



CK HUTCHISON HOLDINGS LIMITED

(Incorporated in the Cayman Islands with limited liability)  
(Stock code: 1)

# TCFD REPORT

2 0 2 1

# CONTENTS

>> Overview	2
>> Governance	5
>> Risk Management	6
>> Strategy	7
>> Metrics & Targets	11

## About CK Hutchison Holdings

The CK Hutchison Group (the “Group” or “CKHH”) is a multinational conglomerate committed to development, innovation and technology in four core businesses: ports and related services, retail, infrastructure, and telecommunications.

### Ports and Related Services

As the world's leading port investor, developer and operator, the Group's Ports division holds interests in 52 ports comprising 293 operational berths in 26 countries, including container terminals operating in six of the 10 busiest container ports in the world. In 2021, the division handled a total throughput of 88.0 million twenty-foot equivalent units. It also engages in river trade, cruise terminal operations and ports related logistic services.

### Retail

The Group's Retail division is the world's largest international health and beauty retailer, with approximately 16,300 stores in 28 markets worldwide. Its diverse retail portfolio comprises health and beauty products, supermarkets, as well as consumer electronics and electrical appliances. It also manufactures and distributes bottled water and beverage products in Hong Kong and Mainland China.

### Infrastructure

The Group's Infrastructure division includes its controlling shareholding in CK Infrastructure Holdings Limited (“CKI”) and interests in six infrastructure assets that are co-owned with CKI. CKI is a global infrastructure company with diversified investments in energy infrastructure, transportation infrastructure, water infrastructure, waste management, waste-to-energy, household infrastructure and infrastructure related businesses. Its investments and operations span Hong Kong, Mainland China, the United Kingdom, Continental Europe, Australia, New Zealand, Canada and the United States.

### Telecommunications

A pioneer in mobile data communication technologies, the Group's Telecommunications division is a leading global operator and innovator of converged telecommunication and digital services implementing innovative technologies in connectivity around the world.

## The Taskforce on Climate-related Financial Disclosures

The Task Force on Climate-Related Financial Disclosures (“TCFD”) was created in 2015 by the Financial Stability Board to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors in providing information to stakeholders. In 2017, the TCFD released a set of disclosure recommendations structured around four thematic areas that represent core elements of how organisations operate as shown in Figure 1. These are supported by 11 recommended disclosures that build out the framework with information that will help investors and others understand how reporting organisations assess and manage climate-related risks and opportunities.

In this report the Group has adopted the structure from the TCFD guidance to share its current progress and future plans.

Figure 1: Core elements of the TCFD recommendations



## Introduction

With every year that passes, the urgency of action to address climate change increases. The Group welcomes the developments and pledges made at COP26, with strengthened commitments now more aligned to a two degrees pathway. It also, however, recognises that there is much more work to be done by all sections of society if these commitments, as well as the preferred 1.5 °C pathway, are to stay within reach.


The physical and transition climate-related risks and opportunities of climate change are impacting the Group now and will continue to do so in the future; it is fundamental to risk management and a critical lens that is required for business strategy development. Meanwhile, the scope and scale of these risks and opportunities vary across the Group's divisions, which therefore requires both a detailed bottom-up approach, in addition to a top-down analysis.

To ensure the Group's alignment to leading practice, all core businesses have been assessing the pathway to setting science-based targets in line with the Group's direction. Both A.S. Watson and CK Hutchison Group Telecom made significant progress during 2021 by setting scope 1, 2 and 3 targets aligned with a pathway to 1.5 °C, that are pending validation by the Science Based Targets initiative. UK Power Networks and Hong Kong Electric have also taken the step to have their targets validated as science-based. Nine of the Group's largest Infrastructure businesses have developed net-zero ambitions and transition pathways.

Another significant step taken by the Group is the commitment to phase out its coal-fired power generation globally by 2035. To date, coal-fired generation installed capacity has reduced from 53% in 2016 to 32% in 2021, and a plan is in place to reduce this to zero before 2035.

Further progress is being made to consolidate progress and plans to develop a single set of Group-wide targets.

The impacts of climate change also present significant opportunities to the Group and each of the Group's core businesses are, in unique ways suited to their differing business contexts, taking meaningful action to enable the net-zero transition. Across the Group, work is underway to continuously move the bar higher and to keep challenging the realms of possibility by adopting cutting-edge innovation and collaborating internally and externally.

The Group has laid out 10 net-zero transition opportunities in its [2021 Sustainability Report](#)  with respect to which it is taking significant steps to drastically cut its own carbon footprint, address current and emerging climate-related risks, enable profound change across the industries in which it operates and grow value-creating business solutions. To summarise these actions, some of the significant actions underway include:

- The Ports division is rolling out a global electrification programme of its vehicles and infrastructure to progressively phase out diesel and is planning to develop a green hydrogen hub and centre of sustainability excellence at Freeport East, centred on two of its ports;
- The Retail division is designing products and services with circular economy principles in mind, eliminating unnecessary waste and greenhouse gas ("GHG") emissions. It is committed to building energy efficiency into the design, construction and operations of its stores and facilities around the world, as well as ratcheting up its sourcing of renewable electricity;
- The Infrastructure division is investing and growing its renewable energy portfolio, readying its gas networks for the future of hydrogen, connecting market-leading levels of renewable energy to the grid, and adopting carbon capture, use and storage to further drive down emissions at its waste to-energy operations; and
- The Telecommunications division is providing leadership in innovation in 5G, IoT applications and smart city solutions which are crucial to accelerating the net-zero transition. 3 UK is helping Hutchison Ports Port of Felixstowe roll out remote controlled rubber-tyred gantry cranes and the division's dedicated data analytics business, CKDelta, is partnering with UK Power Networks and ista to provide data-driven insights that will support the large-scale electric vehicle rollout in the UK as it looks to ban internal combustion engines by 2030.

The Group recognises that the world's transition to net-zero is not a linear path. It is a route upon which the goal posts will move, technologies will change, and understanding will evolve. It must be handled humbly, with an authentic and ambitious desire for change that is rooted in business purpose, and an approach that is firmly based on science.

It is important that the opportunities presented by a net-zero future are open to everyone, with both the costs and opportunities fairly distributed. To address this, the Group's businesses are playing an active role in tackling issues of inequity that may arise, working closely with regulators and governments.

While the Group is still working on its exact pathway, it is already contributing meaningfully, as well as being committed to improving the sophistication and maturity of its approach, and reporting faithfully to its stakeholders as it progresses.

As with sustainability reporting more generally, the Group sees its TCFD reporting as an evolution that it is committed to improving over time as its understanding, systems and processes to address the climate-related risks and opportunities continue to evolve. For this first report, the aim is to communicate the Group's current status to stakeholders and use the opportunity to also conduct a gap analysis for further actions the Group must take to mature its approaches to managing and disclosing on its climate-related risks and opportunities.

In terms of implementation of each of the TCFD recommendations, there are several areas where the Group is progressing well and other areas that have been identified for further action plans that are discussed throughout this report. Figure 2 below indicates the Group's progress in this regard.

Figure 2: Status overview of TCFD recommendations implementation

Governance	Risk Management	Strategy	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	Recommended Disclosures	Recommended Disclosures	Recommended Disclosures
<p>a) Describe the board's oversight of climate-related risks and opportunities.</p>	<p>a) Describe the organization's processes for identifying and assessing climate-related risks.</p>	<p>a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.</p>	<p>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</p>
<p>b) Describe management's role in assessing and managing climate-related risks and opportunities.</p>	<p>b) Describe the organization's processes for managing climate-related risks.</p>	<p>b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.</p>	<p>b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions and the related risks.</p>
	<p>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.</p>	<p>c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2 °C or lower scenario.</p>	<p>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</p>

- Good disclosure - while still aiming to continuously improve
- Limited disclosure - coverage to be increased, quality to be improved
- No disclosure - limited disclosure, methodologies in experimental phase

Disclose the organization's governance around climate-related risks and opportunities.


The governance of the Group's climate strategy follows the overarching structure of its wider sustainability governance which is discussed in more detail in the [2021 Sustainability Report](#) . For clarity of roles and responsibilities, specifically in relation to the Group's climate strategy, this is outlined in Figure 3.

Figure 3 - Governance of climate-related risks and opportunities

Board of Directors						
Accountable for oversight of CKHH risk management. Ensures CKHH has appropriate and effective risk management in place. Receives reports from the Sustainability Committee and the Audit Committee in relation to climate-related risks and opportunities.						
Sustainability Committee			Audit Committee			
Reports to the Board on climate-related risks and opportunities. Progress on the Group's climate strategy is addressed as a key agenda item. In 2021, the Committee met twice with 100% attendance.			Reviews top risks and reports to the Board. Ensures risks are identified and managed with due regard to CKHH's risk appetite. In 2020, climate change was upgraded as a Group-wide risk.			
Sustainability Working Group						
Oversight and responsibility for providing strategic direction and developing strategy regarding climate-related risks and opportunities.						
Sustainability	Risk Management	Finance	Internal Audit	IT	Legal	HR & Corporate Affairs
Spearheads development of Group climate strategy in partnership with key Group functions and core business divisions.	Manages the enterprise risk framework and oversight of division-level top risk profiles.	Oversees budgeting, planning and CAPEX approval of climate technology and solutions.	Conducts audits of sustainability-related controls and audits of emissions data.	Manages sustainability data management platform for collection and tracking of emissions data.	Oversees current and future climate-related policy actions that may impact the Group.	Arranges compensation and talent programmes and corporate communications.
Core business divisions						
Ports	Retail	Infrastructure	Telecommunications			
Responsible for ensuring identification, assessment and monitoring of climate-related risks and opportunities in accordance with CKHH's Risk Management Policy and related sustainability guidance. These core business divisions are responsible for implementing appropriate risk mitigation strategies in line with the Group's climate strategy and priorities. Each division is resourced with dedicated sustainability teams, as well as senior-level Sustainability Working Groups, which communicate regularly on progress made to the Group.						

Internal expertise is provided by the Group's full-time sustainability experts that drive the identification, awareness building and management programmes of their industry-specific climate-related risks and opportunities. The Group recognises however certain parts of the climate action journey require external expertise, such as for scope 3 footprinting and conducting scenario analysis; the Group therefore engages leading third party carbon experts, where necessary, to provide such technical expertise as it builds out its short and long term climate action plans.

High quality data is also fundamental. In 2021, the Group began rolling out a sustainability data management software across the Group with key benefits of this software including having the most up-to-date emissions factors and enhanced tools for ongoing variance checking and active monitoring.

**Next steps**

The Group will continue to evolve its governance processes through identifying further roles and responsibilities in ensuring effective oversight.

### Disclose how the organization identifies, assesses, and manages climate-related risks.

The Group adopts an Enterprise Risk Management framework which is consistent with the COSO (the Committee of Sponsoring Organisations of the Treadway Commission) framework. The framework facilitates a systematic approach in identifying, assessing and managing risks, including climate-related risks, within the Group, be they of strategic, financial, operational or compliance nature. As part of enterprise risk management, the Group has developed an Impact Matrix to define, identify and categorise potential business impacts into 5 ratings, ranging from 1, "minimal", to 5, "extreme".

Risk management is an integral part of the day-to-day operations and management of the Group and is a continuous process carried out at all levels of the Group. There is ongoing dialogue between the Executive Directors and the executive management teams of each core business division regarding current and emerging risks, their plausible impact and mitigation measures. These measures include instituting additional controls and deploying appropriate insurance instruments to minimise or transfer the impact of risks to the Group's businesses.

In terms of formal risk review and reporting, the Group adopts a top-down and bottom-up approach, involving regular input from each core business division as well as discussions and reviews by the Executive Directors and the Board, through the Audit Committee. More specifically, on a half-yearly basis, each core business is required to formally identify and assess the significant risks their business faces, whilst the Executive Directors provide input after taking a holistic assessment of all the significant risks that the Group faces. Relevant risk information including key mitigation measures and plans are recorded in a risk register to facilitate the ongoing review and tracking of progress.

The composite risk register together with the risk heat map, as confirmed by the Executive Directors, form part of the risk management report for review and approval by the Audit Committee on a half-yearly basis. The Audit Committee, on behalf of the Board, reviews the report and provides input as appropriate so as to ensure effective risk management in place.

In 2020, climate change was given additional focus and was included as one of the top risks in the risk register that could affect the Group's financial condition or results of operations.

### Next steps

In 2022 and 2023, the Group will be undertaking important steps to strengthen its methodology and tools to identify and assess climate-related risks and opportunities which in turn will help strengthen the Group's mitigation and adaptation responses.

## Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

The Group recognises that physical and transition climate-related risks and opportunities have the potential to impact the Group's financial position in the medium and long-term.

While all sectors of the economy face business implications from climate-related risks and opportunities in the short, medium and long-term, certain non-financial sectors have been identified by the TCFD as having the highest likelihood of climate-related financial impacts including: Energy; Materials and Buildings; Transportation; and Agriculture, Food, and Forest Products. In line with this, a high-level sensitivity assessment of current and future climate-related scenarios suggests that the Group's Infrastructure division and Ports division are more sensitive to climate-related risks and opportunities, and which are spotlighted in this report in greater detail. That said, both the Retail division and the Telecommunications division are not immune to its effects. During 2022 and 2023, the Group will be conducting a more detailed deep dive of division-level risks and opportunities, including quantitative scenario analysis and measurement of the financial implications of a changing climate with the help of a third party.

### Addressing physical risks

Extreme weather events are on the rise, and with them threats to people, property, infrastructure and services. Chronic physical risks refer to longer-term shifts in climate patterns (sustained higher temperatures, for example) that may cause sea level rise or chronic heat waves. How these risks manifest in the short, medium and long-term is both industry and location-specific, however with large assets and infrastructure exposed to the elements, the Ports division and Infrastructure division have already identified physical risks and are taking meaningful actions to both understand, track and adapt to the effects of a changing climate.

#### Spotlight: The Ports division

Operating 10% of containerised marine trade, Hutchison Ports is the among the largest port operators in the world, with operating ports and terminals in 26 countries around the world, from Asia, the Middle East, Africa, Europe, the Americas to Australasia.

Cyclones, hurricanes and storm surges coupled with rising sea levels are increasingly realistic threats to port infrastructure, security and operational efficiency. The impacts of higher ambient operating temperatures for ports may impact operating parameters and working conditions. For example, higher temperatures may require more frequent equipment calibration as well as the possibility of heat-related illness amongst the workforce.

Given the critical role of ports in the global trading system and their potential exposure to climate-related damage, disruptions and delays, enhancing their climate resilience is a matter of strategic socio-economic importance for the global economy and society as a whole, as [outlined by the United Nations \(UN\)](#) .

In 2017, the UN Conference on Trade and Development conducted research on the impact of climate change on the operations and financial performance of 44 ports in 29 countries around the world. The research identified the following top five climate risks that may impact on future profits and assets of ports over the long-term, including:

1. Sea level rise causing changes in routes;
2. Increased temperature causing health hazards and additional operating costs;
3. Storms and waves causing liner delays and asset impairment;
4. Windy weather causing navigation routes to change; and
5. Flood and drought resulting in course changes and coastal erosion.

The potential impact and severity of these issues will vary from port to port through the 26 countries in which Hutchison Ports operates. In recent years, only one extreme weather event, namely Hurricane Dorian, the category 5 Atlantic hurricane that hit Hutchison Ports FCP in the Bahamas in September 2019, has caused damage to port infrastructure and the cessation of port operations. Aside from this event, extreme weather events have not caused major damage to Hutchison Ports' network. However, Hutchison Ports is aware that once in a hundred year events are becoming more frequent and that it needs to be prepared for a more extreme weather future.

To further assess the physical impacts of climate change, acute and chronic, Hutchison Ports commissioned a global climate risk assessment of its ports by a third party expert. Each port was assessed against the above-mentioned climate risks in relation to severity and likelihood of the event occurring. The assessment resulted in a hierarchy of most exposed ports in the long-term by climate risk type. A shortlist of ports have been identified for further detailed assessment.



### Spotlight: The Infrastructure division

Millions of customers globally rely on the essential services provided by the Group, therefore enhancing resilience and reliability through future-proofing this service infrastructure in the face of more extreme and unpredictable weather is critical. There are several severe weather events that are particularly prevalent for the Infrastructure businesses in the short and medium term – flooding, storms, and bushfires, which are discussed in more detail below. The division is currently undertaking a more holistic and detailed analysis of other current and future physical risks to the division.

#### Flooding and storms

In 2011, responding to the UK Government's concerns on climate change, Wales & West Utilities took a leading role in developing a pioneering tool to help utilities take action to protect their assets from increased flood risks, working in partnership with Landmark and Ambient Risk Analytics. Following four years of mapping in the pilot, the mapping product was launched in 2018 as Britain's first national flood map, incorporating current and future predictive flood scenarios for 2020 and far beyond. Wales & West Utilities was also the first utility in the UK to use the data as part of its UK Climate Change Adaptation Risk Assessment, Reporting and Investment requirements.

Flooding has been identified as one of the top climate risks in UK Power Networks' latest Climate Adaptation Report released in December 2021. Accumulated rainfall, overflowing rivers, sea level rise, reservoir breach and water main burst can lead to severe water ingress to critical electrical assets and ground-mounted transformers, causing equipment damage and loss of power supply to its customers. Mitigation solutions such as water-resistant bunding and flood gates are delivered at existing substations. The business has also integrated flood risk into business-as-usual by revising its technical design standards for substations to be more resilient against flooding, including measures such as raised switchgear installation. UK Power Networks has protected over 2.8 million customer connections from flood risk and reduced its customers at risk of flooding from an average of 70% in 2011 to an average of 13% in 2021.

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 taking how the business handles storms to a new level, by combining data science with improved customer service. This is particularly helpful in times of stormy weather to ensure enough engineers are on standby. A separate part of the project trialled a lightning tracking software to help restore power supplies caused by lightning strikes up to 90% faster.

Northumbrian Water 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. Instead of flowing back to the sewerage system, overflows from the lake spill into natural grassed areas alongside the bank and drain back to a local watercourse instead. Three floating island ecosystems, which were designed and built by Biomatrix Water, have been installed in Killingworth Lake to improve biodiversity and provide natural habitats for wildlife such as fish and nesting birds in the area.

#### Bushfire risk

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.

In hazardous bushfire risk areas, Victoria Power Networks is undergrounding power lines and installing high technology covers over power lines to protect them from climatic conditions. To further reduce fire risk, the business uses advanced Light Detection and Ranging (LiDAR) technology to continually improve the accuracy of scanning and detection of vegetation growing near power lines and ensure overhead conductor clearances remain compliant to Australian Standards throughout their lifetime.

During 2021, Powercor successfully completed the second tranche of a major bushfire mitigation technology rollout and has now installed Rapid Earth Fault Current Limiters ("REFCL") in 18 zone substations, providing additional protection for 15,500 kilometres of the network. Acting like a giant safety switch, the REFCL provides additional protection to the community by reducing voltage levels within milliseconds to mitigate fire risk if a tree strikes powerlines or if lines hit the ground. In recognition of Powercor's successful delivery of the REFCL programme across the distribution network in Ballarat, Greater Bendigo, Ararat and Terang, the business was awarded the Australia Institute of Project Management Project Management Achievement Award in the regional project category. Similarly, SA Power Networks undertakes a range of bushfire risk preparation, mitigation and adaptation activities, including partnering with organisations such as the Bureau of Meteorology, the Energy Networks Association and the Commonwealth Scientific and Industrial Research Organisation to undertake sophisticated modelling to enable more targeted activities.

## Transition impacts

Transition risks as defined by the TCFD, including policy, legal, technology and market changes, may be a risk or an opportunity depending on how these are managed and therefore can be seen as two sides of the same coin; the below table exemplifies the how this manifests across the Group.











Figure 4: Transition impacts - the risks and opportunities to the Group

	Risk to the Group	Opportunity to the Group
<b>Policy &amp; legal</b>	The Group operates in many jurisdictions that have taken policy actions and made climate commitments that, without monitoring and proactively addressing, could result in financial and reputational impacts.	The Group however sees many of these policy actions as an opportunity for its business to position itself as a preferred partner in the low carbon transition.
<b>Technology</b>	Failure to adopt new emerging technologies such as renewable energy, battery storage and carbon capture and storage could affect the competitiveness of the Group.	<p>The Group is acting as a first-mover in many clean technologies and taking leadership approaches across divisions, such as in: port electrification, hydrogen developments in gas networks, connecting market leading levels of renewables to the grid in electricity networks, among many other innovations.</p> <p>It has also adopted technologies to improve resource efficiency, driving down emissions and operating costs, such as through adopting LED lighting, smart metering, latest technology in telecommunications network equipment, and implementing demand-side flexibility to reduce energy losses from its distribution network operators.</p>
<b>Market &amp; reputation</b>	<p>While the ways in which markets could be affected by climate change are varied and complex, shifts in supply and demand for the Group's products and services as consumer's preferences for more sustainable alternatives may occur should it fail to recognise evolving trends.</p> <p>Changing stakeholder perceptions of an organisation's contribution to, or detraction from, the transition to a lower-carbon economy could impact the Group should it not respond accordingly.</p>	Listening to customers and understanding potential market shifts act as a source of competitive advantage and new potential revenue streams for the Group. Extensive stakeholder engagement across the Group ensures it is keeping abreast of, and responding to, evolving stakeholder preferences.

## Building resilience: Maximising opportunities, minimising risks

The Group has identified 10 net-zero transition opportunities for which it is taking significant current and future plans in response to these identified risks and opportunities.

Figure 5: 10 net-zero transition opportunities

Transition opportunity	Strategies
 Renewable and other clean energy	<ul style="list-style-type: none"> <li>Invest in and grow the Group's renewable energy portfolio.</li> <li>Transition gas networks to hydrogen.</li> <li>Connect market-leading levels of renewable energy to the grid.</li> <li>Increase the procurement of renewable electricity.</li> <li>Adopt carbon capture and storage where relevant to waste-to-energy operations.</li> </ul>
 Transitioning high-carbon assets	<ul style="list-style-type: none"> <li>Phase out coal-fired power generation globally by 2035.</li> </ul>
 Sustainable transportation	<ul style="list-style-type: none"> <li>Scale up electric and hybrid-electric vehicles and infrastructure.</li> <li>Lead the way in being first-adopters of hydrogen vehicles and equipment.</li> </ul>
 Energy efficiency	<ul style="list-style-type: none"> <li>Exhaust all feasible options for energy efficiencies.</li> <li>Embrace digitalisation and innovation to transform distribution networks, increase grid flexibility and decrease distribution losses.</li> <li>Be a leader in innovation in 5G, IoT applications and smart city solutions.</li> </ul>
 Circular economy & design	<ul style="list-style-type: none"> <li>Reduce, reuse and recycle all forms of waste.</li> <li>Design products and systems with circular economy principles in mind.</li> </ul>
 Climate adaptation	<ul style="list-style-type: none"> <li>Protect the Group's people and assets and be ready for a changing climate.</li> <li>Conduct periodic climate risk assessments of high-risk assets.</li> <li>Protect biodiversity to restore healthy ecosystems and further strengthen adaptation.</li> </ul>
 Finance and investment	<ul style="list-style-type: none"> <li>Continue to align capital expenditure in line with a net-zero pathway.</li> </ul>
 Supply chain engagement	<ul style="list-style-type: none"> <li>Further develop supplier engagement policies.</li> <li>Develop scope 3 emissions reductions targets.</li> </ul>
 Collaboration, partnerships & advocacy	<ul style="list-style-type: none"> <li>Partner with peers, customers, government and other relevant organisations to accelerate the transition.</li> </ul>
 Carbon offsets	<ul style="list-style-type: none"> <li>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.</li> </ul>

How the Group is actioning upon each of these transition opportunities is explored in detail in the [2021 CKHH Sustainability Report](#) .

## Next steps

Work is underway to analyse the resilience of the Group's climate strategy through applying a range of climate-related scenarios. The Group will also conduct an analysis to quantify the financial impacts of climate change to strengthen its understanding of its financial position in relation to climate change-related risks and opportunities.

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

The Group continues to build upon existing metrics and targets to help guide the implementation of its climate strategy, targets and goals.

## 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 Figure 6. The ultimate aim of these actions is to ensure the Group is taking a science-aligned and leading practice approach to its climate strategy.

Figure 6: 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				

Using the findings from the work completed during 2021, the Group is prioritising developing a short-term and long-term Group-level target during 2022-23.

## 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 on 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<sub>2</sub> e 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 Figure 7. Work is underway to consolidate progress and plans to develop one set of division-wide targets.

Figure 7: 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.

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.

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.

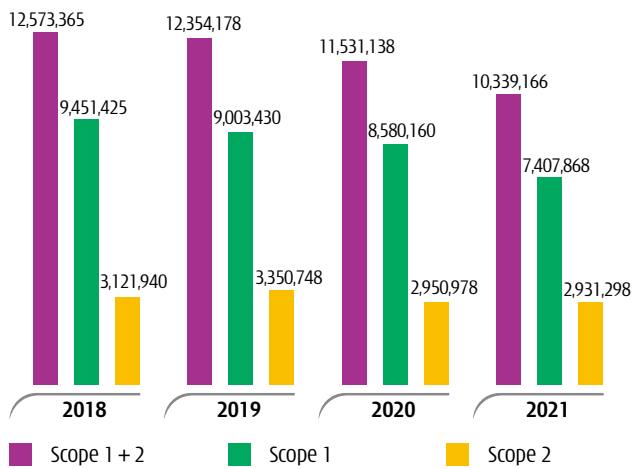
## GHG emissions reduction performance

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 8: Scope 1 and 2 GHG emissions performance (tCO2e)



### Next steps

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 during 2022.

The Group will also continue to build out its metrics and targets to deliver more actionable insights which further help build organisational resilience.

Figure 9: Group breakdown of scope 1 and 2 emissions

