in discharging its responsibilities, a Governance Working Group chaired by the Executive Director and Company Secretary, and comprising representatives from key departments of the Company, provides timely updates, identifies emerging matters of compliance, and establishes appropriate compliance policies and procedures for Group-wide adoption.

Cyber Security Working Group

The Cyber Security Working Group is chaired by the Group Finance Director and Deputy Managing Director and comprises technical specialists from the core businesses, as well as representatives from Internal Audit and Group Information Services Department. It oversees the cyber security risks and defences of the Group to ensure that its efforts in this area are effective, coherent, and well-coordinated. To supplement this, a sub-Working Group focused on Operational Technology ("OT") has also been established to further build common approaches to cyber security within OT networks, while leveraging the deep knowledge and opportunities for collaboration across the Group's businesses.

Sustainability at the core businesses

Each of the core businesses operates in unique sectors and geographies and are therefore supported by their own sustainability leads, governance structures and programmes. Where necessary to their industry and geography, additional policies are adopted to support approaches in addition to the policies of the Group. As a common standard, each core business has set up its own cross-departmental Sustainability Working Group which is chaired by senior management.

Enhancing sustainability data and communications

Having the best quality data is fundamental to setting targets, achieving meaningful progress and giving stakeholders a true reflection of impacts and performance. In 2021, the Group partnered with FigBytes, a sustainability insights platform provider, to use a single, scalable, SaaS platform to manage, track and enable all core businesses globally to report their sustainability data. The platform will further enable the Group to set goals in the system and use data analytics to turn complex data into actionable insights through a dynamic tracking and communications tool. The Group will be launching the platform globally during 2022 with expected launch in Q3 2022.

Internal audit

Internal Audit, reporting directly to the Audit Committee and administratively to the Group Finance Director and Deputy Managing Director, provides independent assurance as to the effectiveness of the risk management activities and controls of the Group, including those related to sustainability. Internal Audit also has an important role throughout the year in sustainability data quality oversight as well as performing ongoing audits of operations to ensure the effectiveness of sustainability-related controls.

Risk management

As part of its enterprise risk management, the Group adopts a top-down and bottom-up approach to managing sustainability risks. Bi-annually, each core business is required to formally identify and assess its risks and as well as the control procedures that are in place in managing the risks identified.

Subject to independent audit assurance by Internal Audit, these self-assessment results are submitted to the Executive Directors and the Audit Committee for review and approval. Relevant assessment results are also shared with external auditors.

During the year, the Group continued to place more focus on climate change to ensure that the associated risks have been addressed or are being mitigated.

Business ethics and integrity

The Group is committed to ensuring that its business activities are carried out with the highest standards of integrity, honesty and transparency. The Board sets a tone of zero tolerance towards fraud and corruption. Through the Audit Committee, the Board has ultimate oversight of business ethics and compliance efforts and also regularly reviews the effectiveness of the risk management and internal control systems of the Group on an ongoing basis.

Further, as a signatory of the United Nations Global Compact, the Group is committed to working against corruption in all its forms.

The Group has a strong internal control framework to guide its businesses in maintaining the highest standards of ethics and business conducts. The framework has five core elements:

Figure 15: Elements of the Group's internal control framework

Governance policies

The Code of Conduct (the "Code") sets out the professional and ethical standards for the Group to observe in all business dealings, including provisions dealing with conflict of interest, fair dealings and integrity, bribery, equal opportunities, diversity and respectful workplace, safe and healthy workplace, confidentiality, personal data protection and privacy, protection of the environment as well as whistleblowing procedures.

The Code applies to all subsidiaries and controlled affiliates of the Group, where every director and employee requires strict adherence to the Code as well as all applicable laws, rules and regulations within the jurisdictions in which the Group operates. For those non-controlled affiliates, employees serving as directors should, to the extent possible, encourage such affiliates to adopt and follow the Code.

The Anti-Fraud and Anti-Bribery ("AFAB") Policy outlines the Group's zero tolerance approach to bribery and corruption and guides employees in recognising the circumstances which may lead to, or give the appearance of, being involved in corruption or unethical business conduct. It includes provisions relating to kickbacks, political and charitable contributions, gifts and hospitality, and procurement of goods and services. For political donations, in accordance with the AFAB Policy as well as the Media, Public Engagement and Donation Policy, it is the general policy of the Group not to make any form of donation to political associations or individual politicians.

Further, business partners and suppliers working with 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-corruption policies and compliance programmes as well as verify if the policies are being complied with. Suitable anti-corruption clauses are incorporated in the contracts with business partners and suppliers to ensure that they are fully aware of the requirements of the Group.

The Group is committed to fully complying with its statutory tax obligations in all the jurisdictions in which it operates, including the payment, reporting and recovery of taxes. To ensure that these obligations are fulfilled, the Group has developed a Tax Governance Framework to provide guidance on how its tax affairs should be managed, including regular assessment of the tax compliance process through periodic questionnaires and reviews. For more information, please see the Group Tax Strategy.

Communication and training

All employees are well informed of the Code as well as the aforementioned governance policies. Employees are also required to self-declare their compliance with the Code and related policies on an annual basis.

Training on business ethics and the ethics policies of the Group is provided to all new joiners as part of their induction programmes. For specific topics such as anti-fraud and anti-corruption, tailor-made training is provided to employees based on their role and area of responsibility at least once every two years. In 2021, a business ethics e-training package was provided to Directors, which featured ethical challenges faced by company directors.

Due diligence

The Group's commitment to anti-fraud and anti-corruption is also reflected in its management of business partners, suppliers, and third party representatives such as advisers, agents, and consultants. The Group conducts due diligence on the selection and renewal of new and existing business partners or suppliers based on an assessment of risk factors including transaction size, product or service nature, financial and compliance status, qualification, potential conflict of interest, and country risk.

Further, 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. Approval from the Head Office is required before engagement of third party representatives, and material capital expenditure projects (in excess of predefined thresholds) also requires Head Office review and approval prior to any binding commitment.

Ongoing assessment

Core businesses are also required to self-assess their control measures at least bi-annually to further drive improvement. In particular, for any material control deficiencies identified, they would formulate an action plan and monitor the progress closely. The results of this self-assessment are reviewed by Internal Audit and reported to the Executive Directors and the Audit Committee.

Monitoring and review

The Group has implemented sound financial controls (including adequate segregation of duties, authorisation controls, records logging, supporting documentation, and audit trail) to prevent and detect irregularities or misconducts. This control system is subject to regular review and audit. In particular, Internal Audit, which is responsible for assessing the effectiveness of the internal control system of the Group, conducts independent audits of the Group's ethical standards and policies in the areas of anti-corruption, fraud incident management, supplier code of conduct, fair dealing with suppliers, donations/sponsorships, handling of confidential/inside information, personal data governance, anti-trust, workplace safety, and accuracy of books and records. The audits run in a typical three-year cycle and are Group-wide. Business units exposing to higher fraud and corruption risks are subject to more frequent and intensive audits (generally once per year). All audit findings are reported to the Audit Committee and the Executive Directors and are also shared with external auditors.

The Group encourages employees and others who deal with the Group (such as customers, suppliers, creditors and debtors) to raise concerns about any suspected impropriety, misconduct or malpractice through confidential reporting channels. This is supported by the Whistleblowing Policy. All reported incidents are treated confidentially, and the individuals raising concerns are protected against unfair dismissal, victimisation or unwarranted disciplinary action for genuine reports made.

The whistleblowing channels that the Group has established are proactively communicated to employees in local languages, available on corporate websites, and also allow for anonymous reporting of improprieties. Each core business further derives its own set of internal escalation procedures to cater for its operational needs, and is required to report the incident to the Group Finance Director and Deputy Managing Director and the Head of Internal Audit function within one working day should the amount involved exceed the de minimis threshold.

Incidents or suspected incidents of fraud and corruption are immediately investigated. Internal Audit is responsible for reviewing every reported incident, seeking relevant stakeholders for direction or comment, determining which incident requires a more in-depth investigation, and escalating promptly to the Executive Directors and the Audit Committee if the incident is of a significant nature. A summary of the reported incidents and relevant statistics (including results of independent investigations and actions taken) is presented to the Executive Directors quarterly and at Audit Committee meetings. For concerns that are substantiated, disciplinary actions including verbal or written warning and termination of employment are taken after due management consideration. Violation of the laws and regulations are reported to the police or other law enforcement organisations.

Privacy and security

Customer data privacy and the management of cyber security risks are at the top of the agenda of the Group, and rigorous policies and governance mechanisms are in place to maintain consistency and oversight across operations.

In terms of privacy, the Group Policy on Personal Data Governance, which embraces the principles of respecting the rights of the individual, of procedural transparency, and of lawful processing, underscores the commitment of the Group to the protection of personal data of customers and employees. The Policy governs fundamental privacy aspects such as the purpose of collection, usage, retention and sharing/transfer of personal data, and safeguards if the data are to be processes by third parties.

The CK Hutchison Cyber Security Working Group, supported by technical experts from across the entire Group, oversees the Group's cyber security defences, monitors the threat landscape facing all of the Group's operations, provides guidance to business units, and ensures coordinated and effective efforts in managing cyber security risks across the Group.

To this end, the Information Security Policy instructs the approach of the Group in protecting the confidentiality, integrity and availability of data, including personal data, as well as in managing and escalating security incidents. The Policy also forms the basis on which the businesses formulate their local policies and procedures.

In addition, through the CK Hutchison Global Cyber Security Collaboration Platform, colleagues within the Group share knowledge, exchange ideas, and collaborate to find the right security solution and the right vendor in a fast-evolving threat environment where organisations are often faced with a vast array of choices.

Internal Audit carries out independent cyber security audits across the Group, with assignments in recent times focusing on the awareness of COVID-19-themed phishing emails, and security considerations in relation to working from home and the use of collaboration tools for virtual team-work. Further, Internal Audit periodically engages external consultants to conduct ethical hacking to probe cyber security defences in real-life settings, and follows up to see that security loopholes uncovered in these exercises are promptly and properly closed.

Further discussion on management approaches to privacy and cyber security are provided within the core business sections next.