CK Hutchison Group Telecom Holdings Limited - Climate Change 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

CK Hutchison Group Telecom ("CKHGT") is a leading global operator of mobile telecommunications and data services. The Group operates telecom networks in Italy, the UK, Sweden, Denmark, Austria and Ireland. It also holds a majority interest in Hutchison Telecommunications Hong Kong Holdings Limited ("HTHKH"), a listed company and an established telecommunications operator. HTHKH provides leading-edge mobile services in Hong Kong SAR and Macau SAR.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Austria
China, Macao Special Administrative Region
Denmark
Hong Kong SAR, China
Ireland
Italy
Sweden
United Kingdom of Great Britain and Northern Ireland

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board Chair	The Board chair and Directors on the CKHGT Governance Board are responsible for overseeing sustainability and climate-related issues at CKHGT. They set the direction of the Group's sustainability policy and strategy, including action on climate change, and ensure strategic alignment on the business level.
Director on board	As above: The Board chair and Directors on the CKHGT Governance Board are responsible for overseeing sustainability and climate-related issues at CKHGT. They set the direction of the Group's sustainability policy and strategy, including action on climate change, and ensure strategic alignment on the business level.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy	<Not Applicable>	The CKHGT Governance Board has ultimate responsibility for overseeing the Group's business strategy (including material strategic climate-related plans), and approving budgets and investment decisions for each of the Operating Companies (OpCos). The Board reviews and approves sustainability objectives, strategies, initiatives, policies and frameworks. This may also include examining identified climate-related risks and opportunities, as well as their impact on business strategy and financial planning.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Two of the CKHGT Board members are also members of Board Sustainability Committee of CKHGT's parent company, with competence assessed on a range of criteria including understanding of climate-related issues in the business context.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The CEOs of the CKHGT operating companies meet on a quarterly basis (the 'Policy Board') . Their responsibilities include:

- setting strategies for their operating company, including climate strategy and emissions targets

- setting budgets, including aspects related to energy efficiency and climate-related initiatives

- assessing and managing risks and opportunities, including climate risks and opportunities.

The Head of Sustainability for CKHGT reports to the Policy Board at quarterly meetings on key aspects of climate strategy, risks and opportunities, including science-based targets (which were approved by the Policy Board) and the climate transition (e.g. renewable energy procurement decision-making) for assessment and approval as needed.

The CEOs all report regularly to the CKHGT Governance Board.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction project Emissions reduction target	CKHGT's largest business has developed and implemented an incentive structure based on a proprietary ESG index covering all of the targets in its 2030 sustainability plan, including its target to be carbon by 2030. For the reporting year this incentive contributed to 10% of the incentive for all Executive Directors including the CEO.
Executive officer	Monetary reward	Efficiency project Efficiency target	CKHGT's largest business has developed and implemented an incentive structure based on a proprietary ESG index covering all of the targets in its 2030 sustainability plan, including its target to be carbon by 2030. For the reporting year this incentive contributed to 10% of the incentive for all Executive Directors including the CEO.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Using this time frame, the Group assesses risks and opportunities of a more immediate nature (e.g. upcoming policy and market shifts) and that require response and actions in a relatively short period of time. 5G developments, for example, will begin to take shape within that time frame which will likely have a business and/or financial impact (e.g. increase in operational costs due to the increase in energy consumption).
Medium-term	6	15	Looking to the medium term, the Group assesses climate-related risks and opportunities that may not have an immediate impact on the business but may substantially impact it in the next 6-15 years. 5G developments, for example, will continue to take shape within that time frame which will likely have a business and/or financial impact (e.g. increase in operational costs due to the increase in energy consumption), as will growth of climate-related products and services.
Long-term	16	30	Ensuring the Group also has a longer term view helps it maintain focus on longer-term climate-related risks and opportunities that may impact the business, and in turn, factor such risks and opportunities into business planning. This may include, for example, longer term, more acute and chronic climate impacts that may impact supply chains.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

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”. A ‘substantive financial or strategic impact’ is one that has at least a ‘major’ business impact, which may involve for example, high financial impacts, a major increase in total emissions or frequent extreme weather and other climate change threats.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
At CKHGT, the risk department is responsible for identifying activities with substantive financial impact and strategic impact to the business including climate-related risks and opportunities, related to direct operations as well as upstream and downstream. Sources of identification may include consultation with the OpCos and interaction with the insurance industry, research on local laws, regulations and market practice, top management interviews, audit reports and internal controls reviews. The Group’s overall risk management process includes risk identification and risk assessment with a view to acting in advance to avoid significant risks or to ultimately mitigate the negative impact (e.g. operational or financial) of the risk on resources at the Group level as well as the individual OpCo level. Through collaboration with insurance companies and intermediaries, the Group carries out a structured risk survey programme on a regular basis. Risks that are identified through the survey are assessed and prioritised within CKHGT via a formal procedure. At CKHGT, risks (including climate-related risk) are divided into two categories and four sub-categories, external and internal financial risks, strategic risks, operational risks and hazard risks. These risks are being managed via four main approaches: retaining the risk, avoiding the risk activity, transferring the risk to a third party and insuring the risk. Climate change is included as part of the Group’s ongoing risk assessment processes. It understands that physical risks such as, typhoons, rising sea levels, heat waves and other extreme weather events result in major disruption or damage to our businesses and assets (direct operations) as well as our supply chains (upstream) and our customers (downstream). The Group also recognises transition risks, such as carbon pricing, impact our operating expenses directly (e.g. direct operations) as a discrete line item or indirectly in energy prices and cost of goods purchased (i.e. upstream and downstream risks and opportunities). With increasing materiality of climate-related risks and opportunities, the Climate Action Working Group initiated a large-scale project to specifically review climate risks and opportunities. This ongoing project has included conducting internal scenario analysis involving workshops to identify specific physical and transition risks that are most relevant to OpCos in their direct operations as well as upstream and downstream, while also following the recommendations from the Taskforce on Climate-related Financial Disclosures (TCFD).

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	With the Group's operating company presence in multiple locations, it is crucial for CKHGT to comply with current regional and local requirements. With a large presence in Europe, oversight of current climate-related regulation is of particular importance. Since the 1990s, the European Union (and the UK) has played a global leadership role in combating climate change by adopting policies for reducing greenhouse gas emissions and for increasing the efficiency of its industries and consumption systems, and more recently regulation has emerged to drive enhanced disclosure of carbon emissions. Risks could include, for example, non-compliance with the UK's Streamlined Energy and Carbon Reporting Requirements, the UK's Energy Saving Opportunities Scheme, Ireland's Climate Action and Low Carbon Development (Amendment) Act of 2021 , and Denmark's Financial Statements Act section 99a: which relates to specification of environmental risks and policies. In our climate-related risk assessments, financial and reputational impacts resulting from non-compliance are assessed and evaluated. This risk is managed through management oversight of our compliance departments, implementing internal policies and procedures to support compliance and working with third parties to understand regulatory developments relevant to our business.
Emerging regulation	Relevant, always included	With the Group's operating company presence in multiple locations, it is crucial for CKHGT to comply with emerging regional and local requirements. In November 2019, the European Parliament declared a climate emergency also requesting the European Commission to adapt all its proposals in line with a 1.5 °C target for limiting global warming and ensure that greenhouse gases emissions are significantly reduced. In response, the Commission unveiled the European Green Deal, including a roadmap to becoming a climate-neutral continent by 2050. Regulation continues to emerge to support the transition and to enhance disclosure , both at an EU level and an an individual country level relevant for our operating markets. Risks include, for example, non-compliance with the forthcoming Corporate Sustainability Reporting Directive across all of CKHGT's European operating companies, emerging requirements for TCFD-aligned reporting across a number of the Group's markets including the UK and HK, and Denmark's forthcoming tax reform involving streamlined CO2-taxation. The Group closely monitors emerging regulation via its European Regulatory Affairs team and regulatory affairs specialists in our local markets, with briefings and collaborative discussion across operating companies to enhance understanding of emerging risks. It manages these risks by adopting relevant frameworks and procedures which support compliance.
Technology	Relevant, always included	CKHGT is a major investor in technology, with a business model dependent on energy-consuming technology assets. It is therefore crucial that CKHGT consider technology risks in its climate-related risk assessments. One example of this risk, would be failure to implement technologies which drive optimal energy efficiency, to support the climate transition and meet our carbon reduction targets. To manage this risk, the Group works closely with its suppliers to improve equipment efficiency.
Legal	Relevant, always included	While the Group considers its chance of being involved in environmental legal litigation comparatively lower to other risk types, this risk is included due to its relevance across different operating markets and the significance of its impact. One example of potential legal risks could be litigation brought by community groups due to excessive resource use by networks or data centres. To mitigate this risk, the Group actively seeks opportunities to increase dialogue with different local stakeholders to ensure continuous engagement and is pursuing its transition plan in order to meet carbon reduction expectations and targets.
Market	Relevant, sometimes included	Market risks are relevant for inclusion in climate-related risk assessments because climate policies and climate impacts may lead to customer demand shifts, supplier disruption and supplier costs - which are important a cross all of the Group's operating companies. One example of the market risks examined in our assessment is the change in customer demand for more sustainable products. The Group considers the potential risk from shifting consumer behavior relatively low at this present time, with less demand for greener products in the telecommunications sector as compared to other sectors. However, this is a sentiment that may change in the near future and will be monitored by the Group. Further, while a significant portion of retail products are sourced from third parties, e.g. smartphones, the Group aims to develop a supplier engagement strategy to further manage this evolving risk.
Reputation	Relevant, always included	Reputational risks are always considered in the Group's climate-related risk assessments due to the high level of stakeholder expectations (including investor expectations) in relation to climate, and the relevance to the Group's financial and strategic planning, with adverse reputational impacts having potential to severely impair our financial performance. For example, failure to meet our carbon reduction targets could impact our reputation with our investors and impact our cost of capital. One way the Group aims to address this risk is to regularly engage important stakeholders to understand expectations and strengthen approaches.
Acute physical	Relevant, always included	Acute physical risks are considered as an important risk type in Group climate-related risk assessments because the Group's products and services depend on the functioning of infrastructure over a wide geographical area, in all of its operating markets. For example, the Group considers the increasing severity and frequency of extreme weather events, such as cyclones, floods and storms, as an immediate risk that affects the operating companies. 5G networks will be required to adapt during extreme weather events, and increasingly so in the face of climate change. Resiliency is enabled by efficient radio equipment that in the future can be powered by micro grids and renewable energy. The resiliency of cell site towers against damage caused by extreme weather events has been a priority focus area for the division's crisis management teams, in addition to rolling out innovative technology solutions such as "network in a box" that can deploy a complete network rapidly enabled by technology features such as self-backhauling, and potentially satellite backhauling. In this regard, the division continues to use a range of network technologies optimised for local weather systems, from metropolitan and rural Asia, to the northern European extremes of Sweden.
Chronic physical	Relevant, sometimes included	Chronic physical risks such as a rise in sea level, increases in mean temperatures, changes in precipitation patterns and extreme variability in weather patterns are included are relevant risks due to their potential for impact operational costs across the Group's businesses. For example, an increase in average temperatures could impact availability and costs of goods and services, as well as potentially increasing demand for refrigerants in our data centres.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market	Other, please specify (Increased cost and lack of availability of renewable energy)

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

As a telecommunications sector company, we are a major user of electricity in our networks, across our operating markets in Europe and Hong Kong. As demand for renewable energy increases , there is a significant risk that the cost of procuring energy attribute certificates increases, particularly in our European operations. This is significant under both of CKHGT's climate transition scenarios but particularly in the medium term under a disorderly transition.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In the UK as an example, over the past two years, the cost of UK REGOs has increased by more than 10 times due to increased demand for renewables as compared to supply available. If this trend continues this would create a significant additional cost of renewable energy procurement.

Cost of response to risk

Description of response and explanation of cost calculation
The CKHGT Group is seeking to manage this risk by reviewing energy buying arrangements, and entering into contractual arrangements to secure a reliable and cost effective supply of renewable energy, including through power purchase agreements. For example, our UK operating company became aware of a significant increase in renewable energy prices and lack of availability in the market. It therefore decided to review its energy buying strategy and investigate renewable energy buying best practice in the current market. It engaged with utility companies and professional advisors to identify and assess renewable energy buying options and appropriate contractual instruments including power purchase agreements. As a result, the UK operating company has selected a new renewable energy supplier, enhanced its understanding of cost effective and risk managed renewable energy procurement, and developed a clear view on preferred contractual mechanisms. The costs involved in responding to the risk relate to time of the Health, Safety, Environment and Energy Lead and other senior staff members in reviewing energy buying options, monitoring prices, engaging with professional advisors, as well as the costs of the professional advisory services.

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Heavy precipitation (rain, hail, snow/ice)

Primary potential financial impact
Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Changes in precipitation patterns and extreme variability in weather patterns may lead to physical damage to infrastructure and assets, causing disruptions to services, and asset write off in some cases. Types of infrastructure prone to this risk include base stations, cell sites and other some other core network infrastructure. Locations particularly impacted to date include operations in Hong Kong, Italy and Sweden.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
As the Group uses frameworks and standards such as the TCFD to mature approaches in the near future, identifying specific financial impacts will be a part of that.

Cost of response to risk

Description of response and explanation of cost calculation
To respond to the risk, the group is starting to do further work to understand specific climate impact risks at a country level and identify appropriate resilience measures. For example, in October 2021, CKHGT's largest operating business, Wind Tre in Italy, experienced an extreme weather event in Catania - where one of its largest technological sites is located. The site was inundated with almost 1.2 metres of water. Afterwards the Italy operating company took the decision to undertake an analysis aimed at identifying corrective and preventive actions to avoid future critical issues. From the end of 2021, the Italy operating company commenced the analysis focused on its 27 'Top Technological Sites' distributed across Italy. It conducted an initial preliminary analysis of vulnerability, then commissioned an expert to prepare a full hydrological, geological and seismic report for the more vulnerable sites. The Italy Opco will implement required preventative measures where weaknesses are identified based on recommendations from this report.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
With growing societal concern around the climate crisis, and increased stakeholder expectations for companies to take action in line with international climate agreements, there is a risk that, without appropriate climate action, we may face a negative impact on our reputation. This may result in reduced demand for our products and services, for example, in the enterprise sector, larger enterprise may increasingly choose to source their telecommunications solutions from companies that have net zero targets or offer lower carbon products and services. Consumers may increasingly look for mobile brands that align with their values and, for example, offer a 'carbon neutral' mobile service. This is relevant for all of our businesses although the level of concern will different across geographies, and is particularly relevant for our UK and European operating companies.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
As the Group uses frameworks and standards such as the TCFD to mature approaches in the near future, identifying specific financial impacts will be as part of that.

Cost of response to risk

Description of response and explanation of cost calculation
The Group has increased its dedicated sustainability resources with the appointment of a Head of Sustainability for CKHGT, and has commissioned consultancy support to develop science-based targets which have now been submitted to the SBTI for validation. It actively coordinates progress on climate change across the opcos through a CKHGT Climate Action Working Group which is progressing collaborative actions on renewable energy strategy and energy efficiency strategy. The Group has focused on transparency, actively reporting its sustainability data through multiple channels, including within annual sustainability reporting. The Group aims to progressively increase its level of disclosure, alongside taking more ambitious steps to improve climate performance, such as through setting a net zero target and increasing its procurement of renewable energy. It is also developing a sustainable products and services strategy to drive growth in products which can help customers to reduce their GHG emissions,

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact
Returns on investment in low-emission technology

Company-specific description
CKHGT has an opportunity to install solar panels across a number of its premises, including its offices, data centres, and network masts, giving the Group secure supply and reduce operating costs. This opportunity is particularly relevant for operating companies with sufficiently high solar resources, including Italy, the UK, Ireland and Austria. The installation of solar generation not only reduces the Group's emissions through the use of renewable energy, but also reduces its reliance on suppliers thereby mitigating the rising cost of energy and energy price volatility. For example, CKHGT's largest operating company in Italy has built 13 solar installations with a total annual production of approximately 350MWh per annum, and in 2021, 3 Ireland ran a remote mast site solar feasibility study which led to the installation of a further ten sites during the year.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The small scale proof of concept in Ireland is expected to save between Euros 7600 and 16,500 per year; these savings could be expected to increase as the business extends the implementation of solar and implements larger installations over time. As the Group uses frameworks and standards such as the TCFD, cost effective opportunities to implement renewables will be identified in other geographies.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
With the rising market cost of renewable energy, in 2021, Three Ireland (Networks) identified a potential opportunity to self-generate renewable energy while reducing its dependence on its existing energy provider. It therefore decided to commission a study for the installation of PV solutions, as a ‘proof of concept’ on Three Ireland-owned infrastructure, in order to assess feasibility and cost effectiveness. The study identified opportunity for an initial ten 2.2kW PV installations on Three Ireland-owned remote mast sites across the East Coast of Ireland, meeting the feasibility and financial return requirements, and a decision was taken to implement these installations. Seven solar PV sites have so far been installed as part of the ‘proof of concept’ project, producing approx. 1700kWh solar power per month. Moving forward we expect to extend project with installations across more remote mast sites and are exploring feasibility of implementing larger solar PV installations on our larger infrastructure (e.g. customer care centre). The approximate cost of infrastructure for the proof of concept is Euros 57,000. This cost would increase as the project is expanded to include more sites.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Reduced direct costs

Company-specific description
CKHGT recognises the opportunity to implement energy efficiency measures across its networks in all of its operating companies including across Europe and HK. Key opportunities are the technology changes required to support the transition to 5G, including remote access network upgrades, network virtualisation, and transmission network upgrades. Implementation of these technology changes will reduce emissions and operating costs per unit of data traffic.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This opportunity is expected to reduce operating costs by reducing the amount of energy required to be purchased from the grid.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
CKHGT's ongoing program of network consolidation and upgrade, includes upgrades to transmission networks, replacement of remote access network equipment, and new technologies supporting greater network virtualisation, data centre consolidation, and switching off of legacy networks in some cases. All of these activities are driving greater energy efficiency across the Group's networks. For example, in the UK, implementation of latest generation radio / baseband units is expected to drive 10-35% energy efficiency based on vendor assumptions; implementation of micro sleep more functionality is expected to drive 15-20% savings based on vendor assumptions; and upgrades to core network are anticipated to increase these efficiencies further.

Comment
The cost to realize this opportunity will be the cost of infrastructure and the cost of managing these energy efficiency programs. However, since this is considered as part of normal operational priorities, this has not been isolated as one figure. This will be considered for future reporting.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of new products or services through R&D and innovation

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
There is an opportunity to develop and grow new, innovative products and services which enable emissions reductions in society, supporting the transition to a low carbon economy. This opportunity is relevant across all of our operating businesses and geographies, but is particularly relevant for CKHGT's specialist data analytics business, CKDelta - which is innovating to support the growth of the electric vehicle market, as well as its operating companies focused on 'internet of things' solutions including Italy, Ireland and Austria.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We expect the market for data analytics support for the electric vehicle sector to grow by a CAGR of 30% over the next 5 years, increasing revenues for CKDelta and CKHGT accordingly.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
CKHGT is investing in innovative teams, systems and business approaches to grow in new markets created through the transition to the low carbon economy. One example is CKHGT's specialist data analytics and insights business which has been focusing on growth opportunities in the electric vehicle market. Situation: Further to the release of the UK Government's decarbonisation plan, CKDelta (a dedicated data analytics business of CKHGT) recognised the significant expected growth of the electric vehicle market, with 91 per cent of new car sales in the UK expected to be EV by 2030. CKDelta also recognised a number of challenges associated with that forecast growth. Firstly, Distribution Network Operators (DNOs) will need to reinforce their networks as demand from consumers for electricity increases and routinely monitor fluctuations in demand on the grid. Secondly, charge points will need to be installed in the right locations to give them the greatest opportunity to demonstrate economic viability in the long term and to ensure swathes of the population are not disadvantaged. In addition, Charge Point Operators (CPOs) will need to build an understanding of the commercial viability of their investments, including being able to manage and adapt their network of charge points. Task: CKDelta identified an opportunity to help players in the electric vehicle ecosystem address these challenges, leveraging its data assets and data analytics capability. It sourced data covering population movement, energy utilisation and points of interest to build a whole system model powered by high-frequency data to address these challenges. Action: CKHGT developed a predictive analytics toolset for both planning and operation of EV charge point infrastructure to predict maximum demand and return on investment for each point of interest. It also developed a predictive model for estimating maximum demand in the network and developed a whole system model to enable investment prioritisation in the network assets using simulations powered by rich data sets from across the EV ecosystem. Result: CKDelta has applied these predictive modelling capabilities to key projects with customers in the DNO and Charge Point Operator sectors, supporting them in understanding the implications of electric vehicle growth for their infrastructure, helping them to plan for network growth with optimal return on investment.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan
Yes, we have a transition plan which aligns with a 1.5°C world

Publicly available transition plan
Yes

Mechanism by which feedback is collected from shareholders on your transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
The Group's Senior Sustainability Manager and CKHGT's Head of Sustainability regularly engage with investors on the climate transition plan to understand expectations and evolve the approach taken. For example, the Group's Senior Sustainability Manager participated in a two-month ESG Roadshow with investors to test and discuss the Group's sustainability with a focus on its climate transition plan, and the Head of Sustainability for CKHGT has participated in meetings with bond holders to discuss the transition plan.

Frequency of feedback collection
More frequently than annually

Attach any relevant documents which detail your transition plan (optional)
See pages 12-24 for Group content including CKHGT, and pages 126-129 for CKHGT-specific content.
CKHH Sustainability Report 2021.pdf

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative, but we plan to add quantitative in the next two years	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: Customized publicly available transition scenario	Company-wide	1.5ºC	Analytical choices: The Group developed customised scenarios using underlying narrative and assumptions provided by the National Greening of the Financial System - which offers a set of macroeconomic scenarios relevant for all sectors. The Group based its analysis on two transition scenarios: 1) Net zero 2050 - and orderly transition to net zero aligned with 1.5 degree temperature outcome;) Delayed transition scenario - which aims for the same temperature outcome by 2100 but with a delayed start, which is more disruptive and may lead to higher warming mid-century before declining. Time frames used for analysis were: short term (2022-2025); medium term (2025-2035); long term (2035 -2050). Parameters: From SSP2 for all scenarios. GDP follows regional historical trends without climate impacts, but early transition in scenario 1 causes temporarily lower growth and delayed transition in scenario 1 causes later, sudden sharp contraction; technology change is fast in scenario 1 but slow then fast in scenario 2. Assumptions: electricity from renewables increases 5X by 2050; radiative forcing is limited to no more than 1.9 W/m2 above pre-industrial levels.
Physical climate scenarios: Customized publicly available physical scenario	Company-wide	3.1ºC - 4ºC	Analytical choices: The Group developed customised scenarios using underlying narrative and assumptions provided by the National Greening of the Financial System - which offers a set of macroeconomic scenarios relevant for all sectors. This scenario was also reflective of SSP2-4.5 (which builds in expectations of radiative forcing consistent with RCP 4.5). The scenario was a 'business as usual' scenario with no further transition beyond current approaches, leading to a continued dependence on fossil fuels, a higher temperature outcome (over 3 degrees) and significant climate and economic impacts over the longer term. Time frames used for analysis were: short term (2022-2025); medium term (2025-2035); long term (2035 -2050). Parameters: From SSP2 for all scenarios. GDP follows regional historical trends without climate impacts, but no climate action causes lower growth and higher uncertainty; slow technology change. Assumptions: fossil fuels remain the dominant source of energy; radiative forcing is stabilized at approximately 4.5 W/m2 after 2100.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Focus question 1: What climate related risks and opportunities may materially affect the CKHGT operating businesses overall, over the short, medium and long term, in a world which meets the 1.5 degree goal? To answer this question we chose two scenarios to meet this goal - one with an orderly and early transition and the other with a disorderly and delayed transition. Focus question 2: What a climate related risks and opportunities, may materially affect the CKHGT operating businesses overall, over the short, medium and long term, in a world with extreme climate impacts? To answer this question we chose one scenario based on no additional climate policies and a temperature outcome of >3 degrees.

Results of the climate-related scenario analysis with respect to the focal questions

Focus question 1: We identified material climate transition risks relevant across CKHGT overall which include: significant increases in energy consumption due to data traffic may outweigh efficiency gains through investment in more energy efficient technologies; increased demand for renewable energy in the market causes may lead to increased cost of energy and renewable energy certificates; and suppliers not being aligned to or ready to adapted to the changing demands, impacting our own sustainability performance. These are all material to the Group's operating business across Europe and Hong Kong since the increase in data traffic is common across all markets and driven by external market factors such as increased use of video, content streaming etc. Moreover, as major energy consumers with significant dependence on technology providers (e.g. network equipment manufacturers) it will be important for them to develop energy efficient equipment, appropriately supported with life cycle emissions data as needed. We identified material climate transition opportunities relevant across CKHGT overall, including: the opportunity to optimise network design and operations for use of more sustainable technologies, considering energy efficiency, operating costs, revenue and customer experience; and an opportunity to increase our renewable energy procurement, potentially using power purchase agreements, to lower our emissions. Focus question 2: We identified material climate adaptation risks relevant across CKHGT overall which include: risks to damage of infrastructure due to storms and flooding causing service disruption and operational costs. This is expected as the majority of CKHGT's operating markets in Europe and HK are in countries more susceptible to flood risk and / or storms. While this risk is relevant to all of our assets, it is most material for CKHGT's network assets given they can be located in remote / rural areas (e.g. near trees and waterways) and given the dependence on these assets for continuity of services over a wide area. We identified material climate transition opportunities relevant across CKHGT overall, including: a move to more reliance on cloud technologies and virtualisation could reduce the physical asset base exposed to climate impacts. This is a broad trend across CKHGT's operating businesses across Europe and Hong Kong.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Risks and opportunities related to changing customer demand for lower carbon products and services in a climate transition, have influenced our decision to include an objective to 'drive enabled GHG emissions in society through our products and services' within our public CKHGT Sustainability Strategy. To date we have grown individual product lines which we consider to be immediate priorities. This includes our 'internet of things' solutions in the utilities sector in Italy and Ireland - enabling GHG savings through avoided meter readings and quicker fault resolution. Going forward we will be expanding our definition and measurement of low carbon products and services with a view to identifying and growing more priority GHG saving solutions.
Supply chain and/or value chain	Yes	Risks and opportunities related to supplier readiness to support us in meeting our carbon targets have influenced our decision to measure our purchased goods and services emissions as part of our scope 3 baseline and to engage with high priority suppliers. For example, in our baseline year (2020) we identified that approximately 75% of our value chain footprint lies in our scope 3 emissions, of which a significant proportion is driven by purchased goods and services, and in 2021 we engaged with device manufacturers to obtain life cycle analysis emissions data. Going forward we aim to do further analysis to identify high priority suppliers for engagement and continue to engage with them on emissions disclosure and emissions opportunities.
Investment in R&D	Yes	Risks and opportunities related to the energy efficiency opportunities from 5G and IOT, supporting the climate transition, have influenced our decision to invest in R&D in particular markets. For example, CKHGT's largest business, Wind Tre in Italy, renewed its partnership with ZTE for cooperation in the testing of innovative solutions through the ZTE Innovation & Research Center (ZIRC) in L'Aquila, with particular focus on the activities in the areas of 5G and IoT and specific focus on smart city services. It also launched a partnership with the Municipality of Rome and others, supporting the Open Tech Lab at Tiburtina Station – an innovation space bringing together private and public sector actors, creating an ecosystem for new technological services with high social and economic value including through emissions reductions. Going forward CKHGT will continue to identify appropriate opportunities to invest in R&D across its markets.
Operations	Yes	Risks related to the physical impacts of climate change, and in particular extreme weather events have influenced the design of our network infrastructure, operations and equipment so that the right equipment is in place appropriate to location and potential for climate extremes. For example. 3 Sweden's employees are equipped with all-terrain vehicles to help them navigate through the snow as well as ice protection structures to protect their telecommunication equipment. Going forward CKHGT there may be an opportunity to collaborate with other operators in resilience planning where infrastructure is shared.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Indirect costs	While emission reductions initiatives, such as through energy efficiency measures, have been part of the Group's operating ethos for many years, a more strategic approach to action on climate change has recently been developed. This has included direct costs of more energy efficient technologies, as well as indirect costs of employees with suitable skills to drive forward our approach, and appropriate external support from consultants. For example, we added the costs of a new Head of Sustainability for CKHGT to support the Group in its approach to the climate transition and engaged external consultants to support us in developing net zero targets. Climate transition and adaptation will continue to have an increasing impact on financial planning, particularly as the Group works to achieve its science-based emission reduction targets.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?
No, and we do not plan to in the next two years

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
17893

Base year Scope 2 emissions covered by target (metric tons CO2e)
508748

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
526641

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
263320.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
17067

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
460595

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
477662

% of target achieved relative to base year [auto-calculated]

18.6005267345307

Target status in reporting year
Underway

Is this a science-based target?
Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition
1.5°C aligned

Please explain target coverage and identify any exclusions
This target covers all operating companies of CKHGT. A number of small office-based entities have been excluded due to materiality. It covers all greenhouse gases. Removals from bioenergy are not relevant for this organisation.

Plan for achieving target, and progress made to the end of the reporting year
Our plan for achieving the target includes increasing our procurement of renewable energy, installing microgeneration where appropriate and cost effective, upgrading our network infrastructure including transitioning to 5G technologies which allow for the more energy efficient movement of data traffic, and implementation of other more energy efficient approaches and technologies such as free cooling and UPS.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Year target was set
2021

Target coverage
Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting
Category 8: Upstream leased assets
Category 9: Downstream transportation and distribution
Category 10: Processing of sold products
Category 11: Use of sold products
Category 12: End-of-life treatment of sold products
Category 13: Downstream leased assets
Category 14: Franchises
Category 15: Investments

Base year
2020

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3 emissions covered by target (metric tons CO2e)
1481333

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
1481333

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
42

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

859173.14

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
1525399

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
1525399

% of target achieved relative to base year [auto-calculated]
-7.08274558246172

Target status in reporting year
Underway

Is this a science-based target?
Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition
1.5°C aligned

Please explain target coverage and identify any exclusions
This target covers all operating companies of CKHGT. A number of small office-based entities have been excluded due to materiality. It covers all greenhouse gases. Removals from bioenergy are not relevant for this organisation.

Plan for achieving target, and progress made to the end of the reporting year
CKHGT further engage with its suppliers to support better data quality related to purchased goods and services and reduce emissions in the supply chain.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	6	882
Implementation commenced*	19	62055
Implemented*	3	14256
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Other, please specify	Other, please specify (Site consolidation)

Estimated annual CO2e savings (metric tonnes CO2e)
4133

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
99798

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment

Initiative category & Initiative type

Transportation	Company fleet vehicle replacement

Estimated annual CO2e savings (metric tonnes CO2e)
27

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
6-10 years

Comment

Initiative category & Initiative type

Other, please specify	Other, please specify (Data centre consolidation and move to more efficient data centre)

Estimated annual CO2e savings (metric tonnes CO2e)
10096

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
165000

Investment required (unit currency – as specified in C0.4)
150000

Payback period
<1 year

Estimated lifetime of the initiative
>30 years

Comment

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Facilities and energy managers are assigned budget for maintenance and upgrades.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Please select

Description of product(s) or service(s)

The Group's "Internet of Things" Technologies solutions enable customers to avoid emissions through energy saving made through active monitoring. As an example of such an offering: Energy Supervisor is a SaaS IoT solution, born from the partnership between WINDTRE BUSINESS and OUVERT (a Company with decades of experience in the Energy Performance Analysis and Management of complex systems). The aim of this solution is to provide customers with tools, instruments and methodologies for the management of all the available data sources related to energy and natural resource consumption. Through the use of sensors and advanced Machine Learning techniques, data is analysed and aggregated and presented through dashboards for active monitoring..

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

<Not Applicable>

Functional unit used

<Not Applicable>

Reference product/service or baseline scenario used

<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario

<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions

<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

1

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?
No

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
17893

Comment

Scope 2 (location-based)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
477799

Comment

Scope 2 (market-based)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
508748

Comment

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
681459

Comment

Scope 3 category 2: Capital goods

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
564267

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
113114

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
44723

Comment

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
346

Comment

Scope 3 category 6: Business travel

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
920

Comment

Scope 3 category 7: Employee commuting

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
8481

Comment

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment

Scope 3 category 10: Processing of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment

Scope 3 category 11: Use of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
55169

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
2074

Comment

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment

Scope 3 category 14: Franchises

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
6812

Comment

Scope 3 category 15: Investments

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
3969

Comment

Scope 3: Other (upstream)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment

Scope 3: Other (downstream)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
17067

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
442505

Scope 2, market-based (if applicable)
460595

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
778281

Emissions calculation methodology
Supplier-specific method
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
35

Please explain
Total Purchased device volumes: LCA data for specific devices were taken from publicly available sources published by some of the key suppliers. Average LCA factors were created, split by device type, for devices which did not have specific LCA data. LCA factor was split into constituent process based on percentage split identified in publicly available sources (Manufacturing, Transportation (Inbound & Outbound), Use Phase, End of Life). Total Purchased device volumes per OpCo were multiplied by the specific device or average device LCA factor for manufacturing & production to calculated total emissions. Total Operational Spend received: EEIO factors applied to spend categories that account for 95% of spend.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
434989

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
EEIO factors applied to spend categories that account for 95% of spend.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
173896

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Upstream emissions factors (BEIS) applied to consumption values of each fuel. Upstream emissions factors for each operating country (IEA) applied to electricity consumption values.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
34307

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
EEIO factors applied to Logistics, Inventory and Distribution Spend.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
113

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Waste treatment emissions factors (BEIS) were used to calculate emissions based on waste quantities and treatment types.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1198

Emissions calculation methodology
Spend-based method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Where available, journey type, distance and volumes were used with BEIS business travel emissions factors to calculate total emissions. Where journey data was not available and data was only provided in the form of spend, the total spend was converted to USD and multiplied by the relevant EEIO emissions factor to calculate total emissions.

Employee commuting

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
6583

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Number of FTE was input into tool along with average commuting statistics to produce a total amount of emissions

Upstream leased assets

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
39638

Emissions calculation methodology
Asset-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Electricity consumption data obtained for specific assets and multiplied by IEA emissions factors.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Excluded on the basis that CKHGT only sells final products (devices) to end customer, there is no downstream transportation of goods.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Excluded on the basis that CKHGT only sells final products (devices) to end customer, there is no further processing of goods required.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
51883

Emissions calculation methodology
Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Total purchased device sold per OpCo ws multiplied by the specific device or average device LCA factor for use phase to calculate total device Use-phase (non country specific).

End of life treatment of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2370

Emissions calculation methodology
Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Total Purchased device volumes per OpCo were multiplied by the specific device or average device LCA factor for manufacturing & production emissions

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Excluded on the basis that CKHGT does not lease any material assets to 3rd parties and considered de minimis.

Franchises

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1693

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
For each region, the benchmark kWh/m2/year was multiplied by the regional grid electricity emissions factor to calculate an emissions benchmark (kgCO2e/m2/year). Total SQM of franchise operations for each OpCo was multiplied by the specific country emissions benchmark to calculate total franchise emissions.

Investments

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
448.2

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Investment value was multiplied by investment emissions factor to calculate total emissions associated with investment.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No other upstream to report.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No other downstream to report.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
64.47

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
459572

Metric denominator
Other, please specify (Petabytes of data)

Metric denominator: Unit total
7129

Scope 2 figure used
Location-based

% change from previous year
29

Direction of change
Decreased

Reason for change
The key drivers are the many investments CKHGT is making to consolidate and modernise networks, which is also improving energy efficiency, as well as a reduction in location-based emissions factors.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
HFCs	5888	IPCC Fifth Assessment Report (AR5 – 100 year)
CO2	11051.34	Other, please specify (UK Government GHG Conversion Factors for Company Reporting)
CH4	5.72	Other, please specify (UK Government GHG Conversion Factors for Company Reporting)
N2O	117.37	Other, please specify (UK Government GHG Conversion Factors for Company Reporting)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	1713
Italy	10129
Austria	1373
Denmark	366
Sweden	357
Hong Kong SAR, China *This data also includes combined data for Macau.*	2718
Ireland	411

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.
By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
UK OpCO	1713
Italy OpCo	10129
Austria OpCo	1373
Denmark OpCo	366
Sweden OpCo	357
HK and Macau OpCO	2718
Ireland OpCo	411

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	72907	18497
Italy	222314	322720
Austria	19237	960
Denmark	4280	18595
Ireland	21750	0
Hong Kong SAR, China *This also includes data for Macau.*	99536	99536
Sweden	2481	287

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
UK OpCo	72907	18497
Italy OpC	222314	322720
Austria OpCo	19237	960
Denmark OpCo	4280	18595
Ireland OpCo	21750	0
Sweden OpCo	2481	287
Hong Kong & Macau OpCo	99536	99536

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	40700	Decreased	7.7	CKHGT increased its renewable energy consumption by 8% compared to the prior year. 8% of the scope 2 2020 footprint = 0.08*508,748 = 40,700. Prior year scope 1 and 2 market based total = 526,640. 40,700 / 526,640*100 = 7.7%
Other emissions reduction activities		<Not Applicable>		
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology	20461	Decreased	3.9	Emissions of 2665 moved from scope 2 to scope 3 upstream leased assets. 17,796 emissions reduced due to change in emissions factors (calculated by applying 2020 emissions factors to the 2021 consumption footprint and comparing the difference to the 2021 footprint based on 2021 emissions factors). 20461/526,640*100 = 3.9%.
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	51082.44	51082.44
Consumption of purchased or acquired electricity	<Not Applicable>	682361.33	965055.21	1647416.54
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	799.62	<Not Applicable>	799.62
Total energy consumption	<Not Applicable>	683160.95	1016138	1699299

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Not relevant for our organisation

Other biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Not relevant for our organisation

Other renewable fuels (e.g. renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Not relevant for our organisation.

Coal

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Not relevant for our organisation.

Oil

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Not relevant for our organisation

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
17083.51

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
17083.51

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
33998.94

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
51082.44

MWh fuel consumed for self-generation of electricity
33998.94

MWh fuel consumed for self-generation of heat
17083.51

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	34798.56	34798.56	799.62	799.62
Heat	17083.51	17083.51	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Ireland

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
81.46

Country/area of origin (generation) of the low-carbon energy or energy attribute
Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2021

Comment

Sourcing method
Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Sweden

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
103000

Country/area of origin (generation) of the low-carbon energy or energy attribute
Sweden

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier
Electricity

Low-carbon technology type
Low-carbon energy mix, please specify

Country/area of low-carbon energy consumption
Austria

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
161863

Country/area of origin (generation) of the low-carbon energy or energy attribute
Austria

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Solid biomass - biomass from agriculture, bioliquid, biomass gas)

Country/area of low-carbon energy consumption
Italy

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
125802

Country/area of origin (generation) of the low-carbon energy or energy attribute
Italy

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Hydro, nuclear, solar, wind (onshore / offshore))

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1471

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Hydro, solar, bioenergy, wind (onshore / offshore))

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
805

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Hydro, solar, wind (onshore / offshore))

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
866

Country/area of origin (generation) of the low-carbon energy or energy attribute
Please select

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Solar , wind (onshore / offshore))

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
299592

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Unknown)

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
6552

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7153

Country/area of origin (generation) of the low-carbon energy or energy attribute
United Kingdom of Great Britain and Northern Ireland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Solar, wind (onshore / offshore))

Country/area of low-carbon energy consumption
United Kingdom of Great Britain and Northern Ireland

Tracking instrument used
REGO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

6699

Country/area of origin (generation) of the low-carbon energy or energy attribute
Please select

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area
Italy

Consumption of electricity (MWh)
832687

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
832687

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)
375810

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
375810

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Ireland

Consumption of electricity (MWh)
81461

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
81461

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Austria

Consumption of electricity (MWh)
159864

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
159864

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Denmark

Consumption of electricity (MWh)
49194

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
49194

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Sweden

Consumption of electricity (MWh)
117479

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
117479

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Hong Kong SAR, China

Consumption of electricity (MWh)
148783

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
148783

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

0.01

% total procurement spend (direct and indirect)

% of supplier-related Scope 3 emissions as reported in C6.5

17

Rationale for the coverage of your engagement

CKHGT has engaged with its device suppliers to request life cycle analysis carbon data. This is because devices are provided by a relatively number of suppliers (in many cases common suppliers across our operating companies) but with a relatively large contribution to CKHGT's scope 3 carbon footprint. Also life cycle GHG emissions associated with devices are set to become an increasingly difficult issue with consumers replacing their devices more frequently (now every 33 months on average) and the significant majority of life cycle emissions typically being produced at manufacturing stage.

Impact of engagement, including measures of success

CKHGT received life cycle carbon emissions data from the majority of its device suppliers, covering 140 different device models, enabling improved data quality / accuracy over an important element of its scope 3 footprint.

Comment

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

CKHGT engages significantly with trade association the GSMA. The GSMA represents the interests of mobile operators worldwide, bringing together more than 750 operators with almost 300 companies in the broader mobile ecosystem which includes handset and device makers, software companies, equipment providers, internet companies, as well as organisations in adjacent industry sectors. Its climate-related engagement strategy involves: membership of the GSMA's Climate Action Taskforce and participation in the collaborative meetings of that taskforce, enabling CKHGT to stay up to date on key climate related topics affecting all industry players and to influence the direction of climate-related work; participating in a collaborative GSMA Scope 3 working group which is developing an industry guidance paper on scope 3 carbon footprinting; and participating in a GSMA EU Sustainability Policy working group (with the majority of policy topics linked to climate change) enabling CKHGT to stay up to date on climate and sustainability policy developments and input to industry climate and sustainability policy discussions.

We also engage significantly with our investors on climate change. CKHGT's investor climate-engagement strategy involves regular meetings with investors, both reactively and proactively outlining its approach to climate change including in relation to setting of science based targets and transition planning. This has included an ESG investor roadshow covering a range of matters including climate change. Engagement with investors on climate change is typically led by the CKHH Group lead on sustainability, with feedback provided to the CKHGT Head of Sustainability, and has also involved the CKHGT Head of Sustainability directly a number of times.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage indirectly through trade associations

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, but we plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

The Climate Action Working Group includes senior representatives from each of the OpCos and convenes regularly to ensure the Working Group members keep each other abreast of developments and changes, policy-related or otherwise. The Head of Sustainability also communicates to the senior CKHGT executives who in turn update the Governance Board of important strategy changes. CKHGT ensures its position and views on climate change are communicated and reflected to the GSMA in an accurate and timely manner. Through regular engagement with the GSMA board, CKHGT stays in close contact with the latest thinking and developments of the GSMA.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify (GSMA ("Groupe Speciale Mobile Association"))

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The GSMA represents the interests of mobile operators worldwide, bringing together more than 750 operators with almost 300 companies in the broader mobile ecosystem. The GSMA is aligned to the goals of the Paris Agreement and has developed an industry-wide climate action roadmap, to help the mobile sector to address climate change in line with the 1.5 degrees goal. To facilitate this goal, it collaborated with the Science-Based Targets initiative (SBTi) and the International Telecommunication Union and Global e-Sustainability initiative to develop an ICT sector decarbonisation pathway , making it easier for ICT companies to set ambitious emissions targets in line with limiting global warming to 1.5 degrees Celsius. It encourages its members to become more transparent and to disclose via the CDP. It also promotes the enabling role of the mobile sector in reducing greenhouse gas emissions within society (e.g. through application of 'internet of things' (IoT) technologies. CKHGT is a member of the GSMA's Climate Action Working Group, working collaboratively with other members of the industry, and its position is aligned to that of the GSMA.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary sustainability report

Status
Complete

Attach the document
CKHH Sustainability Report 2021.pdf

Page/Section reference
126-129

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication
In mainstream reports

Status
Complete

Attach the document
CKH annual report 2021.pdf
CKHH Sustainability Report 2021.pdf

Page/Section reference
Annual Report: - Chairman's Statement pg 1 - Risk Factors pg 72 - Corporate Governance report pg 115-117

Content elements
Governance
Strategy
Risks & opportunities
Emission targets

Comment

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	No, and we do not plan to have both within the next two years	<Not Applicable>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, and we do not plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Please select	<Not Applicable>

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	Please select

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Impacts on biodiversity	CKHGT's largest operating company, in Italy, is partnered with WWF in its "GenerAction Sea" programme, protecting the Mediterranean Sea and the Italian shoreline. This is detailed in the telecommunications chapter of the CKHH sustainability report.

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Finance Director of CK Hutchison Group Telecom	Director on board

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	10083000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Other, please specify	CKHGT will be working towards developing more detailed insights that will be of benefit to our customers.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Through third party assessment and insights.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
Yes

SC2.2a

(SC2.2a) Specify the requesting member(s) that have driven organizational-level emissions reduction initiatives, and provide information on the initiatives.

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below
I have read and accept the applicable Terms