

C0. Introduction

C0.1

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

At Nokia, we create technology that helps the world act together.

As a trusted partner for critical networks, we are committed to innovation and technology leadership across mobile, fixed and cloud networks. We create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Adhering to the highest standards of integrity and security, we help build the capabilities needed for a more productive, sustainable and inclusive world.

For our latest updates, please visit us online www.nokia.com

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.

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.

Operational 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
Yes, an ISIN code	FI0009000681

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	Under our Corporate Governance Guidelines, the Board of Directors (led by the Board Chair) evaluates Nokia's environmental and social activities and governance practices (ESG), related risks and target setting as well as their implementation and effectiveness in the Company. Climate-related issues are included in the ESG topics. An example of a climate-related decision made by the Board in 2021 is that the Board approved that key ESG targets related to climate change will be included in the short-term incentive program for the CEO and Group Leadership team, and reviewed the evolving ESG requirements and expectations, investor feedback and the disclosure approach.
Board-level committee	The Board Committees monitor environmental and social developments and activities in the Company for their respective areas of responsibilities. In 2021 the Committee Charters were updated to define the ESG accountabilities of each Committee. The Audit Committee's responsibilities included, amongst others, the implementation planning of new climate and other sustainability reporting requirements. The Audit Committee also annually reviews sustainability disclosures, which include climate-related issues. The Personnel Committee assists the Board in the incorporation of the Environmental, social and governance (ESG) related metrics in the incentive structures, and oversees the human capital management. The Corporate Governance and Nomination Committee assesses and advises the Board in the ESG-related activities and practices aiming to enhance the governance structure supporting them. The Technology Committee reviews how sustainability is embedded into our technology strategy and roadmaps.
Please select	

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 major plans of action Reviewing and guiding risk management policies Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	Minimum once a year, the board has an Enterprise Risk Management (ERM) review of our key risks and opportunities, including risk factors from climate-related issues. Further oversight to climate-related issues is provided by the Board's annual sustainability review, which includes such matters as review of the targets, key actions and performance. The Board also reviews our quarterly ESG disclosures, which include climate topics, such as Nokia's latest achievements in relation to climate change mitigation and other areas, our climate-related targets and other matters. The Board has a proactive and value-driven role in driving responsible business practices at Nokia and in our value chain. In essence, the Board oversees Nokia's transparency, coupled with strong policies and procedures and overseeing ESG embedded within all parts of the organization, including the corporate, technology and Business Group strategic plans.

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
Yes	When assessing the competence of board members on climate-related issues, we consider relevant education and/or career expertise. The relevance is evaluated case by case. For example, the Chair of our Corporate Governance and Nomination Committee has climate-related competence acquired through their experience of leading Vaisala Corporation. Vaisala is a global leader in weather, environmental, and industrial measurements and works together with nearly all meteorological institutes in the world, supporting them in gathering accurate weather observations for weather forecasts that are critical for societies.	<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 Financial Officer (CFO)	<Not Applicable>	Other, please specify (Climate-related topics are reported in quarterly reports prepared under the supervision of our CFO. Our CFO functions in the role of Chief Risk Officer and presents to the Board when they review our key risks and opportunities in our ERM framework)	<Not Applicable>	Quarterly
Other C-Suite Officer, please specify (Chief Corporate Affairs Officer)	<Not Applicable>	Other, please specify (Our CCAO has overall responsibility for sustainability and climate in the Group Leadership Team (GLT). CCAO presents our climate-related strategy, progress and targets reviews to the Board on behalf of the entire GLT.)	<Not Applicable>	Annually
Other C-Suite Officer, please specify (Group Leadership Team (GLT))	<Not Applicable>	Other, please specify (The GLT reviews and approves implementation of and changes to ESG (including climate-related) policies, management & operational frameworks, strategy, targets and performance. The GLT conducts sustainability reviews at a minimum twice per year.)	<Not Applicable>	Annually
Sustainability committee	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually

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).

Sustainability Committee

Our sustainability committee is called the Sustainability Council. In line with our mode of operation, the Group Leadership Team (GLT) approves sustainability-related strategy, targets and operational frameworks, within which corporate functions and business groups can operate. This enables accountability and empowerment of each business group whilst maintaining appropriate strategic and operative oversight. Independent councils and committees, such as the Sustainability Council, are used to steer and align the sustainability agenda, ensure the implementation of Nokia's strategies, targets and frameworks and make recommendations to the GLT.

The Sustainability Council is chaired by Vice President, ESG, who reports to the Chief Corporate Affairs Officer. The Council consists of senior leaders from units representing product development, real estate, strategy and technology, human resources, and procurement. In 2021, the Council convened 7 times. The Council is tasked to steer the alignment of sustainability (including climate-related) strategy, priorities, and the implementation of sustainability activities across Nokia; contribute to the sustainability strategy and materiality assessment; to review sustainability targets and performance; and to provide additional insight to sustainability-related risks and opportunities.

Chief Corporate Affairs Officer (CCAO)

Nokia Group Leadership Team and its members are responsible for the overall management of the company including climate related issues when relevant to their area of responsibility. Our Chief Corporate Affairs Officer is a member of the Group Leadership Team and has the overall responsibility for sustainability and climate at the executive management level. During 2021, the Corporate Affairs Officer reviewed the status and provided oversight of Nokia's key sustainability programs and targets as part of quarterly business reviews. In addition, Chief Corporate Affairs Officer and Vice President, ESG together present sustainability reviews in the Board of Directors' meetings at minimum once a year. These reviews include e.g. the progress of climate-related targets, strategy, key actions and performance.

CFO

Our Chief Financial Officer (CFO) is a member of the Group Leadership Team. We report on the climate-related topics in the Group's external quarterly financial reports which are reviewed by the Board of Directors. Our CFO also has the role of Chief Risk Officer and is responsible for driving the role of Enterprise Risk Management (ERM) in our governance framework and supports in bringing ERM matters in front of the Group Leadership Team and the Board. At least once per year, the Board of Directors has an ERM review of our key risks and opportunities which are presented by the CFO. In addition, our CEO, CFO and business group presidents review additional sustainability topics at a minimum of two times per year as part of Nokia business reviews.

Group Leadership Team (GLT)

In line with our mode of operation, the GLT approves sustainability and climate-related strategy, targets and operational frameworks, within which corporate functions and business groups can operate. This enables the accountability and empowerment of each business group while maintaining appropriate strategic and operative oversight. The GLT conducts a sustainability review and provides feedback to the ESG function minimum two times per year and as topic-specific areas require. The GLT also monitors the progress of our science-based emission reduction targets across scope 1, 2 and 3 twice a year. Our CCAO presents our climate-related strategy, progress, targets reviews to the Board on behalf of the entire GLT.

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
Corporate executive team	Monetary reward	Emissions reduction target	For the Nokia Group Leadership team, in 2021, short-term incentive targets and achievements were based on a mix of metrics. Targets were measured either at a Nokia Group level or, alternatively, a mix of Nokia Group and business group level for business group presidents. One of these metrics was ESG (carbon emissions and diversity).
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The 2021 short-term incentive framework for the President and CEO was based on financial, strategic and ESG objectives. Target for "Emissions Scopes 1,2 and 3" had a 5% weight.

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	1	Covers our annual plan
Medium-term	1	3	Covers our long-range planning period of 3 years
Long-term	3	10	Long term is typically up to 10 years but in some cases we will consider a longer time horizon.

C2.1b

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

Nokia risk management covers strategic, operational, financial, compliance and hazard risks and opportunities. Climate change related issues are part of this risk management process and taxonomy. Under the Nokia Enterprise Risk Management (ERM) framework, significance of individual risk factors is evaluated against six different dimensions (people & environment, compliance, reputation, financial, operative and strategic impact) where the rating per each dimension is based on qualitative criteria on a scale from 0 to 4, where 0 refers to "no impact" and 4 implies a major impact. Risk or an opportunity has a substantive impact on our business when it could, if realized, prevent Nokia from reaching a strategic goal or an objective or require re-evaluation of mid-term/long-term strategic goals or objectives (rating 3 or 4). As a quantifiable indicator, any risk or opportunity with an impact over 150 mEUR on our operating profit or balance sheet is also considered as substantive for Nokia.

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

Climate-related risks and opportunities are integrated into the multi-disciplinary company-wide risk management process which covers strategic, operational, financial, compliance and hazard risks and opportunities. The process for identifying, assessing and responding to climate-related risks and opportunities covers direct operations, as well as upstream and downstream value chains, and short-, medium- and long-term time horizons.

Key risks and opportunities are primarily identified against business targets either in business operations or as an integral part of strategy and financial planning. The Nokia Enterprise Risk Management (ERM) Policy defines key principles of Nokia ERM that apply to all Business Groups, transversal, central and support functions (entities). One of the core principles is that each entity head is an owner of the risks in the area of responsibility and is responsible to identify and manage and mitigate key risks and capture opportunities (although all employees are responsible for identifying, analyzing and managing risks as appropriate and applicable to their roles and duties.)

Risk identification and assessment process is a combination of top-down and bottom-up approaches. The bottom-up process consists of a regular risk and opportunity assessment update, including interviews, desktop analysis or other means to discover new risks or opportunities. Entities review risk and opportunity qualitative ratings and update financial impact and likelihood estimates as needed, in order to determine which risks and opportunities could have a substantive financial or strategic impact.

Responses to climate-related risk and opportunities, such as risk mitigation or opportunity development actions, are documented during the same assessment process. Bottom-up update takes place typically once in a year. Identified key risks and opportunities are managed top-down and monitored as part of business performance management.

In addition to the normal risk identification and assessment process, our ESG function and the Sustainability Council also have a role in assessing climate-related risks and opportunities. The Council consists of senior leaders from units representing product development, sales, real estate, strategy and technology, human resources and procurement, providing a cross-organizational forum to discuss also climate-related issues. The Council steers the alignment of the sustainability strategy, priorities and the implementation of sustainability activities across Nokia. The Council also contributes to the sustainability strategy, materiality assessment and review of sustainability targets and performance, and provides additional insight to risk and opportunity assessment, including climate-related topics. In 2021, the Council convened seven times, and related to the topic of climate change, the Council for example steered the setting of climate targets and the work related to the EU Taxonomy.

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	As a global company, we are subject to many climate-related regulatory requirements around the world, such as the EU energy efficiency directive and the EU Taxonomy Regulation and related Climate Delegated Act. Implementation of such regulations typically increases operating costs for companies and ultimately get transferred to the sales prices. Hence, we expect the regulation to impact our operating costs and likely to do the same for our suppliers, thus ultimately impacting the cost of components for Nokia as we procure components and manufacture goods on a global basis.
Emerging regulation	Relevant, always included	We continuously monitor proposed new regulations and assess their potential impacts on Nokia. Current international trends show increased enforcement activity in the area of climate change. Examples of climate-related emerging regulation risks that we consider include the development of carbon pricing mechanisms around the world and the evolving scope of climate-related reporting requirements for listed companies (such as the EU Taxonomy for sustainable activities, EU Corporate Sustainability Reporting Directive, U.S. SEC proposal on Climate-related disclosures and IFRS Sustainability reporting standards). Such regulations are expected to bring additional cost to Nokia, for example, by requiring more resources in the transition needed to comply with additional reporting requirements or by potentially increasing the cost of energy/components.
Technology	Relevant, sometimes included	In our highly competitive industry and market with a small number of vendors, technology leadership is required to underpin momentum and financial returns. We partner with our customers so that our technology can help meet some of the most pressing challenges the world faces such as climate change and stalling productivity growth. The energy efficiency of our network equipment is a focus area across the organization. 5G is already natively greener than 4G, but we investigate how we can further improve energy efficiency in 5G-Advanced. However, the R&D of new and innovative, technologically advanced products, as well as upgrades to current products and new generations of technologies, is a complex and uncertain process requiring high levels of innovation and investment, including trying to accurately anticipate the technological, regulatory and market trends. We may focus our resources on products and technologies that do not become widely accepted or ultimately prove unviable. The move to more low carbon solutions could, for example, create longer lead times, lead to less agile supply and/or higher component costs or force Nokia to increase local manufacturing. An example of a solution that we are exploring is the use of Artificial Intelligence/Machine Learning in NG-RAN. This will share the traffic between different frequency layers and technologies as well as optimize mobility in the network.
Legal	Relevant, sometimes included	Failure to comply with our legal obligations in relation to climate is a potential risk to our business. An example of the legal risks that we consider in many risk assessment areas is whether Nokia has processes in place to monitor changes in the laws and regulations, including those related to climate. In addition, we consider the possibility of litigation/claims brought by governments, private organizations, or individuals for claims arising from alleged failures to meet legal requirements for climate-related matters, failure to comply with new or changed disclosure requirements, or for breaches of climate-related contractual commitments and representations that may be included in the customer bid and contract documentation.
Market	Relevant, always included	Climate change drives green energy demand, energy consumption and emission reduction plans as well as circular economy approaches and may shift the criteria for our customers' vendor selection. In addition to changing customer behavior and its potential impact on our sales demand, climate-related physical and transitional impacts can inflict upward pressure in the cost of raw materials, which could transfer into increased component and energy prices.
Reputation	Relevant, sometimes included	Our reputation could be negatively impacted by a failure to appropriately address existing and emerging matters relating to climate. We may fail or be unable to fully achieve one or more of our climate-related targets due to a range of factors within or beyond our control, and we may adjust or modify our targets in light of new information, adjusted projections, or a change in business strategy, any of which could negatively impact our brand and reputation. A failure to, or perception of a failure to, disclose climate-related metrics and set targets that are rigorous enough or in an acceptable format, could negatively impact our brand, reputation, and business. Another example of a climate-related reputational risk we consider is that third-party ratings could make inaccurate or unsubstantiated interpretations of our climate-related practices and performance based on their own assessments and publish such interpretations with or without offering a possibility for us to comment.
Acute physical	Relevant, always included	Acute physical climate-related events may cause disruptions in our or our partners' manufacturing, service creation, delivery, logistics or supply chain. Examples of acute physical risks we consider include e.g. tropical cyclones, wildfires and floods and related severe damage to a production facility of a critical supplier, our operations or our customer.
Chronic physical	Relevant, sometimes included	Long-term physical impacts caused by climate change, such as rising temperatures, may pose risks to our operations and supply chain. Examples of chronic physical risks we consider include water scarcity and rising temperatures and related impacts on our operations. Temperature rise could, for example, potentially lead to increased failure rates in outdoor deployments.

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?

Upstream

Risk type & Primary climate-related risk driver

Acute physical	Other, please specify (Increasing likelihood of extreme weather events or natural catastrophes)
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Primary potential financial impact

Other, please specify (Loss of inventory)

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Our manufacturing network is dispersed around the world: Asia Pacific, Japan and India (29% in 2021), Europe (27%), China (29%) and the Americas (15%). Many of our own production sites or the production sites of our suppliers/partners are geographically concentrated, with large number of such suppliers/partners based in East and South East Asia, a region that can be sensitive to tropical cyclones. For instance, we have our own manufacturing facilities in Suzhou (China) and Chennai (India) that are both in an area vulnerable to tropical cyclones. We rely on efficient logistic chain elements, such as regional distribution hubs (such as one in Suzhou) or transport chain elements (main ports, streets, and airways). In the event that any of these geographic areas are affected by extreme weather events or natural catastrophes, such as heavy storms and rain, tornadoes, floods, extreme heat or wildfires, production or deliveries may be disrupted if the facilities, manufacturing equipment or inventory within the premises get damaged by water, heat or if operations must be shut down, for instance, due to unstable commercial power and road closures.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

180000000

Explanation of financial impact figure

Based on data from our crisis and incident monitoring system, the probability of an extreme weather event or a natural catastrophe to cause severe damage to our operations or of a critical supplier is rather unlikely, but in the long term the probability of such an event may increase as climate change is expected to increase the occurrence and severity of extreme weather. As an example, roughly 30% of all our crisis alarms or incidents reported in 2021 were related to tropical storms or wildfires. Fortunately, those have had from minimal to no impact on our operations. As a result, our estimate for potential minimum financial impact is zero.

Our supply network consists of 25 factories around the globe and six hubs for customer fulfilment. For instance, in the event one of our Electronic Manufacturing Suppliers' manufacturing operations were disrupted or destroyed, we would be activating alternative supply source and capacity, likely with minimal or no impact on customer deliveries. On the other hand, if any of our regional distribution hubs would be caught in the middle of a tropical cyclone or a wildfire, it could lead to loss of inventory in those premises as a result of being subject to extreme heat and/or water. Value of such inventories typically vary between 5–180 mEUR depending on inventory location. We use the 180 mEUR as our maximum financial impact, although it could be even more depending on the level of customer deliveries at the end of each quarter. Likely other implications would be customer project rollout delays with contractual penalties, deferred revenue or loss of sales to competition.

Cost of response to risk

4000000

Description of response and explanation of cost calculation

We maintain business continuity plans to ensure that products, services and solutions continue to be delivered at acceptable levels during a significant disruption to operations. Business continuity planning includes, for example, response plans for IT outages and transfer of production between sites. Securing alternative supply sources is part of our normal global supply change management. These risk management actions often involve specific case studies, such as a deep dive into the conditions in India that suffer from severe flooding, to map the potential risk areas and impacts. In addition, the Real Estate organization considers both adaptation and mitigation of climate change in its site selection and operations. As an example, the impact of extreme weather conditions is considered as part of the selection of new office locations to manage the impact of natural catastrophe perils such as tropical cyclones or wildfires.

The previously described activities are a part of our normal business process without significant additional cost implications. In addition, Nokia has insurance for property damage covering buildings, equipment and machinery. We consider cost of property damage insurance and maintaining effective business continuity plans as the cost of risk response which together amount to less than 4 mEUR. Business continuity plans are updated roughly in six months intervals with estimated time investment (and related labor costs) of approximately 15 FTE (Full time equivalents) across the company altogether annually. We assume the cost of 1 FTE to be approximately 100 000 EUR.

This gives the calculation of: Property damage insurance 2 mEUR + 15 FTE (Full time equivalents) * 0,1 mEUR = 3.5 mEUR

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Chronic physical	Other, please specify (Rising mean temperatures and impact on disease vectors)
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Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

COVID-19 pandemic has taught everyone a new lesson on the possibility of a global pandemic and how far reaching the impacts to the global economy can be. Rising mean temperature is likely to change the "disease vectors" and enable spread of some infectious diseases, including Lyme disease and mosquito-borne diseases such as malaria and dengue more broadly than before or increasing likelihood for another COVID-19 like pandemic and related disruption to the business (see for example, Harvard School of Public health: <https://www.hsph.harvard.edu/c-change/subtopics/coronavirus-and-climate-change>). In the second quarter of 2022, cases of Monkeypox have been identified in several non-endemic countries.

The degree to which such health threats may affect our employees, supply chain, and our results, assets or financial condition are highly uncertain and cannot be accurately predicted, including, but not limited to, the duration and spread of the outbreak, its severity, locations impacted, the governmental or our actions to contain the virus or treat its impact, and how quickly and to what extent normal operating and/or economic conditions can resume. The main impacts of COVID-19 on our operations have been related to temporary factory closures causing deferred sales, longer component lead times, prolonged shipping times caused by decline in global logistics capacity and increased remote working and travel restrictions affecting our employees.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

200000000

Potential financial impact figure – maximum (currency)

300000000

Explanation of financial impact figure

We can estimate a ballpark range of financial impact of a global pandemic based on our experience with COVID-19 but it is impossible to predict with accuracy the precise impact of such risk on us, our operations and our business in the future. During 2020, the impact of COVID-19 on our financial performance and financial position was primarily related to delivery and implementation challenges, including temporary factory closures in the first half of the year, with a 200-300 mEUR negative impact on quarterly net sales, which we use as a basis for minimum and maximum impact figures. Aggregated full year negative impact of 200mEUR on net sales, with majority of these net sales shifting to future periods rather than being lost, related primarily to Submarine Networks in Networks Infrastructure, which experienced temporary factory closures that particularly impacted Q1 2020 and Q2 2020. In addition, COVID-19 affected our operational costs and cash flows in 2020, for example as a result of temporarily lower travel, temporary delays in capital expenditure, lower inventories and cash outflows related to income taxes due to tax reliefs. However, we also concluded having had a temporary benefit of approximately 250 mEUR in 2020 because of lower travel and personnel expenses due to COVID-19 in overall.

Cost of response to risk

2000000

Description of response and explanation of cost calculation

Nokia has a global manufacturing footprint designed for optimized global supply, and to mitigate against risks such as local disruptive events, transportation capacity problems, and political risks. As a result, we are not dependent on one location or entity. As COVID-19 emerged, we established a global command center to manage the supply chain challenges arising from the outbreak and were ready to activate relevant business continuity plans should the situation in any part of our organization have required this.

We put in place strict protocols for Nokia facilities and provided clear advice to our employees about how they can mitigate the risks of COVID-19 in situations where they have to go about critical work. The range of steps taken included banning international travel for Nokia employees, except for strictly-defined 'critical' reasons; closing all our facilities to all visitors, with the exception of people engaged in essential maintenance and services, asking our staff to work from home wherever possible, enhancing building hygiene measures across our facilities, and providing clear advice on how staff can mitigate health risk by maintaining good personal hygiene and wear masks. As working from home became a "new norm", we also provided guidance on how staff can maintain a healthy work-life balance and look after their physical and mental well-being. As a matter of fact, we were able to pivot to remote working very effectively in the early days of pandemic and today Nokia has adopted a hybrid work model offering its employees flexibility on where and how they want to work.

Our business continuity planning covers operative disruptions such as loss of staff or suppliers which relate directly to the implications of COVID-19. We consider cost of maintaining effective business continuity plans as the cost of risk response which amounts to less than 2 mEUR. Business continuity plans are updated roughly in six months intervals with estimated time investment and related labor costs of approximately 15 FTE (Full time equivalents) across the company annually. We assume the cost of 1 FTE to be approximately 100 000 EUR.

This gives the calculation of: 15 FTE (Full time equivalents) * 0,1 mEUR = 1.5 mEUR

Comment**Identifier**

Risk 3

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Market	Other, please specify (Increased cost of energy and raw materials)
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Nokia is not an energy-intensive company (annual energy costs average typically less than EUR 100 million). However, climate change and the initiatives to transition to lower carbon energy sources may impact the whole value chain. It may lead to increase in the cost of raw materials and energy and may thus result in an increase in our own costs and/or increase the production costs for our suppliers- who are likely to transfer the cost pressure to us in increased service and component prices. We may need to offset the cost increase by increasing the price of our products. Furthermore, energy price increases may reduce the purchasing power of consumers and hence impact our business customers' willingness to spend. However, in our risk analysis the assumption is that the impact is long term and that the adverse impact on our industry or Nokia would not be disproportionately higher than on other industries or to our competitors at least to a significant extent.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

150000000

Explanation of financial impact figure

Our energy cost was less than EUR 100 million in 2021. Assuming a 30% increase in our energy cost due to a potential increase of fuel/energy taxes or other changes in regulations, our annual direct costs would increase by approximately EUR 30 million. The estimate has been calculated as follows: 100* 0.3 = 30. We have seen an increase in global energy prices during 2022, however that is more likely caused by the Russian invasion in Ukraine rather than climate change. Looming energy crisis is seemingly slowing down or even reversing the transition to lower carbon energy sources, hence the minimum potential financial impact can be zero, at least in short term. Given the size and scope of our portfolio, we purchase over EUR 12 billion worth of products and services per year from 11 000 different suppliers. Assuming that climate change and transition to lower carbon energy sources would increase purchase prices by 1%, that would represent EUR 120 million increase in our costs. These calculations are provided purely as a sensitivity and should not be interpreted to imply accuracy on the financial impact of the risk described. We use EUR 150 million (EUR 30 million increase in energy prices + EUR 120 million increase in purchase prices) as the potential maximum financial impact.

Cost of response to risk

2000000

Description of response and explanation of cost calculation

Our experts in functions such as Legal, Sustainability and Procurement monitor related regulations and legislative developments, such as the EU energy efficiency directive on the energy performance of buildings and work throughout our value chain to prepare for changes. We are continuously implementing measures to increase our own and our customers' energy efficiency and engage our suppliers to do the same.

As a case example on how we reduce the risk of increased energy costs related to potential carbon price increase, in 2021 we continued to reduce energy consumption related emissions in our facilities. The GHG emissions from facilities decreased by 30% as compared to 2019, which clearly exceeded our target of 20%. We have set a science-based emission reduction target (SBT) aligned with 1.5°C. Our SBT is to reduce GHG emissions by 50% by 2030 across our value chain (Scope 1, 2 and 3) compared to 2019 emissions. In addition to our SBT, we have set other short-, medium- and long-term targets in specific areas of our operations and value chain to drive concrete actions that support the achievement of the SBT and in part help mitigate the impacts of potential increase in energy cost.

We encourage our key suppliers to report their climate impacts and set carbon reduction targets through the CDP Supply Chain Program, which helps us to plan improvement programs with our suppliers and improve our Scope 3 emissions reporting. We also run training workshops for our suppliers, covering topics like climate change. These on-going activities in part help to mitigate our energy related cost and risk.

Estimated annual cost impact of risk management is less than EUR 2 million. The magnitude of impact has been estimated based on related labor costs of approximately 15 FTE (Full time equivalents). Often the benefits outweigh the costs of management (e.g. reduction in energy use and air travel) and the actions are part of overall business conduct. Therefore, no overall meaningful additional cost impact is observed.

We assume the cost of 1 FTE to be approximately 100 000 EUR.

This gives the calculation of: 15 FTE (Full time equivalents) * 0,1 mEUR = 1.5 mEUR

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?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

We have an impact on climate from a portfolio perspective by continually driving down the power consumption of our products, thus improving the energy efficiency of the products when in use by our customers. The development and/or expansion of low emission goods and services is thus a recognized opportunity for our business.

5G is a natively greener technology than its predecessor 4G and can potentially provide 100 times more traffic with less energy per bit. Beyond its own footprint, 5G is expected to reduce energy use in other sectors of society and industry as it enables new robust use cases. Nokia AirScale Radio Access is a complete radio access solution that helps telecom operators to address the increasing demands for mobile broadband. Innovations such as liquid cooled base stations, new chipset designs and power saving software features based on artificial intelligence, all provide impetus to improve the energy efficiency of 4G and 5G networks and thus minimize related CO2

emissions.

The energy efficiency of mobile networks can be significantly improved by using power-saving features, small cell deployments and new 5G architecture and protocols. 5G has powerful energy-saving features such as advanced sleep modes which help reduce power consumption particularly in low traffic. Our AirScale radio base station products provide even more powerful energy saving software features when network traffic is medium or high. Over 150 customers have installed energy efficiency software features on our products, including more than 30 customers with 5G energy efficiency features. Over 20% of our radio products in the field have one or more energy efficiency software features activated.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

222000000

Explanation of financial impact figure

It is very difficult to estimate the impact as it relates to long-term development with various uncertainties. Based on our 2021 business volumes, for example a 1% growth in demand would lead to approximately EUR 222 million increase in our annual net sales (total sales were EUR 22 202 million in 2021), so explanation of the maximum financial impact figure is $0.01 * 22\ 202 = 222$ million. In the event of no increase to sales, the financial impact would be 0 and thus we consider 0 as a potential minimum financial impact figure. These calculations are provided purely as a sensitivity and should not be interpreted to imply accuracy on the financial impact of the opportunity described.

Cost to realize opportunity

1000000

Strategy to realize opportunity and explanation of cost calculation

Our main strategy to realize the opportunity is to invest in R&D to develop energy efficient products. In 2021, our R&D spend was EUR 4 214 million. A part of the R&D spend goes to activities such as developing our AirScale Radio portfolio, new energy efficient fiber access solutions and chipset innovations. The costs of these improvements and new developments are integrated into our standard product roadmaps. Our Design for Environment (DfE) approach helps to ensure we create technologies that incorporate environmentally sustainable principles. Life cycle thinking is a key component of this approach. It helps us reduce our products' lifetime environmental impact by improving material and energy efficiency and enables compliance with both regulatory and our own requirements. Estimated annual cost to realize the opportunity is around EUR 1 million, referring to related labor costs of approximately 10 FTE (Full Time Equivalent) with approximate cost of 1 FTE assumed as ~EUR 0.1 million.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

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

Nokia is well positioned to play a key role in the connected world that can help society, people and the planet in various ways, including decarbonization of industry and addressing climate change related challenges. Examples of possible opportunity areas are reductions in emissions from physical processes, better use of scarce resources through precision agriculture and improved water management and mitigating risks of flood or drought. Reliable communications infrastructure is also essential in various catastrophic situations (e.g. destruction by typhoons or hurricanes).

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

222000000

Explanation of financial impact figure

It is very difficult to estimate the increased revenues through access to new and emerging markets, as the impact relates to long-term development with various uncertainties. Based on our 2021 business volumes, for example a 1% growth in demand would lead to approximately EUR 222 million increase in our annual net sales (total sales were EUR 22 202 million in 2021). $0.01 \cdot 22\,202 = 222$ million. In the event of no increase in demand, the financial impact would be 0 and thus we consider 0 as a potential minimum financial impact figure. These calculations are provided purely as a sensitivity and should not be interpreted to imply accuracy on the financial impact of the opportunity described.

Cost to realize opportunity

1000000

Strategy to realize opportunity and explanation of cost calculation

Nokia is well positioned to play a key role in the connected world that can help society, people and the planet in various ways, including decarbonization of industry and addressing climate change related challenges. Examples of possible opportunity areas are reductions in emissions from physical processes, better use of scarce resources through precision agriculture and improved water management and mitigating risks of flood or drought. Reliable communications infrastructure is also essential in various catastrophic situations (e.g. destruction by typhoons or hurricanes).

The following case examples describes activities/products to realize the opportunity. Our Ultra Compact Network is a rapidly deployable 4G solution which enables vital public safety communications to be implemented at emergency scenes where wide area network coverage is not available. In addition, the joint development of LuxTurrin5G ecosystem led by Nokia forms the digital backbone for cities to become smart and sustainable. The multi-disciplinary consortium of 26 partners has achieved solid results together, and announced that the solution is now ready for global smart city markets. The modular smart poles are equipped with 5G base stations providing fast, reliable and secure connections, and video cameras, radars, and sensors needed for navigation, weather, temperature, air quality or carbon dioxide measurement can be integrated into the poles.

Our R&D spend was EUR 4 214 million in 2021 and a part of this goes to activities like developing our AirScale Radio portfolio, new energy efficient fiber access solutions and chipset innovations. The costs of these improvements and new developments are integrated into our standard product roadmaps. Our Design for Environment (DfE) approach helps to ensure we create technologies that incorporate environmentally sustainable principles. Life cycle thinking is a key component of this approach. It helps us reduce our products' lifetime environmental impact by improving material and energy efficiency and enables compliance with both regulatory and our own requirements. Estimated annual cost to realize the opportunity is around EUR 1 million, referring to related labor costs of approximately 10 FTE (Full Time Equivalents), the approximate cost of 1 FTE assumed as ~EUR 0.1 million.

Comment**Identifier**

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Move to more efficient buildings

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Increasing the energy efficiency of buildings can bring reductions in facility energy costs. Energy saving measures are done primarily for business reasons like cost savings, and only secondarily because of the identified climate related risks and opportunities. We have a global Environmental Management System (EMS) through which we analyze our most significant environmental aspects annually. We take into account current and potential future regulatory and other related requirements, stakeholder interest, the size of the environmental impact, related risks and opportunities, and current and potential changes in our business. Our own operations are certified under the ISO 14001:2015 EMS standard. In 2021 the coverage of employees within the scope of that certification was 88%.

Our main climate target is our science-based target (SBT). Our SBT is to reduce greenhouse gas emissions by 50% by 2030 across our value chain (Scope 1, 2 and 3) compared to 2019 emissions. The target is aligned with limiting global warming to 1.5°C. In 2021, we also joined the RE100 initiative, a global initiative led by the Climate Group in partnership with CDP, which brings together the world's most influential businesses committed to 100% renewable electricity. Our RE100 target is to achieve 100% purchased electricity from renewable sources by 2025 to power our offices, R&D labs, and factories. Energy efficiency related actions in our offices and factories to achieve these targets are on-going, and in 2021 the GHG emissions from our facilities were reduced by 30% compared to the 2019 baseline. 53% of total purchased electricity was associated with renewable sources.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

30000000

Explanation of financial impact figure

Our annual energy costs are typically less than EUR 100 million. Assuming the energy efficiency increase of 30%, our energy costs could be reduced annually by

approximately EUR 30 million based (0.3*100=30 million). This calculation is provided purely as a sensitivity and should not be interpreted to imply accuracy on the financial impact of the opportunity described.

Cost to realize opportunity

1000000

Strategy to realize opportunity and explanation of cost calculation

Our strategy to realize this opportunity is to implement projects that are designed to improve facility operational efficiency. In 2021, such projects included, for example the utilization of LED lighting at sites within China, Portugal, Poland and Singapore; the use of partial free cooling in Finland; and optimization of cooling towers and chillers in India. In addition, transferring real estate operations to more energy efficient sites in Germany and the US has brought reductions in energy use compared to the previous sites.

Annual cost impact related to realizing the opportunity is around EUR 1 million. The cost impact (referring to related labor costs), and typically the benefits outweigh the costs with a net positive financial impact. The impact has been estimated based on related labor costs of approximately 10 FTE (Full time equivalents) with approximate cost of 1 FTE assumed as ~EUR 0.1 million. .

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

Shareholders may exercise their right to speak and ask questions at the Annual General Meeting (AGM).

Frequency of feedback collection

Annually

Attach any relevant documents which detail your transition plan (optional)

nokia-people-and-planet-2021-sustainability-report.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 and quantitative	<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
Physical climate scenarios RCP 2.6	Company-wide	<Not Applicable>	<p>Parameters: Parameters included in our analysis include the likelihood of extreme weather events, risks to health, livelihoods, food security, water supply, cities and economic growth and poverty. We have focused on comparing the emission pathways likely resulting in the warming of 1.5°C and 2.0°C and their potential impacts.</p> <p>Assumptions: Assumptions include e.g. increased likelihood of extreme weather events when the global temperature increases from 1.5°C to 2.0°C, which might impact especially Nokia employees in Asia-Pacific or manufacturing suppliers in East and South East Asia Risks to health, livelihoods, food security, water supply, cities and economic growth.</p> <p>Analytical choices: Our analysis using this scenario is qualitative. The time horizon considered is 3–10 years, covering our long-range planning period and long-term horizon. Value chain segments included in the analysis are direct operations, upstream and downstream.</p>
Transition scenarios IEA 2DS	Company-wide	<Not Applicable>	<p>Parameters: Parameters included in the scenario include the development of the energy mix and carbon intensity of the electricity grid, and the sales mix of our products and their power consumption development. Decarbonization of the ICT sector depends largely on the electricity grid emissions. As the large part of our emissions come from the customer use of sold products that use electricity, the grid carbon intensity is one of the most important factors in our analysis.</p> <p>Assumptions: Assumptions include rapid decarbonization pathway in line with international policy goals and 2°C of global warming, with grid carbon intensity reaching ~250 gCO₂e/kWh in 2030.</p> <p>Analytical choices: Our analysis using this scenario is quantitative. The time horizon considered for the energy mix development, carbon intensity of the electricity grid and our product sales mix and power consumption is until 2030. Value chain segments included in the analysis are direct operations, upstream and downstream.</p>
Transition scenarios IEA B2DS	Company-wide	<Not Applicable>	<p>Parameters: Parameters included in the scenario include the development of the global energy mix, carbon intensity of the electricity grid, and the sales mix of our products and their power consumption development. Decarbonization of the ICT sector depends largely on the electricity grid emissions. As the large part of our emissions come from the customer use of sold products that use electricity, the grid carbon intensity is one of the most important factors in our analysis.</p> <p>Assumptions: Assumptions include the energy sector reaching carbon neutrality by 2060, and grid carbon intensity reaching ~230 gCO₂e/kWh by 2030.</p> <p>Analytical choices: Our analysis using this scenario is qualitative. The time horizon considered for the energy mix development, carbon intensity of the electricity grid and our product sales mix and power consumption is until 2030. Value chain segments included in our analysis are direct operations, upstream and downstream.</p>

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

Focal questions addressed in our scenario analysis included, for example:

1. What are the most significant potential gaps in achieving our 1.5C climate targets/transitioning to a 1.5C world?
2. In which areas of our business and operations are the largest acceleration needs and potential for emission reduction?

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

1. Decarbonization of the global electricity grid is beyond our control, and in case the speed of grid decarbonization lags significantly behind from the 2DS and B2DS scenarios, it may pose a challenge for our transition to a 1.5°C world.
2. The largest part of our emissions come from the customer use of sold products (scope 3, category 11), so investing in product energy efficiency in R&D activities is crucial for achieving our scope 3 emission reductions. In addition, recognizing customer uptake of green electricity to operate the networks could accelerate our alignment with a 1.5°C world. Currently, we calculate our scope 3, category 11 emissions by applying global average grid emissions, and do not collect information on the potential customer purchases of green electricity certificates. These are the two most significant areas with potential and need for emission reduction. On the other hand, there are areas where emission reduction possibilities are more limited, such as our marine fleet related to our subsea cables business.

We have used the results of the scenario analysis as a basis for setting our 1.5°C aligned science-based emission reduction target (SBT) and planning related actions on different areas of operations, including investment in the development of more energy efficient solutions and setting short and medium targets that support the achievement of our SBT by 2030. We have also made a decision to purchase more renewable electricity and to join the RE100 initiative where our target is to purchase 100% renewable electricity across Nokia facilities, including offices, R&D labs and factories by 2025.

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	<p>Our products play a growing critical role in helping other industries, particularly asset intensive industries and broader society to decarbonize and increase efficiency that reduces waste of natural resources. This is our handprint. Digitalization and enhanced connectivity provided by our solutions support industry verticals from manufacturing, logistics, and transportation in reaching their sustainability goals and can help enable their net zero pathway. Our solutions support the energy industry's transition and help the agricultural sector bring in more sustainable practices. Our handprint provides our greatest mid to long-term opportunity.</p> <p>On our footprint, customer demand for products and services that generate lower emissions is identified as an opportunity with medium- and long-term impact. For mobile service providers, a major part of their carbon emissions come from the radio access network. A case example of one of the most substantial strategic decisions made in this area, that have been influenced by climate-related risks and opportunities, is the development of energy efficient products such as our AirScale radio products and more power efficient chip sets (FP5). Our climate-related risk and opportunity analysis has also influenced our target setting: we have set a target to achieve 50% reduction of average power consumption of 5G mMIMO Base Station by 2023 from 2019 baseline. On the group level we have set a Science Based Target to halve our emissions across scope 1, 2 and 3 between 2019–2030, covering close to 100% of our product portfolio.</p> <p>Our AirScale radio base station solution (BTS) spearheads our commitment to help our customers build a sustainable business supported by a zero emissions network. Innovative hardware and intelligent software cut base station energy consumption. Over 150 customers have installed energy efficiency software features to our products, and over 20% of our radio products in the field had one or more energy efficiency software features activated.</p> <p>Due to continued demand for connectivity and capacity, our Network Infrastructure (NI) Business Group continues investment in products such as our own silicon (FP5, PSE-Vs/6, Quillion) Systems and advanced SW that drastically reduce power consumption. IP Network FP5 chip sets achieve up to 75% reduction in power consumption over previous generations.</p>
Supply chain and/or value chain	Yes	<p>Increase in energy cost has been identified as a potential risk with medium- and long-term impact, and that is why we have requested some 500 of our suppliers to disclose their climate performance and targets through the CDP supply chain module. This engagement with our suppliers on climate change is a case example of one of the most substantial strategic decisions made in this area that have been influenced by the climate-related risks and opportunities. It has impacted both Nokia and our suppliers' cost and workload.</p>
Investment in R&D	Yes	<p>Energy efficiency of products has been identified as an important topic and an opportunity with medium- and long-term impact. Our Design for Environment (DfE) R&D process addresses energy efficiency of all our products. A case example of the most substantial strategic decisions made in this area that have been influenced by the climate-related risks and opportunities include the development of new more energy efficient hardware and software, such as our ReefShark chipset, FP5, Quillion and PSE-V.</p>
Operations	Yes	<p>Energy savings in our operations has been identified as an opportunity with short-, medium- and long-term impact. A case example of the most substantial strategic decisions made in this area that have been influenced by the climate-related risks and opportunities include setting our climate-related targets. We have set a Science Based Target to reduce GHG emissions across scope 1, 2, and 3 by 50% by 2030 (base year 2019), and an additional target to purchase electricity only from renewable sources by 2025 to power our offices, R&D labs, and factories, aligned with the requirements of the RE100 initiative.</p>

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	Revenues Indirect costs	<p>Climate-related issues are one of the many factors impacting our product competitiveness and their impact on revenue is difficult to quantify to the extent it would have a clear impact in the financial planning process. A case study example of how climate-related risks and opportunities have influenced our financial planning include e.g. significant new product introductions and related investments such as ReefShark chipset and AirScale radio products. Significant new product introductions are taken into consideration in the planning process in case they have significant impact on the sales margin development. However, so far it has not been feasible to specify the climate change related product revenue risks and opportunities in the financial planning. Time horizon covered by the financial planning is our long range plan, i.e. covering the current year and 3 consecutive years.</p> <p>Energy saving measures have some impact on operating costs and cost savings – for example in our facilities we speak about some millions of EUR annual impact (less than 30 MEUR). These activities are done primarily for business reasons like savings in energy costs, and only secondarily because of the identified climate related risks and opportunities. Time horizon covered is the annual financial planning (short-term).</p>

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?

Yes

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.

Financial Metric

Other, please specify (Share of our total Scope 1, 2 and 3 emissions covered by our Science-based emission reduction target (SBT) in 2021)

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

92

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

We have set a science-based emission reduction target (SBT) aligned with a 1.5°C world. In 2021, the scope of our Science Based Target (SBT) covered 37 598 000 metric tons CO2e which was 92% of our total scope 1, 2 and 3 emissions in 2021.

The target applies to our scope 1, 2 and 3 emissions, and covers the following activities (and related spend and revenue):

- Scope 1: emissions from our facilities, car fleet and marine fleet
- Scope 2: emissions from purchased energy
- Scope 3: emissions from the customer use of sold products (covering almost 100% of our current portfolio) and emissions from the logistics and the final assembly factories in our supply chain.

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

2017

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 3

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Category 1: Purchased goods and services

Category 4: Upstream transportation and distribution

Category 11: Use of sold products

Base year

2019

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

124992

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

327246

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

34508452

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

34960690

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)

88

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

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]

17480345

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

124254

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

224453

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

37249595

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

37598302

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

-15.0890156916239

Target status in reporting year

Revised

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Please explain target coverage and identify any exclusions

Our SBT is to reduce greenhouse gas emissions by 50% by 2030 across our value chain (Scope 1, 2 and 3) compared to 2019 emissions.

This recalibrated target was accepted by the Science Based Targets initiative in March 2021 and is aligned with limiting global warming to 1.5°C, replacing our original science-based targets set in 2017. The baseline year for our updated SBT is 2019 and reported emissions in the base year were 34.961 million metric tons CO2e.

The target applies to our Scopes 1, 2 and 3 emissions, and covers the following activities:

- Scope 1: emissions from our facilities, car fleet and marine fleet
- Scope 2: emissions from purchased energy
- Scope 3: emissions from the customer use of sold products (covering almost 100% of our current portfolio) and emissions from the logistics and the final assembly factories in our supply chain

Plan for achieving target, and progress made to the end of the reporting year

Despite great progress in reducing our Scope 2 emissions, we were not on track with our SBT at the end of 2021. As anticipated, the emissions covered by our SBT were 8% above our cumulative carbon budget for 2020–2021, if a linear reduction from 2019 is expected annually. However, we do not expect the reduction of emissions in our value chain to be a linear process. We still plan to achieve our target of 50% reduction in emissions by 2030 as we see greater impact as more energy efficient products and features of our portfolio are adopted and decarbonization of the electricity grid continues globally.

To drive concrete actions that support the achievement of our SBT, our plan includes other short-, medium- and long-term targets and emission reduction initiatives in specific areas of our operations and value chain. Such initiatives include but are not limited to, for example:

1. Joining the RE100 initiative, and setting a target to achieve 100% purchased electricity from renewable sources by 2025 to power our offices, R&D labs, and factories. While renewable energy is not currently available in all the countries where we operate, we will work with the broader ecosystem to drive greater uptake of sustainable electricity. In addition, we continue to explore the transfer of real estate operations to more energy efficient sites and implement projects improving facility operational efficiency.
2. Investing in the development of new more energy efficient hardware and software, such as our ReefShark chipset, FP5, Quillion and PSE-V. We have set a 50% reduction of average power consumption of 5G mMIMO Base Station by 2023 from 2019 baseline.
3. Engaging our supply chain, including setting emission reduction targets and working with our suppliers on their plans to achieve them. These targets include, for example, a) Our final assembly suppliers reaching net zero emissions by 2030, b) Our materials suppliers reduce GHG emissions by 50% (compared to 2019 baseline), and c) GHG emission reduction of 73% from logistics by 2030 (compared to 2019).

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?**

Target(s) to increase low-carbon energy consumption or production

C4.2a**(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.****Target reference number**

Low 1

Year target was set

2021

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2019

Consumption or production of selected energy carrier in base year (MWh)

960752

% share of low-carbon or renewable energy in base year

31

Target year

2025

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

53

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

31.8840579710145

Target status in reporting year

Underway

Is this target part of an emissions target?

Nokia joined to RE100 and our target is to use 100% renewable electricity in our own operations by 2025. Use of renewable energy is also part of Nokia's tools to achieve SBT target.

Is this target part of an overarching initiative?

RE100

Science Based Targets initiative

Please explain target coverage and identify any exclusions

Increasing the share of renewable electricity in the total purchased electricity supports us in achieving our Science-based target for Nokia and RE100 target for Scope 2. In November 2021, we committed to use 100% renewable electricity in our facilities by 2025, aligning with the requirements of the RE100 initiative. Our RE100 target included our offices, R&D labs, and factories.

Plan for achieving target, and progress made to the end of the reporting year

In 2021, purchased electricity consumption across our facilities didn't change compared to 2020. 53% of total purchased electricity was associated with renewable sources (39% in 2020) and our Scope 2 emissions decreased by 15% from 2020 levels.

Our RE100 target is to achieve 100% purchased electricity from renewable sources by 2025 to power our offices, R&D labs, and factories. While renewable energy is not currently available in all the countries where we operate, we will work with the broader ecosystem to drive greater uptake of sustainable electricity.

List the actions which contributed most to achieving this target

<Not Applicable>

Target reference number

Low 2

Year target was set

2020

Target coverage

Site/facility

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2020

Consumption or production of selected energy carrier in base year (MWh)

892879

% share of low-carbon or renewable energy in base year

39

Target year

2021

% share of low-carbon or renewable energy in target year

45

% share of low-carbon or renewable energy in reporting year

53

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

233.333333333333

Target status in reporting year

Achieved

Is this target part of an emissions target?

Increasing the share of renewable electricity in the total purchased electricity supports us in achieving our Science-based target . Our new target for 2022 is to achieve at least 60% utilisation of renewable electricity compared to total purchased electricity.

Is this target part of an overarching initiative?

RE100

Science Based Targets initiative

Please explain target coverage and identify any exclusions

In 2021, purchased electricity consumption across our facilities didn't change compared to 2020. 53% of total purchased electricity was associated with renewable sources (39% in 2020) and our Scope 2 emissions decreased by 15% from 2020 levels.

Plan for achieving target, and progress made to the end of the reporting year

<Not Applicable>

List the actions which contributed most to achieving this target

Total energy use within our real estate was unchanged compared to 2020. Countries employing renewable electricity in 2021 were Australia, Canada, China, Finland, France, Germany, Greece, India, Poland and the United States. We continue to encourage the consideration of sustainability in the selection, development, management and disposal of our facilities. All markets implemented projects designed to improve facility operational efficiency, including but not limited to the utilization of LED lighting at sites within China, Portugal, Poland and Singapore; the use of partial free cooling in Finland; and optimization of cooling towers and chillers in India. In addition, transferring real estate operations to more energy efficient sites in Germany and the US has brought reductions in energy use compared to the previous sites.

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	8	5586
To be implemented*	41	6176
Implementation commenced*	1	1468
Implemented*	51	172771
Not to be implemented	5	399

C4.3b

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

Initiative category & Initiative type

Low-carbon energy consumption	Large hydropower (>25 MW)
-------------------------------	---------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

124484.33

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)

97291

Payback period

<1 year

Estimated lifetime of the initiative

1-2 years

Comment

7 initiatives: EAC purchases in United States, China, Finland, India, Canada, France, Germany

Initiative category & Initiative type

Low-carbon energy consumption	Wind
-------------------------------	------

Estimated annual CO2e savings (metric tonnes CO2e)

41701.42

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)

11776

Payback period

<1 year

Estimated lifetime of the initiative

1-2 years

Comment

1 initiative: EAC purchases in Poland

Initiative category & Initiative type

Energy efficiency in buildings	Building Energy Management Systems (BEMS)
--------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

84.49

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)

12096

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

0

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

3 initiatives conducted at sites within France, Poland and Romania

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)
--------------------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

4897.07

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)

1000294

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

3695210

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

29 initiatives conducted at sites located in India, Portugal, Poland, Finland, France, Taiwan, Singapore, Belgium, China and Italy

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

909.44

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)

144045

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

482431

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

8 initiatives conducted on sites located in India, Singapore, Poland, China and Romania

Initiative category & Initiative type

Energy efficiency in buildings	Maintenance program
--------------------------------	---------------------

Estimated annual CO2e savings (metric tonnes CO2e)

582

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)

99408

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

526136

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

2 initiatives conducted at sites located in India and the United States

Initiative category & Initiative type

Company policy or behavioral change	Site consolidation/closure
-------------------------------------	----------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

112.48

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)

26800

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

235000

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

1 initiative conducted at site located in the Netherlands

C4.3c

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

Method	Comment
Dedicated budget for other emissions reduction activities	We have renewable energy purchase contracts for 1-3 years at a time.
Internal incentives/recognition programs	While we have always believed that ESG is core to how we run our business and our role in society, 2021 demonstrated clearly the importance of our role in society and the personnel committee decided that it would now be appropriate to formalize this as part of our incentive structure. The short-term incentive structure of Nokia Group Leadership Team (GLT) focuses on three key metrics, one of them being ESG to deliver on our responsibilities to reduce carbon emissions and become a more diverse employer.
Other	Our facilities have sustainability requirements that set out what is required during construction projects and major renovations. The requirements include e.g. specific targets, increased energy sub-metering and energy efficient equipment.

C4.5

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

No

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 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

124374

Comment**Scope 2 (location-based)****Base year start**

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

599817

Comment**Scope 2 (market-based)****Base year start**

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

554560

Comment

18% green electricity employed

Scope 3 category 1: Purchased goods and services**Base year start**

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

2700000

Comment

This data for Nokia Group. Other base year data for comparable combined company (Nokia Group + former Alcatel Lucent).

Scope 3 category 2: Capital goods**Base year start**

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

375703

Comment**Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)****Base year start****Base year end****Base year emissions (metric tons CO2e)****Comment**

Fuel and energy related activities not included in Scope 1 and 2: not presently being assessed, because emissions are by calculation less than 0.1% of total Scope 3 emissions.

Scope 3 category 4: Upstream transportation and distribution**Base year start**

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

404208

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Waste generated in operations: not assessed annually because in our Scope 3 screening , these emissions were calculated to represent less than 0.1% of our total Scope 3 emissions.

Scope 3 category 6: Business travel

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

135574

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

185741

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Upstream leased assets: not presently being assessed as leased vehicles and facilities are presently assessed in Scope 1 emissions.

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Transportation Nokia paid included into category 4 reporting.

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Processing of sold products: not considered relevant because processing is not required for sold Nokia products.

Scope 3 category 11: Use of sold products

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

41310000

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

End-of-life treatment of sold products: not considered relevant. Based on our life cycle analysis, the use-phase accounts for 89–95% of global warming potential, production (supply chain and own operations) for 5–10%, logistics for 1–2% and end-of-life treatment approximately 1%. Therefore, this category is not considered relevant for reporting in Scope 3 GHG inventory assessments.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Downstream leased assets: not presently being assessed because emissions are by calculation less than 0.1% of total Scope 3 emissions.

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Franchises: not applicable, as Nokia does not have franchises.

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Investments: not applicable, Nokia has invested in some companies but has no operational control. In line with our approach with financial accounting these are not consolidated in our environmental reporting either.

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

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

Other, please specify (Corporate value chain (Scope 3), Accounting and reporting standard, Supplement to the GHG Protocol corporate accounting and reporting standard)

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)

124254.102

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Year tCO2e

2021 124254.102

2020 116268.462

2019 124991.948

2018 134449.649

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

377324.862

Scope 2, market-based (if applicable)

224453.34

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Year location-based market-based

2021 377324.862 224453.340

2020 380223.282 263604.078

2019 421941.186 327245.995

2018 436944.314 364914.688

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)

1571602

Emissions calculation methodology

Hybrid method

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

64

Please explain

Purchased goods and services: emissions are reported based on data collected with CDP Climate Survey from Nokia's biggest suppliers, and directly from our final assembly suppliers, representing 64% of total purchase spend in 2021 (46% in 2020). We use a hybrid method, using emissions allocated for Nokia by the suppliers and also intensity based (GHG/€) allocation, where allocated emissions were not available, or allocation was not reliable based on different internal quality measures. Collected data is then multiplied to cover 100% of spend. In 2021 calculation we included only suppliers' Scope 1 and 2 emissions, not Scope 3 emissions, which were reported only by a small share of respondents. To avoid double counting, emission data from product and employee transportation service suppliers is excluded. Those emissions are reported as part of Scope 1 (emissions from car fleet and marine fleet) and Scope 3 (category 4 and 9; transportation and distribution, and category 6; business air travel). 2021 disclosure is based on the latest CDP data representing suppliers' year 2020 emissions. We recognize that this emission category includes a lot of uncertainty, as suppliers have different qualities in their own reporting and in allocating emissions to Nokia, and due to the extrapolation Nokia does for data to represent 100% of Nokia spend.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

455195

Emissions calculation methodology

Spend-based method

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

0

Please explain

Capital goods: the relevance of emissions from this category to be included in the Scope 3 inventory is assessed each year, as capital goods purchases vary from year to year. The threshold for inclusion is 0.5% of total Scope 1+2+3 emissions. Emissions from capital goods are based on financial data on property, plant, and equipment additions during the reporting year and estimated by using the GHG Protocol Scope 3 Evaluator tool.

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

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

38600

Emissions calculation methodology

Average data method

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

84

Please explain

Fuel and energy related activities not included in Scope 1 and 2: not presently being reported, because emissions are by calculation less than 0.1% of total Scope 3 emissions. Result is extrapolated to total energy consumption.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

326066

Emissions calculation methodology

Distance-based method

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

100

Please explain

Includes Scope 3, cat 4 and cat 9 data. Upstream (cat 4) and downstream (cat 9) transportation and distribution: Data includes emissions from inbound and outbound logistics. Data is based on the top 16 (18 in 2020) logistics supply partners delivery data (ton-km) and transportation mode. Reporting is done in real weight, by using EPA's CO2e emission factors. Upstream emissions include emissions from transportation paid by Nokia.

Waste generated in operations

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

2700

Emissions calculation methodology

Average data method

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

0

Please explain

Waste generated in operations: not reported

annually because in our Scope 3 screening , these emissions were calculated to represent less than 0.1% of our total Scope 3 emissions.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

5647

Emissions calculation methodology

Distance-based method

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

100

Please explain

Business travel: emissions are reported for business air travel, which has the biggest impact out of all business travel modes. Travel information is obtained from our assigned Travel Agencies. Supplied data includes distance traveled, delineated by flight distance ranges and cabin class. Data from travel agencies is consolidated in a system which is used to calculate emissions from air travel. Emissions factors are obtained from EPA.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

17246

Emissions calculation methodology

Distance-based method

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

0

Please explain

Employee commuting: We conducted an employee commuting survey in 2018. Survey results are a representative sample from several countries. Those results are extrapolated to represent commuting of all employees for 2018–2021 emissions. For 2020–2021, share of commuting methods was adjusted based on allowed occupancy at Nokia sites during global COVID-19 restrictions.

Upstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

0

Emissions calculation methodology

Other, please specify (included into scope 1&2 reporting)

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

0

Please explain

Upstream leased assets: not presently being assessed as leased vehicles and facilities are presently reported in Scope 1 and 2 emissions.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

0

Emissions calculation methodology

Other, please specify (reported together with category 4)

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

100

Please explain

Scope 3, cat 9, downstream transportation and distribution is not reported separately but reported together with Scope 3, cat 4, upstream transportation and distribution data.

Processing of sold products

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

0

Emissions calculation methodology

Other, please specify (not considered relevant because processing is not required for sold Nokia products)

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

0

Please explain

Processing of sold products: not considered relevant because processing is not required for sold Nokia products.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

38258989

Emissions calculation methodology

Methodology for direct use phase emissions, please specify (sum across electricity consumed from use of sold products)

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

0

Please explain

Use of sold products: The calculation formula is following: Σ [total lifetime expected uses of products (hours) x number of products sold in reporting period x product power consumption (kW) x emission factor for electricity (kg CO2e/kWh)]. Data covers products from Nokia's Network business groups. Product use time varies between 6 and 15 years, depending on the products. Energy use calculations are based on product group specific standards, for example, by ETSI, wherever standards have been published. The objective is to have a product coverage above 80%; in 2021 we are above 90%. Calculations are so far based on assumption that all products are powered by grid electricity. We use the IEA's latest world average CO2 equivalent emission factor available in the beginning of the reporting year.

End of life treatment of sold products

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

415900

Emissions calculation methodology

Other, please specify (product LCA)

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

0

Please explain

End-of-life treatment of sold products: not considered relevant. Based on our life cycle analysis, the use-phase accounts for 89–95% of global warming potential, production (supply chain and own operations) for 5–10%, logistics for 1–2% and end-of-life treatment approximately 1%. Therefore, this category is not considered relevant for reporting in Scope 3 GHG inventory assessments.

Downstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

21800

Emissions calculation methodology

Average data method

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

100

Please explain

Downstream leased assets: not presently being reported because emissions are by calculation less than 0.1% of total Scope 3 emissions. Calculation for sub leased facilities contains both owned and leased facilities excluded from scope 1 and 2 reporting.

Franchises

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

0

Emissions calculation methodology

Other, please specify (not applicable, as Nokia does not have franchises)

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

0

Please explain

Franchises: not applicable, as Nokia does not have franchises.

Investments

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

0

Emissions calculation methodology

Other, please specify (not applicable, Nokia has invested in some companies but has no operational control. In line with our approach with financial accounting these are not consolidated in our environmental reporting either.)

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

0

Please explain

Investments: not applicable, Nokia has invested in some companies but has no operational control. In line with our approach with financial accounting these are not consolidated in our environmental reporting either.

Other (upstream)

Evaluation status

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

Other (downstream)

Evaluation status

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

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

0.000015706

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

348707.44

Metric denominator

unit total revenue

Metric denominator: Unit total

22202000000

Scope 2 figure used

Market-based

% change from previous year

9.7

Direction of change

Decreased

Reason for change

The change is due to emission reduction activities, including increased purchases for renewable energy and reduction in the amount of total purchased electricity.

2020: 0.000017384 tCO2e/euro

2021: 0.000015706 tCO2e/euro

$[(0.000015706 - 0.000017384)/0.000017384]*100 = -9.7\%$

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
CO2	123882.744	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	9.711	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	11.701	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	349.946	IPCC Fourth Assessment Report (AR4 - 100 year)
PFCs	0	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	0	IPCC Fourth Assessment Report (AR4 - 100 year)
NF3	0	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Asia Pacific (or JAPA)	68.482
Europe	4569.107
India	374.611
China	167.173
Latin America (LATAM)	9.37
Africa and Middle East	60.947
North America	13515.921
Other, please specify (Worldwide) <i>Includes company lease fleet and marine vessels</i>	105488.492

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Emissions from combustion of gasoline in facility-associated mobile vehicles	53.816
Emissions from combustion of propane in facility-associated mobile vehicles	2.905
Emissions from combustion of natural gas in facility operations	17639.11
Emissions from combustion of diesel and fuel oil in facility operations	248.192
Emissions from combustion of LPG in facility operations	273.21
Emissions from fuel cell employing natural gas to generate electricity	197.673
Emissions from refrigerant leaks (HFC407c)	349.946
Emissions from fire-fighting activities (CO2)	0.757
Emissions from combustion of fuel in marine fleet	81069.492
Emissions from fuel combustion in car fleet	24419

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)
Asia Pacific (or JAPA)	14404.933	14404.933
Europe	113618.943	65444.454
Latin America (LATAM)	478.134	478.134
Africa and Middle East	1855.378	1855.378
China	80079.806	13227.767
North America	96320.045	71470.117
India	70567.623	57572.556

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Emissions from purchased electricity	360798.005	207926.483
Emissions from purchased chilled water	4344.462	4344.462
Emissions from District Cooling	4583.592	4583.592
Emissions from District Heating	7502.627	7502.627
Emissions from purchased steam	96.176	96.176

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	22665.329	Decreased	6	Due to increased use of purchased renewable energy in 2021, an additional 22,665.329 tCO2e was reduced. Comparing this reduction to 2020 total Scope 1 and Scope 2 emissions (379,872.539 tCO2e), the emissions reduction percentage is 6.0%. A more detailed assessment is listed below: 2020 Purchase of electricity green attributes: 351,229 MWh resulting in 169,451.321 tCO2e reduction. 2021 Purchase of electricity green attributes: 469,627 MWh resulting in 192,116.650 tCO2e reduction. [(192,116.650 tCO2e - 169,451.321 tCO2e)/379,872.539 tCO2e]*100 = 6.0% reduction
Other emissions reduction activities	8499.769	Decreased	2.2	Due to 'other emissions reduction activities' implemented during the year 8,499.769 tCO2e were reduced (see further breakdown of these below). Compared with 2020 Scope 1 and Scope 2 emissions (379,873.539 tCO2e), the emissions reduction percentage is 2.2% [(-8,400.769/379,873.539 tCO2e)*100] = 2.2%. 2021 versus 2020 tCO2e emissions Purchased Electricity Reduction: (400,043.133 tCO2e - 415,330.422 tCO2e) = -15,287.289 tCO2e Car Fleet Energy Increase: (24,419.000 tCO2e - 21,030.777 tCO2e) = 3,388.223 tCO2e Fire Extinguisher Usage Decrease: (0.757 tCO2e - 3.086 tCO2e) = -2.329 tCO2e HFC134a Release Decrease: (0.000 tCO2e - 218.400 tCO2e) = -218.400 tCO2e HFC 407c Release Decrease: (349.946 tCO2e - 401.517 tCO2e) = -51.571 tCO2e Marine Fleet Energy Increase: (81,069.492 tCO2e - 75,145.154 tCO2e) = 5,924.337 tCO2e Mobile-Diesel Usage Decrease: (0.000 tCO2e - 23.238 tCO2e) = -23.238 tCO2e Mobile-Gasoline Usage Increase: (53.816 tCO2e - 48.145 tCO2e) = 5.671 tCO2e Mobile-Propane Usage Increase: (2.905 tCO2e - 0.000 tCO2e) = 2.905 tCO2e Stationary-Fuel Oil Usage Increase: (248.192 tCO2e - 234.888 tCO2e) = 13.304 tCO2e Stationary-LPG Usage Decrease: (273.210 tCO2e - 357.874 tCO2e) = -84.664 tCO2e Stationary-Natural Gas Usage Increase: (17,639.110 tCO2e - 17,220.498 tCO2e) = 418.612 tCO2e Delivered Chilled Water Usage Decrease: (4,344.462 tCO2e - 7,120.272 tCO2e) = -2,775.811 tCO2e District Cooling Usage Increase: (4,583.592 tCO2e - 3,826.290 tCO2e) = 757.301 tCO2e District Heating Usage Increase: (7,502.627 tCO2e - 6,156.393 tCO2e) = 1,346.234 tCO2e Purchased Steam Usage Decrease: (622.021 tCO2e - 96.176 tCO2e) = -525.845 tCO2e Total Change: [(-15,287.289)+(3,388.223)+(-2.329)+(-218.400)+(-51.571)+(-1,387.210)+(5,924.337)+(-23.238)+(5.671)+(2.905)+(13.304)+(-84.664)+(418.612)+(-2,775.811)+(757.301)+(1,346.234)+(-525.845)] = -8,499.769 tCO2e % tCO2e Change: [-8,499.769 tCO2e/379,873.539 tCO2e]*100] = -2.2%
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

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	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	Yes
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)	LHV (lower heating value)	0	100329.6	100329.6
Consumption of purchased or acquired electricity	<Not Applicable>	469626.92	421520.85	891147.77
Consumption of purchased or acquired heat	<Not Applicable>	0	33115.24	33115.24
Consumption of purchased or acquired steam	<Not Applicable>	0	424.5	424.5
Consumption of purchased or acquired cooling	<Not Applicable>	0	33547.96	33547.96
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	394.18	<Not Applicable>	394.18
Total energy consumption	<Not Applicable>	470021.1	588938.16	1058959.26

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	Yes
Consumption of fuel for the generation of cooling	Yes
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

LHV

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

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

No sustainable biomass utilized in 2021

Other biomass

Heating value

LHV

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

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

No other biomass utilized in 2021

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

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

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

No other renewable fuels utilized in 2021

Coal

Heating value

LHV

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

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

No coal utilized in 2021

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

1199.74

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1003.72

MWh fuel consumed for self-generation of steam

196.02

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

The total fuel oil energy consumed by the organization was 1,199.74 MWh. This includes fuel oils employed in facility-associated mobile and stationary sources. This value does not include fuel oils employed by our marine vessels or car fleet activities.

Fuel Oil: 980.11 MWh - 100% of energy employed in heating buildings (80% employed for heat versus 20% employed with steam generation).

Motor Gasoline: 219.63 MWh - Gasoline employed in facility-associated mobile sources

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

99129.87

MWh fuel consumed for self-generation of electricity

492.98

MWh fuel consumed for self-generation of heat

71384.15

MWh fuel consumed for self-generation of steam

17519.62

MWh fuel consumed for self-generation of cooling

9733.12

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

The total fuel gas energy consumed by the organization was 99,129.87 MWh. This includes fuel gas employed in facility-associated mobile and stationary sources.

Natural Gas: 97,331.20 MWh - Based on 90% of energy employed in heating buildings (80% employed for heat versus 20% employed with steam generation). 10% to operate absorption chillers.

Liquefied Petroleum Gas (LPG): 1,292.20 MWh - 100% of energy employed in heating buildings (100% employed for heat).

Propane: 13.48 MWh - Propane employed in facility-associated mobile sources.

Natural Gas (Bloom Cell): 492.98 MWh - Natural Gas employed in Fuel Cell that generates electricity for facility.

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

Heating value

LHV

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

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

No other non-renewable fuels utilized in 2021

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

100329.6

MWh fuel consumed for self-generation of electricity

492.98

MWh fuel consumed for self-generation of heat

72387.86

MWh fuel consumed for self-generation of steam

17715.64

MWh fuel consumed for self-generation of cooling

9733.12

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuel usage assessment encompasses 100% of facility mobile and stationary operations. It does not include fuels employed by worldwide car fleet and marine vessels.

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	492.98	492.98	0	0
Heat	72387.86	72387.86	0	0
Steam	17715.64	17715.64	0	0
Cooling	9733.12	9733.12	0	0

C8.2g

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

Country/area

Albania

Consumption of electricity (MWh)

1.4

Consumption of heat, steam, and cooling (MWh)

0

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

1.4

Is this consumption excluded from your RE100 commitment?

No

Country/area

Algeria

Consumption of electricity (MWh)

8.86

Consumption of heat, steam, and cooling (MWh)

0

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

8.86

Is this consumption excluded from your RE100 commitment?

No

Country/area

Angola

Consumption of electricity (MWh)

0.29

Consumption of heat, steam, and cooling (MWh)

0

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

0.29

Is this consumption excluded from your RE100 commitment?

No

Country/area

Argentina

Consumption of electricity (MWh)

205

Consumption of heat, steam, and cooling (MWh)

0

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

205

Is this consumption excluded from your RE100 commitment?

No

Country/area

Armenia

Consumption of electricity (MWh)

6.65

Consumption of heat, steam, and cooling (MWh)

0

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

6.65

Is this consumption excluded from your RE100 commitment?

No

Country/area

Australia

Consumption of electricity (MWh)

2629.17

Consumption of heat, steam, and cooling (MWh)

0

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

2629.17

Is this consumption excluded from your RE100 commitment?

No

Country/area

Austria

Consumption of electricity (MWh)

591.88

Consumption of heat, steam, and cooling (MWh)

7.77

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

599.65

Is this consumption excluded from your RE100 commitment?

No

Country/area

Azerbaijan

Consumption of electricity (MWh)

8.89

Consumption of heat, steam, and cooling (MWh)

0

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

8.89

Is this consumption excluded from your RE100 commitment?

No

Country/area

Bangladesh

Consumption of electricity (MWh)

56.27

Consumption of heat, steam, and cooling (MWh)

0

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

56.27

Is this consumption excluded from your RE100 commitment?

No

Country/area

Belarus

Consumption of electricity (MWh)

0.34

Consumption of heat, steam, and cooling (MWh)

0

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

0.34

Is this consumption excluded from your RE100 commitment?

No

Country/area

Belgium

Consumption of electricity (MWh)

16690.02

Consumption of heat, steam, and cooling (MWh)

2056.1

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

18746.12

Is this consumption excluded from your RE100 commitment?

No

Country/area

Benin

Consumption of electricity (MWh)

0.63

Consumption of heat, steam, and cooling (MWh)

0

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

0.63

Is this consumption excluded from your RE100 commitment?

No

Country/area

Bolivia (Plurinational State of)

Consumption of electricity (MWh)

2.01

Consumption of heat, steam, and cooling (MWh)

0

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

2.01

Is this consumption excluded from your RE100 commitment?

No

Country/area

Bosnia & Herzegovina

Consumption of electricity (MWh)

4.56

Consumption of heat, steam, and cooling (MWh)

0

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

4.56

Is this consumption excluded from your RE100 commitment?

No

Country/area

Brazil

Consumption of electricity (MWh)

1980.2

Consumption of heat, steam, and cooling (MWh)

0

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

1980.2

Is this consumption excluded from your RE100 commitment?

No

Country/area

Brunei Darussalam

Consumption of electricity (MWh)

15.64

Consumption of heat, steam, and cooling (MWh)

0

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

15.64

Is this consumption excluded from your RE100 commitment?

No

Country/area

Bulgaria

Consumption of electricity (MWh)

97.2

Consumption of heat, steam, and cooling (MWh)

0

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

97.2

Is this consumption excluded from your RE100 commitment?

No

Country/area

Burkina Faso

Consumption of electricity (MWh)

2.04

Consumption of heat, steam, and cooling (MWh)

0

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

2.04

Is this consumption excluded from your RE100 commitment?

No

Country/area

Cambodia

Consumption of electricity (MWh)

0.49

Consumption of heat, steam, and cooling (MWh)

0

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

0.49

Is this consumption excluded from your RE100 commitment?

No

Country/area

Cameroon

Consumption of electricity (MWh)

40.89

Consumption of heat, steam, and cooling (MWh)

0

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

40.89

Is this consumption excluded from your RE100 commitment?

No

Country/area

Canada

Consumption of electricity (MWh)

63711.64

Consumption of heat, steam, and cooling (MWh)

0

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

63711.64

Is this consumption excluded from your RE100 commitment?

No

Country/area

Chile

Consumption of electricity (MWh)

4.45

Consumption of heat, steam, and cooling (MWh)

0

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

4.45

Is this consumption excluded from your RE100 commitment?

No

Country/area

China

Consumption of electricity (MWh)

125007.2

Consumption of heat, steam, and cooling (MWh)

5125.71

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

130132.91

Is this consumption excluded from your RE100 commitment?

No

Country/area

Colombia

Consumption of electricity (MWh)

90.12

Consumption of heat, steam, and cooling (MWh)

0

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

90.12

Is this consumption excluded from your RE100 commitment?

No

Country/area

Congo

Consumption of electricity (MWh)

19.86

Consumption of heat, steam, and cooling (MWh)

0

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

19.86

Is this consumption excluded from your RE100 commitment?

No

Country/area

Costa Rica

Consumption of electricity (MWh)

0.4

Consumption of heat, steam, and cooling (MWh)

0

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

0.4

Is this consumption excluded from your RE100 commitment?

No

Country/area

Côte d'Ivoire

Consumption of electricity (MWh)

38.08

Consumption of heat, steam, and cooling (MWh)

0

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

38.08

Is this consumption excluded from your RE100 commitment?

No

Country/area

Croatia

Consumption of electricity (MWh)

31.66

Consumption of heat, steam, and cooling (MWh)

0

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

31.66

Is this consumption excluded from your RE100 commitment?

No

Country/area

Cuba

Consumption of electricity (MWh)

1.68

Consumption of heat, steam, and cooling (MWh)

0

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

1.68

Is this consumption excluded from your RE100 commitment?

No

Country/area

Czechia

Consumption of electricity (MWh)

2.23

Consumption of heat, steam, and cooling (MWh)

0

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

2.23

Is this consumption excluded from your RE100 commitment?

No

Country/area

Denmark

Consumption of electricity (MWh)

26.2

Consumption of heat, steam, and cooling (MWh)

0

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

26.2

Is this consumption excluded from your RE100 commitment?

No

Country/area

Dominican Republic

Consumption of electricity (MWh)

0.26

Consumption of heat, steam, and cooling (MWh)

0

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

0.26

Is this consumption excluded from your RE100 commitment?

No

Country/area

Ecuador

Consumption of electricity (MWh)

43.88

Consumption of heat, steam, and cooling (MWh)

0

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

43.88

Is this consumption excluded from your RE100 commitment?

No

Country/area

Egypt

Consumption of electricity (MWh)

691.44

Consumption of heat, steam, and cooling (MWh)

0

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

691.44

Is this consumption excluded from your RE100 commitment?

No

Country/area

El Salvador

Consumption of electricity (MWh)

0.53

Consumption of heat, steam, and cooling (MWh)

0

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

0.53

Is this consumption excluded from your RE100 commitment?

No

Country/area

Estonia

Consumption of electricity (MWh)

0.6

Consumption of heat, steam, and cooling (MWh)

0

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

0.6

Is this consumption excluded from your RE100 commitment?

No

Country/area

Ethiopia

Consumption of electricity (MWh)

2.37

Consumption of heat, steam, and cooling (MWh)

0

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

2.37

Is this consumption excluded from your RE100 commitment?

No

Country/area

Finland

Consumption of electricity (MWh)

119152.21

Consumption of heat, steam, and cooling (MWh)

35916.15

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

155068.36

Is this consumption excluded from your RE100 commitment?

No

Country/area

France

Consumption of electricity (MWh)

57059.79

Consumption of heat, steam, and cooling (MWh)

0

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

57059.79

Is this consumption excluded from your RE100 commitment?

No

Country/area

Georgia

Consumption of electricity (MWh)

0.13

Consumption of heat, steam, and cooling (MWh)

0

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

0.13

Is this consumption excluded from your RE100 commitment?

No

Country/area

Germany

Consumption of electricity (MWh)

27646.85

Consumption of heat, steam, and cooling (MWh)

7555.58

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

35202.43

Is this consumption excluded from your RE100 commitment?

No

Country/area

Ghana

Consumption of electricity (MWh)

0.57

Consumption of heat, steam, and cooling (MWh)

0

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

0.57

Is this consumption excluded from your RE100 commitment?

No

Country/area

Greece

Consumption of electricity (MWh)

10010.8

Consumption of heat, steam, and cooling (MWh)

0

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

10010.8

Is this consumption excluded from your RE100 commitment?

No

Country/area

Guatemala

Consumption of electricity (MWh)

0.61

Consumption of heat, steam, and cooling (MWh)

0

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

0.61

Is this consumption excluded from your RE100 commitment?

No

Country/area

Hong Kong SAR, China

Consumption of electricity (MWh)

9.48

Consumption of heat, steam, and cooling (MWh)

0

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

9.48

Is this consumption excluded from your RE100 commitment?

No

Country/area

Hungary

Consumption of electricity (MWh)

10319.59

Consumption of heat, steam, and cooling (MWh)

2309.68

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

12629.27

Is this consumption excluded from your RE100 commitment?

No

Country/area

India

Consumption of electricity (MWh)

93910.97

Consumption of heat, steam, and cooling (MWh)

0

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

93910.97

Is this consumption excluded from your RE100 commitment?

No

Country/area

Indonesia

Consumption of electricity (MWh)

770.62

Consumption of heat, steam, and cooling (MWh)

0

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

770.62

Is this consumption excluded from your RE100 commitment?

No

Country/area

Iran (Islamic Republic of)

Consumption of electricity (MWh)

8.41

Consumption of heat, steam, and cooling (MWh)

0

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

8.41

Is this consumption excluded from your RE100 commitment?

No

Country/area

Iraq

Consumption of electricity (MWh)

26.77

Consumption of heat, steam, and cooling (MWh)

0

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

26.77

Is this consumption excluded from your RE100 commitment?

No

Country/area

Ireland

Consumption of electricity (MWh)

45.35

Consumption of heat, steam, and cooling (MWh)

0

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

45.35

Is this consumption excluded from your RE100 commitment?

No

Country/area

Israel

Consumption of electricity (MWh)

2314.51

Consumption of heat, steam, and cooling (MWh)

0

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

2314.51

Is this consumption excluded from your RE100 commitment?

No

Country/area

Italy

Consumption of electricity (MWh)

9678.01

Consumption of heat, steam, and cooling (MWh)

0

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

9678.01

Is this consumption excluded from your RE100 commitment?

No

Country/area

Japan

Consumption of electricity (MWh)

9591.54

Consumption of heat, steam, and cooling (MWh)

8622.44

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

18213.98

Is this consumption excluded from your RE100 commitment?

No

Country/area

Jordan

Consumption of electricity (MWh)

8.83

Consumption of heat, steam, and cooling (MWh)

0

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

8.83

Is this consumption excluded from your RE100 commitment?

No

Country/area

Kazakhstan

Consumption of electricity (MWh)

68.45

Consumption of heat, steam, and cooling (MWh)

0

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

68.45

Is this consumption excluded from your RE100 commitment?

No

Country/area

Kenya

Consumption of electricity (MWh)

79.45

Consumption of heat, steam, and cooling (MWh)

0

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

79.45

Is this consumption excluded from your RE100 commitment?

No

Country/area

Kuwait

Consumption of electricity (MWh)

1.7

Consumption of heat, steam, and cooling (MWh)

0

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

1.7

Is this consumption excluded from your RE100 commitment?

No

Country/area

Lao People's Democratic Republic

Consumption of electricity (MWh)

3.57

Consumption of heat, steam, and cooling (MWh)

0

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

3.57

Is this consumption excluded from your RE100 commitment?

No

Country/area

Latvia

Consumption of electricity (MWh)

1.43

Consumption of heat, steam, and cooling (MWh)

0

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

1.43

Is this consumption excluded from your RE100 commitment?

No

Country/area

Lebanon

Consumption of electricity (MWh)

3.6

Consumption of heat, steam, and cooling (MWh)

0

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

3.6

Is this consumption excluded from your RE100 commitment?

No

Country/area

Libya

Consumption of electricity (MWh)

7.93

Consumption of heat, steam, and cooling (MWh)

0

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

7.93

Is this consumption excluded from your RE100 commitment?

No

Country/area

Lithuania

Consumption of electricity (MWh)

58.58

Consumption of heat, steam, and cooling (MWh)

8.07

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

66.65

Is this consumption excluded from your RE100 commitment?

No

Country/area

Luxembourg

Consumption of electricity (MWh)

0.13

Consumption of heat, steam, and cooling (MWh)

0

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

0.13

Is this consumption excluded from your RE100 commitment?

No

Country/area

China, Macao Special Administrative Region

Consumption of electricity (MWh)

0.08

Consumption of heat, steam, and cooling (MWh)

0

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

0.08

Is this consumption excluded from your RE100 commitment?

No

Country/area

Madagascar

Consumption of electricity (MWh)

0.16

Consumption of heat, steam, and cooling (MWh)

0

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

0.16

Is this consumption excluded from your RE100 commitment?

No

Country/area

Malaysia

Consumption of electricity (MWh)

417.56

Consumption of heat, steam, and cooling (MWh)

0

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

417.56

Is this consumption excluded from your RE100 commitment?

No

Country/area

Mali

Consumption of electricity (MWh)

7.29

Consumption of heat, steam, and cooling (MWh)

0

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

7.29

Is this consumption excluded from your RE100 commitment?

No

Country/area

Mauritania

Consumption of electricity (MWh)

0.95

Consumption of heat, steam, and cooling (MWh)

0

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

0.95

Is this consumption excluded from your RE100 commitment?

No

Country/area

Mexico

Consumption of electricity (MWh)

369.96

Consumption of heat, steam, and cooling (MWh)

0

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

369.96

Is this consumption excluded from your RE100 commitment?

No

Country/area

Mongolia

Consumption of electricity (MWh)

0.26

Consumption of heat, steam, and cooling (MWh)

0

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

0.26

Is this consumption excluded from your RE100 commitment?

No

Country/area

Morocco

Consumption of electricity (MWh)

110.48

Consumption of heat, steam, and cooling (MWh)

0

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

110.48

Is this consumption excluded from your RE100 commitment?

No

Country/area

Mozambique

Consumption of electricity (MWh)

0.36

Consumption of heat, steam, and cooling (MWh)

0

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

0.36

Is this consumption excluded from your RE100 commitment?

No

Country/area

Myanmar

Consumption of electricity (MWh)

26.6

Consumption of heat, steam, and cooling (MWh)

0

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

26.6

Is this consumption excluded from your RE100 commitment?

No

Country/area

Netherlands

Consumption of electricity (MWh)

1538.46

Consumption of heat, steam, and cooling (MWh)

0

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

1538.46

Is this consumption excluded from your RE100 commitment?

No

Country/area

New Zealand

Consumption of electricity (MWh)

400.87

Consumption of heat, steam, and cooling (MWh)

0

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

400.87

Is this consumption excluded from your RE100 commitment?

No

Country/area

Niger

Consumption of electricity (MWh)

5.82

Consumption of heat, steam, and cooling (MWh)

0

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

5.82

Is this consumption excluded from your RE100 commitment?

No

Country/area

Nigeria

Consumption of electricity (MWh)

38.83

Consumption of heat, steam, and cooling (MWh)

0

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

38.83

Is this consumption excluded from your RE100 commitment?

No

Country/area

Norway

Consumption of electricity (MWh)

500.66

Consumption of heat, steam, and cooling (MWh)

0

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

500.66

Is this consumption excluded from your RE100 commitment?

No

Country/area

Pakistan

Consumption of electricity (MWh)

473.15

Consumption of heat, steam, and cooling (MWh)

0

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

473.15

Is this consumption excluded from your RE100 commitment?

No

Country/area

Panama

Consumption of electricity (MWh)

0.5

Consumption of heat, steam, and cooling (MWh)

0

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

0.5

Is this consumption excluded from your RE100 commitment?

No

Country/area

Peru

Consumption of electricity (MWh)

93.15

Consumption of heat, steam, and cooling (MWh)

0

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

93.15

Is this consumption excluded from your RE100 commitment?

No

Country/area

Philippines

Consumption of electricity (MWh)

82.86

Consumption of heat, steam, and cooling (MWh)

76.32

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

159.18

Is this consumption excluded from your RE100 commitment?

No

Country/area

Poland

Consumption of electricity (MWh)

65069.53

Consumption of heat, steam, and cooling (MWh)

5277.45

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

70346.98

Is this consumption excluded from your RE100 commitment?

No

Country/area

Portugal

Consumption of electricity (MWh)

5795.98

Consumption of heat, steam, and cooling (MWh)

0

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

5795.98

Is this consumption excluded from your RE100 commitment?

No

Country/area

Puerto Rico

Consumption of electricity (MWh)

0.3

Consumption of heat, steam, and cooling (MWh)

0

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

0.3

Is this consumption excluded from your RE100 commitment?

No

Country/area

Qatar

Consumption of electricity (MWh)

7.27

Consumption of heat, steam, and cooling (MWh)

0

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

7.27

Is this consumption excluded from your RE100 commitment?

No

Country/area

Romania

Consumption of electricity (MWh)

17583.33

Consumption of heat, steam, and cooling (MWh)

0

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

17583.33

Is this consumption excluded from your RE100 commitment?

No

Country/area

Russian Federation

Consumption of electricity (MWh)

715.59

Consumption of heat, steam, and cooling (MWh)

0

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

715.59

Is this consumption excluded from your RE100 commitment?

No

Country/area

Saudi Arabia

Consumption of electricity (MWh)

787.1

Consumption of heat, steam, and cooling (MWh)

0

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

787.1

Is this consumption excluded from your RE100 commitment?

No

Country/area

Senegal

Consumption of electricity (MWh)

1.56

Consumption of heat, steam, and cooling (MWh)

0

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

1.56

Is this consumption excluded from your RE100 commitment?

No

Country/area

Serbia

Consumption of electricity (MWh)

31.85

Consumption of heat, steam, and cooling (MWh)

0

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

31.85

Is this consumption excluded from your RE100 commitment?

No

Country/area

Singapore

Consumption of electricity (MWh)

2980.14

Consumption of heat, steam, and cooling (MWh)

0

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

2980.14

Is this consumption excluded from your RE100 commitment?

No

Country/area

Slovakia

Consumption of electricity (MWh)

1627.68

Consumption of heat, steam, and cooling (MWh)

0

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

1627.68

Is this consumption excluded from your RE100 commitment?

No

Country/area

Slovenia

Consumption of electricity (MWh)

0.47

Consumption of heat, steam, and cooling (MWh)

0

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

0.47

Is this consumption excluded from your RE100 commitment?

No

Country/area

South Africa

Consumption of electricity (MWh)

552.78

Consumption of heat, steam, and cooling (MWh)

0

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

552.78

Is this consumption excluded from your RE100 commitment?

No

Country/area

Republic of Korea

Consumption of electricity (MWh)

2398.6

Consumption of heat, steam, and cooling (MWh)

0

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

2398.6

Is this consumption excluded from your RE100 commitment?

No

Country/area

Spain

Consumption of electricity (MWh)

5123.7

Consumption of heat, steam, and cooling (MWh)

0

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

5123.7

Is this consumption excluded from your RE100 commitment?

No

Country/area

Sri Lanka

Consumption of electricity (MWh)

1.47

Consumption of heat, steam, and cooling (MWh)

0

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

1.47

Is this consumption excluded from your RE100 commitment?

No

Country/area

Sweden

Consumption of electricity (MWh)

8.63

Consumption of heat, steam, and cooling (MWh)

0

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

8.63

Is this consumption excluded from your RE100 commitment?

No

Country/area

Switzerland

Consumption of electricity (MWh)

715.07

Consumption of heat, steam, and cooling (MWh)

0

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

715.07

Is this consumption excluded from your RE100 commitment?

No

Country/area

Syrian Arab Republic

Consumption of electricity (MWh)

2.52

Consumption of heat, steam, and cooling (MWh)

0

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

2.52

Is this consumption excluded from your RE100 commitment?

No

Country/area

Taiwan, China

Consumption of electricity (MWh)

3095.33

Consumption of heat, steam, and cooling (MWh)

0

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

3095.33

Is this consumption excluded from your RE100 commitment?

No

Country/area

United Republic of Tanzania

Consumption of electricity (MWh)

64.64

Consumption of heat, steam, and cooling (MWh)

0

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

64.64

Is this consumption excluded from your RE100 commitment?

No

Country/area

Thailand

Consumption of electricity (MWh)

141.01

Consumption of heat, steam, and cooling (MWh)

0

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

141.01

Is this consumption excluded from your RE100 commitment?

No

Country/area

Togo

Consumption of electricity (MWh)

3.27

Consumption of heat, steam, and cooling (MWh)

0

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

3.27

Is this consumption excluded from your RE100 commitment?

No

Country/area

Tunisia

Consumption of electricity (MWh)

76.79

Consumption of heat, steam, and cooling (MWh)

0

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

76.79

Is this consumption excluded from your RE100 commitment?

No

Country/area

Turkey

Consumption of electricity (MWh)

2107.48

Consumption of heat, steam, and cooling (MWh)

0

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

2107.48

Is this consumption excluded from your RE100 commitment?

No

Country/area

Turkmenistan

Consumption of electricity (MWh)

16.43

Consumption of heat, steam, and cooling (MWh)

0

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

16.43

Is this consumption excluded from your RE100 commitment?

No

Country/area

Uganda

Consumption of electricity (MWh)

5.95

Consumption of heat, steam, and cooling (MWh)

0

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

5.95

Is this consumption excluded from your RE100 commitment?

No

Country/area

Ukraine

Consumption of electricity (MWh)

57.93

Consumption of heat, steam, and cooling (MWh)

0

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

57.93

Is this consumption excluded from your RE100 commitment?

No

Country/area

United Arab Emirates

Consumption of electricity (MWh)

264.8

Consumption of heat, steam, and cooling (MWh)

64.28

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

329.08

Is this consumption excluded from your RE100 commitment?

No

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

5574.93

Consumption of heat, steam, and cooling (MWh)

68.14

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

5643.07

Is this consumption excluded from your RE100 commitment?

No

Country/area

United States of America

Consumption of electricity (MWh)

219760.01

Consumption of heat, steam, and cooling (MWh)

0

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

219760.01

Is this consumption excluded from your RE100 commitment?

No

Country/area

Uruguay

Consumption of electricity (MWh)

1.96

Consumption of heat, steam, and cooling (MWh)

0

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

1.96

Is this consumption excluded from your RE100 commitment?

No

Country/area

Uzbekistan

Consumption of electricity (MWh)

4.26

Consumption of heat, steam, and cooling (MWh)

0

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

4.26

Is this consumption excluded from your RE100 commitment?

No

Country/area

Venezuela (Bolivarian Republic of)

Consumption of electricity (MWh)

0.1

Consumption of heat, steam, and cooling (MWh)

0

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

0.1

Is this consumption excluded from your RE100 commitment?

No

Country/area

Viet Nam

Consumption of electricity (MWh)

90.5

Consumption of heat, steam, and cooling (MWh)

0

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

90.5

Is this consumption excluded from your RE100 commitment?

No

Country/area

Yemen

Consumption of electricity (MWh)

4.02

Consumption of heat, steam, and cooling (MWh)

0

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

4.02

Is this consumption excluded from your RE100 commitment?

No

Country/area

Zambia

Consumption of electricity (MWh)

6.08

Consumption of heat, steam, and cooling (MWh)

0

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

6.08

Is this consumption excluded from your RE100 commitment?

No

C8.2h

(C8.2h) Provide details of your organization's renewable electricity purchases in the reporting year by country

Country/area of renewable electricity consumption

Canada

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

58515

Tracking instrument used

US-REC

Total attribute instruments retained for consumption by your organization (MWh)

58515

Country/area of origin (generation) of the renewable electricity/attribute consumed

Canada

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

1974

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (M-RETS)

Comment

RECs:

Start# End# of RECs

726926 738007 11082

797204 813492 16289

703258 713469 10212

754293 759567 5275

703531 705244 1714

752403 766345 13943

Country/area of renewable electricity consumption

China

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

108526

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

108526

Country/area of origin (generation) of the renewable electricity/attribute consumed

China

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

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Evident Registry)

Comment

Account Holder (Cancelled by) ACT COMMODITIES BV
 From Certificate ID To Certificate ID
 0000-0000-9349-0263 0000-0000-9359-8788

Country/area of renewable electricity consumption

Finland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

109095

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

109095

Country/area of origin (generation) of the renewable electricity/attribute consumed

Norway

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

1968

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Oomi Oy
 Certificate Number (From) Certificate Number (To)
 708000340067300 000000063045792 7608000340067300 000000063053602
 708000340067300 000000058899941 708000340067300 000000058906923
 708000340067300 000000059015605 708000340067300 000000059022714
 708000340067300 000000059130209 708000340067300 000000059137468
 708000340067300 000000059204386 708000340067300 000000059211242
 708000340067300 000000062439436 708000340067300 000000062446535
 708000340067300 000000062608647 708000340067300 000000062616043
 708000340067300 000000062732620 708000340067300 000000062740136
 708000340067300 000000062849094 708000340067300 000000062856350
 708000340067300 000000062942870 708000340067300 000000062950190
 708000340067300 000000063003382 708000340067300 000000063011092
 708000340067300 000000063045792 708000340067300 000000063053602
 708000340067300 000000066275175 708000340067300 000000066282458
 708000340067300 000000066425275 708000340067300 000000066430057
 708000340067300 000000066493214 708000340067300 000000066498041
 708000340067300 000000066553480 708000340067300 000000066558326
 708000340067300 000000066592726 708000340067300 000000066596241

Country/area of renewable electricity consumption

Finland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

230

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

230

Country/area of origin (generation) of the renewable electricity/attribute consumed

Norway

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

1930

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Oomi Oy

Certificate Number (From) Certificate Number (To)

708000340067300 000000060655525 708000340067300 000000060655561

708000340067300 000000060671644 708000340067300 000000060671764

708000340067300 000000064471553 708000340067300 000000064471609

708000340067300 000000064497302 708000340067300 000000064497316

Country/area of renewable electricity consumption

Finland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2150

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2150

Country/area of origin (generation) of the renewable electricity/attribute consumed

Norway

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

1979

Vintage of the renewable energy/attribute (i.e. year of generation)

Please select

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Oomi Oy

Certificate Number (From) Certificate Number (To)

708000340067300 000000064563255 708000340067300 000000064563945

708000340067300 000000064611499 708000340067300 000000064612957

Country/area of renewable electricity consumption

Finland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2720

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2720

Country/area of origin (generation) of the renewable electricity/attribute consumed

Norway

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

1974

Vintage of the renewable energy/attribute (i.e. year of generation)

Please select

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Oomi Oy
Certificate Number (From) Certificate Number (To)
708000340067300 000000064975478 708000340067300 000000064976810
708000340067300 000000065028102 708000340067300 000000065029488

Country/area of renewable electricity consumption

Finland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

348

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

348

Country/area of origin (generation) of the renewable electricity/attribute consumed

Norway

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

1979

Vintage of the renewable energy/attribute (i.e. year of generation)

Please select

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Oomi Oy
Certificate Number (From) Certificate Number (To)
708000340067300 000000065323230 708000340067300 000000065323577

Country/area of renewable electricity consumption

Finland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1116

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1116

Country/area of origin (generation) of the renewable electricity/attribute consumed

Norway

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

1973

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Oomi Oy
Certificate Number (From) Certificate Number (To)
708000340067300 000000065108836 708000340067300 000000065109189
708000340067300 000000065133937 708000340067300 000000065134698

Country/area of renewable electricity consumption

France

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

15627

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

15627

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1968

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001441132121 643002406556003 100001441147748

Country/area of renewable electricity consumption

France

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

24710

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

24710

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1975

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001441147749 643002406556003 100001441172458

Country/area of renewable electricity consumption

France

Sourcing method

Please select

Renewable electricity technology type

Small hydropower (<25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1051

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1051

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1956

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001441278490 643002406556003 100001441279540

Country/area of renewable electricity consumption

France

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Small hydropower (<25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3933

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

3933

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1914

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001442486853 643002406556003 100001442490785

Country/area of renewable electricity consumption

France

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Small hydropower (<25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

854

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

854

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1961

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001442870566 643002406556003 100001442871419

Country/area of renewable electricity consumption

France

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Small hydropower (<25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

8384

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

8384

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1978

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001443092899 643002406556003 100001443101282

Country/area of renewable electricity consumption

France

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2372

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2372

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1975

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001443573550 643002406556003 100001443575921

Country/area of renewable electricity consumption

Germany

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

4605

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

4605

Country/area of origin (generation) of the renewable electricity/attribute consumed

Sweden

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

1968

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Finextra)

Comment

Account Holder (Cancelled by) Agder Energi Vannkraft AS
Certificate Number (From) Certificate Number (To)
643002406556003 100001441127517 643002406556003 100001441132121

Country/area of renewable electricity consumption

India

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

9771

Tracking instrument used

I-REC

Total attribute instruments retained for consumption by your organization (MWh)

9771

Country/area of origin (generation) of the renewable electricity/attribute consumed

India

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

2013

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Evident Registry)

Comment

From Certificate ID To Certificate ID
0000-0000-8110-7040 0000-0000-8111-6810

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2710

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2710

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range
PL00017258/GP_WIL/016/18736/2020 1-2710

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2097

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2097

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range
PL00017227/GP_WIL/04/2377/2020 16-2212

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1246

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1246

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range
PL00017228/GP_WIL/05/2377/2020 1-1246

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1227

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1227

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range
PL00017229/GP_WIL/06/2377/2020 1-1227

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

935

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

935

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2010

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00017231/GP_WIL/03/2377/2020 1-935

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

22166

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

22166

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2013

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00017234/GP_WIL/08/2377/2020 3699-25864

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2233

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2233

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00016752/GP_WIL/016/18736/2020 1-2233

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2329

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2329

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2012

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00016538/GP_WIL/02/2377/2020 1-2329

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3300

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

3300

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2010

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00016091/GP_WIL/01/18763/2020 1-3300

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2410

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2410

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00016124/GP_WIL/016/18736/2020 1-2410

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1410

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1410

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00015839/GP_WIL/016/18736/2020 1-1410

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1929

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1929

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2010

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00015559/GP_WIL/01/18763/2020 3246-5174

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1471

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1471

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00015081/GP_WIL/016/18736/2020 1-1471

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1507

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1507

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00014706/GP_WIL/016/18736/2020 1-1507

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2799

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

2799

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00014003/GP_WIL/016/18736/2020 1-2799

Country/area of renewable electricity consumption

Poland

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1432

Tracking instrument used

GO

Total attribute instruments retained for consumption by your organization (MWh)

1432

Country/area of origin (generation) of the renewable electricity/attribute consumed

Poland

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

2019

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (Towarowa Gielda Energii S.A)

Comment

Certificate Number Range

PL00014004/GP_WIL/016/18736/2020 1-1432

Country/area of renewable electricity consumption

United States of America

Sourcing method

Unbundled Energy Attribute Certificate (EAC) purchase

Renewable electricity technology type

Large hydropower (>25 MW)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

11150

Tracking instrument used

US-REC

Total attribute instruments retained for consumption by your organization (MWh)

11150

Country/area of origin (generation) of the renewable electricity/attribute consumed

Canada

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

1974

Vintage of the renewable energy/attribute (i.e. year of generation)

2020

Brand, label, or certification of the renewable electricity purchase

Other, please specify (M-RETS)

Comment

Start# End# # of RECs

764919 775843 10925

808997 809173 177

759568 759615 48

Country/area of renewable electricity consumption

United States of America

Sourcing method

Green electricity products from an energy supplier (e.g. Green Tariffs)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

45757

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

45757

Country/area of origin (generation) of the renewable electricity/attribute consumed

United States of America

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

2021

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

Green-e

Comment

Westford Campus: Green-e RECs equal to 100% of metered usage retired on behalf of Nokia

Cyprus Waters Campus: Green-e RECs equal to 100% of metered usage retired on behalf of Nokia

2021 assigned as "Commissioning year of the energy generation facility" as no information regarding generating facilities provided within contract.

Country/area of renewable electricity consumption

India

Sourcing method

Direct procurement from an offsite grid-connected generator e.g. Power Purchase Agreement (PPA)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

7512

Tracking instrument used

Contract

Total attribute instruments retained for consumption by your organization (MWh)

7512

Country/area of origin (generation) of the renewable electricity/attribute consumed

India

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

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2021

Brand, label, or certification of the renewable electricity purchase

No brand, label, or certification

Comment

Green-e Energy Renewable Generator Registration Form and Attestation document employed

C8.2i

(C8.2i) Provide details of your organization's low-carbon heat, steam, and cooling purchases in the reporting year by country.

Country/area of consumption of low-carbon heat, steam or cooling

China

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Finland

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Germany

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Hungary

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Lithuania

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Poland

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Heat

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

China

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Steam

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Austria

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Belgium

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Finland

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Germany

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Japan

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

Philippines

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

Country/area of consumption of low-carbon heat, steam or cooling

United Arab Emirates

Sourcing method

None (no purchases of low-carbon heat, steam, or cooling)

Energy carrier

Cooling

Low-carbon technology type

Other, please specify (None)

Low-carbon heat, steam, or cooling consumed (MWh)

0

Comment

C8.2j

(C8.2j) Provide details of your organization's renewable electricity generation by country in the reporting year.

Country/area of generation

Australia

Renewable electricity technology type

Solar

Facility capacity (MW)

0.3

Total renewable electricity generated by this facility in the reporting year (MWh)

335.62

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

335.62

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

<Not Applicable>

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

335.62

Comment

Country/area of generation

India

Renewable electricity technology type

Solar

Facility capacity (MW)

0.05

Total renewable electricity generated by this facility in the reporting year (MWh)

58.56

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were not issued (MWh)

58.56

Renewable electricity directly consumed by your organization from this facility in the reporting year for which certificates were issued and retired (MWh)

0

Renewable electricity sold to the grid in the reporting year (MWh)

0

Certificates issued for the renewable electricity that was sold to the grid (MWh)

0

Certificates issued and retired for self-consumption for the renewable electricity that was sold to the grid (MWh)

0

Type of energy attribute certificate

<Not Applicable>

Total self-generation counted towards RE100 target (MWh) [Auto-calculated]

58.56

Comment

C8.2k

(C8.2k) Describe how your organization's renewable electricity sourcing strategy directly or indirectly contributes to bringing new capacity into the grid in the countries/areas in which you operate.

Nokia's utilization of Power Purchase Agreements (PPAs) allows us to support the concept of additionality. In addition, our purchase of energy attribute certificates (RECs, GOs) from various countries world-wide provides a global reach that encourages utilities to obtain an increased supply of renewable energy from their respective generators.

Also, for those leased sites in which the landlord is responsible for supplying utilities, we have had negotiated contracts whereby they have obtained green energy agreements and authorized the construction of on-site solar arrays.

C8.2l

(C8.2) In the reporting year, has your organization faced any challenges to sourcing renewable electricity?

	Challenges to sourcing renewable electricity	Challenges faced by your organization which were not country-specific
Row 1	No	<Not Applicable>

C9. Additional metrics

C9.1

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

Description

Energy usage

Metric value

34

Metric numerator

%

Metric denominator (intensity metric only)

% change from previous year

34

Direction of change

Increased

Please explain

2021 renewable electricity consumption versus 2020 renewable electricity consumption increased from 2020 values.

2020 Renewable Electricity Usage: 351,229,231 kwh

2021 Renewable Electricity Usage: 470,021,101.66 kwh

$[(470,021,101.66 \text{ kwh} - 351,229,231 \text{ kwh}) / 351,229,231 \text{ kwh}] * 100 = 34.0\%$

Description

Energy usage

Metric value

15.4

Metric numerator

%

Metric denominator (intensity metric only)

% change from previous year

15.4

Direction of change

Decreased

Please explain

2021 Market-based emissions from purchased electricity decreased by 15.4% from 2020 values

2020 tCO₂e: 245,879.10

2021 tCO₂e: 207,926.48

$[(207,926.48 \text{ tCO}_2\text{e} - 245,879.10 \text{ tCO}_2\text{e}) / 245,879.10 \text{ tCO}_2\text{e}] * 100 = -15.4\%$

Description

Other, please specify (Total Waste)

Metric value

7

Metric numerator

%

Metric denominator (intensity metric only)

% change from previous year

7

Direction of change

Increased

Please explain

Total waste includes reuse, recycle, energy recovery, landfill and incineration without energy recover activities:

2021 total waste: 8,400 t

2020 total waste: 7,900 t

$[(8,400 \text{ t} - 7,900 \text{ t}) / 7,900 \text{ t}] * 100 = 7\%$

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

nokia-people-and-planet-2021-sustainability-report.pdf

Page/ section reference

page 94, assurance coverage of all reported data

page 98, scope 1 data points assured

pages 108-109, independent practitioner's assurance report: "... 2. Scope 1 greenhouse gas (GHG) emissions, by sources (metric tons CO2e)..."

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

nokia-people-and-planet-2021-sustainability-report.pdf

Page/ section reference

page 94, assurance coverage of all reported data

page 98, scope 2 data points assured

pages 108-109, independent practitioner's assurance report: "... 3. Scope 2 GHG emissions, market based and location based (metric tons CO2e)..."

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

nokia-people-and-planet-2021-sustainability-report.pdf

Page/ section reference

page 94, assurance coverage of all reported data

page 98, scope 2 data points assured

pages 108-109, independent practitioner's assurance report: "... 3. Scope 2 GHG emissions, market based and location based (metric tons CO2e)..."

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
 Scope 3: Upstream transportation and distribution
 Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

nokia-people-and-planet-2021-sustainability-report.pdf

Page/section reference

page 94, assurance coverage of all reported data
 page 98-99, scope 3 data points assured
 pages 108-109, independent practitioner's assurance report:
 "... 7. Emissions from purchased goods and services (metric tons CO2e)
 8. Emissions from upstream transportation and distribution (metric tons CO2e)
 9. Scope 3 GHG emissions: use of sold products (metric tons CO2e)..."

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

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?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	International Standard on Assurance Engagements (ISAE) 3000 (Revised)	Verified indicators, source People & Planet 2021 report: - page 94, assurance coverage of all reported data - pages 98-100, data points assured - pages 108-109, independent practitioner's assurance report: 1. Progress against Science-based target (SBT) 5. Renewable electricity amount (GWh) and portion of total electricity consumption (%)
C8. Energy	Energy consumption	International Standard on Assurance Engagements (ISAE) 3000 (Revised)	Verified indicators, source People & Planet 2021 report: - page 94, assurance coverage of all reported data - page 100, data points assured - pages 108-109, independent practitioner's assurance report: 4. Energy consumption within Nokia, by types of energy (GWh) and change to 2020 (%)

nokia-people-and-planet-2021-sustainability-report.pdf

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?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities

GHG Scope

Scope 2

Application

Since Nokia has committed to employing 100% renewable electricity for all of our worldwide facilities by 2025, we have allocated the associated cost of purchasing required EACs to the various Business Groups that occupy the buildings. Thus, the cost is not based on actual tCO₂ emitted, but instead based on the cost of removing tCO₂ associated with non-renewable electricity. As less purchased non-renewable electricity is utilized by site occupants, less EACs need to be purchased. In addition, the installation of on-site solar systems will also reduce the requirement to purchase EACs. As such, by implementing this pricing system there is an incentive for the occupants of these buildings to reduce their electricity usage as well as to install on-site renewable energy applications.

Actual price(s) used (Currency /metric ton)

0.66

Variance of price(s) used

0.45 euro/tCO₂e to 7.65 euro/tCO₂e

Type of internal carbon price

Internal fee

Impact & implication

As a result of this pricing mechanism, Business Groups are more actively assessing their operations to minimize electricity usage. This includes reviewing their existing occupancy footprints in countries that experience high EAC purchase costs, as well as evaluating projects that minimize energy usage yet exhibit longer return on investment time periods. Minimizing electricity usage through internal carbon pricing is especially important within the telecommunication industry which as ours, as energy usage plays a vital role and leads to important carbon emissions. The expected impact and implication of Nokia's program is to drive down greenhouse gas emissions, increase our investments in energy efficiency projects which are especially relevant within our industry, as well as guide our business groups in assessing strategic decisions associated with low-carbon opportunities

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers/clients
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

5

% total procurement spend (direct and indirect)

64

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

4

Rationale for the coverage of your engagement

We collect monthly GHG emissions data from all of our final assembly suppliers on a factory level. For the rest of the suppliers we use CDP Supply Chain -program as a means to engage and collect climate performance data from suppliers. CDP Supply Chain data collection was established in 2010 and we have been collecting annual data

ever since. To make the greatest impact on GHG emissions caused by Nokia's supply chain, we prioritize suppliers based on three dimensions 1) energy intensity of their sector, 2) strategic relevance and 3) our spend with the suppliers. Related to dimension 1, energy intensive suppliers include e.g. component manufacturers, final assembly, transportation and data centres. Related to dimension 2, we have category strategies and our aim is to have all our "highly ranked", i.e. "preferred" and "allowed" suppliers covered by CDP and hence CDP covers also non-energy intensive suppliers. We are engaging with these suppliers to maximize our impact: we are targeting suppliers with the highest emissions as well as suppliers with which we have most spend and/or which are strategic to us, i.e. where we can influence most. In 2021 around 5% of our suppliers by number reported to us, covering around 64% of supplier spend and around 4% of emissions of GHG Scope 3 Category 1: Purchased good and services.

Impact of engagement, including measures of success

We measure the success via several CDP program metrics, starting from the number of suppliers responding to CDP up to evolution of the CDP performance evolution score. As a result of the awareness and engagement campaign every year, the amount of the suppliers who disclose climate information through CDP to us is increasing year over year (from 66 in 2012 to 441 in 2021). By getting our suppliers to report their climate data through CDP, Nokia hopes that they will become more aware of the impact that they have on climate and therefore take a more active stand in reducing their emissions. Various performance indicators such as # of suppliers actually reporting GHG emissions and related savings, # of suppliers purchasing renewable energy and # of suppliers setting emission reduction targets, including in line with Science Based Targets are increasing year on year. As CDP performance score is part of our Supplier Performance evaluation, suppliers are also incentivized in improving their CDP score over time.

Comment

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

Climate change performance is featured in supplier awards scheme

Other, please specify (Run an engagement campaign to educate suppliers about science based targets)

% of suppliers by number

5

% total procurement spend (direct and indirect)

64

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

4

Rationale for the coverage of your engagement

We have set ambitious targets for our suppliers to cut their emissions by 50% by 2030. That rises to 100% for final assembly suppliers from a 2019 baseline who have the same target as Nokia's own factories. We have set a more ambitious target to our final assembly suppliers, because they are treated equally to Nokia own factories, and we have greater leverage over their operations. We're also working with transportation suppliers to help us to bring our logistics emissions down by 73% by 2030.

We have set up an annual process of supplier engagement that embraces awareness, raising and good practice sharing, climate data collection and reporting, performance evaluation and, recognizing and rewarding great results.

Impact of engagement, including measures of success

Awareness raising and good practice sharing:

Every year, we host the Nokia Supplier Climate Webinar where we share our expectations, 2030 targets and good practices coming from different stakeholders within Nokia such as R&D, Logistics, Travel and Fleet and Real Estate. This is a great example of how our environmental experts from different Business Units are connecting, consolidating and sharing their insights and learning. The aim is to cultivate good practices across our supplier networks and find inspiring new angles for our suppliers to work on each year.

Follow up on Climate data collection and reporting:

We send out an annual climate assessment questionnaire via CDP to over 600 suppliers, supported by practical guidance and sessions on how to measure CO2, how to set SBT based targets, how to allocate emissions and fill out all required information. Following these assessment rounds, results are communicated with suppliers and tailored advice is shared with the next steps, based on their performance. When it comes to our final assembly suppliers, data collection and monitoring take place on a much more stringent monthly basis. Performance and reduction projects track and benchmark impact within our own factories.

Integrating results into performance evaluation and measure of success:

Supplier performance results are embedded into our Supplier Performance Evaluation process. Our suppliers receive scores for sustainability/carbon reduction alongside those for quality, business delivery, relationship, and innovation performance.

Impact of engagement:

An example of impact and positive outcome achieved from this engagement, is for instance the fact that from 2020 to 2021 the number of our suppliers that scored A-C on CDP has increased from 199 to 231.

Rewarding and recognizing best examples:

Recognizing great practice is as important as penalizing the bad so Nokia has embedded sustainability/carbon reduction into our Nokia Procurement Diamond Awards which are hosted by our top leadership team, including our CEO. As part of the qualification criteria to Sustainability award, suppliers need to score >C in CDP and submit their specific entry.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Other, please specify (Encourage and collaborate around Science Based Targets)

% of suppliers by number

5

% total procurement spend (direct and indirect)

64

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

4

Rationale for the coverage of your engagement

Our recalibrated Science based target for 2030 is in line with the 1.5°C global warming scenario: Reduce our absolute Scope 1, 2 and 3 GHG emissions by 50% between 2019 and 2030. Our assembly suppliers were added into Nokia's SBT target when it was recalibrated. Additionally, we have set our main assembly suppliers a target that they should reach net zero emissions in their Nokia relevant manufacturing part by 2030. In 2021 we engaged all our suppliers that are part of our CDP programme in a campaign related to Science Based Targets. Rational for scoping: energy intense categories, strategic relevance and spend (all together 403 suppliers).

Impact of engagement, including measures of success

We work in strategic partnership with our suppliers towards achieving our 2030 aspiration and helping to commonly address the challenge to limit average rises in temperatures to 1.5C. We communicated to all of our suppliers Nokia own SBT commitment and expectations from them. We have supported suppliers on the development of factory level roadmaps for net 0 target by 2030 and are following the progress up at business review meetings. We also share our own learnings from Nokia organization. From 2019 baseline, for instance our final assembly suppliers have already been able to reduce emissions from 74996 tons of CO2e to 54210 tons of CO2e. And the total Scope 3 emissions from purchased goods and services from 3 million tons of CO2e to 1.57 million tons of CO2e.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services
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% of customers by number

50

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

50

Please explain the rationale for selecting this group of customers and scope of engagement

Around 90% of our total carbon footprint is caused by the use of sold products by our customers in their communications networks, and therefore it is essential that we work with our customers on reducing power consumption, increasing energy and material efficiency and innovating across design – manufacture – deliver – operate – end of life chain, while also promoting circular practices to reduce waste and increase reuse, recycle and refurbishment. Products from our Mobile Networks business group account for a large proportion of the carbon emissions caused by products in use, and that is why we engage with key Communication Service Providers (CSPs) who are buying these products. Sales to CSPs represented approximately 81% of Nokia sales in 2021. But we also engage with non-mobile service providers on environmental and social aspects of technology and digitalization.

We continue to engage our customers through global campaigns on Zero Emission products, AirScale base station, and software features reducing energy consumption and Nokia innovation liquid cooling. In 2021 we held customer workshops and review meetings on the benefits of 5G, related energy efficiency features, circular products and services, and materials, packaging and waste. Beyond mobile radio access products we also engage with our customers on other areas of our portfolio. We also hold regular update sessions with customers as required on ESG topics, our targets and achievements and explore potential areas of collaboration on environmental and social issues.

We also engage with our customers through disclosure platforms such as CDP and EcoVadis, through which we share our progress on climate-related topics.

Impact of engagement, including measures of success

The success of engagement with our customers can be indirectly measured through our Science Based Targets, specifically the category "Use of sold products". We commit to reduce our emissions by 50% across all Scopes (1, 2, and 3) between 2019 and 2030 in our 1.5°C aligned Science Based Targets. The Scope 3 target includes almost 100% of our current product portfolio as well as logistics and EMS manufacturing. Progressing towards and eventually reaching this target of reducing 50% of emissions by 2030 is our measure of success.

Also, as we share our progress on climate-related topics with our customers through platforms such as CDP and EcoVadis, when we see the number of customers requesting our data via these platforms increase, we consider that a measure of success.

We have regular review meetings with larger key customers and sustainability issues are included in sales proposal responses. Some larger CSPs also have their own specific supplier engagement surveys which we respond to and well as topic specific requirements, such as on materials, recyclability and recycled content. We also share as requested with smaller/medium sized customers our approach to sustainable development, materiality and environmental actions as well as our related programs. In 2021 we again saw increased interest towards our energy efficient product portfolios and over 150 customers have installed energy efficiency software features on our products, including more than 30 customers with 5G energy efficiency features. Over 20% of our radio products in the field have one or more energy efficiency software features activated. Modernization is a key approach to minimizing the expected rise in energy use as 5G is deployed and data grows, and the networks we modernized used on average 46% less energy than those that were not modernized. We also share with our customers the potential to reuse, recycle or refurbish legacy equipment as needed.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
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% of customers by number

50

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

50

Please explain the rationale for selecting this group of customers and scope of engagement

We targeted our customers (CSPs and enterprises) for our campaigns, launches and virtual engagement during a year when physical restrictions were in place around the globe. We also for the first time since the beginning of the pandemic, engaged with our customers at the Mobile World Congress in February 2022 where we met numerous key customers and other stakeholders during 4 days of the biggest communications event globally. We engage regularly in different channels with these customers as around 90% of our total carbon footprint is caused by the use of sold products in our customers communications networks and the largest contributor is our Mobile

Networks business group.

We believe it is important to design, build and deliver technology innovations that produce the greatest positive impact on reducing GHG emissions as core to our contribution to combatting climate change. For example, in 2021 we trialled Nokia's unique Liquid Cooling baseband solution with Japanese customer KDDI. The solution cuts cooling energy consumption by more than 70 percent compared to traditional air conditioning systems. We further promoted zero emission functions and features through our online campaigns such as our #NoBoundaries campaign, which focused on a sustainable future enabled by digital technologies. Other campaigns in 2021 focused on sustainability benefits (including climate benefits) of digitalization in for example agriculture, and product energy efficiency.

In 2021 we partnered with GSMA Intelligence to find out how Communication service providers (CSPs) plan to achieve their energy-efficiency targets. We surveyed more than 100 mobile service providers worldwide, probing on which technologies hold the most promise and how far along the industry is in adopting energy-efficiency solutions - with a special focus on techniques enabled by artificial intelligence (AI) and analytics.

We continued our collaboration with the Joint Audit Cooperation (JAC) initiative, the association of some of the world's largest telecom operators who jointly work with suppliers such as Nokia.

Impact of engagement, including measures of success

We measure the success of marketing campaigns by the number of views, readers and unique visitors, and also by the created sales leads.

As examples of positive outcomes achieved, for example, in 2021 we trialled Nokia's unique Liquid Cooling baseband solution with Japanese customer KDDI. The solution cuts cooling energy consumption by more than 70 percent compared to traditional air conditioning systems. This has led to new productizations and new market trails in other markets as well. We further promoted our latest chipsets for radio, optical and fixed networks which all bring big energy savings and help reduce emissions. As a result of our engagement with key customer in the JAC initiative we also received a best practice recognition for our work in circular economy. We work to promote and collaborate with industry and enterprises particularly manufacturing, energy, and webscale companies to provide network solutions that enable them to cut their emissions.

Our study with GSMA Intelligence on how CSPs plan to achieve their energy efficiency targets found that CSPs think adopting renewable energy sources and AI are the most important strategies for reducing their environmental footprint - more effective than innovations in wireless technologies or network modernization. The study gives important insight for the whole industry, into how CSPs see energy efficiency and how they plan to tackle the issue.

C12.1d

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

We are participating in international standardization work related to the environmental impact of ICT sector in key organizations focusing on telecommunication specific aspects such as the ETSI Technical Committee EE (Environmental Engineering) and ITU-T Study Group 5 (Environment, climate change and circular economy) where we hold official positions (editors, associate rapporteurs, WP vice-chair). Commonly agreed measurement and methodology standards are the basis for reporting energy performance of the products as well as GHG emissions in a uniform manner. We have been participating in ETSI standardization work for more than a decade. Measurement methodology standard for 5G radio energy efficiency was completed for publication in early 2022. Other members involved in ETSI standardization include component or product suppliers, like Intel and Cisco, as well as operators, such as Orange and TIM. It is common goal for all to reduce emissions from telecommunication networks.

Nokia is also involved in ITU-T standardization work creating methodologies for calculating the GHG emissions from ICT and assessing the GHG emission reductions enabled by ICT. Other members involved in ITU-T standardization include component or product suppliers, like Intel and Cisco, as well as operators, such as Orange and KPN.

Efficient material usage in Circular Economy has a positive effect on the climate as emissions can be reduced e.g., in materials sourcing and production. Nokia is participating in the ITU-T and ETSI Circular Economy standardization work targeting to create standard approach commonly agreed with the industry. In 2021, main content was completed in a new standard about 'Applicability of EN 45552 to EN 45559 methods for assessment of material efficiency aspects of ICT network infrastructure goods in the context of circular economy' for publication in 2022.

As standardization is a long-term activity in the ICT sector, expanding over several calendar years, incremental progress into the right direction and towards commonly agreed standards is our measure of success in this area. Nokia has long-term strategy to enable with standards the assessment and reporting of carbon emissions from telecommunication sector and quantify the positive effect that telecommunication has in other sectors for reducing their emissions.

C12.2

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

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Climate-related disclosure through a public platform

Description of this climate related requirement

All of our Preferred and Allowed suppliers need to fill out annually CDP questionnaire and disclose their data to Nokia. Minimum requirement for Preferred suppliers is to obtain performance Score C on CDP. And for allowed D. The requirement can be higher than minimum based on specific Purchasing Category (we have around 90 of different purchasing categories and strategies). Suppliers that do not meet the Category strategy requirements can be downgraded in their status.

% suppliers by procurement spend that have to comply with this climate-related requirement

80

% suppliers by procurement spend in compliance with this climate-related requirement

80

Mechanisms for monitoring compliance with this climate-related requirement

Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Setting a science-based emissions reduction target

Description of this climate related requirement

We have set ambitious targets for our suppliers to cut their emissions by 50% by 2030. That rises to 100% for final assembly suppliers from a 2019 baseline who have the same target as Nokia's own factories. We're also working with transportation suppliers to help us to bring our logistics emissions down by 73% by 2030. Final assembly and logistics reduction targets are integrated to Nokia SBTs. Suppliers are encouraged to reduce their emissions in line with Nokia requirements and in alignment with SBTs. As its a long term target, at this stage the response is rather retain and engage. Our final assembly suppliers have already established 2030 targets for Nokia scope of operations to reach to 0 CO2e by 2030.

For the rest of the suppliers we follow the progress via CDP. From 441 suppliers (representing 65% of purchasing spend we had 154 of them setting the reduction targets in line with SBTs and 79 have been approved by SBT.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

24

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Off-site third-party verification

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Other, please specify (Sustainable aviation fuel provision by our logistics service provides based on a set criteria)

Description of this climate related requirement

Nokia is working with transportation suppliers to help us to bring our logistics emissions down by 73% by 2030. One of the strategies for reducing emissions among others is to utilize biofuels for transportation, including Sustainable Aviation Fuel. Sustainable Aviation fuel provision by our logistics service provider has to be based on a set of requirements including proof of third-party certification for accounting and allocation sustainable aviation fuel to the customers. As this is a new area and we started to work on SAF in 2021, 15% of our core LSP partners meet this requirement.

% suppliers by procurement spend that have to comply with this climate-related requirement

100

% suppliers by procurement spend in compliance with this climate-related requirement

33

Mechanisms for monitoring compliance with this climate-related requirement

Certification

Response to supplier non-compliance with this climate-related requirement

Other, please specify (Exclude supplier from tender related to SAF transportation provision)

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 directly with policy makers
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?

Yes

Attach commitment or position statement(s)

See pages 20-21.
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Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

We have an active global network of people with global positions, and the messages are agreed jointly in regular meetings between all relevant colleagues. Processes-wise we have e.g., training and governance which support the consistency. Environmental management, including climate change topics, as well dealing with government officials are part of Nokia Code of Conduct (CoC) and there is an annual mandatory CoC training called Ethical Business Training for all employees. As part of our certified Environmental management system, based on ISO 14001, we also arrange different environmental trainings and conduct internal audits. Our Environmental management system is globally certified according to ISO 14001 and the external audits done by a third party check consistency with our internal guidelines and ISO 14001 requirements. Nokia's Government Affairs (GA) team and ESG team belong to the same organization and work regularly together. The teams have a standing monthly alignment meeting to assess political and regulatory developments around ESG (including climate) and Nokia's advocacy related to them. Specifically related to industry associations, which are developing joint industry views on various policy issues, GR team is centrally coordinating Nokia representation in the associations. This central coordination ensures consistency in messaging even when different experts across Nokia engage in different work streams of industry associations across continents. Issues are discussed also at the management team level, for example in our Sustainability Council including people who are in charge or both implementing and developing strategy and policy activities, to ensure consistency of messages with the strategy. All our policy engagements are consistent with the company's overall sustainability strategy.

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>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate

Mandatory climate-related reporting

Specify the policy, law, or regulation on which your organization is engaging with policy makers

EU Taxonomy

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Europe

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

We attempt to promote the value of digital technologies and solutions for sustainable transformation to policy makers.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

In our view, digital tools and technologies should be better included in the Taxonomy.

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

Yes, we have evaluated, and it is aligned

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 (DIGITALEUROPE)

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 have already influenced them to change their 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)

DIGITALEUROPE's vision is a Europe where digital technologies, innovation, and artificial intelligence can provide Europe's people with competitive jobs, better health, and better public services. A strong unfragmented DIGITAL EUROPE that takes leadership in creating digital Inclusion, Green growth, Innovation, Trust, Agile mission-based policy making that drives prosperity and creates benefits for the European society and leads globally in an open economy. As part of Green Growth DIGITALEUROPE advocates that Europe should continue to build a framework for a sustainable, low-carbon, and resource-efficient Europe that is fit for the fast-moving innovations in the ICT sector and leverages the true potential of digital technologies as key enablers for green growth. (See <https://www.digitaleurope.org/policies/strongerdigitaleurope/>) DIGITALEUROPE has a policy group dedicated to Digital Sustainability that deals with chemicals, eco-design, waste and supply chain transparency issues. This policy group also addresses climate change and circular economy policy. DIGITALEUROPE is convinced that digital technologies can make the big transformation for Europe happen, based on United Nations Sustainable Development Goals (SDGs), circular economy and decarbonisation objectives, and DIGITALEUROPE believes that the following key aspects should be considered by the incoming EU institutions. This position is further detailed in the Call to Action for Digitalisation as key for a sustainable Europe https://www.digitaleurope.org/wp-content/uploads/2019/06/Narrative_Sustainability.pdf.

Through our active participation at all levels of the association we drive the vision of the association as well as help shape the individual positions in the Digital Sustainable Policy Group (DSPG). Notably, Nokia holds the position of President of the Executive Board as well as a vice-chair position in the DSPG.

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

Trade association

Other, please specify (Nokia is member of several national trade associations in Europe, for example Technology Industries of Finland)

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 have already influenced them to change their 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)

Technology Industries of Finland is the lobbying organisation for technology industry companies. They impact national and EU decision making by providing information about the technology industry (see <https://teknologiateollisuus.fi/en/technology-industries-finland>). They have a presence in numerous international organisations, for example Orgalime, DIGITALEUROPE and CENELEC (see <https://teknologiateollisuus.fi/en/about/international-cooperation-bodies>).

Nokia is member of their working groups in Technology Industries of Finland, including Sustainable development working group (see <https://teknologiateollisuus.fi/en/node/556>). We influence via those working groups by active participation.

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

Trade association

European Roundtable of Industrialists (ERT)

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 have already influenced them to change their 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 Energy Transition and Climate Change Working Group addresses the triggers for a successful transition towards a low carbon economy, and thus contributes to achieving the goals of the Paris Climate Agreement. Please see the full position on climate change here: <https://ert.eu/focus-areas/energy-and-climate-change/>

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 mainstream reports

Status

Complete

Attach the document

nokia-people-and-planet-2021-sustainability-report.pdf

Page/Section reference

Combating climate change, pages 39-54 and Environmental data, pages 98-102

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

Comment

People & Planet 2021 report contains information of Nokia’s climate targets achievements and working methods.

Publication

In mainstream reports

Status

Complete

Attach the document

nokia-ar21-20f_0.pdf

Page/Section reference

Sustainability and corporate responsibility, pages in report 94-111.

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emission targets
- Other metrics

Comment

Nokia Annual Report on Form 20-F 2020 contains information of Nokia’s financial data but also about sustainability governance, strategy and targets, including for example combating climate change and responsible sourcing.

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	Yes, both board-level oversight and executive management-level responsibility	Under our Corporate Governance Guidelines, the Board of Directors evaluates Nokia’s environmental and social activities and governance practices (ESG), related risks and target setting as well as their implementation and effectiveness in the Company. In line with our mode of operation, the Global Leadership Team (GLT) approves sustainability and climate-related strategy, targets and operational frameworks, within which corporate functions and business groups can operate. Biodiversity-related topics are included in the scope of ESG topics. Currently biodiversity has not been assessed to be amongst the most material topics for Nokia and has not been actively brought to the attention of the Board or GLT, but we do expect it to become increasingly important in the future.	<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, but we 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, but we 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	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Species management

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	Other, please specify (Biodiversity-related project led by Nokia employees. Nokia volunteers planted over 900 trees in what they call the "Nokia forest," part of Timisoara's (Romania) forest protection curtain.)	page 38. nokia-people-and-planet-2021-sustainability-report.pdf

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	Chief Financial Officer	Chief Financial Officer (CFO)

SC. Supply chain module

SC0.0