

C0. Introduction

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C0.1

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

**Kapsch TrafficCom** (KTC) is a global provider of transportation solutions for sustainable mobility. Its innovative solutions in the application fields of tolling, traffic management, demand management and mobility services contribute to a healthy world without traffic congestion (i.e. reduction of traffic emissions). With its one-stop solutions, KTC covers the entire value chain of its customers, from components to design and implementation to operation of systems. KTC has brought projects to fruition in more than 50 countries around the globe. As part of the Kapsch Group and headquartered in Vienna, KTC has subsidiaries and branches in more than 25 countries. In its 2021/22 financial year, around 4,220 employees generated revenues of EUR 519.8 million.

KTC delivers software, hardware and infrastructure. The majority of KTC’s emissions are indirect emissions caused by purchased material and power consumption of operational solutions, the construction and maintenance/operations of related infrastructure and office buildings (electricity, heating, cooling). KTC has its own production facilities (in Austria and Canada). However, most hardware, including infrastructure for tolling systems is sourced from 3rd parties. In addition, business travel and employee commuting are significant contributors to KTC’s emissions.

KTC’s corporate environmental sustainability strategy is summarized in its Green Vision, available on the company’s homepage: <https://www.kapsch.net/en/about-us/sustainability>.

The Green Vision includes following two umbrella goals which have been set in 2020:

- *Green company* - CO2 neutrality by 2027

Kapsch TrafficCom aims to become CO2 neutral by 2027, in accordance with the greenhouse gas protocol.

- *Green portfolio*

Over their entire lifecycle, Kapsch TrafficCom products and services help to reduce more CO2 emissions than they cause.

The latter means that KTC solutions help to reduce more traffic related emissions (CO2, PM, NOx) than they cause during their whole life cycle. This positive eco-balance will positively contribute to KTC’s aim to become climate neutral as a company.

KTC intends to report on an annual base through the CDP Climate Change Questionnaire. KTC’s aim is to step-wise improve and extend its sustainability efforts and its reporting.

C0.2

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**(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	April 1 2021	March 31 2022	Yes	2 years

C0.3

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

- Austria
- Canada
- South Africa
- Sweden

C0.4

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

EUR

C0.5

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

Financial control

C0.8

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

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	AT000KAPSCH9

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
Chief Executive Officer (CEO)	<p>The CEO is responsible for ESG in general and fulfills in addition the role of the CSO. The ESG coordinators report initiatives and activities of the internal ESG task force to the CEO. Furthermore, he is accountable for the strategic field of demand management , which is the company's core solution to enable clients to avoid greenhouse gases caused by road traffic.</p> <p>The CEO is in addition responsible for the sales, delivery and operations regions Europe, Middle East, North Africa (EMENA), North America (NAM), Latin America (LAM), Asia-Pacific (APAC) and Africa.</p> <p>Especially in Europe, due to the plan "fit for 55" of the European Union , solutions that enable low emission zones, are currently of particular interest. Region North America, is a growing market, which also requires solutions to cut traffic related emissions, as both, the United States and Canada, aim to become climate neutral. Furthermore, the CEO is responsible for the production facility in Canada and has therefore direct decision-making power over production-related emission reduction potential.</p>
Chief Financial Officer (CFO)	<p>The CFO is responsible for:</p> <ul style="list-style-type: none"> <li>* the corporate supply chain management, which causes the majority of the company carbon footprint (scope 3 - category 1),</li> <li>* the production facility in Austria. as well as</li> <li>* ESG related reporting and</li> <li>* corporate risk management.</li> </ul> <p>KTC is constantly extending its sustainability related efforts and its associated reporting to show progress and transparency towards its customers and partners.</p>
Other C-Suite Officer	<p>Amongst other the Chief Technology Officer (CTO) is responsible for innovation, software excellence, product management and an environmentally sustainable KTC portfolio. As KTC's corporate strategy highlights the importance of sustainability and there is a growing market demand, KTC is working on optimizing the emission reduction potential of its portfolio and the reduction of the emissions caused during the life cycle. The CTO's accountability is to foster these efforts and ensure that KTC's portfolio meets customer requirements. Sustainable innovation is a central focus to meet current and future market trends.</p> <p>In financial year 2021/22 the product &amp; solution development expenses of Kapsch TrafficCom amounted to EUR 83.5 million that correspond to about 16.1% of the total Group revenues. In the previous financial year that was EUR 106.6 million and 21.1% of total Group revenues.</p>

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 – all meetings	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<Not Applicable>	<p>Dealing with climate-related topics is an important aspect of KTC's business. Therefore, all Executive Board members are responsible for sustainability-related matters within their areas of competence.</p> <p>Georg Kapsch, Chairman of the Executive Board of Kapsch TrafficCom, has the Executive Board responsibility for Environment/Social/Governance (ESG). The various (non-financial) sustainability initiatives in the Group are coordinated by two individuals. These ESG coordinators in turn lead the ESG task force, in which the various sustainability initiatives are coordinated on a broader basis.</p> <p>Strategy:</p> <p>In 2020, KTC's new corporate strategy "Strategy 2027" was developed and shared with employees. Environmental sustainability is an integral part of Strategy 2027. This is reflected in the strategic orientation of KTC's portfolio towards emission reducing solutions. Amongst other experts, the environmental sustainability team and the executive expert on EU affairs were involved in the strategy definition process.</p> <p>Major plans and actions and progress monitoring:</p> <p>With respect to the strategy two environmental sustainability goals were derived. The major plans of actions as well as the status of implementation and the progress regarding reaching the two environmental sustainability goals are reported by the environmental sustainability team to the CEO/CSO on a monthly base.</p> <p>Objectives and progress monitoring:</p> <p>* In 2021, two ESG coordinators have been appointed. Within the ESG task force, climate related topics are discussed on a bi-monthly base, action items defined and progress reported. The most important agenda items are consequently brought to the attention of the CEO/CSO and CFO.</p> <p>* Annually the content of the non-financial report is discussed with all board members. The expert in charge of financial and non-financial reporting (one of the two ESG coordinators) reports the progress in sustainability activities to the CFO and the CEO.</p> <p>* The executive expert on EU affairs leads the initiative to ensure compliance to upcoming EU climate related legislation. The status is reported on a monthly base to the CEO/CSO.</p> <p>* Within the global risk management, climate related issues are included. KTC Group Risk function quarterly reports to the executive board members and the audit committee of the supervisory board.</p> <p>* The HSSEQ management maintains the ISO 14001 certificate at headquarters, production site in Austria and in Spain. The HSSEQ management system is applicable for all KTC employees and entities.</p>

**C1.1d**

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

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	<p>Kapsch TrafficCom has identified climate-relevant emissions as a key issue (pls see non-financial report, section environment). Various concepts have been implemented to help reduce emissions and consequently the negative impact on climate. The Executive Board of KTC is ultimately responsible for these concepts, including their implementations, controlling and reporting. The Chief Executive Officer (CEO) has a paramount position as he in fact is also the acting Chief Sustainability Officer (CSO).</p> <p>This is reflected in his emphasis on sustainability in the company's strategy. Content-wise the ESG team (experts sustainability, EU affairs &amp; non-financial reporting) regularly advises him on sustainability matters and therefore he holds solid expertise in sustainability and its adjacent fields.</p>	<Not Applicable>	<Not Applicable>

**C1.2**

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

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>KTC's CEO has also the CSO function. During the monthly Jour Fix between the CEO and the Environmental sustainability team, climate related risks and opportunities are discussed, associated actions are agreed upon, planned, and their status of implementation reported. In addition, these identified risks and opportunities are listed in the environmental risk register. They are reported on a quarterly basis to the Enterprise Risk Management. If appropriate, they are added to the corporate risk register. Furthermore, the climate-related opportunities are a key element of KTCs strategic decisions as they touch upon vital parts of KTC's business areas.</i>	<Not Applicable>	More frequently than quarterly
Chief Financial Officer (CFO)	<Not Applicable>	Assessing climate-related risks and opportunities <i>The environmental sustainability team strongly collaborates with KTC's Investor Relations and Compliance Officer, who is in charge of reporting activities. He is also one of the two ESG coordinators and a direct report to the CFO. This ESG coordinator also covers non-financial risk management (outside-in risks).</i>	<Not Applicable>	Quarterly
Other C-Suite Officer, please specify (Chief Technology Officer)	<Not Applicable>	Assessing climate-related risks and opportunities <i>The environmental sustainability team strongly collaborates with experts in the field of innovation, product management and the application centers (i.e. development units of the KTC portfolio). Being in charge of innovation, product management and the KTC solution portfolio, the CTO oversees and is the senior decision maker regarding the technological developments including the implementation of the various environmental aspects.</i>	<Not Applicable>	As important matters arise
Safety, Health, Environment and Quality committee called "ASA and HSSEQ Circle" in KTC Austria.	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>Upcoming topics regarding environment, health, and personal safety are locally discussed in a group of nominees representing all departments of KTC Austria. The outcome (i.e. action items, progress status) is reported quarterly to all team leaders in KTC Austria.</i>	<Not Applicable>	Quarterly
Environmental, Health, and Safety manager at KTC called: HSSEQ Manager in KTC	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>The KTC HSSEQ Managers manage OHSE hazards, risks and opportunities supported by team leaders and employees. They are documented in the KTC global environmental risk register. This KTC global environmental risk register is an input for the enterprise risk register.</i>	<Not Applicable>	Quarterly
Environment/ Sustainability manager at KTC called: Environmental Sustainability team	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>The environmental sustainability team's purpose is to identify and mitigate KTC's climate related risks and identify and foster opportunities.</i>	<Not Applicable>	More frequently than quarterly
Public affairs manager at KTC: Executive Expert EU Affairs	<Not Applicable>	Assessing climate-related risks and opportunities <i>The Executive Expert EU Affairs leads the initiative to ensure that KTC identifies procedural requirements at earliest stage and adapts KTC processes pro-actively.</i>	<Not Applicable>	More frequently than quarterly
Risk manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>Additionally to the environmental sustainability team, the corporate risk manager oversees any significant climate related risks and opportunities (e.g. identified during the management of OHSE hazards, risks and opportunities), which fulfill the enterprise risk management criteria. In this case, they are reported quarterly to Executive Board and the audit committee of the supervisory board.</i>	<Not Applicable>	More frequently than quarterly
Other committee, please specify (Supervisory board)	<Not Applicable>	Assessing climate-related risks and opportunities <i>The audit committee audits the annual non-financial report and handles the report on risk management. The audit committee also reviews the effectiveness of the internal control system and the risk management system. This includes climate-related risks and opportunities.</i>	<Not Applicable>	More frequently than quarterly
Other committee, please specify (ESG task force)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>Alignment between the two ESG coordinators, the environmental sustainability team, the Executive Expert EU Affairs and the VP Management System HSSEQ.</i>	<Not Applicable>	More frequently than quarterly

**C1.2a**

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

**Chief Executive Officer**

The CEO is accountable for:

\* ESG in general and fulfills in addition the role of the CSO

\* the strategic field of demand management, which is the company's core solution to enable clients to avoid greenhouse gases caused by road traffic

\* sales, delivery and operations regions Europe, Middle East, North Africa (EMENA), North America (NAM), Latin America (LAM), Asia-Pacific (APAC) and Africa

\* production facility in Canada

Especially in Europe, due to the plan "fit for 55" of the European Union, solutions that enable low emission zones, are currently of particular interest. Region North America is a growing market, which also requires solutions to cut traffic related emissions, as both, the United States and Canada, aim to become climate neutral.

The ESG coordinators report initiatives and activities of the internal ESG task force to the CEO. During the monthly Jour Fix with the Environmental sustainability team, climate related risks and opportunities are discussed, associated actions are agreed upon, planned, and their status of implementation reported. The identified risks and opportunities are listed in the environmental risk register. They are reported on a quarterly base to the Enterprise Risk Management. If appropriate, they are added to the corporate risk register. Climate-related opportunities are a key element of KTCs strategic decisions as they touch upon vital parts of KTC's business areas.

#### **Chief Financial Officer**

The CFO is accountable for:

- \* the corporate supply chain management, which causes the majority of the company carbon footprint (scope 3 - category 1),
- \* the production facility in Austria as well as
- \* ESG related reporting and
- \* corporate risk management.

KTC is constantly extending its sustainability related efforts and its associated reporting to show progress and transparency towards its customers and partners.

The environmental sustainability team strongly collaborates with KTC's Investor Relations and Compliance Officer, who is in charge of reporting activities. He is also one of the two ESG coordinators and a direct report to the CFO.

This Enterprise risk manager also covers non-financial risk management (outside-in risks).

#### **Chief Technology Officer**

The CTO is accountable for:

- \* innovation
- \* software excellence
- \* product management and
- \* an environmentally sustainable KTC portfolio.

As KTC's corporate strategy highlights the importance of sustainability and there is a growing market demand, KTC is working on optimizing the emission reduction potential of its portfolio and the reduction of the emissions caused during the life cycle. The CTO is taking care to foster these efforts and ensures that KTC's portfolio meets customer requirements. Sustainable innovation is a central focus to meet current and future market trends.

#### **Safety, Health, Environment and Quality committee**

is called "ASA and HSSEQ Circle" in KTC Austria.

Locally, upcoming topics regarding environment, health and personal safety are discussed within a group of nominees representing all departments of KTC Austria. The outcome (i.e. action items, progress status) is reported on a quarterly base to all team leaders in KTC Austria.

#### **Environmental, Health and Safety Manager**

is called HSSEQ Manager in KTC.

The KTC HSSEQ Managers are in charge of OHSE hazards, risks and opportunities supported by team leaders and employees. They are documented in the KTC global environmental risk register. This KTC global environmental risk register is an input for the enterprise risk register.

#### **Environment/Sustainability Manager**

at KTC called: Environmental Sustainability team

The environmental sustainability team's purpose is to identify and mitigate KTC's climate related risks and identify and foster opportunities.

#### **Public affairs manager**

at KTC called: Executive expert EU affairs

The Executive Expert on EU affairs leads the initiative to ensure compliance to upcoming climate related legislation. The status is reported on a monthly base from the executive expert on EU affairs to the CEO.

#### Risk manager

When climate related risks and opportunities (e.g. identified during the management of OHSE hazards that falls under the responsibility of HSSEQ) fulfil the criteria of the Enterprise Risk Management, they are managed as well by the Corporate Risk Manager. Then they are reported on a quarterly base to executive board and the audit committee of the supervisory board.

#### Supervisory board

During the audit committee climate related risks and opportunities are assessed, as part of the enterprise risk management. The supervisory board meets at least quarterly.

#### ESG task force

The purpose of the ESG task force is the alignment of all ongoing corporate initiatives in the context of sustainability. Its members are the two ESG coordinators, the environmental sustainability team, the Executive Expert EU Affairs and the VP Management System HSSEQ.

### C1.3

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#### (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	In 2020, incentives were set for the CEO. And in 2021, in addition for the CTO and the CFO.

### C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction project Emissions reduction target Behavior change related indicator	<p>The CEO is compensated pursuant to the remuneration policy 2020. Note: The CEO also fulfills the role of the CSO.</p> <p>The Remuneration Committee of the Supervisory Board sets four non-financial targets for each financial year, with at least two targets covering a multi-year timeframe.</p> <p>In the selection of the targets, the Remuneration Committee uses the key performance indicators in the company's current consolidated non-financial report as a reference point, but can also autonomously define them.</p> <p>A member of the Executive Board shall be entitled to an amount of EUR 10,000 for the achievement of each target.</p> <p>Following climate-related targets are currently active:                      * 2021-23: Reduction of business flights                      By 31.3.2023 the number of used flight tickets in the financial year shall be less than 50% of the value in FY 2018/19 (i.e., the financial year before massive COVID-19 travel restrictions). In 2018/19, 8,001 flight tickets were used.</p> <p>* 2022-23: Reduction of fuel consumption                      The average emission per vehicle (in metric tons of CO2 equivalents) shall decrease by 2% (current value: 4.92)</p> <p>All those goals equally apply for the Chief Executive Officer and the Chief Technology Officer.</p>
Chief Financial Officer (CFO)	Monetary reward	Emissions reduction project Emissions reduction target Behavior change related indicator	<p>The CFO is compensated pursuant to the remuneration policy 2020.</p> <p>The Remuneration Committee of the Supervisory Board sets four non-financial targets for each financial year, with at least two targets covering a multi-year timeframe.</p> <p>In the selection of the targets, the Remuneration Committee uses the key performance indicators in the company's current consolidated non-financial report as a reference point, but can also autonomously define them.</p> <p>A member of the Executive Board shall be entitled to an amount of EUR 10,000 for the achievement of each target.</p> <p>Following climate-related targets are currently active:                      * 2021-23: Reduction of business flights                      By 31.3.2023 the number of used flight tickets in the financial year shall be less than 50% of the value in FY 2018/19 (i.e., the financial year before massive COVID-19 travel restrictions). In 2018/19, 8,001 flight tickets were used.</p> <p>* 2022-23: Reduction of fuel consumption                      The average emission per vehicle (in metric tons of CO2 equivalents) shall decrease by 2% (current value: 4.92)</p> <p>All those goals equally apply for the Chief Executive Officer and the Chief Technology Officer.</p>
Other C-Suite Officer	Monetary reward	Emissions reduction project Emissions reduction target Behavior change related indicator	<p>The Chief Technology Officer (CTO) is compensated pursuant to the remuneration policy 2020.</p> <p>The Remuneration Committee of the Supervisory Board sets four non-financial targets for each financial year, with at least two targets covering a multi-year timeframe.</p> <p>In the selection of the targets, the Remuneration Committee uses the key performance indicators in the company's current consolidated non-financial report as a reference point, but can also autonomously define them.</p> <p>A member of the Executive Board shall be entitled to an amount of EUR 10,000 for the achievement of each target.</p> <p>Following climate-related targets are currently active:                      * 2021-23: Reduction of business flights                      By 31.3.2023 the number of used flight tickets in the financial year shall be less than 50% of the value in FY 2018/19 (i.e., the financial year before massive COVID-19 travel restrictions). In 2018/19, 8,001 flight tickets were used.</p> <p>* 2022-23: Reduction of fuel consumption                      The average emission per vehicle (in metric tons of CO2 equivalents) shall decrease by 2% (current value: 4.92)</p> <p>All those goals equally apply for the Chief Financial Officer and the Chief Executive Officer.</p>

**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	short-term is defined as up to 1 year.
Medium-term	1	4	medium-term is defined from 1 to 4 years.
Long-term	4		long-term is defined as longer than 4 years.

## C2.1b

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

#### Definition of substantive financial or strategic impact:

Substantive financial and strategic impact is assumed if:

- \* an information requires a change of strategy,
- \* a comprehensive change of the organizational set up is required or
- \* the long-term performance and outlook of core business areas is concerned.

#### Description of the quantifiable indicator(s) used to define substantive financial or strategic impact:

If the annual revenues rise/fall by more than EUR 65 million in a financial year or by more than EUR 100 million in the medium term this is considered substantive financial or strategic impact.

There is no differentiation when identifying climate-related risks or assessing their substantive financial or strategic impact. There is also no differentiation for any other risks.

## C2.2

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### (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 identified, assessed and responded to via the KTC risk and opportunity culture. Risk and opportunity management explicitly includes all KTC entities, therefore all value chain stages; i.e. direct operations (e.g. HSSEQ, development, production, corporate information security management), upstream (e.g. supply chain management) as well as downstream (e.g. sales, project management, delivery, operations) and covers all time horizons (short-term, medium-term and long-term). Employees may provide information on (identified) risks and opportunities during daily business activity.

At KTC a generic way for describing and assessing a risk has been established, independently of risk/opportunity type, covered value chain stage or covered time-horizon. It consists of the sub-sequent steps:

- \* establishing the context - i.e. identification of risk areas,
- \* risk/opportunity assessment, and
- \* risk/opportunity treatment.

These are accompanied by communication and consultation, as well as monitoring and review.

Risk and opportunity management takes place during several activities e.g. bids, development, delivery projects, operations projects, and on department level (e.g. HSSEQ, information security, environmental sustainability, supply chain management).

Risks are aligned quarterly and – if significant - included in the ERM reporting on a quarterly basis. The significance of the risk is determined by the ERM either based on its financial impact (proportion of the EBIT) or on a qualitative assessment, if the financial impact can't be quantified.

In this regard, no differentiation is made between long-term, medium-term and short-term risks/opportunities. Risks/Opportunities are assessed and treated as soon as they are identified and are then reassessed periodically to identify if the impact or likelihood of a risk/opportunity occurring has changed, which is particularly important for long-term risks.

With regards to climate-related risks/opportunities, the ESG task force together with Corporate Strategy and HSSEQ regularly coordinate their activities to identify and evaluate those climate-related risks and opportunities that would have a substantive impact on KTC's business activities and communicate them at least quarterly to Risk Management.

Legal, HSSEQ and information security provide additional governance, procedures and tools. Similar to the ERM, dedicated colleagues in HSSEQ, Environmental Sustainability and Information Security Management - in their role as Risk Coordinator - are maintaining their own risk registers for tracking risks that are threatening the aims defined by them. The risk coordinator roles are connected via a dotted or solid line to the corporate risk manager.

As described, risk and opportunity management activities are integrated in the daily business activities of KTC. Risks and opportunities are identified, assessed and treated on a regular base.

Regarding climate-related risks and opportunities in addition, at least once a year a structured and formal risk and opportunity identification assessment is accomplished.



--- RISK MANAGEMENT ---

Identification of risk areas

The ERM describes KTC's risk management framework. Based on the risk profile of KTC, the ERM identifies the main areas of risks. Risk management procedures have to be implemented by the affected organizational units (e.g. sales, delivery, etc.). This allows for an active and effective management of risks and, additionally, promotes a risk and opportunity based view upon business decisions.

Assessment of risk

Once a risk is identified, the risk and its expected impact (if materialized) need to be assessed. Therefore, the risk assessment consists of a repeating cycle (risk identification, risk analysis, and risk evaluation). The documentation of the risk includes a qualitative assessment of the risk parameters and if possible a quantified assessment of likelihood and financial impact. The risk impact can be described with up to three impact scenarios (worst case, best case, most likely case) to describe the financial impact.

Based on the assessment, a risk may be considered a significant risk. The corporate risk manager assesses the financial impact of the risks. Based on the proportion of the EBIT, the risk is classified as significant or not. If the risk cannot be financially quantified (in a reasonable way) a qualitative assessment is performed by the corporate risk manager. KTC uses a 5x5 risk matrix which combines mainly two risk parameters: risk impact and risk likelihood. Each parameter can be defined based on five levels (risk impact: low, moderate, high, serious, critical; risk likelihood: very unlikely, unlikely, medium likelihood, likely, very likely). Furthermore, as part of the ERM, a global risk report is prepared on a quarterly basis. The report does provide a comprehensive view on significant risks and their potential impact on the FY's financial targets (net sales, EBIT).

Once a risk is assessed, it must be assigned to a risk owner. A suitable risk owner is generally the individual accountable for ensuring an appropriate management of that risk. In their position, risk owners should be able to capture the risk's full magnitude, to identify and understand the sources of the risks and to dispose over sufficient budget to implement mitigation measures.

Response to risk (that could have substantive financial or strategic impact)

Via mitigation (e.g. reducing impact, reducing the risk's likelihood to occur) and the definition of a contingency plan (i.e. actions that will be taken once the risk has materialized) the risk treatment process is started.

--- OPPORTUNITY MANAGEMENT ---

Identification of opportunity areas

The corporate strategy team identified, documented and communicated the relevant opportunity areas for Kapsch Traffic Com in the corporate strategy 2027 to all employees.

Assessment of opportunities

Opportunities are assessed similar to risks. Their expected impact, likelihood and financial impact is assessed. The opportunity is assigned to a suitable opportunity owner with the ability to capture the opportunity's full magnitude to identify and understand the opportunity and to dispose over sufficient budget to implement measures to foster the realization of the opportunity.

Response to opportunities (that could have substantive financial or strategic impact)

The opportunity owner has to ensure that appropriate measures to foster the realization of the opportunity are set and the corresponding expected impact, likelihood and financial impact are kept up-to-date.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	With regulators requesting an increasing level of transparency of corporate enterprises with regards to sustainability (e.g. their impact on the environment), KTC recognizes the relevance to monitor and address these developments. Within the EU, for example, Regulation (EU) 2020/852 'on the establishment of a framework to facilitate sustainable investment', often referred to as Taxonomy Regulation, requires KTC to report the share of its revenue derived from environmentally sustainable economic activities. The technical screening criteria developed by the Commission will likely be used for other areas such as public procurement, bids, etc.
Emerging regulation	Relevant, always included	With regulators requesting an increasing level of transparency of corporate enterprises with regards to sustainability (e.g. their impact on the environment), KTC recognizes the relevance to monitor and address these developments. As such not only current regulations may be intensified, but new ones may emerge. The European Commission's proposal 2021/189, concerning corporate sustainability reporting, addresses the reporting of emissions. This will most likely result in mandatory emission reporting. Non-compliance could potentially lead to fines and difficulties accessing financial markets. Additionally, in Austria, CO2 taxes are expected to be introduced in 2022. This will have a direct impact on KTC's headquarters. Other KTC locations in the EU, Canada or the US may be affected by similar local legislation. The introduction of CO2 taxes in KTC's target markets would have an impact on the required environmental sustainability of KTC's portfolio (i.e. low carbon footprint of the solutions life-cycle and high emission reduction potential during its operation). The Eurovignette regulation, which enables CO2 based tolling for trucks in the EU, is an opportunity for the extension of KTC's portfolio in the tolling segment. As such, it is essential to explore this opportunity further.
Technology	Relevant, always included	KTC is embracing innovation with a market-driven approach. A deep understanding of robust market trends and desirability stands at the forefront of KTC's approach to bring superior innovations to the market and its customers. Unsuccessful investment in new environmentally friendly technologies could potentially harm KTC's financial position and is therefore, considered a risk to the company. For instance, KTC is currently investing in a portfolio transformation towards Software as a Service solutions. The associated risk is potential missing customer acceptance.
Legal	Relevant, always included	There is a risk related to legal consequences such as potential proceedings against KTC in case requirements in a customer contract are not met. Legal actions could result in loss of net sales, additional costs, reputational damage and customer dissatisfaction. An example would be not fulfilling the emission reduction goal which was agreed upon with the customer beforehand.
Market	Relevant, always included	On 12 December 2015, 196 states adopted the Paris Agreement, pledging to limit global warming to below 2 degrees Celsius (preferably to 1.5 degrees Celsius). To achieve this long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible. An increasing amount of cities, such as Amsterdam, Melbourne, and New York City, have also made pledges to go carbon-neutral. Considering that globally around 20% of the total greenhouse gas emissions are caused by road transport, the demand for sustainable options of transportation are increasingly popular among customers. From a business risk perspective, KTC mostly perceives climate change as an opportunity.
Reputation	Relevant, always included	Having a negative environmental influence at some point in the value chain (direct operations, upstream, or downstream) could lead to increased stakeholder concern and/or negative stakeholder feedback. Being unable to reach promised environmental goals, such as CO2 neutrality, could negatively impact KTC's reputation. This in fact could lead to difficulties raising capital or recruiting new employees.
Acute physical	Relevant, always included	The severity, frequency, and likelihood of extreme weather events such as cyclones, floods and, wildfires have increased. KTC's physical roadside infrastructure, as well as the two manufacturing plants in Austria and Canada or the more than 100 global KTC offices (all rented premises), are at risk of being damaged by extreme weather events.
Chronic physical	Relevant, always included	More extreme temperatures such as more frequent heat waves causes the demand for air conditioning and heating to rise, resulting in increased energy costs.

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?**

No

C2.3b

**(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	<p>As part of the risk management process, all risks identified at KTC are evaluated whether they have substantive financial or strategic impact on the company.</p> <p>KTC's definition of substantive financial or strategic impact is if annual revenues rise or fall by more than EUR 65 million in a financial year or by more than EUR 100 million in the medium term.</p> <p>Although Kapsch has defined several climate-related risks (see also the responses to question C2.2a) none is considered to have potential substantive financial or strategic impact on its business.</p> <p>The explanation for this can be found in its strategy and business model. By aiming to challenge the limits of mobility for a healthy world without congestion, its solutions contribute to the reduction of emissions caused by road transport.</p> <p>The increased awareness and sense of urgency regarding climate change is therefore predominantly a chance, not a risk, for its business. That does however not mean that its value chain does not face any climate-related risks.</p> <p>Nevertheless, due to the nature of its business model these risks are limited. Most of its business activities are office-based, its production and operations, in general, do not produce significant direct GHG emissions.</p> <p>The energy consumption of all its activities is relatively low (i.e. it does not constitute a dominant cost factor). Therefore KTC does not expect to fall under any current carbon related legislation (e.g. ETS-scheme, carbon tax, restrictions to KTC's operations).</p> <p>KTC does not rely on supplies from emission-intensive sectors that may cause KTC to face an increase in prices. Nor does KTC rely on supplies from emission-intensive sectors that may cause a significant increase in prices.</p> <p>Rises in energy pricing related to changes in regulation would not affect KTC as a major risk. This applies to all regions that KTC operates in for at least the next 5 to 10 years.</p>

C2.4

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

Yes

C2.4a

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

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

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

*Kapsch Traffic Com delivers solutions in the field of Intelligent transportation systems (ITS). These can help to reduce traffic demand and curb emissions. In a nutshell, ITS \* reduce congestion and improve traffic flow on busy roads, \* influence drivers to adapt their behavior, \* free space on roads for greener transport alternatives and \* improve air quality. Globally, road traffic accounts for 20% of the GHG emissions. To limit global warming, a significant increase of demand for products fostering the reduction of road traffic emissions is expected by Kapsch Traffic Com.*

**Company-specific description**

Kapsch Traffic Com (KTC) delivers solutions in the field of Intelligent transportation systems (ITS). These can help to reduce traffic demand and curb emissions.

The corresponding Kapsch portfolio include:

- \* tolling solutions - distance-based tolls improve transport efficiency and can achieve a CO2 reduction of up to 20%
- \* traffic management solutions - urban traffic management reduces stop and go traffic in cities by optimizing traffic lights, which reduces CO2 emissions in developed cities by 8% and in emerging cities by 15% on average
- \* low emission zones - low emission zones are the tool to address local toxic air pollution and cut CO2 emissions. They enable GHG emissions savings of around 20%.
- \* demand management - demand management combines the powerful components of tolling, traffic management and low emission zones in an optimized way. When appropriately implemented this solution can achieve up to 30% emission reduction, supporting air quality and climate related agendas of cities.

With view to the increasing political focus on climate related policies and initiatives on national, regional and city level particularly in Europe, like the European Green Deal, it is expected that the demand for all these solutions will rise considerably over the next years. As this represents an important opportunity for Kapsch TrafficCom, a specific

focus will be put on the region EMENA. This is also perceived as an important step, as successful projects in this region could have a knock-on effect on other areas in the world, where sustainability might not be in the focus yet.

KTC is a major player in the quite fragmented ITS market, which is also reflected in its leading role in the industry's standardization efforts as well as KTC's investment into research and development regarding its portfolio. In FY22 the latter amounted to EUR 83.5 million. A special focus lies on investments in the growing market segment demand management, which is expected to even grow by 38% per year until 2027.

Moreover, with regards to supporting customers in their efforts to reduce GHG emission, KTC is currently the only market participant offering this comprehensive tool set to reduce those emissions through infrastructure. Due to all those factors KTC is confident to be able to achieve a minimum market share of 14% of the total addressable market (expected value: EUR 7.2 billion in 2027) with its sustainability-supporting portfolio.

#### Time horizon

Long-term

#### Likelihood

Very likely

#### Magnitude of impact

High

#### Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

#### Potential financial impact figure (currency)

1000000000

#### Potential financial impact figure – minimum (currency)

<Not Applicable>

#### Potential financial impact figure – maximum (currency)

<Not Applicable>

#### Explanation of financial impact figure

1 billion € (in 2027)

Based on assumptions from our regional offices a potential addressable market size of 7.2 billion € has been estimated for 2027. This is based on an expected average yearly growth rate of 6.7%. The indicated figure shows the size of the part of the Intelligent Transportation Systems market which Kapsch TrafficCom is able to target with its current solutions (Tolling, Traffic Management, Demand Management, Tolling Services). Based on experience from former years and a qualitative assessment of the competitiveness of our portfolio, we assume to win a part of the market worth one billion in revenue.

#### Cost to realize opportunity

900000000

#### Strategy to realize opportunity and explanation of cost calculation

--- Strategy to realize ---

In order to reach this goal the company on the one hand aims at maintaining and supporting the core business, which is tolling. While on the other hand a special focus lies on promoting the traffic management & demand management business, by particularly targeting cities, as upcoming regulations on city level will increasingly require the deployment of traffic management systems that support emission reduction in cities, like our solutions do.

We aim at realizing this opportunity of gaining 1 billion of revenue per year by 2027. Multiple actions are planned over the next years to reach this goal. One already completed action to facilitate exploiting this opportunity was the hosting of the Kapsch TrafficCom Summit on the topic of Sustainable Mobility and the Future of Transport in March 2022. For this event customers from Europe, the Middle East, North America, South America and Africa were invited. 185 customers, attended the event, which allowed us to create awareness for the necessity to consider sustainable mobility options, and in turn strongly fostered our ability to exploit the opportunity to sell more Kapsch intelligent transportation management solutions.

The detailed plan to reach this target is elaborated on in the Strategy 2027 memorandum, which has been developed and communicated internally but is not communicated externally due to confidentiality reasons.

--- Cost calculation ---

The cost calculation is based on following pillars:

\* KTC is aiming for a market volume of EUR 1 billion revenue per year by 2027

\* The annual EBIT shall at least be 10%

Therefore, the average cost to realize an ITS project has to be 90% and the total expected cost to realize this opportunity is EUR 900 million.

#### Comment

The compatibility of Kapsch TrafficCom's products with more environmentally conscious markets has been proven by various scientific studies, which supports the reasoning that the expected market developments represent a considerable opportunity for us. The respective underlying facts are summarized in a publicly available folder which can be accessed through the following link:

[https://www.kapsch.net/\\_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035\\_Factsheet\\_Sustainable\\_Future.pdf](https://www.kapsch.net/_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035_Factsheet_Sustainable_Future.pdf)

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## C3. Business Strategy

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### C3.1

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

**Row 1**

**Transition plan**

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

**Publicly available transition plan**

Yes

**Mechanism by which feedback is collected from shareholders on your transition plan**

We have a different feedback mechanism in place

**Description of feedback mechanism**

The transition plan was approved by all board members, including the majority shareholder of Kapsch TrafficCom.

**Frequency of feedback collection**

Annually

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

The transition plan is called "Our Green Vision" and is available on the corporate's homepage: [https://www.kapsch.net/en/about-us/sustainability/Our\\_Green\\_Vision\\_2022.pdf](https://www.kapsch.net/en/about-us/sustainability/Our_Green_Vision_2022.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	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Important but not an immediate priority	We are already considering various scenarios throughout the analysis of our climate-related risks and opportunities but have not yet formalized it to a sufficient degree. Nevertheless as our company's business model centers around offering solutions that should help avoid emissions and have the aim to become climate neutral by 2027, we would be prepared for the most stringent scenario of limiting global warming to 1.5°C.

**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	Climate change is rather an opportunity than a risk for KTC. Environmental sustainability is an integral part of the new corporate strategy. This is reflected in the strategic orientation of KTC's portfolio towards emission reducing solutions. KTC's solutions (e.g. tolling, traffic management, low emission zones and demand management) help to reduce emissions related to road traffic.
Supply chain and/or value chain	Evaluation in progress	Suppliers are important stakeholders for KTC and were therefore included in the stakeholder analysis for the development of the strategy 2027. The discussion of climate related matters together with suppliers is an ongoing effort. Compliance to climate-related requirements is part of the supplier selection process. The adherence of these requirements is monitored by KTC.
Investment in R&D	Yes	Climate-related opportunities have influenced the focus of KTC's strategy to invest in sustainable innovation and new sustainable solutions, as well as in improving existing solutions within the upcoming years. Investment in R&D is considered a major opportunity, hence its influence on KTC's strategy. During the reporting period 16.1% of the total revenue (i.e. EUR 83.5 million) have been invested in development of the sustainable portfolio.  sustainable innovation: Within the reporting period KTC has further developed the wooden gantry innovation (started during the last reporting period) that can replace its GHG emission-intensive predecessor model, the steel gantry.  new sustainable solutions: In its strategy, KTC has envisioned the development of next-generation demand management, a solution to reduce road traffic related CO2 emissions in urban areas combining congestion charging and traffic management. During the reporting period this solution has been further developed.  improvement of existing solutions: KTC minimizes the product's carbon footprint by continuing its efforts to reduce power consumption and to reduce CO2-intensive materials used in solutions.
Operations	Yes	Aligned with KTC's goal to become CO2 neutral by 2027, the company will continue to switch to renewable energy providers wherever possible and continue to strive for reduction of total power consumption.  Three of the five major KTC sites (larger than 5000m <sup>2</sup> ): production site in Austria, office sites in Austria and the office site in Sweden have been using electricity from renewable sources during the reporting period.

**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	Revenues: Considering that globally around 20% of the total greenhouse gas emissions are caused by road traffic, KTC perceives climate action as an opportunity to promote change. Additionally, with climate-regulations becoming more strict, and awareness being raised, sustainable options become increasingly attractive for clients. This in turn is expected to have a positive effect on KTC's sales and cash flow.  Indirect costs: However, to provide these sustainable options, KTC needs to invest into R&D. This and the costs for financing the team resources necessary to take care of environmental sustainability are indirect cost.

**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**

Revenue

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

100

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

100

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

100

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

Our company's portfolio is focused on facilitating the management of traffic and therefore also reducing congestion. As a consequence, they have a CO2 positive effect if they are applied correctly. This in turn means that 100% of our sold solutions (=revenues) can be considered to be in line with the organization's transition to a 1.5°C world.

We have arrived at this conclusion through performing extensive secondary research, as a variety of academic research studies support this reasoning. In particular we have found supporting evidence for the positive environmental effect of our four core solutions tolling, traffic management, low emission zones and demand management. A study by Cavallaro, Giaretta & Nocera (2018) has shown that distance based tolls can improve transport efficiency and therefore have a CO2 reduction potential of up to 20%. At the same time, this study has also shown that low emission zones have the potential to reduce CO2 emissions by approximately 20%. Furthermore, a study by Chong-White (2016) has shown that coordinated adaptive traffic systems reduced travel time by 28% which resulted in a reduction of CO2 by 15%. Ultimately internal calculations have shown that modern demand management, which aims at leveraging the advantages of applying a traffic management system in combination with a tolling scheme, has the potential of reducing 30% of emissions. For more detailed information and sources please refer to the sustainability fact sheet that has been compiled: [https://www.kapsch.net/\\_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035\\_Factsheet\\_Sustainable\\_Future.pdf](https://www.kapsch.net/_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035_Factsheet_Sustainable_Future.pdf)

Based on this evidence we argue that our products can be considered low-carbon. Nevertheless, unfortunately no recognized taxonomy yet acknowledges the eligibility of our offered solutions as low-carbon. Even though the EU Taxonomy Regulation explicitly mentions better traffic management in recital 49 as one of those areas to be invested in for the purpose of financing sustainable growth. The Eurovignette Directive 2022 sees the comprehensive application of tolls as a necessity for optimizing the transport system. Nevertheless, neither tolling nor traffic management are currently included as economic activities in the relevant delegated acts; they have obviously been forgotten, meaning that the revenues as well as the associated capital and operating expenditures of Kapsch TrafficCom currently do not qualify for taxonomy. Therefore, we are currently engaging with policy makers in the European Union to create an understanding for this shortcoming and work towards an inclusion of our solutions in the EU Taxonomy for environmentally sustainable economic activities.

**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**

2022

**Target coverage**

Company-wide

**Scope(s)**

Scope 1

**Scope 2 accounting method**

&lt;Not Applicable&gt;

**Scope 3 category(ies)**

&lt;Not Applicable&gt;

**Base year**

2022

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

3047

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

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

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

3047

**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**

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

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

100

**Target year**

2027

**Targeted reduction from base year (%)**

25

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

2285.25

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

3047

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

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

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

3047

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

0

**Target status in reporting year**

New

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain target coverage and identify any exclusions**

Goal: Reduce the Scope 1 emissions by 25% by 2027.

As the company's Scope 1 emissions solely comprise its fleet, no subjects will be excluded from this goal.

For FY22, the first time the Scope 1 emissions of all sites with more than 5 employees or a size more than 250 m<sup>2</sup> was evaluated. This selection cover the work areas of 92% of all KTC employees.

The emissions of those sites (i.e. 3047 t CO2e) are the base for this target. The aim until 2027 is to annually decrease these Scope 1 emissions by 5% on average.

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

As Kapsch TrafficCom's Scope 1 emissions originate solely from the company's fleet, this goal will be approached by gradually:

- \* increasing the share of electric vehicles in the fleet
- \* increasing the share of company vehicles with lower fuel consumption
- \* decrease the total distance travelled by combustion engine vehicles
- \* decreasing the number of company vehicles in general.

As the goal was only set in 2022, no progress can be shown yet.

This target is supported by the short term goal set for the executive board:

- \* 2022-23: Reduction of fuel consumption

The average emission per vehicle (in metric tons of CO2 equivalents) shall decrease by 2% (current value: 4.92)

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

**Target reference number**

Abs 2

**Year target was set**

2022

**Target coverage**

Company-wide

**Scope(s)**

Scope 2

**Scope 2 accounting method**

Location-based

**Scope 3 category(ies)**

<Not Applicable>

**Base year**

2022

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

<Not Applicable>

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

2834

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

<Not Applicable>

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

2834

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

<Not Applicable>

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

100

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

<Not Applicable>

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

100

**Target year**

2027

**Targeted reduction from base year (%)**

10

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

2550.6

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

<Not Applicable>

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

2834

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

<Not Applicable>

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

2834

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

0

**Target status in reporting year**

New

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

Goal: Reduce the Scope 2 emissions by 10% by 2027.

The company's Scope 2 emissions comprise electricity consumption, heating and cooling, no subjects will be excluded from this goal.

For FY22, the first time the Scope 2 emissions of all sites with more than 5 employees or a size more than 250 m<sup>2</sup> was evaluated. This selection cover the work areas of 92% of all KTC employees.

The emissions of those sites (i.e. 2834 t CO2e) are the base for this target. The aim until 2027 is to annually decrease these Scope 2 emissions by 2% on average.

As the preconditions to reduce emissions from Scope 2 are not the same at every location, due to varying availability of renewable energy options, not every location will be able to contribute to the same extent to this goal. Consequently, there will most probably be large disparities in goal achievement between different locations, meaning that some locations will not be able to achieve any significant reduction while others will be able to overcompensate.

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

In order to achieve this goal, we will perform detailed analyses about the viability of switching to low carbon energy at each of Kapsch TrafficCom's locations in cooperation with our landlord to perform all necessary steps to switch the used energy mix to a more sustainable option at all locations where this option is operationally and financially viable.

As an additional measure office space will be reduced where due to the new home office regulation this space is not required anymore.

Currently more than 38% of the electricity consumption is obtained from renewable sources. The aim is to slightly increase this ratio to 40% until 2027.

**List the emissions reduction initiatives which contributed most to achieving this target**

<Not Applicable>

**Target reference number**

Abs 3

**Year target was set**

2020

**Target coverage**

Company-wide

**Scope(s)**

Scope 3

**Scope 2 accounting method**

<Not Applicable>

**Scope 3 category(ies)**

Category 6: Business travel

**Base year**

2020

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

<Not Applicable>

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

<Not Applicable>

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

3240.86

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

3240.86

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

<Not Applicable>

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

<Not Applicable>

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

100

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

100

**Target year**

2023

**Targeted reduction from base year (%)**

50

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

1620.43

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

<Not Applicable>

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

<Not Applicable>

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

406.54

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

406.54

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

174.911597538925

**Target status in reporting year**

Achieved

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain target coverage and identify any exclusions**

In 2020 the goal to limit the number of business flights to less than 50% of Pre-CoViD was set for the CEO. It covers all business flights of all KTC sites of Kapsch TrafficCom globally.



In 2020, no other Scope 3 emissions than Category 6 have been evaluated. Therefore, the total known base was limited to Scope 3 business travel related emissions.

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

<Not Applicable>

**List the emissions reduction initiatives which contributed most to achieving this target**

Financial incentive set for the CEO (from next financial year onwards this is applicable for the whole board)

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## C4.2

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**(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

Net-zero target(s)

### C4.2a

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**(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**

2022

**Target coverage**

Company-wide

**Target type: energy carrier**

All energy carriers

**Target type: activity**

Consumption

**Target type: energy source**

Low-carbon energy source(s)

**Base year**

2022

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

13144

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

38.57

**Target year**

2027

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

40

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

38.57

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

0

**Target status in reporting year**

New

**Is this target part of an emissions target?**

This target is part of Abs 2, that aims at reducing the company's Scope 2 emissions by 10%.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain target coverage and identify any exclusions**

This goal is intended to be applicable company-wide without any exclusions. Nevertheless, as the preconditions to reduce emissions from Scope 2 are not the same at every location, due to varying availability of renewable energy options (KTC is never the owner of a location but always tenant), not every location will be able to contribute to the same extent to this goal. Consequently, there will most probably be large disparities in goal achievement between different locations, meaning that some locations will not be able to achieve the switch to renewable energy options, as this contract is typically concluded between the landlord and the energy provider.

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

In order to achieve this goal, we will perform detailed analyses about the viability of switching to low carbon energy at each of Kapsch TrafficCom's locations in cooperation with our landlord to perform all necessary steps to switch the used energy mix to a more sustainable option at all locations where this option is operationally and financially viable.

**List the actions which contributed most to achieving this target**

<Not Applicable>

---

C4.2c

**(C4.2c) Provide details of your net-zero target(s).**

**Target reference number**

NZ1

**Target coverage**

Company-wide

**Absolute/intensity emission target(s) linked to this net-zero target**

Abs1

Abs2

Abs3

**Target year for achieving net zero**

2027

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Please explain target coverage and identify any exclusions**

KTC strives to become CO2 neutral until 2027 regarding Scope 1 and Scope 2 emissions. KTC intends to cut emissions in Scope 3 as much as technically and economically feasible. The company will mainly lower greenhouse gas emissions related to Scope 1 and 2 by reducing power consumption wherever possible and gradually shifting to renewable energy at office and manufacturing sites. Kapsch TrafficCom also minimizes its main Scope 3 emissions by reducing the emissions related to its portfolio and employee mobility. Remaining emissions will be overcompensated through achieving a positive ecological balance of the Kapsch TrafficCom portfolio and off-setting measures.

**Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?**

No

**Planned milestones and/or near-term investments for neutralization at target year**

<Not Applicable>

**Planned actions to mitigate emissions beyond your value chain (optional)**

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	3	796
To be implemented*	0	0
Implementation commenced*	6	1432
Implemented*	8	2943
Not to be implemented	2	

C4.3b

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

**Initiative category & Initiative type**

Other, please specify	Other, please specify (Design that enables the replacement of steel gantries)
-----------------------	-------------------------------------------------------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

0

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

Scope 3 category 1: Purchased goods & services

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

**Voluntary/Mandatory**

Voluntary

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

0

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

80000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

Ongoing

**Comment**

KTC strives to reduce its Scope 3 emissions as much as technically and economically feasible.

In 2020, KTC calculated the product carbon footprint of a typical tolling solution (causing 84,070 t CO2e during 10 years of operations). The top 3 contributors to the PCF:

\*roadside system (47% of the PCF)

\*enforcement vehicles (33% of the PCF)

\*data centers (17% of the PCF)

The roadside system consists of the tolling infrastructure (i.e. gantry) and its electronic equipment. A regular gantry is made from steel and causes around 30% of the roadside system's PCF. By applying a new wooden design, more than 70% of the GHG emissions caused by the (regular) tolling infrastructure can be avoided. Therefore, the design for the wooden gantry model has been developed and during the reporting period it was finalized. As part of a research project the first KTC wooden gantry will be constructed at the KTC test site Teesdorf in Austria in 2022. This avoids 22.1 t CO2e in comparison to the conventional gantry type.

KTC can provide wooden gantries as an alternative to steel or aluminum gantries to its clients. More details about the wooden gantry can be found on the homepage: <https://www.kapsch.net/en/about-us/sustainability>

The investment required includes the costs for the development of the concept & the design. Costs for the construction of the wooden gantry are not included. Emissions can only be saved by implementation of this design, therefore CO2e savings of this initiative are 0.

**Initiative category & Initiative type**

Transportation	Business travel policy
----------------	------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

2834

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

Scope 3 category 6: Business travel

**Voluntary/Mandatory**

Voluntary

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

4633804

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

0

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

The goal to reduce the number of business flights to 50% of the Pre-Covid level has been added to the 2021-2023 remuneration targets of the board. This initiative already showed significant effects. In the reporting year 407 CO2e tons were caused by business flights. In the base year FY2020 3,241 CO2 tons were caused by more than 8,000 flights.

This year's savings of 2,834 CO2 tons are a reduction of 87.6%.

The value for annual monetary savings shows the difference between the costs for business flights in FY20 - before this initiative was started - and the reporting year.

**Initiative category & Initiative type**

Waste reduction and material circularity	Waste reduction
------------------------------------------	-----------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

96.71

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

Scope 3 category 1: Purchased goods &amp; services

Scope 3 category 5: Waste generated in operations

**Voluntary/Mandatory**

Voluntary

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

492333

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

0

**Payback period**

&lt;1 year

**Estimated lifetime of the initiative**

Ongoing

**Comment**

From the reporting year onwards the use period for IT equipment for KTC employees will be 4 years instead of 3 years. Annually 96,71 t CO2e can be avoided.

**Initiative category & Initiative type**

Other, please specify	Other, please specify (Concept that enables lower power consumption during use phase for product VRX)
-----------------------	-------------------------------------------------------------------------------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

0

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

Scope 3 category 11: Use of sold products

**Voluntary/Mandatory**

Voluntary

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

0

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

25000

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

In 2020, KTC calculated the product carbon footprint of a typical tolling solution (in total causing 84,070 t CO2e). This calculation revealed that the top 3 contributors to the PCF are:

- \* the roadside system (47% of the PCF)
- \* the enforcement vehicles (33% of the PCF)
- \* the data centers (17% of the PCF)

The roadside system consists of the tolling infrastructure (i.e. gantry) and its electronic equipment. More than 60% of the roadside systems PCF is caused by the power consumption of its electronic equipment during its lifetime. The most often used product of the roadside system is the VRX. Therefore, during the reporting period the product VRX was analyzed and a concept has been developed to optimize its power consumption. When applying the concept, the power consumption for the VRX can be reduced from 125W to 25W. The application of the concept is possible for most use cases. This leads to an annual saving of 213 kg CO2e per operated VRX. On average 3,000 pieces are sold per year. This adds up to an average annual total saving potential of 670 t CO2e.

Emissions can only be saved by implementation of this design, therefore CO2e savings of this initiative are 0.

KTC can provide the VRX with low power consumption to its clients. For more details about this concept please visit our homepage: <https://www.kapsch.net/en/about-us/sustainability> and contact us.

**Initiative category & Initiative type**

Other, please specify	Other, please specify (Sustainable portfolio)
-----------------------	-----------------------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

0

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

Scope 3 category 1: Purchased goods & services

Scope 3 category 11: Use of sold products

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

**Voluntary/Mandatory**

Voluntary

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

0

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

83500000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

Ongoing

**Comment**

KTC's portfolio comprises tolling, traffic management, low emission zone as well as demand management solutions that bear considerable emission reduction potential for clients as is elaborated on in more detail in our sustainability fact sheet

([https://www.kapsch.net/\\_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035\\_Factsheet\\_Sustainable\\_Future.pdf](https://www.kapsch.net/_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035_Factsheet_Sustainable_Future.pdf))

During the reporting period, Kapsch Traffic Com invested EUR 83.5 million (16.1% of total group revenues) in the improvement and expansion of its portfolio.

As an example, the Geo Location Platform is now available as SaaS solution. The product carbon footprint of a SaaS solution is significantly smaller than a conventional software solution, as it does not require hardware at the client's site and is optimized regarding power consumption. According to an Azure study a SaaS solution can save between 72% and 98% CO2 emission (compared to on-premise). The GLP SaaS contributes to reduce Scope 3 Cat.1, Cat.11 and Cat.12 emissions.

In addition, KTC maintains the product recyclability for radio frequency field products and in-vehicle products above 80% to reduce Scope 3 Cat.12 emissions

We are certain that these initiatives actually save CO2e emissions, but we currently cannot fully quantify them. Therefore, we set the emission saving to 0.

---

**Initiative category & Initiative type**

Other, please specify	Other, please specify (Initiatives to foster future CO2e emissions savings)
-----------------------	-----------------------------------------------------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

0

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

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

**Voluntary/Mandatory**

Voluntary

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

0

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

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

During the reporting period following initiatives were implemented:

- \* Green Vision - public document available on the company homepage outlining KTC's environmental sustainability strategy
- \* Green Portfolio / Green Company - internal process documents to collect and share best practices regarding achieving the two sustainability goals "green portfolio - positive ecological balance" and "green company - CO2 neutrality by 2027"
- \* Calculation of PCF for the products GLP SaaS, DLVP, OBU4010 (standard & product innovations) - to derive further CO2e emission reduction potentials in the KTC portfolio
- \* Creation of a factsheet on the emission reduction potential of ITS solutions based on scientific references - available on the company homepage

Even though these initiatives have no direct effect on emission savings (therefore we set the emission reduction to 0), we are confident that they contribute to the reduction of CO2e emissions of KTC and its clients in the future. These initiatives have been accomplished as part of daily business activities of the environmental sustainability team. No additional investment was required.

---

**Initiative category & Initiative type**

Other, please specify	Other, please specify (Promote public transport, reduce commuting and reduce IT infrastructure)
-----------------------	-------------------------------------------------------------------------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

0

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

- Scope 2 (location-based)
- Scope 2 (market-based)
- Scope 3 category 7: Employee commuting

**Voluntary/Mandatory**

Voluntary

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

0

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

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

Ongoing

**Comment**

To further reduce the corporate carbon footprint the following initiatives have been implemented:

\* Jobticket - a ticket for public transport (weekly, monthly or yearly ticket) is offered to employees with a reduced price - to reduce Scope 3 Cat.7 emissions

\* New home office regulation - Employees are allowed to work up to 60% of their working time from home - to reduce Scope 3 Cat.7 as well as Scope 2 emissions

\* Corporate IT infrastructure - server reduction - The required amount of servers is continuously evaluated to assess whether servers are still required. In the reporting year servers associated to the Engineering departments have been further reduced from 45 to 14 due to this initiative. In the previous year the number of servers could be reduced from 121 to 45 - to reduce Scope 2 emissions.

We are certain that these initiatives actually save CO2e emissions, but we currently cannot quantify them. Therefore, we set the emission saving to 0. These initiatives have been accomplished as part of daily business activities of the corresponding departments. No additional investment was required.

**Initiative category & Initiative type**

Waste reduction and material circularity	Product/component/material reuse
------------------------------------------	----------------------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

11.99

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

Scope 3 category 1: Purchased goods &amp; services

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

**Voluntary/Mandatory**

Voluntary

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

0

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

30000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

Ongoing

**Comment**

During the reporting period one of the OBU 4010 product innovations - the initiative "refurbishment of OBU 4010" - was completed.

The process to reuse the electronic components of OBU 4010 was defined and the manufacturing set-up established. With two launching customers 74,000 OBU 4010 were refurbished during FY22.

The clients sent their OBUs back to KTC. The casing was opened and the electronic components tested whether they still provide the required quality to be reused. The electronic components of more than 90% of the returned OBUs were able to be re-used for new refurbished OBUs 4010 and provided back to the clients.

Refurbishing an OBU 4010 enables a reduction of 162.04g CO2e per OBU 4010. This is a reduction of 43% of the total PCF.

$162.04 \text{ g CO}_2\text{e} * 74,000 = 11.99 \text{ t CO}_2\text{e}$ .

During FY22 3,967,991 units of OBU 4010 were produced. This initiative has therefore an annual saving potential of 642.99 t CO2e.

KTC can provide refurbished OBU 4010 to its clients on request. For more details about the refurbishment concept please contact us. For general information visit our homepage: <https://www.kapsch.net/en/about-us/sustainability>.

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

Method	Comment
Dedicated budget for low-carbon product R&D	In the reporting period, a dedicated budget for the green Onboard Unit (OBU) innovation project was available. The overall goal is to extend the life-time of the Onboard and/or to reduce its product carbon footprint via re-use of material or replacement of material with high carbon footprint.
Dedicated budget for low-carbon product R&D	In the reporting period, a dedicated budget for the completion of sustainable gantry innovation project was available. The wooden gantry design has been completed. Wooden gantries can be realized on client request. The design of the light-weight steel gantry has been further improved.
Dedicated budget for low-carbon product R&D	In the reporting period, a dedicated budget for the replacement of traditional software solutions with a software as a service solution was available. The Geo Location Platform is now available as SaaS and promoted and offered to clients. The product carbon footprint of the SaaS solution is significant smaller than the conventional software solution, as it does not require additional hardware or power consumption at the client's site. According to an Azure study an Azure hosted SaaS solution is between 72% and 98% more CO2 emission efficient than an on-premise solution.
Dedicated budget for energy efficiency	The power consumption of the tolling equipment of the gantry was optimized. For the product VRX, depending on the use case, a power consumption reduction of up to 80% can be realized.
Dedicated budget for low-carbon product R&D	Sustainability is a focal aspect in product design and innovation at KTC. Each of KTC's products and solutions bears considerable emission reduction potential for customers as has been elaborated on in more detail in our sustainability fact sheet ( <a href="https://www.kapsch.net/_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035_Factsheet_Sustainable_Future.pdf">https://www.kapsch.net/_Resources/Persistent/463f1b0c2ec9bc01e6d2689cc2152378125a56e7/KTC7035_Factsheet_Sustainable_Future.pdf</a> ). In the reporting year the dedicated budget of EUR 83.5 million (16.1% of total group revenues) was available for the development of the KTC portfolio, to further contribute to the positive ecological balance of the portfolio.

## C4.5

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

Yes

## C4.5a

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

#### Level of aggregation

Group of products or services

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

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

#### Type of product(s) or service(s)

Other	Other, please specify (Free Flow Tolling)
-------	-------------------------------------------

#### Description of product(s) or service(s)

Free-flow tolling:

This is a system where tolling operators install an automatic charging system on the road that tracks road usage either through onboard units in vehicles or automatic number plate recognition. As the traffic flow is not interrupted with this system emissions can be saved in comparison to the conventional Plaza tolling system where vehicles need to stop and congestion might build up.

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

Yes

#### Methodology used to calculate avoided emissions

Other, please specify (Empirical Study by University of Belgrade (Journal of Environmental Management))

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

Use stage

#### Functional unit used

One thousand average vehicles using the tolling solution passing one tolling enforcement station (This unit has been chosen as the number of enforcement stations diverges strongly in different projects depending e.g. on the size of the deployed system.)

#### Reference product/service or baseline scenario used

Plaza tolling (manual system): This refers to a tolling system that is operated through manual cash desks, where every vehicle needs to stop for paying its respective toll for road usage.

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

Use stage

#### Estimated avoided emissions (metric tons CO<sub>2</sub>e per functional unit) compared to reference product/service or baseline scenario

0.3793

#### Explain your calculation of avoided emissions, including any assumptions

The scientific study „Methodology for determining ecological benefits of advanced tolling systems“ by Milenkovic et al. calculated the emissions caused by different vehicle types in an MLFF setting as well as a Plaza tolling (manual system) setting. The average cars emissions when entering and exiting those two settings were used to calculate the respective CO<sub>2</sub>e savings. The savings of MLFF compared to the Plaza Tolling amount to 30.9% for an average vehicle.

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

70

#### Level of aggregation

Group of products or services

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

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

#### Type of product(s) or service(s)

Other	Other, please specify (Traffic Management)
-------	--------------------------------------------

#### Description of product(s) or service(s)

Traffic management system

This is a system that manages the whole mobility context (intersections, ring roads, public transport, emergency priorities etc.) of a city, region or country. Through data analytics and forecasts traffic is managed increasingly proactive, as various descriptive, diagnostic and predictive analytics enhance traffic flow by optimizing the capacity of the road network which can considerably reduce fuel consumption and as a consequence also CO<sub>2</sub> emissions caused.

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

Yes

#### Methodology used to calculate avoided emissions

Other, please specify (KTCs calculation based on operational customer solution)

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

Use stage

**Functional unit used**

One thousand average vehicles when a traffic management solution is in place driving 1 km distance. (This unit has been chosen as the quantity of vehicles strongly differs.)

**Reference product/service or baseline scenario used**

No advanced traffic management installed.

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

Use stage

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

0.016467

**Explain your calculation of avoided emissions, including any assumptions**

In Madrid KTC installed an advanced traffic management solution. The average fuel consumption per vehicle was measured on a predefined test route before and after the installation of the advanced traffic management solution. The outcome was converted to CO2e emissions. In percent a reduction of more than 6% of the total road traffic emissions were realized. The result has been validated by a scientific 3rd party.

On average KTC measured after introducing an advanced KTC traffic management solution a CO2e reduction potential of 8% in developed cities and 15% in emerging cities.

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

30

## 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	Yes, a change in boundary No, but we have discovered significant errors in our previous response(s)	<p>-- ERRORS --</p> <p>We have found out that the emissions of Scope 1 at KTC do not need to include the total emissions of the manufacturing sites. In the previous reporting period, Scope 2 emissions of the two manufacturing sites were erroneously reported as Scope 1 emissions. The calculation has been corrected accordingly.</p> <p>The applied emission factors for gasoline and diesel have been adapted based on a more reliable source (<a href="https://secure.umweltbundesamt.at/co2mon/co2mon.html">https://secure.umweltbundesamt.at/co2mon/co2mon.html</a>)</p> <p>For two sites (Canada, South Africa) we identified errors in the data collection of the fuel consumption. This fault has been corrected accordingly for all reported years.</p> <p>--- Boundary change ---</p> <p>* Scope 3 - Category 2 has been evaluated for FY21 and FY22 for the global organization.</p> <p>* Scope 3 - Category 3 is reported for the first time for all sites with more than 5 employees or a size larger than 250 m<sup>2</sup> starting with FY22. This covers 92% of the global KTC organization.</p> <p>* Scope 3 - Category 5 has been evaluated for FY21 and FY22.</p> <p>* Scope 3 - Category 6 has been reported for the entire global KTC organization starting with FY20.</p> <p>--- OUTLOOK ---</p> <p>Due to improvement of our reporting capabilities we could provide with this reporting period more emission data. Unfortunately, we cannot provide them for the original base year. Therefore, we will provide the extended Scope 1 and Scope 2 emissions starting with next year for all sites with more than 5 employees or larger than 250 m<sup>2</sup>. Nevertheless, we already used the improved data base for the emission target setting.</p>

### C5.1c



**(C5.1c) Have your organization's base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?**

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	Yes	We have found out that the emissions of Scope 1 at KTC do not need to include the total emissions of the manufacturing sites. In the previous reporting period, Scope 2 emissions of the two manufacturing sites were erroneously reported as Scope 1 emissions. The calculation has been corrected accordingly. Only emissions caused by the company fleet are reported as Scope 1 emission. In addition, the fuel consumption of two sites has been corrected for the reported years FY20, FY21 and this reporting year.

**C5.2**

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

**Scope 1**

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

589.26

**Comment**

This value includes:

\* CO2e of the fleet's fuel consumption (all locations >5000m<sup>2</sup>)

**Scope 2 (location-based)**

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

577.44

**Comment**

This value includes:

\* CO2e of electricity, heating and cooling at the site in South Africa (location >5000 m<sup>2</sup>)

-> the used CO2e emission factor was the average of South Africa.

\* CO2e of electricity, heating and cooling of the production sites in Canada (location >5000 m<sup>2</sup>)

-> the used CO2e emission factor was the average of Mississauga in Canada.

**Scope 2 (market-based)**

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

555.56

**Comment**

This value includes:

\* CO2e of electricity, heating and cooling at the office sites in Austria and Sweden (locations >5000 m<sup>2</sup>)

\* CO2e of electricity, heating and cooling of the production sites in Austria (location >5000 m<sup>2</sup>)

-> the used CO2e emission factor was provided by the electricity/heating providers.

**Scope 3 category 1: Purchased goods and services**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 2: Capital goods**

**Base year start**

April 1 2020

**Base year end**

March 31 2021

**Base year emissions (metric tons CO2e)**

447.27

**Comment**

Based on KTC's financial report of this financial year, the GHG emissions associated of the capital good types: leasehold improvements, technical equipment and machinery and other equipment, factory and office equipment were evaluated.

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

**Base year start**

April 1 2021

**Base year end**

March 31 2022

**Base year emissions (metric tons CO2e)**

794.03

**Comment**

Scope 3 - Category 3 is reported for the first time for all sites with more than 5 employees or a size larger than 250 m<sup>2</sup> starting with FY22. It includes only the emissions caused by fuel related activities. Emissions due to energy-related activities are included to Scope 2 emissions, as emission factors covering the life-cycle have been used.

**Scope 3 category 4: Upstream transportation and distribution**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 5: Waste generated in operations**

**Base year start**

April 1 2020

**Base year end**

March 31 2021

**Base year emissions (metric tons CO2e)**

157.38

**Comment**

For this category the emissions of the two production facilities (Austria & Canada) as well as the non-office-related waste from other locations are added up. The generated waste at the office sites is insignificant as it is comparable to domestic waste. Therefore it has been disregarded for this calculation. The waste generated at the production site in Austria as well as the residual non-office-related waste has been calculated based on the different waste types disposed. The waste of the production site in Canada has been approximated with the waste generated at production site Austria, which is already a conservative estimate as the location in Canada produces only for the North American market while Austria produces for the rest of the world.

**Scope 3 category 6: Business travel**

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

3241

**Comment**

Scope 3 - Category 6 is reported for the entire global KTC organization. It includes all business flights.

**Scope 3 category 7: Employee commuting**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**Scope 3 category 8: Upstream leased assets**

**Base year start**

April 1 2021

**Base year end**

March 31 2022

**Base year emissions (metric tons CO2e)**

0

**Comment**

Kapsch Traffic Com has no other upstream leased assets than its two production sites and its office sites. All fuel and energy related emissions of all sites with more than 250 sqm or more than 5 employees have been evaluated for FY22. Starting with FY23, they will be reported as part of the Scope1 and Scope 2 emissions. In FY22, the total scope 1 emissions of all these sites were 3046.51 t CO2e, the total scope 2 emissions were 2834.38 t CO2e.

**Scope 3 category 9: Downstream transportation and distribution**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

### Scope 3 category 10: Processing of sold products

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

0

**Comment**

The KTC portfolio is not and never has been processed after being sold.

### Scope 3 category 11: Use of sold products

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**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**

### Scope 3 category 13: Downstream leased assets

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

0

**Comment**

So far KTC does not lease anything to customers or any other 3rd party.

### Scope 3 category 14: Franchises

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

0

**Comment**

So far KTC has no franchises.

### Scope 3 category 15: Investments

**Base year start**

April 1 2021

**Base year end**

March 31 2022

**Base year emissions (metric tons CO2e)**

0

**Comment**

All subsidiaries of KTC that are in the reporting scope are reported in scope 1 and scope 2.

Starting with next year all sites with more than 250 sqm or more than 5 employees will be reported as part of the Scope1 and Scope 2 emissions as well. In FY22 the scope 1 emissions of all these sites were 3046.51 t CO2e, the total scope 2 emissions were 2834.38 t CO2e.

### Scope 3: Other (upstream)

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

0

**Comment**

There are no other upstream emissions.

**Scope 3: Other (downstream)**

**Base year start**

April 1 2019

**Base year end**

March 31 2020

**Base year emissions (metric tons CO2e)**

0

**Comment**

There are no other downstream emissions.

C5.3

---

**(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

---

C6.1

---

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

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**

384.7

**Start date**

April 1 2021

**End date**

March 31 2022

**Comment**

This value includes:

\* CO2e of the fleet's fuel consumption (all locations >5000m<sup>2</sup>)

**Past year 1**

**Gross global Scope 1 emissions (metric tons CO2e)**

470.74

**Start date**

April 1 2020

**End date**

March 31 2021

**Comment**

This value includes:

\* CO2e of the fleet's fuel consumption (all locations >5000m<sup>2</sup>)

**Past year 2**

**Gross global Scope 1 emissions (metric tons CO2e)**

589.26

**Start date**

April 1 2019

**End date**

March 31 2020

**Comment**

This value includes:

\* CO2e of the fleet's fuel consumption (all locations >5000m<sup>2</sup>)

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**

For the office site and production site in Austria and for the office site in Sweden CO2 emission factors have been provided by the suppliers of electricity and heating. For the office site in South Africa the average electricity emission factor of South Africa was used. For the production site in Mississauga the used CO2e emission factor was the average of Mississauga in Canada.

**C6.3**

---

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

**Reporting year**

**Scope 2, location-based**

510.71

**Scope 2, market-based (if applicable)**

615.92

**Start date**

April 1 2021

**End date**

March 31 2022

**Comment**

For the office sites and production site in Austria and for the office site in Sweden CO2 emission factors have been provided by the suppliers of electricity and heating. For the office site in South Africa the average electricity emission factor of South Africa was used. For the production site in Mississauga the used CO2e emission factor was the average of Mississauga in Canada.

**Past year 1**

**Scope 2, location-based**

571.24

**Scope 2, market-based (if applicable)**

579.76

**Start date**

April 1 2020

**End date**

March 31 2021

**Comment**

For the office site and production site in Austria and for the office site in Sweden CO2 emission factors have been provided by the suppliers of electricity and heating. For the office site in South Africa the average electricity emission factor of South Africa was used. For the production site in Mississauga the used CO2e emission factor was the average of Mississauga in Canada.

**Past year 2**

**Scope 2, location-based**

577.44

**Scope 2, market-based (if applicable)**

555.56

**Start date**

April 1 2019

**End date**

March 31 2020

**Comment**

For the office site and production site in Austria and for the office site in Sweden CO2 emission factors have been provided by the suppliers of electricity and heating. For the office site in South Africa the average electricity emission factor of South Africa was used. For the production site in Mississauga the used CO2e emission factor was the average of Mississauga in Canada.

**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) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.****Purchased goods and services****Evaluation status**

Relevant, not yet calculated

**Emissions in reporting year (metric tons CO2e)**

&lt;Not Applicable&gt;

**Emissions calculation methodology**

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

**Please explain**

For FY22 the data for these emissions are only available for the production site in Austria. We are working on the evaluation of this data with the target to cover >80% of all purchased goods and services. The results will be available for the next reporting period.

**Capital goods****Evaluation status**

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

441.22

**Emissions calculation methodology**

Spend-based method

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

100

**Please explain**

Based on KTC's financial report of this financial year, the GHG emissions associated with the capital good types: leasehold improvements, technical equipment and machinery and other equipment, factory and office equipment were evaluated via the spend-based method.

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

Relevant, calculated

**Emissions in reporting year (metric tons CO2e)**

794.03

**Emissions calculation methodology**

Fuel-based method

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

100

**Please explain**

For all sites with more than 5 employees or larger than 250 m<sup>2</sup> these emission have been evaluated based on the consumption of diesel and gasoline and the indirect emission factor provided here: <https://secure.umweltbundesamt.at/co2mon/co2mon.html>  
Emissions due to energy-related activities are included in Scope 2 emissions, as emission factors covering the life-cycle have been used.

**Upstream transportation and distribution****Evaluation status**

Not relevant, explanation provided

**Emissions in reporting year (metric tons CO2e)**

&lt;Not Applicable&gt;

**Emissions calculation methodology**

&lt;Not Applicable&gt;

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

&lt;Not Applicable&gt;

**Please explain**

For FY22 this data is not available for global KTC. We intend to include upstream transportation and distribution related emissions to Category 1 Purchased goods and services starting with the next report.

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

142.54

### Emissions calculation methodology

Waste-type-specific method

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

61.72

### Please explain

For this category the emissions of the two production facilities (Austria & Canada) as well as the non-office-related waste from other locations are added up. The generated waste at the office sites is insignificant as it is comparable to domestic waste. Therefore it has been disregarded for this calculation. The waste generated at the production site in Austria as well as the residual non-office-related waste has been calculated based on the different waste types disposed. The waste of the production site in Canada has been approximated with the waste generated at the production site in Austria, which is already a conservative estimate as the location in Canada produces only for the North American market while the production site in Austria produces for the rest of the world.

## Business travel

### Evaluation status

Relevant, calculated

### Emissions in reporting year (metric tons CO2e)

406.55

### Emissions calculation methodology

Distance-based method

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

100

### Please explain

All business flights of KTC globally are covered.

## Employee commuting

### Evaluation status

Relevant, not yet calculated

### 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

For FY22 the data for these emissions are only available for the production site in Austria. We are working on a general model to approximate this value for all sites. The results will be available for an upcoming reporting period.

## Upstream leased assets

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Kapsch Traffic Com has no other upstream leased assets than its two production sites and its office sites. Indirect emissions of sites with more than 5000 sqm size are already covered under scope 2 emissions. Therefore it is not relevant.

All fuel and energy related emissions of all sites with more than 250 sqm or more than 5 employees have been evaluated for FY22. Starting with FY23, they will be reported as part of the Scope1 and Scope 2 emissions. In FY22, the total scope 1 emissions of all these sites were 3046.51 t CO2e, the total scope 2 emissions were 2834.38 t CO2e.

## Downstream transportation and distribution

### Evaluation status

Relevant, not yet calculated

### 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

For FY22 the data for these emissions are only available for the production site in Austria. We are working on a general model to approximate this value for all sites. The results will be available for an upcoming reporting period.

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

The KTC portfolio is not and never has been processed after being sold.

## Use of sold products

### Evaluation status

Relevant, not yet calculated

### 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

Until FY22 we have only evaluated for some of our products the CO2e emissions they cause during operations. We are working on completing this data with the target to cover >80% of all sold products. The results will be available for the next reporting period.

At KTC, the emissions caused by the use of sold products is always defined by the energy consumption of the product during use.

## End of life treatment of sold products

### Evaluation status

Relevant, not yet calculated

### 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

For FY22 the data for these emissions are only available for the production site in Austria. We are working on the evaluation of this data with the target to cover >80% of all sold products. The results will be available for the next reporting period.

KTC is in general not entitled to treat the sold solutions at their end of life. KTC's client is in charge of this. Nevertheless, KTC ensures that radio frequency field products and in-vehicle products as well as video and sensor products manufactured by KTC are more than 80% recyclable.

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

So far KTC does not lease anything to customers or any other 3rd party.



## Franchises

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

So far KTC has no franchises.

## Investments

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

Kapsch Traffic Com has no significant other investments than its subsidiaries. Direct and indirect emissions caused by sites with more than 5000 sqm size are already covered under scope 1 and scope 2 emissions. Therefore it is not relevant.

All fuel and energy related emissions of all sites with more than 250 sqm or more than 5 employees have been evaluated for FY22. Starting with FY23, they will be reported as part of the Scope1 and Scope 2 emissions. In FY22, the total scope 1 emissions of all these sites were 3046.51 t CO2e, the total scope 2 emissions were 2834.38 t CO2e.

## Other (upstream)

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

KTC has no other upstream emissions.

## Other (downstream)

### Evaluation status

Not relevant, explanation provided

### Emissions in reporting year (metric tons CO2e)

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

### Please explain

KTC has no other downstream emissions.

## C6.5a

---

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

**Past year 1**

**Start date**

April 1 2020

**End date**

March 31 2021

**Scope 3: Purchased goods and services (metric tons CO2e)**

**Scope 3: Capital goods (metric tons CO2e)**

447.27

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Scope 3: Upstream transportation and distribution (metric tons CO2e)**

0

**Scope 3: Waste generated in operations (metric tons CO2e)**

157.38

**Scope 3: Business travel (metric tons CO2e)**

209.73

**Scope 3: Employee commuting (metric tons CO2e)**

**Scope 3: Upstream leased assets (metric tons CO2e)**

0

**Scope 3: Downstream transportation and distribution (metric tons CO2e)**

**Scope 3: Processing of sold products (metric tons CO2e)**

0

**Scope 3: Use of sold products (metric tons CO2e)**

**Scope 3: End of life treatment of sold products (metric tons CO2e)**

**Scope 3: Downstream leased assets (metric tons CO2e)**

0

**Scope 3: Franchises (metric tons CO2e)**

0

**Scope 3: Investments (metric tons CO2e)**

0

**Scope 3: Other (upstream) (metric tons CO2e)**

0

**Scope 3: Other (downstream) (metric tons CO2e)**

0

**Comment**

**Past year 2**

**Start date**

April 1 2019

**End date**

March 31 2020

**Scope 3: Purchased goods and services (metric tons CO2e)**

**Scope 3: Capital goods (metric tons CO2e)**

**Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)**

**Scope 3: Upstream transportation and distribution (metric tons CO2e)**

0

**Scope 3: Waste generated in operations (metric tons CO2e)**

**Scope 3: Business travel (metric tons CO2e)**

3240.86

**Scope 3: Employee commuting (metric tons CO2e)**

**Scope 3: Upstream leased assets (metric tons CO2e)**

0

**Scope 3: Downstream transportation and distribution (metric tons CO2e)**

**Scope 3: Processing of sold products (metric tons CO2e)**

0

**Scope 3: Use of sold products (metric tons CO2e)**

**Scope 3: End of life treatment of sold products (metric tons CO2e)**

**Scope 3: Downstream leased assets (metric tons CO2e)**

0

**Scope 3: Franchises (metric tons CO2e)**

0

**Scope 3: Investments (metric tons CO2e)**

0

**Scope 3: Other (upstream) (metric tons CO2e)**

0

**Scope 3: Other (downstream) (metric tons CO2e)**

0

**Comment**

**C6.7**

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**(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**

0.00000291

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

1511.33

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

519800000

**Scope 2 figure used**

Location-based

**% change from previous year**

9

**Direction of change**

Decreased

**Reason for change**

The intensity figure decreased 9% compared with the previous year, as revenue increased, while both Scope 1 and Scope 2 emissions still decreased. The main share of this improvement is due the reduction of 18% of the Scope 1 emissions on the 5 major locations (in total 86.0 t CO2e). Scope 2 emissions of the 5 major locations decreased by 2% (in total 24.4 t CO2e). In total (Scope 1 and Scope 2 combined) the emissions were decreased by 7% (in total 110.4 t CO2e). In the reporting period the usage of public transport was promoted (introduction of job ticket) and the reduction of commuting was fostered (introduction of new home office regulation -> up to 60% home office possible), for details please refer to initiative "Promote public transport, reduce commuting and reduce IT infrastructure" mentioned in chapter 4.3.b. "Initiatives to foster future CO2e emissions savings" had the effect to raise awareness amongst employees for more sustainable employee mobility.

**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	384.7	IPCC Fifth Assessment Report (AR5 – 20 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)
Austria	210.45
Canada	21.39
Sweden	0
South Africa	152.85

**C7.3**

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

By facility

By activity

**C7.3b**

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Production site in Austria (Vienna KCO) (fleet)	14.84	48	16
Production site in Canada (Mississauga) (fleet)	21.39	44	-80
Office sites Austria (fleet)	195.61	48	16
Office site Sweden Jönköping (fleet)	0	58	14
Office sites South Africa (fleet)	152.85	-26	28

**C7.3c**

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

Activity	Scope 1 emissions (metric tons CO2e)
Fleet (all major office locations)	384.7

**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)
Austria		571.6
Sweden		44.33
South Africa	32.43	
Canada	478.28	

**C7.6**

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

- By facility
- By activity

**C7.6b**

**(C7.6b) Break down your total gross global Scope 2 emissions by business facility.**

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Office sites in Austria	0	296.29
Office site Sweden Jönköping	0	44.33
Office sites South Africa	32.43	0
Production site in Austria (Vienna KCO)	0	275.3
Production site in Canada (Mississauga) (fleet)	478.28	0

**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)
Production	478.28	275.3
Offices	32.43	340.62

**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	0	No change	0	no change
Other emissions reduction activities	110.4	Decreased	100	The main share of this improvement is due the reduction of 18% of the Scope 1 emissions on the 5 major locations (in total 86.0 t CO2e). Scope 2 emissions of the 5 major locations decreased by 2% (in total 24.4 t CO2e). In total (Scope 1 and Scope 2 combined) the emissions were decreased by 7% (in total 110.4 t CO2e). In the reporting period the usage of public transport was promoted (introduction of job ticket) and the reduction of commuting was fostered (introduction of new home office regulation -> up to 60% home office possible), for details please refer to initiative "Promote public transport, reduce commuting and reduce IT infrastructure" mentioned in chapter 4.3.b. "Initiatives to foster future CO2e emissions savings" had the effect to raise awareness amongst employees for more sustainable employee mobility.
Divestment	0	No change	0	no change
Acquisitions	0	No change	0	no change
Mergers	0	No change	0	no change
Change in output		<Not Applicable >		not evaluated
Change in methodology	0	No change	0	no change
Change in boundary	0	No change	0	no change
Change in physical operating conditions	0	No change	0	no change
Unidentified	0	No change	0	no change
Other	0	No change	0	no change

## 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?

Location-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)	No
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	No

### 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)	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired electricity	<Not Applicable>	2835.2	2047.85	4883.05
Consumption of purchased or acquired heat	<Not Applicable>	1758.21	1866	3624.21
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	440.11	12.37	452.48
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	5033.53	3926.22	8959.74

C8.2e

---

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

**Sourcing method**

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

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Austria

**Tracking instrument used**

Contract

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

2973.22

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

Austria

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

**Comment**

It is not known from which energy generation facility the power is obtained.

---

**Sourcing method**

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

**Energy carrier**

Electricity

**Low-carbon technology type**

Hydropower (capacity unknown)

**Country/area of low-carbon energy consumption**

Sweden

**Tracking instrument used**

Contract

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

674.1

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

Sweden

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

**Comment**

It is not known from which energy generation facility the power is obtained.  
Electricity is used for electricity consumption, heating and cooling.

---

**Sourcing method**

Heat/steam/cooling supply agreement

**Energy carrier**

Heat

**Low-carbon technology type**

Low-carbon energy mix, please specify (district heating)

**Country/area of low-carbon energy consumption**

Austria

**Tracking instrument used**

Contract

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

1386.21

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

Austria

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

**Comment**

The commissioning year of the energy generation facility is not known.

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**C8.2g**

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

**Country/area**

Canada

**Consumption of electricity (MWh)**

2000

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

847

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

2847

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

---

**Country/area**

Austria

**Consumption of electricity (MWh)**

2553.65

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

2851.69

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

5405.34

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

---

**Country/area**

Sweden

**Consumption of electricity (MWh)**

296.1

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

378

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

674.1

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

---

**Country/area**

South Africa

**Consumption of electricity (MWh)**

33.3

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

0

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

33.3

**Is this consumption excluded from your RE100 commitment?**

<Not Applicable>

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**C9. Additional metrics**

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**C9.1**

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

**Description**

Please select

**Metric value**

**Metric numerator**

**Metric denominator (intensity metric only)**

**% change from previous year**

**Direction of change**

<Not Applicable>

**Please explain**

There are no additional metrics.

**C10. Verification**

**C10.1**

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

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

**C10.2**

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, but we are actively considering verifying within the next two years

**C11. Carbon pricing**

**C11.1**

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

No, but we anticipate being regulated in the next three years

**C11.1d**

**(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

In Austria, CO2 taxes are expected to be introduced in 2022. This will have a direct impact on KTC's headquarters. Other KTC locations in the EU, Canada or the US may be affected by similar local legislation within the next three years. KTC will closely monitor corresponding emerging regulations to ensure compliance as soon as they become effective. KTC is preparing all relevant data in advance. The CCF of the production facility in Austria has already been completed. The CCF calculation of the Austrian office sites is currently in progress. Measures to further reduce Kapsch Traffic Com's CCF are in progress.

**C11.2**

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

No

**C11.3**

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

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

## C12. Engagement

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### C12.1

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

Yes, our suppliers

Yes, our customers/clients

### C12.1a

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#### (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

10

##### % total procurement spend (direct and indirect)

15

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

##### Rationale for the coverage of your engagement

The suppliers are assessed according to their relative importance which depends on their ability to contribute to the company's strategic competitive advantage through a long-term business relationship or the provision of products difficult to replace. For the most important group (A-suppliers) the supplier onboarding process involves a comprehensive environmental impact assessment in the form of a questionnaire containing, among other things, 41 questions on environmental aspects. To ensure continuous compliance with those requirements those A-suppliers are in this regards audited every 3 years.

##### Impact of engagement, including measures of success

To measure the success of this engagement internally the share of A-suppliers fulfilling the environmental criteria is audited every 3 years. A-suppliers are the suppliers that have a long-term business relationship with KTC and provide inputs that are strategically important, while their products bear a high health & security, information security, quality or environmental risk. 12.5% of KTC's suppliers are A-suppliers. During the reporting period KTC was able to verify that already 80% of A-suppliers meet the set of environmental requirements. The remaining 20% are already scheduled for auditing.

This allows KTC to work towards its threshold for success, which is 100% of A-suppliers fulfilling the environmental requirements. This goal is expected to be met in 2022. Through those audits as well as the environmental impact questionnaires the company is able to make for example sure that the suppliers deploy an Ecodesign process or that they have an environmental system with supporting documentation (like ISO14001 certification) in place, which is compulsory for suppliers of the highest category (A-suppliers).

Through this engagement we are confident that we were able to impel our suppliers to consider their environmental impact more carefully, especially in regions, like South East Asia or China, that might not have the same degree of environmental regulation as is applicable in Europe.

##### Comment

% of suppliers by number = 10% (12.5% \* 80%)

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### C12.1b

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**(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**

100

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

100

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

All customers were invited to the Kapsch TrafficCom Summit on the topic of Sustainable Mobility and the Future of Transport. The time difference between our customers all around the world made it difficult to find a time slot where all potential participants would be reachable. Consequently, a time slot was picked that was convenient particularly for the European and American market where the majority of our customers is located. In addition this overlaps with the regions where the reduction of CO2e emissions caused by traffic has increasing relevance for the clients.

This facilitated the event to have maximum impact on our customers. Clients located in the Asia Pacific region were provided with the recording of the event.

**Impact of engagement, including measures of success**

The aim of the event was to make customers aware of the positive environmental effects of our solutions (i.e. reducing GHG emissions as well as particulate matters caused by road traffic) as well as providing a platform for customers but also the general public (registration was available to everyone through social media) to discuss about future trends in sustainable mobility. In this respect, the number of participants was the main success factor for us as it shows how many individuals we were able to reach with our message of fostering sustainable mobility. We were able to convince 185 customers to attend the event, which clearly surpassed our success threshold of 100 participants. Particularly with regards to the fact that many of those customers are representing a whole city's/region's administration, it is remarkable how many citizens' lives we potentially have influenced through this event. Triggering administrations to offer more sustainable mobility options can avoid up to 30% of road traffic related CO2e emissions, which has a significant effect on the quality of life in a city/region, a positive effect on public health due to improved air quality and in the long-run on global warming.

As an add-on we were also able to motivate 65 participants from the general public to join the event and therefore contributed to sparking the discussion about sustainable mobility in society as well.

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**C12.2**

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

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

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**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**

Complying with regulatory requirements

**Description of this climate related requirement**

The company requires from all its suppliers to comply with diverse regulatory standards, in particular compliance with REACH, RoHS, WEEE and conflict minerals requirements. All suppliers are required to declare their compliance with those requirements through a self-assessment before being contracted. The most important suppliers (A & B suppliers) are additionally regularly monitored regarding their compliance to those requirements. This happens depending on their strategic importance through repeated self-assessments or supplier audits.

Even though these requirements are not part of the supplier contract they are a mandatory precondition to conclude a supplier contract with KTC.

**% 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**

100

**Mechanisms for monitoring compliance with this climate-related requirement**

Supplier self-assessment  
Off-site third-party verification  
On-site third-party verification

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

Suspend and engage

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**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

**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)**

This commitment can be found in the document "Our Green Vision" published on the corporate homepage: <https://www.kapsch.net/en/about-us/sustainability>

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

Process: The executive expert EU Affairs reports directly to the CEO (who is simultaneously the Chief Sustainability Officer) and is a fully integrated member of the ESG Task Force of Kapsch TrafficCom. This approach assures that Kapsch policy related activities are aligned with the broader ESG driven climate change strategy of Kapsch TrafficCom.

Policy goal: We believe that the taxonomy regulation lacks a key link to the EU transport policy: a technical screening criterion for mobility management, either covering road charging and urban access management solely (due to the better scientific evidence) or together with management of traffic flow (for which scientific evidence seems to be less consolidated).

Strategy: Kapsch strategy for 2021-2022 was to first inform Austrian stakeholders of our plan to raise awareness and gather support bottom-up, before becoming active on the EU stage. Once initiated we hold contact with the various stakeholders listed below, with a focus on EU actors.

**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

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**(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**

Other, please specify (Sustainable Finance)

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

'Taxonomy regulation' – Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment' and its delegated acts

**Policy, law, or regulation geographic coverage**

Regional

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

EU27

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

Support with minor exceptions

**Description of engagement with policy makers**

Methodological note:

The list below lists stakeholders we engage with to achieve our goals and also includes stakeholders we liaise with to influence trade associations and policy makers. So this list goes beyond public policy makers.

VCÖ (Austrian mobility NGO):

presentation of our need for a technical screening criterion for mobility management. VCÖ is the Austrian member of EU NGO federation 'Transport & Environment'. VCÖ is dedicated to reducing transport related emissions from air to CO2.

ASFINAG:

Austrian road operator, presentation of our need for a technical screening criterion for mobility management

Austrian Ministry of Climate:

exchanges on a technical screening criterion for mobility management

Office of Deputy Chancellor:

exchanges on a technical screening criterion for mobility management

AustriaTech:

Austrian government agency in charge of intelligent transport and mobility funding. Austria Tech is tasked enabling Austria to fulfil its de-carbonization goals. Exchanges on a technical screening criterion for mobility management and research needs.

DG MOVE:

exchanges with the 'Transport Investment', 'Innovation & Research' and 'Intelligent Transport' on the need for a technical screening criterion for mobility management for coherence with the EU's transport policy and TEN-T

ASECAP (road operator trade association):

promoting taxonomy as a strategic priority, engagement with ASECAP expert groups (co-initiator of the taxonomy group) and presentation at ASECAP DG MOVE meeting, promoting a technical screening criterion for road charging. Promotion of wood made toll gantries to road concessionaires. Elaboration of ASECAP's contribution to consultation on the taxonomy delegated act environment, promoting a technical screening criterion for road charging.

Platform on Sustainable Finance:

contribution to the consultation on the taxonomy environment delegated act as Kapsch TrafficCom, promoting a technical screening criterion for mobility management.

ERTICO (ITS EU trade association):

Promotion of taxonomy as a ERTICO priority. ERTICO is now considering making it a central part of its strategy.

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

Taxonomy and Kapsch TrafficCom

Kapsch supports the taxonomy regulation and aims to engage in 'environmentally sustainable economic activity'. We believe that our economic activity serves the objectives of the taxonomy regulation. This mainly as an 'enabling activity', for our customer, as well as for EU transport policy itself.

Shortcomings: taxonomy in transport

Transport policy aims to decarbonize and reduce emissions through substituting transport modes and making individual modes more efficient. Taxonomy works only within a transport mode, increasing its efficiency. The taxonomy regulation is over-reliant on manufacturing and improving the performance within the economic activities it defines in its delegated acts. It does not consider managing the substitution between different economic activities. Exactly that shift is central to reducing emissions in transport and EU transport policy, where the balance between economic activities that can substitute each other is key. We aim to change that.

Integration taxonomy & transport policy

Currently there is no technical screening criterion defined for our key economic activities (road charging and mobility management). The Eurovignette Directive, sustainable urban mobility plans (SUMP), sustainable urban mobility indicators (SUMI), the Smart and Sustainable Mobility Policy, the National Emission Reduction Commitments Directive all rely on access and mobility management to reduce emissions of transport. Mobility management has to be considered in the taxonomy regulation and requires a technical screening criterion.

**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

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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**

KTC\_Non-Financial\_Report\_2021-22.pdf

**Page/Section reference**

Chapter 2 - Business Model - SDGs

Chapter 5 - Environment

Chapter 9 - Non-financial key figures

**Content elements**

Strategy

Risks & opportunities

Emissions figures

Emission targets

**Comment**

To ensure compliance to Austria law, Kapsch Traffic Com is required to deliver the non-financial report as part of KTC's annual reporting package that as well include audited financial results. The complete reporting package is published on our homepage: <https://www.kapsch.net/en/ir/download-center>  
Kapsch TrafficCom has published a non-financial report every year since the financial year 2017/18.

**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, board-level oversight	<p>In a nutshell, Kapsch TrafficCom's vision is to deliver solutions in the field of Intelligent transportation systems (ITS) which</p> <ul style="list-style-type: none"> <li>* reduce congestion and improve traffic flow on busy roads,</li> <li>* influence drivers to adapt their behavior,</li> <li>* free space on roads for greener transport alternatives and</li> <li>* improve air quality.</li> </ul> <p>A reduction of road traffic emissions includes the reduction of CO2 emissions but also the emissions of particulate matters (e.g. NOx) and noise. Particulate matter and noise are particularly harmful for biodiversity.</p> <p>Particularly emissions of NOx, which originate to a large extent from road traffic (Natural England, 2016), need to be highlighted as they exhibit extraordinarily strong effects on biodiversity (UNECE, 2022). Studies have shown that the solutions offered by Kapsch TrafficCom have the potential to reduce the emissions of NOx in road traffic considerably. For instance, the implementation of Free Flow Tolling solutions instead of conventional Plaza Tolling solutions can reduce the emissions of NOx by up to 30% (Coelho, Farias &amp; Roupail, 2005), while coordinated traffic management solutions have the potential to save up to 13% of NOx emissions (Chong-White, 2016).</p> <p>Thus, by working on the realization of this vision, the board reduces the negative effects on biodiversity.</p> <p>The company's commitment to protect biodiversity is also elaborated on in KTC's non-financial report in chapters 2.2 and 3.</p> <p>Sources: Natural England. (2016). The ecological effects of air pollution from road transport: an updated review (NECR199). Retrieved June 13, 2022, from <a href="http://publications.naturalengland.org.uk/publication/6212190873845760">http://publications.naturalengland.org.uk/publication/6212190873845760</a> UNECE. (2022). Air pollution, ecosystems and biodiversity. Retrieved June 13, 2022, from <a href="https://unece.org/air-pollution-ecosystems-and-biodiversity">https://unece.org/air-pollution-ecosystems-and-biodiversity</a> Coelho, M. C., Farias, T. L. &amp; Roupail, N. M. (2005). Measuring and Modeling Emission Effects for Toll Facilities. Transportation Research Record Journal of the Transportation Research Board, 1941(1), 136-144. Retrieved June 13, 2022, from <a href="https://journals.sagepub.com/doi/10.1177/0361198105194100117">https://journals.sagepub.com/doi/10.1177/0361198105194100117</a> Chong-White, C. (2016). An Insight into the Economics that Underpin the Dynamic Allocation of Road Space Using Traffic Signals in New South Wales. Economic Papers: A journal of applied economics and policy, 35(2), 155-168. Retrieved June 13, 2022, from <a href="https://onlinelibrary.wiley.com/doi/10.1111/1759-3441.12135">https://onlinelibrary.wiley.com/doi/10.1111/1759-3441.12135</a></p>	<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	Yes, we have endorsed initiatives only	<Not Applicable>	SDG

**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	Yes, we assess impacts on biodiversity in our downstream value chain only	<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	Other, please specify (Improvement of air quality and reduction of noise)

**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 mainstream financial reports	Content of biodiversity-related policies or commitments Impacts on biodiversity	To ensure compliance to Austria law, Kapsch TrafficCom is required to deliver the non-financial report as part of KTC's annual reporting package that includes audited financial results. Please refer to <a href="https://www.kapsch.net/en/ir/download-center">https://www.kapsch.net/en/ir/download-center</a> KTC_Non-Financial_Report_2021-22.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 Executive Officer (CEO) – The CEO also fulfills the position of the Chief Sustainability Officer (CSO).	Chief Executive Officer (CEO)

**SC. Supply chain module**

**SC0.0**

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

Within the reporting period the KTC supply chain management continued to re-structure and roll-out the new global supply chain tool. It is foreseen that for all KTC developed products the information "Product Carbon Footprint" (PCF)

this information is included as soon as it is available.

In addition, all KTC suppliers will be requested to provide information on their sustainability strategy and to provide the PCF of their delivered products as well.



## SC0.1

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

	Annual Revenue
Row 1	519800000

## SC1.1

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

**Requesting member**

Transurban Group

**Scope of emissions**

Scope 1

**Allocation level**

Business unit (subsidiary company)

**Allocation level detail**

Scope 1 is understood as the emissions caused by the fleet of the subsidiary KTC Australia. The emissions related to Transurban are estimated aliquot to the revenue associated with Transurban.

**Emissions in metric tonnes of CO<sub>2</sub>e**

22.59

**Uncertainty (±%)**

5

**Major sources of emissions**

The fuel consumption of the company's fleet is the only source of Scope 1 emissions in KTC Australia.

**Verified**

No

**Allocation method**

Allocation based on the market value of products purchased

**Market value or quantity of goods/services supplied to the requesting member**

11012221.64

**Unit for market value or quantity of goods/services supplied**

Currency

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

To calculate the emissions related to the fleet at location KTC Australia relevant for Transurban, the total Scope 1 emissions of KTC Australia were multiplied by the factor "% of revenue associated with Transurban" in KTC Australia (i.e. the fleet related emissions which can be accounted to business activities done for Transurban in the reporting period.)

**Requesting member**

Transurban Group

**Scope of emissions**

Scope 2

**Allocation level**

Business unit (subsidiary company)

**Allocation level detail**

Scope 2 is understood as the emissions caused by electricity consumption, heating and cooling of site KTC Australia. The emissions related to Transurban are estimated aliquot to the revenue associated with Transurban.

**Emissions in metric tonnes of CO<sub>2</sub>e**

56.09

**Uncertainty (±%)**

5

**Major sources of emissions**

The electricity consumption of the office site is the only source of Scope 2 emissions in KTC Australia, as the energy carrier for heating and cooling is also electricity.

**Verified**

No

**Allocation method**

Allocation based on the market value of products purchased

**Market value or quantity of goods/services supplied to the requesting member**

11012221.64

**Unit for market value or quantity of goods/services supplied**

Currency

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

To calculate the Scope 2 emissions at location KTC Australia relevant for Transurban, the total Scope 2 related emissions of KTC Australia were multiplied by the factor "%

of revenue associated with Transurban" in KTC Australia (i.e. the office electricity, heating, cooling related emissions which can be accounted to business activities done for Transurban in the reporting period.)

**Requesting member**

Transurban Group

**Scope of emissions**

Scope 3

**Allocation level**

Business unit (subsidiary company)

**Allocation level detail**

Scope 3 is understood as the emissions associated with site KTC Australia not covered in Scope 1 or Scope 2. The emissions related to Transurban are estimated aliquot to the revenue associated with Transurban.

**Emissions in metric tonnes of CO2e**

16.94

**Uncertainty (±%)**

5

**Major sources of emissions**

Emissions reported here are caused by Fuel-related activities (Scope 3 Category 3 - energy-related activities are already included in Scope 2) and Business travel (Scope 3 Category 6). All other scope 3 emissions are excluded, as they either have not been evaluated limited to the subsidiary KTC Australia (e.g. Scope 3 Category 2 capital goods) or are not relevant (e.g. Scope 3 Categories 5 Waste generated in operations), or have not yet been evaluated (e.g. Scope 3 Category 1 goods and services purchased) at all.

**Verified**

No

**Allocation method**

Allocation based on the market value of products purchased

**Market value or quantity of goods/services supplied to the requesting member**

11012221.64

**Unit for market value or quantity of goods/services supplied**

Currency

**Please explain how you have identified the GHG source, including major limitations to this process and assumptions made**

To calculate the Scope 3 emissions at location KTC Australia relevant for Transurban, the total evaluated Scope 3 related emissions of KTC Australia (Scope 3 Categories 3 & 6) were multiplied by the factor "% of revenue associated with Transurban" in KTC Australia (i.e. the emissions for business flights or fuel-and-energy-related activities which can be accounted to business activities done for Transurban in the reporting period.)

SC1.2

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

no published information has been used to complete SC1.1

SC1.3

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

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	KTC needs to group its product variants to product families and calculate only for an "average" product the product carbon footprint (PCF) representing the product family best.
Customer base is too large and diverse to accurately track emissions to the customer level	KTC needs to assign the PCF values in its Supply Chain Management-tool for each product. Then an automatic allocation of PCF per customer can be generated.
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	KTC needs to either calculate with the global average emission factor for electricity, or with an average of a certain area (in case the product is only sold to and operated in a certain geographic area).

SC1.4

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

Yes

SC1.4a

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

As a first step KTC will complete the calculation of the product carbon footprint of its portfolio.

Then these figures will be added to the SCM-tool. The calculated PCF figures can be made available to KTC customers on request.

In parallel, the KTC Supply Chain Management (SCM) will contact the KTC suppliers in a step-wise approach (starting with A-suppliers, continuing with suppliers with highest total spend).

**SC2.1**

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

**Requesting member**

Transurban Group

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

3-5 years

**Estimated lifetime CO2e savings**

243.8

**Estimated payback**

Cost/saving neutral

**Details of proposal**

Longevity OBU

The Kapsch TrafficCom innovation team is currently assessing options to replace the battery in its mass product, the OBU 4010, by a renewable energy source. As the lifetime of the battery is usually the only reason why the product needs to be replaced after approx. 5 years, this could result in a considerable prolongation of product life time to 10 years. According to first evaluations this could result in a reduction of the product carbon footprint of 47%.

In the financial year 2021/22 we calculated the product carbon footprint of the mass product OBU 4010. The total lifecycle emissions of this product are 378.21 g CO2e . Considering the longer life-time the associated emissions can be reduced by 179.16 g CO2e per piece in comparison to the standard OBU 4010. When considering e.g. the total volume of ordered OBUs in FY22 by Transurban, this sums up to savings of 243.8 t CO2e. Becoming a launching customer for this product could therefore help Transurban to save CO2 emissions.

For more information, please reach out to us and visit our homepage: <https://www.kapsch.net/en/about-us/sustainability>

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**Requesting member**

Transurban Group

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

3-5 years

**Estimated lifetime CO2e savings**

220.5

**Estimated payback**

Cost/saving neutral

**Details of proposal**

Refurbishment OBU

With view to increasing concerns about sustainable operations as well as the global commodity shortage that the industry currently faces, we have started an initiative that aims at considerably reducing the material usage of our mass product, the OBU 4010, through refurbishment. Interested customers can send back old products, whose electronic components are then inspected and if still functioning they are reused and receive a new battery and a new casing. This initiative has the potential to save 43% of the CO2 that emerges from the total product carbon footprint.

In the financial year 2021/22 we calculated the product carbon footprint of the mass product OBU 4010. The total lifecycle emissions of this product are 378.21 g CO2e . With the initiative "Refurbishment OBU" the electronic components can be re-used between 3 to 4 times. Considering the reduction of used material the associated emissions can be reduced by 162.04 g CO2e per piece in comparison to the standard OBU 4010. When considering e.g. the total volume of ordered OBUs in FY22 by Transurban, this sums up to savings of 220.5 t CO2e. Participating in this initiative instead of ordering new OBUs could considerably support Transurban's efforts to reduce CO2 emissions.

For more information, please reach out to us and visit our homepage: <https://www.kapsch.net/en/about-us/sustainability>

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**Requesting member**

Transurban Group

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

0-1 year

**Estimated lifetime CO2e savings**

53

**Estimated payback**

Cost/saving neutral

**Details of proposal**

Wooden gantry

The Green Gantry is an environmentally friendly alternative for roadside infrastructure. As it is made of timber, it brings not only advantages like durability and cost savings but also helps to save tons of CO2 emission. With one Green Gantry 53 t CO2 could be saved, when applied instead of a steel gantry with a span of 35m . Introducing this wooden alternative instead of the standard steel gantry type could therefore have a high CO2 reduction potential for Transurban.

For more information, please reach out to us and visit our homepage: <https://www.kapsch.net/en/about-us/sustainability>

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**Requesting member**

Transurban Group

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

0-1 year

**Estimated lifetime CO2e savings**

19.3

**Estimated payback**

Cost/saving neutral

**Details of proposal**

Lightweight steel gantry

Gantries contribute a substantial amount to the product carbon footprint of a tolling solution. Therefore, the introduction of a new design that is less material-intensive, the so called lightweight steel gantry, is a good lever to reduce the product carbon footprint. Through a different more elaborate construction structure this gantry requires considerably less steel. The product carbon footprint of the newly designed steel gantry is 63% smaller than the previous one, resulting in a reduction of 19.3 t CO2e. Similarly to the wooden gantry alternative also this product could considerably support Transurban's efforts to reduce their environmental impact.

For more information, please reach out to us and visit our homepage: <https://www.kapsch.net/en/about-us/sustainability>

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**Requesting member**

Transurban Group

**Group type of project**

New product or service

**Type of project**

New product or service that has a lower upstream emissions footprint

**Emissions targeted**

Actions that would reduce both our own and our customers' emissions

**Estimated timeframe for carbon reductions to be realized**

0-1 year

**Estimated lifetime CO2e savings**

369.3

**Estimated payback**

Cost/saving neutral

**Details of proposal**

GLP SaaS

The GLP is an enabler for tolling, traffic management and connected vehicle businesses and has successfully evolved to a Software as a Service (SaaS) solution. In comparison to on-premise solutions, the product carbon footprint of a SaaS solution is significantly reduced, as the usage of hardware and power consumption is optimized

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and it is hosted at a Cloud service provider using low carbon energy. As a consequence, a study by Microsoft (<https://www.microsoft.com/en-gb/download/details.aspx?id=56950>) states that a SaaS solution can save between 72% and 98% of CO2 emissions in comparison to an on-premise solution. On average this could therefore lead to savings of 369.3 t CO2e over a lifetime of 10 years. Supporting their GNSS-based solutions with this tool instead of an on-premise solution could help Transurban considerably to save CO2 emissions.

For more information, please reach out to us and visit our homepage: <https://www.kapsch.net/en/about-us/sustainability>

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## SC2.2

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

No

## SC4.1

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**(SC4.1) Are you providing product level data for your organization's goods or services?**

Yes, I will provide data

## SC4.1a

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**(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.**

18.17

## SC4.2a

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**(SC4.2a) Complete the following table for the goods/services for which you want to provide data.**

**Name of good/ service**

Refurbishment Onboard Unit (OBU) TRP 4010

**Description of good/ service**

The TRP 4010 is a DSRC based Onboard Unit placed in the vehicle to charge the correct toll. The PCF of the product can be significantly reduced, when the electronic components are re-used. In case the client collects the used Onboard Units and ships them back to KTC in quantities >5,000 pieces, per return-cycle on average 90% can be re-used. Between 3 to 4 return-cycles are feasible.

Considering that the electronic components are re-used 3 times, this leads to a reduction of 43% in comparison to the standard OBU4010.

In the standard OBU 4010, the electronic components account for 73% of the material's carbon footprint. In the refurbished OBU4010, this can be reduced to 43%, when the electronic components are sent back 3 times for refurbishment.

**Type of product**

Final

**SKU (Stock Keeping Unit)**

74,000

**Total emissions in kg CO2e per unit**

0.22

**±% change from previous figure supplied**

43

**Date of previous figure supplied**

July 15 2021

**Explanation of change**

The PCF of the TRP4010 is 378g CO2e per unit. When the electronic components are re-used 3 times, this leads to a PCF of 216g CO2e per unit.

If they are re-used 4 times, this leads to a PCF of 206g CO2e per unit.

**Methods used to estimate lifecycle emissions**

GHG Protocol Product Accounting & Reporting Standard

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**Name of good/ service**

Standard Onboard Unit (OBU) TRP 4010

**Description of good/ service**

The TRP 4010 is a DSRC based Onboard Unit placed in the vehicle to charge the correct toll.

**Type of product**

Final

**SKU (Stock Keeping Unit)**

3,967,991

**Total emissions in kg CO2e per unit**

0.38

**±% change from previous figure supplied**

0

**Date of previous figure supplied**

July 15 2021

**Explanation of change**

This product has not been adapted since the last submission of the CDP report. Instead new product alternatives with better environmental performance have been introduced, like the Refurbishment OBU 4010. The total PCF of the standard OBU 4010 is 378,21 g CO2e per unit.

**Methods used to estimate lifecycle emissions**

GHG Protocol Product Accounting & Reporting Standard

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**SC4.2b**

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**(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.**

**Name of good/ service**

Refurbishment Onboard Unit (OBU) TRP 4010

**Please select the scope**

Scope 1, 2 & 3

**Please select the lifecycle stage**

Cradle to grave

**Emissions at the lifecycle stage in kg CO2e per unit**

0.216

**Is this stage under your ownership or control?**

Yes

**Type of data used**

Primary

**Data quality**

The material phase calculation for the standard OBU 4010 has been calculated by an environmental consultancy (denkstatt.eu). For the PCF of the refurbishment OBU, this calculation has only been slightly adapted - the corresponding GHG emissions of the re-used electronic components have been adjusted to receive this value.

Based on experience 90% of electronic components can be re-used per re-use cycle. That means that after the 3rd re-use cycle 73% can still be re-used and per 1000 produced new units the production of 2439 electronic components can be avoided.

The production, distribution, use and EOL phase was calculated by KTC and does not differ from the calculation for the standard product.

**If you are verifying/assuring this product emission data, please tell us how**

Basis data for material phase was calculated by environmental consultancy.

**Name of good/ service**

Standard Onboard Unit (OBU) TRP 4010

**Please select the scope**

Scope 1, 2 & 3

**Please select the lifecycle stage**

Cradle to grave

**Emissions at the lifecycle stage in kg CO2e per unit**

0.378

**Is this stage under your ownership or control?**

Yes

**Type of data used**

Primary

**Data quality**

The material phase (responsible for 83% of emissions) of the product was calculated by environmental consultancy (denkstatt.eu).

The production, distribution, use and EOL phase was calculated by KTC.

**If you are verifying/assuring this product emission data, please tell us how**

The material phase was calculated by environmental consultancy (denkstatt.eu).

**SC4.2c**

**(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.**

Name of good/ service	Initiative ID	Description of initiative	Completed or planned	Emission reductions in kg CO2e per unit
Onboard Unit TRP 4010 (with re-used electronic components)	Initiative 1	The main contributor to the PCF are the electronic components. Based on experience per return-cycle on average 90% can be re-used. Between 3 to 4 return-cycles are feasible. Per unit 162 g CO2e can be avoided.	Completed	0.16
Onboard Unit TRP 4010 (with extended life-time)	Initiative 2	The life-time of the Onboard Unit can be significantly extended, if the battery is replaced with a renewable energy source.	Ongoing	0.18

**SC4.2d**

**(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?**

No

**Submit your response**

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

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

**The European Climate Pact Submission**

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**Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.**

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

**Please confirm below**

I have read and accept the applicable Terms