

# Welcome to your CDP Climate Change Questionnaire 2019

# C0. Introduction

# C<sub>0.1</sub>

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

As of December 31, 2018 the Continental Corporation consists of 572 companies, including non-controlled companies in addition to the parent company Continental AG. The Continental team is made up of 243,226 employees over a total of 554 locations in 60 countries. Overall responsibility for management is borne by the Executive Board of Continental AG In the reporting year, each division was represented by one Executive Board member until September 30, 2018. Since October 1, 2018, the Powertrain division has been under new management as a result of its transformation into an independent group of legal entities from 2019. With the exception of Corporate Purchasing, the central functions of Continental AG are represented by the chairman of the Executive Board, the chief financial officer and the Executive Board member responsible for Human Relations. They take on the functions required on a crossdivisional basis to manage the corporation. These include, in particular, finance, controlling, compliance, law, IT, sustainability, quality and environment. In the reporting year, the corporation consisted of the Automotive Group and the Rubber Group, which comprised five divisions with 26 business units. A division or business unit is classified according to products, product groups and services or according to regions. Differences result primarily from technological product requirements, innovation and product cycles; the raw materials base; and production technology. The divisions and business units have overall responsibility for their business, including their results.

# C<sub>0.2</sub>

## (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
Row	January 1,	December 31,	No
1	2018	2018	

# C<sub>0.3</sub>

## (C0.3) Select the countries/regions for which you will be supplying data.

Austria

Belgium

Brazil



Chile

China

Czechia

Ecuador

Finland

France

Germany

Greece

Hungary

India

Italy

Japan

Malaysia

Mexico

**Philippines** 

Poland

Portugal

Republic of Korea

Romania

Russian Federation

Serbia

Singapore

South Africa

Spain

Switzerland

Turkey

United Kingdom of Great Britain and Northern Ireland

United States of America

# C<sub>0.4</sub>

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

**EUR** 

# C<sub>0.5</sub>

(C0.5) Select the option that describes the reporting boundary for which climaterelated impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control



# 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)	The highest level of responsibility for climate change strategy and management within Continental is our CEO (Chief Executive Officer / Chairman of the Executive Board). Amongst other issues, he is responsible for Corporate Quality & Environment, which includes climate change as a major issue. The climate change management within the combined Function Corporate Quality & Environment is part of his executive portfolio.
Other C-Suite Officer	The board member for HR and Sustainability is also responsible for the Sustainability department, which was newly created in the reporting year and coordinates the sustainability strategy, its development and an interdepartmental Sustainability Committee. All relevant business units and central functions are represented on the Sustainability Committee alongside the board member for HR and Sustainability and another Executive Board member, the CFO. Climate change data, risks and opportunities are a regular agenda topic in their meetings.
Chief Financial Officer (CFO)	The CFO also has some responsibility for sustainability issues. He is part of the Sustainability Committee. Climate change data, risks and opportunities are a regular agenda topic in their meetings.

# 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	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action	The climate related risks and opportunities as well as the climate strategy are regularly reported via "Management Reviews" which are provided to the CEO and the Top Management. Based on the performance results and the implemented action



Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-	plans, they steer and decide upon the necessary steps to improve our climate strategy.  The corporate strategy includes all risks and opptunities relevant to our existing and future product portfolio.
for addressing climate- related issues	

# 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)	Responsibility	Frequency of reporting to the board on climate-related issues
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Half-yearly
Energy manager	Managing climate-related risks and opportunities	Half-yearly
Environment/ Sustainability manager	Both assessing and managing climate-related risks and opportunities	Annually
Procurement manager	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Chief Procurement Officer (CPO)	Assessing climate-related risks and opportunities	As important matters arise

 $<sup>\</sup>Omega$  The CFO and Board Member for HR lead the Sustainability Committee.



# 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).

All commitees and managers listed above operate at the highest management levels. These range from C-Suite responsibilities to higher or middle manager positions depending on the function, or in the case of the Sustainability Committee multiple levels of management are represented together including 2 Executive Board Members. The responsibilities have been distributed in this way due to the complex organisational structure of Continental requiring coordination across the highest levels of decision making with input from division-specific or function-specific managers.

C-Suite individuals within the Sustainability Committee are responsible for making strategic decisions with regard to general sustainability and climate issues together with the Board while the next level of management (e.g. Environmental Managers, Energy Managers, etc.) are responsible for providing input for management reviews. They are also responsible for disseminating and guiding management decisions from the highest management levels to the operational levels where the high-level climate goals must be applied to local or division-specific contexts.

# C<sub>1.3</sub>

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

Yes

# C1.3a

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

# Who is entitled to benefit from these incentives?

Energy manager

### Types of incentives

Monetary reward

## **Activity incentivized**

Efficiency target

#### Comment

The energy and emissions reduction targets represent the core competence/responsibility of our energy managers.



## Who is entitled to benefit from these incentives?

Environment/Sustainability manager

# Types of incentives

Monetary reward

## **Activity incentivized**

Emissions reduction target

### Comment

The energy and emissions reduction targets represent the core competence/responsibility of our environment managers in the plants, BU's and divisions.

## Who is entitled to benefit from these incentives?

Facilities manager

## Types of incentives

Monetary reward

## **Activity incentivized**

Efficiency target

### Comment

Energy and emissions reduction targets are also a focus of our facility managers within the production plants.

### Who is entitled to benefit from these incentives?

Other, please specify
Divisional Heads for Environemnt

# Types of incentives

Monetary reward

# **Activity incentivized**

Efficiency target

### Comment

The focus on energy and emissions reduction targets are the responsibility of our divisional heads for environment.

## Who is entitled to benefit from these incentives?

Procurement manager

# Types of incentives

Monetary reward



## **Activity incentivized**

Environmental criteria included in purchases

# Comment

In Purchasing we have set a target focusing on sustainability along the supply chain.

## Who is entitled to benefit from these incentives?

All employees

# Types of incentives

Monetary reward

# **Activity incentivized**

Efficiency project

#### Comment

An on-going component of our "Idea Mangement" program includes the provision of financial rewards to employees who suggest changes to the production processes/other areas of operations that lead to improved energy efficiency or an improvement in other sustainability metrics (e.g. water use reductions).

# C2. Risks and opportunities

# C2.1

# (C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment	
Short- term	0	1	Short term refers to immediate risks that can be responded to and resolved within 1 year.	
Medium- term	1	6	Medium term refers to observable risks over a 1-6 year time-horizon that require the implementation of programs and targets to resolve climate-related issues.	
Long-term	6	20	Long term refers to long lasting ambitions and goals over a 6-20 year time horizon that require advanced planning to achieve and overcome long-term climate risks.	

# C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.



Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

# C2.2a

# (C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	This is managed as part of Continental's governance, risk and compliance policy.  In the GRC policy adopted by the Executive Board, Continental defines the general conditions for integrated GRC as a key element of the risk management system, which regulates the identification, assessment, reporting and documentation of risks. In addition, this also further increases corporate-wide risk awareness and establishes the framework for a uniform risk culture. The GRC Committee ensures that this policy is adhered to and implemented.  The GRC system incorporates all components of risk reporting and the examination of the effectiveness of the Financial Reporting ICS.  Risks are identified, assessed and reported at the organizational level where they are also managed. A multistage assessment process is used to involve the higher level organizational units as well. The GRC system thus includes all reporting levels, and environmental and climate risks are fully integrated.

# C2.2b

# (C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

At the corporate level, the responsibilities of the GRC (Governance, Risk & Compliance) Committee – chaired by the Executive Board member responsible for Finance, Controlling, Compliance, Law, IT – include identifying which risks are significant for the corporation.

The GRC Committee regularly informs the Executive Board and the Audit Committee of the Supervisory Board of the major risks, any weaknesses in the control system and measures



taken. Moreover, the auditor of the corporation is required to report to the Audit Committee of the Supervisory Board regarding any major weaknesses in the Financial Reporting ICS that are identified by the auditor as part of their audit activities.

The risks and their effects are assessed primarily according to quantitative criteria and assigned to different categories in line with the net principle, i.e. after risk mitigation measures. If a risk cannot be assessed quantitatively, then it is assessed qualitatively based on the potential negative effects its occurrence would have on achieving strategic corporate goals and based on other qualitative criteria such as the impact on Continental's reputation. Significant individual risks for the corporation are identified from all of the reported risks based on the probability of occurrence and the amount of damage that would be caused in the period under consideration. The individual risks that Continental has classified as material and the aggregated risks that have been assigned to risk categories are all described in the Report on Risks and Opportunities. This report provides the potential negative EBIT effect of an individual risk or the sum of risks included in a category if they exceed €100 million in the period under consideration, or whether there is a significant negative impact on the strategic corporate goals.

Furthermore, the GRC Committee identifies and assesses strategic risks, for example as part of a SWOT analysis. Any new material risks arising unexpectedly between regular reporting dates have to be reported immediately and considered by the GRC Committee. This also includes risks identified in the audits by corporate functions, as well environmental and climate-related risks.

In addition to the risk analyses carried out by the reporting units as part of integrated GRC, audits are also performed by the Corporate Audit department. Furthermore, the central controlling function analyzes the key figures provided as part of this reporting process at the corporate and division levels in order to assess the effects of potential risks.

### Risk management

The responsible management level initiates suitable countermeasures that are also documented in the GRC system for each risk identified and assessed as material. The GRC Committee monitors and consolidates the identified risks and suitable countermeasures at the corporation level. It regularly reports to the Executive Board and recommends further measures if needed. The Executive Board discusses and resolves the measures, and reports to the Supervisory Board's Audit Committee. The responsible bodies continually monitor the development of all identified risks and the progress of initiated actions. Corporate Audit regularly audits the risk management process, thereby continually monitoring its effectiveness and further development.

# C2.2c

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

Relevance &	Please explain
inclusion	



Current regulation	Relevant, always included	This is assessed by the divisonal strategy departments and is included in the Risk & Opportunitiy Management described above.
Emerging regulation	Relevant, always included	This is assessed by the divisonal strategy departments and is included in the Risk & Opportunitiy Management described above.
Technology	Relevant, always included	This is assessed by the divisonal technology departments and is included in the Risk & Opportunitiy Management described above.
Legal	Relevant, always included	This is assessed by the divisonal law and compliance departments and is included in the Risk & Opportunitiy Management described above.
Market	Relevant, always included	This is assessed by the divisonal markets and sales departments and is included in the Risk & Opportunitiy Management described above.
Reputation	Relevant, always included	This is assessed by the divisonal markets and sales departments and is included in the Risk & Opportunitiy Management described above.
Acute physical	Relevant, always included	This is assessed by the Corporate Loss Preventions department and is included in the Risk & Opportunitiy Management described above.
Chronic physical	Relevant, always included	This is assessed by the Corporate Loss Preventions department and is included in the Risk & Opportunitiy Management described above.
Upstream	Relevant, always included	This is assessed as part of the Corporate Supply Chain Management strategy and is included in the Risk & Opportunitiy Management described above.
Downstream	Relevant, always included	This is assessed as part of the Corporate Supply Chain Management strategy and is included in the Risk & Opportunitiy Management described above.

# C2.2d

# (C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

In our Risk and Opportunity Management, we include the following categories that are reviewed and adapted at the Board level:

## <u>Risks</u>

- Financial Risks
- Risks Related to the Markets in which Continental Operates (incl. environmental and climate related risks)



- Risks Related to Continental's Business Operations (incl. property loss and business interruption)
- Legal and Environmental Risks

### **Opportunities**

- Material Opportunities
- There are opportunities for Continental if macroeconomic development is better than anticipated.
- There are opportunities for Continental if the sales markets develop better than anticipated
- There are opportunities for Continental from changes in the legal framework, espaecially climate related increase of regulation calling for lower emissions or an emissions tax.
- There are opportunities for Continental from an intensified trend toward vehicle electrification.
- There are opportunities for Continental from digitalization and particularly from the intelligent interconnection of vehicles with each other and with the internet.
- The trend toward automated driving presents Continental with opportunities.

Continental will be reorganizing itself until 2020 in order to actively shape the mobility of the future. We will therefore be able to respond even more flexibly to the requirements of various customers, markets, government agencies, and companies and make faster and more efficient use of our opportunities. A holding structure will be set up under a new umbrella brand. This will be divided into two group sectors, in addition to the Powertrain division. The reporting structure is to be used starting 2020. The Chassis & Safety and Interior divisions will be reorganized by the beginning of 2020. The two areas will be supported by a newly created central Automotive Research and Development function, which will bundle basic research and applications as an independent unit. The two current divisions Tires and ContiTech will remain unchanged in terms of their independent organizational structure and will form the second group sector. As part of the realignment, the Powertrain division was transformed into an independent group of legal entities at the beginning of 2019. In addition to the combustion engine business, its activities will continue to include all future business involving hybrid and electric drive systems and all current battery activities. At the same time, we are preparing a partial initial public offering (IPO) for Powertrain, which will be possible in the second half of 2019. However, control over the new company is not to be relinquished in the medium to long term. The reason for the transformation into an independent group of legal entities is the change occurring in the driving business, the development of which is determined chiefly by regulatory emission limit requirements which vary in the markets that are important to us. Rapid adaptability is therefore essential in order to succeed in this business. Another reason is the increased focus on electric mobility. Considerable investments have already been made here and will continue to be necessary in the future. Furthermore, a legally independent business is in an even better position to actively support the expected long-term consolidation process in these markets. Our seven strategic dimensions will not be affected by the reorganization. They complement each other and are geared toward sustainably creating value for all stakeholders and ensuring the future viability of the company.



# C2.3

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

Yes

# C2.3a

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

### Identifier

Risk 1

### Where in the value chain does the risk driver occur?

Direct operations

### Risk type

Physical risk

## Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

### Type of financial impact

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

## Company- specific description

Continental operates at 554 locations in 61 countries. About one third are in areas subject to increased physical climate-risks such as in Latin-America, South-East Asia and Sub-Saharan Africa. The creation of a climate-related risk assessment and hotspot analysis with a focus on climate-related water supply and water stress for all sites was implemented in 2018. The objective is to be able to react better to the negative effects of climate-related water shortages and to align goals related to water consumption at our locations as well as to implement adaptation projects to meet challenges within specific regions. Currently, a hotspot risk management strategy is under development and will be integrated in Continental's post 2020 strategy.

## Time horizon

Medium-term

### Likelihood

Very likely

## Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?



Yes, a single figure estimate

# Potential financial impact figure (currency)

1

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

## **Explanation of financial impact figure**

1 = The values for potential financial impact are obtained regularly and are in use for internal decision making and risk assessment purposes. The potential financial impact is an internal figure and shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## **Management method**

Continental operates at 554 locations in 61 countries. About one third are in areas subject to increased physical climate-risks such as in Latin-America, South-East Asia and Sub-Saharan Africa. The creation of a climate-related risk assessment and hotspot analysis with a focus on climate-related water supply and water stress for all sites was implemented in 2018. The objective is to be able to react better to the negative effects of climate-related water shortages and to align goals related to water consumption at our locations as well as to implement adaptation projects to meet challenges within specific regions. Currently, a hotspot risk management strategy is under development and will be integrated in Continental's post 2020 strategy.

The management of the Continental Corporation is geared toward creating added value and ensuring a well-balanced financing structure. This means sustainably increasing the value of each business unit and the corporation as a whole. We evaluate the risks and opportunities that arise responsibly and on an ongoing basis in order to achieve this.

The standardized corporation-wide risk management system regulates the recording, assessment, documentation and reporting of risks.

## Cost of management

1

#### Comment

1 = The costs of management shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## But:

- 1. It happens across multiple sectors
- 2. Is an integral part of the company's strategy and decision making
- 3. The company is considering the current development of climate-related risk management as a high priority



### Identifier

Risk 2

### Where in the value chain does the risk driver occur?

Supply chain

## Risk type

Physical risk

## Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

## Type of financial impact

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

## Company- specific description

In 2018 the Rubber Group of Continental Corporation achieved €44.2 billion in sales. Natural rubber is the single most significant raw material required for this production process.

Most raw materials suppliers for the Rubber Group are global companies due to the unique nature of the business. Local sourcing is therefore not always appropriate for various reasons. We are working to add information on manufacturing locations to our supplier database. We are already able to assign the majority of our raw materials to their production location so that this can serve as a basis for any following analysis. The share of regional deliveries (within the same region) make up approximately 70% of total deliveries (America, Europe, Asia, other). The share of local deliveries (within the same country) was approximately 27% in the year under review.

Key raw materials for the Rubber Group include synthetic rubber (24%), chemicals (28%), reinforcing materials (25%), natural rubber (15%) and other goods.

Natural rubber is highly dependent on rain water. Changes in precipitation patterns can be named as the highest risk for the productivity of natural rubber.

## Time horizon

Medium-term

### Likelihood

Likely

## Magnitude of impact

Medium

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

Yes, a single figure estimate



# Potential financial impact figure (currency)

1

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

## **Explanation of financial impact figure**

1 = The values for potential financial impact are obtained regularly and are in use for internal decision making and risk assessment purposes. The potential financial impact is an internal figure and shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## Management method

Continental participates in the Sustainable Natural Rubber Initiative (SNR-i). This establishes standards and best practices to make the entire value chain for natural rubber more sustainable. In this regard, upholding human rights and promoting humane working conditions constitute one of the six key fields of action.

## **Cost of management**

1

## Comment

1 = The costs of management shall not to be disclosed on the grounds that they contain business secrets or confidential material.

We monitor the environmentally friendly production of our suppliers worldwide as part of internal supplier audits. Relevant issues in the scope of these audits include compliance, organization and the provision of resources for EH&S. About 85% of our suppliers in the Automotive Group and 73% in the Rubber Group were certified according to ISO 14001.

### Identifier

Risk 3

## Where in the value chain does the risk driver occur?

Customer

## Risk type

Transition risk

## Primary climate-related risk driver

Market: Changing customer behavior

## Type of financial impact

Reduced demand for goods and/or services due to shift in consumer preferences



## Company- specific description

Due to higher oil prices or other energy costs, the behavior of consumers could change more rapidly than industrial development and production can respond.

#### Time horizon

Medium-term

### Likelihood

Likely

## Magnitude of impact

Medium

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

1

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

## **Explanation of financial impact figure**

1 = The values for potential financial impact are obtained regularly and are in use for internal decision making and risk assessment purposes. The potential financial impact is an internal figure and shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## Management method

The risk management system complies fully with the Corporate Governance Principles of the Continental Corporation and with statutory regulations, and is part and parcel of the annual financial statements audit. In terms of the system for early risk detection, which is part of the risk management system, the auditor of our 2016 consolidated financial statements found that the Executive Board had taken the necessary measures under Section 91 (2) of the German Stock Corporation Act (AktG) and that the company's system for early risk detection is suitable for identifying developments that pose a risk to the continued existence of the company at an early stage.

Continental is investing in e-car component development to mitigate the business impact of climate change effectively. Different technology types are considered to decrease market-related risks and to increase opportunities according to upcoming market developments like: clean diesel and gasoline engines, climate-neutral synthetic fuels and fuel cells.

## Cost of management

848,000,000



### Comment

Q1 2018: The technology company's net expenditure for research and development was €848 million, which equates to 7.7 percent of sales. In the same period of the previous year, the ratio was 7.1 percent.

# 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**

Resource efficiency

## Primary climate-related opportunity driver

Use of recycling

# Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

## **Company-specific description**

Due to a shortage of natural resources species to our business operations, Continental relies increasingly on the use of recycling material and is implementing measures to expand recycling group-wide.

### Time horizon

Short-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)



1

## Potential financial impact figure - minimum (currency)

## Potential financial impact figure – maximum (currency)

## **Explanation of financial impact figure**

1 = The values for potential financial impact are obtained regularly and are in use for internal decision making and risk assessment purposes. The potential financial impact is an internal figure and shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## Strategy to realize opportunity

The environmental management system incorporates all levels of the value chain and the complete life cycles of Continental products. As a result, our environmental responsibilities extend from research and development, the purchasing of raw materials and components, logistics and production, to the use and recycling of our products. Our activities are geared toward continually optimizing the use of resources in relation to business volume. We manufacture products that make an active contribution toward protecting the environment and conserving resources throughout their entire duration of use as well as when they are ultimately recycled.

In manufacturing, we are aiming for a 20% reduction in relation to the adjusted sales volume of energy and water consumption, CO2 emissions and waste generation by 2020 (base year: 2013). At the same time we are doing our best to increase the recycling rate of industrial waste by 2% each year.

## Cost to realize opportunity

1

# Comment

1 = The costs of realizing this opportunity shall not to be disclosed on the grounds that they contain business secrets or confidential material.

However, we are striving to achieve a specific waste volume of 6.8 metric tons per € million of adjusted sales and a recycling rate of 90% by 2020.

# Identifier

Opp2

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

Direct operations

# **Opportunity type**

Energy source



## Primary climate-related opportunity driver

Use of lower-emission sources of energy

# Type of financial impact

Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

# Company-specific description

Sourcing low emission sources of energy presents an opportunity to address likely additional legal regulations to reduce CO2 emissions in the future. By acting proactively, we can hedge our exposure to the shifting political and business environments while reducing production costs.

#### Time horizon

Short-term

## Likelihood

Very likely

# Magnitude of impact

Medium-high

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

Yes, a single figure estimate

# Potential financial impact figure (currency)

1

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

## **Explanation of financial impact figure**

1 = The values for potential financial impact are obtained regularly and are in use for internal decision making and risk assessment purposes. The potential financial impact is an internal figure and shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## Strategy to realize opportunity

We already generate around a third of our sales with products that are designed to reduce CO2 emissions. In Q1 2019, the technology company's net expenditure for research and development was €902 million, which equates to 8.2 percent of sales. In the same period of the previous year, the ratio was 7.7 percent.

## Cost to realize opportunity

1



### Comment

1 = The costs of realizing this opportunity shall not to be disclosed on the grounds that they contain business secrets or confidential material.

### Identifier

Opp3

# Where in the value chain does the opportunity occur?

Customer

## Opportunity type

Products and services

## Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

## Type of financial impact

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

## Company-specific description

Through the introduction of eco-labels, Continental could advertise its ecologically beneficial products more effectively, thereby setting itself apart from competitors.

### Time horizon

Short-term

## Likelihood

Likely

# Magnitude of impact

Medium

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

Yes, a single figure estimate

## Potential financial impact figure (currency)

1

Potential financial impact figure - minimum (currency)

Potential financial impact figure – maximum (currency)

## **Explanation of financial impact figure**

1 = The values for potential financial impact are obtained regularly and are in use for internal decision making and risk assessment purposes. The potential financial impact is an internal figure and shall not to be disclosed on the grounds that they contain



business secrets or confidential material.

## Strategy to realize opportunity

To protect the climate, Continental has set itself the goal of reducing energy consumption and CO2 emissions in production by 20% based on adjusted sales by 2020 (compared with 2013). The introduction of energy management systems and energy-saving campaigns will help to unlock potential savings. The BEE (Be Energy Efficient) campaign rolled out across the corporation is a key part of energy management. It comprises three main elements intended to ensure that corporate energy targets are achieved: introducing management systems in line with ISO 50001; Measuring and analyzing consumption to boost efficiency; Raising awareness and motivation among the entire organization.

The actions involved include switching to LED lighting, implementing efficiency measures in air-conditioning and ventilation systems and installing combined heat and power plants. These measures decrease the product-specific carbon footprint of individual components.

Smart Surfaces from Continental: One example of this rollout in action includes Continental's "Light" labeled products, which cuts fuel consumption and CO2 emissions. With a weight advantage of up to 50 percent compared with conventional foils, they ensure a convincing, sustainable climate footprint. Their use is also particularly important in electric vehicles – every gram of weight saved in these means a longer range and better vehicle performance.

## Cost to realize opportunity

1

### Comment

1 = The costs of realizing this opportunity shall not to be disclosed on the grounds that they contain business secrets or confidential material.

## C2.5

# (C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	Due to increasingly stringent consumption and emission standards throughout the industrial world, including the EU and Asia, car manufacturers are increasingly being forced to develop environmentally compatible technologies aimed at lowering fuel consumption as well as CO2 and particulate emissions. These developments have caused a trend toward lower-consumption vehicles. The technologies are developed and delivered by Continental.



Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Continental's earnings situation is affected to a significant extent by the cost of raw materials, electronic components and energy. For the Automotive Group divisions, this particularly relates to the cost of steel and electronic components. If we succeed even better than before in offsetting possible cost increases or compensating for them through higher prices for our products, this would then have a positive effect on Continental's earnings. The earnings situation of the Rubber Group divisions is significantly impacted by the cost of oil and of natural and synthetic rubber. Price developments are sometimes directly connected to climate related risks.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	The earnings situation of the Rubber Group divisions in particular is significantly impacted by the cost of oil and of natural and synthetic rubber within our supply chain.  Price developments are sometimes directly connected to climate related risks, and in the case of those raw materials derived from agriculture that are sensitive to climatic changes, such as natural rubber, adaptation interventions will become increasingly important to secure supplies.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	Climate-related efficiency programs are an integral part of Continental's R&D strategy. Of course, climate-related risk and opportunity aspects are taken into account. This is evident especially in the development of new markets like e-cars and low-carbon technologies.  In Q1 2018, the technology company's net expenditure for research and development was €848 million, which equates to 7.7 percent of sales. In the same period of the previous year, the ratio was 7.1 percent.
Operations	Impacted	We consider the complete scope of risk management during the planning for new greenfield projects.
Other, please specify		



# C2.6

# (C2.6) Describe where and how the identified risks and opportunities have been factored into your financial planning process.

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	Decoupling of emissions and value added (Revenues) by carbon intensity targets     Revenue according to low-carbon technologies is increasing and so 2 degree compatible products are registered as climate-related opportunities.
Operating costs	Impacted for some suppliers, facilities, or product lines	Increasing water and carbon prices and the demand for green electricity supply are registered opportunities and risks.
Capital expenditures / capital allocation	Not yet impacted	While climate-related risks and opportunities have not yet been a major factor in our investment decisions and credit outlook, we expect that this will change in the future and therefore are taking steps now to integrate these issues into our 2030 sustainability strategy.
Acquisitions and divestments	Impacted	This depends on the regions which are affected by climate related issues.
Access to capital	Not yet impacted	While climate-related risks and opportunities have not yet been a major factor in our investment decisions and credit outlook, we expect that this will change in the future and therefore are taking steps now to integrate these issues into our 2030 sustainability strategy.
Assets	Not yet impacted	While climate-related risks and opportunities have not yet been a major factor in our investment decisions and credit outlook, we expect that this will change in the future and therefore are taking steps now to integrate these issues into our 2030 sustainability strategy.
Liabilities	Not yet impacted	While climate-related risks and opportunities have not yet been a major factor in our investment decisions and credit outlook, we expect that this will change in the future and therefore are taking steps now to integrate these issues into our 2030 sustainability strategy.
Other		

# C3. Business Strategy

# C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes



# C3.1a

# (C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

# C3.1c

# (C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

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Environmental protection at Continental is based on the global policy for environment, safety, security, health and fire protection (ESH policy) which, among other things, stipulates that we want to use our processes and products to make a material contribution to sustainable environmental protection — especially climate protection — over the entire product life cycle. Overall responsibility for environmental management is borne by the Corporate Quality and Environment department, which reports directly to the chairman of the Executive Board and develops strategic targets for environmental protection in the corporation as a whole. These are broken down by division, and the ultimate responsibility for the resulting strategic requirements, objectives and programs at each location lies with the respective ESH managers. We continuously improve our environmental performance through the systematic application of management systems. We have set clear targets for the corporation. By 2020, we want to reduce our specific CO2 emissions, energy and water consumption, and waste generation by 20% in relation to adjusted sales, using 2013 as a basis. We also intend to improve our waste recycling and reuse rate by two percentage points a year. New locations are being integrated into these processes and programs incrementally.

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## **Environmental and climate protection**

Environmental & Climate protection is an integral part of our company policy. For us, economics and environmental awareness are not contradictions, but are the foundation for sustainable value creation at Continental. Our environmental management system is based on global megatrends, which also form the basis of the corporation's overall strategy. This system incorporates all levels of the value chain and the entire life cycles of Continental products. As a result, our climate-related responsibilities extend from research and development, the purchasing of raw materials and components, green energy procurement strategies, logistics and production, to the use and recycling of our products. Our service processes are geared toward continuously improving the use of resources in relation to business volume. The further tightening of the regulatory provisions on fuel consumption and emission standards for motor vehicles in developing and emergingmarkets could also trigger higher demand for Continental's products. With our comprehensive portfolio of gasoline and diesel systems including sensors, actuators, exhaust-gas aftertreatment and tailormade electronics, through to fuel supply systems, engine management and transmission control units, down to systems and components for hybrid and electric drives, as well as with tires with optimized rolling resistance



and tires for hybrid vehicles, we are already providing solutions that enable compliance with such changes within the legal framework and can therefore respond quickly to changes that arise in the regulatory provisions. An increase in the installation rates for these products due to regulatory changes would have a positive influence on our sales and earnings.

In terms of climate-related business decisions, we are developing products to protect our climate in other areas. For example, we are significantly lowering vehicles' CO2 emissions by means of innovative hybrid drives, injection valves, telematic systems, and optimized hose lines. These criteria are an integrated part of the intern product development process.

# C3.1d

# (C3.1d) Provide details of your organization's use of climate-related scenario analysis.

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.			
Climate- related scenarios	Details		
Other, please specify RCP 4.5 and RCP 8.5	Continental is in the early stages of integrating climate-related scenarios into our risk analyses and environmental (climate and water) action, and therefore no such scenarios were used thus far in an effective way to inform our internal action.  A first use of climate scenarios was used as part of our water risk assessment. The RCP 4.5 and RCP 8.5 climate scenarios were used by the WRI Aqueduct Tool (recommended by the TCFD) as optimistic and business as usual climate scenarios respectively to model changes in water stress and supply over long time horizons (i.e. 2020, 2030 and 2040). These models were used in combination with other indicators to determine where water stress and supply are projected to worsen due to supply side (climate change-related) reasons. We were able to determine that even using the optimistic RCP 4.5 model we will likely see a worsening of water stress due to climate change in several of the high-risk basins where we have direct operations or source raw materials, such as in Mexico.  This tool considers qualitative and quantitative indicators.		
2DS	Further examinations of climate-related scenarios are currently underway as part of our assessment regarding the potential to set Science Based Targets. (The 2DS is part of the SBT methodology SDA.) All emission pathways will be examined further in consideration of their integration into our business strategy and in particular in our post-2020 sustainability strategy (5-15 years). At present, these scenarios are part of an internal energy procurement strategy adaption process (and the climate-target adaption process for the beyond 2020 target (SBT)). This approach considers quantitative indicators.		



# C4. Targets and performance

# C4.1

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

Intensity target

# C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

# Target reference number

Int 1

## Scope

Scope 1+2 (location-based)

# % emissions in Scope

100

## Targeted % reduction from base year

20

# **Metric**

Metric tons CO2e per unit revenue

# Base year

2013

# Start year

2013

# Normalized base year emissions covered by target (metric tons CO2e)

759

# **Target year**

2020

## Is this a science-based target?

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

# % of target achieved

2

# **Target status**

Underway

# Please explain



Start and base year is 2013 with a target year of 2020. The target aims for a 3% annual reduction, or approximately a 20% reduction over the full target period. However, due to significant growth in production and sales as well as several acquisitions, Continental has currently only achieved 2% of this target reduction.

% change anticipated in absolute Scope 1+2 emissions

25.8

% change anticipated in absolute Scope 3 emissions

8.8

# C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

## **Target**

**Energy productivity** 

**KPI - Metric numerator** 

MWh

**KPI – Metric denominator (intensity targets only)** 

Millions € revenue

Base year

2013

Start year

2013

**Target year** 

2020

KPI in baseline year

230

KPI in target year

221

% achieved in reporting year

87.5

**Target Status** 

Underway

## Please explain

Start and base year is 2013 with a target year of 2020. The target aims for a 3% annual reduction, or approximately a 20% reduction over the full target period.



## Part of emissions target

Yes, this is included as part of our Climate Strategy 2020.

# Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

## **Target**

Waste

## **KPI – Metric numerator**

**Tonnes** 

# **KPI – Metric denominator (intensity targets only)**

Millons € revenue

# Base year

2013

## Start year

2013

## **Target year**

2020

## KPI in baseline year

8.4

## KPI in target year

6.8

# % achieved in reporting year

0

## **Target Status**

Underway

# Please explain

Start and base year is 2013 with a target year of 2020. The target aims for a 3% annual reduction, or approximately a 20% reduction over the full target period. This target is currently not on track to achieve full compliance by 2020 due to increases in this KPI due to significant growth in the use of packaging.

## Part of emissions target

Yes, this is included as part of our Climate Strategy 2020.

## Is this target part of an overarching initiative?

No, it's not part of an overarching initiative



## **Target**

Engagement with suppliers

## **KPI – Metric numerator**

Percentage Certification according ISO 14001

# **KPI – Metric denominator (intensity targets only)**

## Base year

2013

## Start year

2013

## **Target year**

2020

## KPI in baseline year

80

## KPI in target year

100

## % achieved in reporting year

95

## **Target Status**

Underway

## Please explain

This is an annual rolling target that is measured relative to the previous year's performance and with the aim to achieve 100% certification by 2020.

## Part of emissions target

Yes, this is included as part of our Climate Strategy 2020

# Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

# 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	1	345
To be implemented*	42	5,790
Implementation commenced*	102	7,930
Implemented*	491	50,736
Not to be implemented		

# C4.3b

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

# Initiative type

Energy efficiency: Building services

# **Description of initiative**

Other, please specify

Different technical solution with high efficient equipment

## Estimated annual CO2e savings (metric tonnes CO2e)

25,200

## Scope

Scope 1

# Voluntary/Mandatory

Voluntary

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

70,180,000

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

10,300,800

## Payback period

4 - 10 years

## Estimated lifetime of the initiative

6-10 years

## Comment



## Initiative type

Energy efficiency: Processes

## **Description of initiative**

Other, please specify

Different technical solution with high efficient equipment

## Estimated annual CO2e savings (metric tonnes CO2e)

10,500

## Scope

Scope 2 (market-based)

# Voluntary/Mandatory

Voluntary

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

39,800,000

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

5,700,800

## Payback period

4 - 10 years

## Estimated lifetime of the initiative

6-10 years

## Comment

## Initiative type

Process emissions reductions

## **Description of initiative**

Changes in operations

## Estimated annual CO2e savings (metric tonnes CO2e)

10,036

## Scope

Scope 2 (market-based)

## Voluntary/Mandatory

Voluntary

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

30,196,614

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



4,546,219

## Payback period

4 - 10 years

## Estimated lifetime of the initiative

3-5 years

### Comment

## Initiative type

Energy efficiency: Building services

# **Description of initiative**

Other, please specify

Different technical solutions

# Estimated annual CO2e savings (metric tonnes CO2e)

5,200

# Scope

Scope 2 (market-based)

# Voluntary/Mandatory

Voluntary

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

15,200,000

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

2,500,000

# Payback period

1-3 years

## Estimated lifetime of the initiative

6-10 years

## Comment

# C4.3c

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

Method	Comment
Compliance with regulatory	In case of regulatory requirements the measures will be implemented
requirements/standards	immediately



Financial optimization calculations	All voluntary measures are calculated according to our internal investment rules
Dedicated budget for energy efficiency	Energy departments have a special budget for energy efficiency measures carried out in production plants. Implementation of the Energy Management System is in line with ISO 50001
Employee engagement	Continental runs an effective system where ideas for improvement can be indicated by employees. Ideas regarding energy saving and reducing CO2 emissions when implemented in our processes are financially rewarded.
Dedicated budget for other emissions reduction activities	Implementation of the "Green Plant Label Award" in "Gold", Silver" and Bronze" strenghens our environmental strategy and provides solutions for best available technique. All plants are requested to reach "Bronze" status by 2020.
Dedicated budget for low- carbon product R&D	Continental has several co-operations with federal governments where R&D departments from the various business units are located. Examples include the use of recycled materials (saving natural resources and energy for production of virgin raw materials) which leads to a decrease in CO2 emissions.

# C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

# C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

## Level of aggregation

Group of products

## **Description of product/Group of products**

Engine Systems seeks to increase power and performance while reducing consumption. The business unit develops and produces innovative system solutions for environmentally friendly, efficient and sustainable combustion engines.

Fuel & Exhaust Management seeks to reduce the level of exhaust fumes released into the environment despite increasing traffic volumes. Its product portfolio includes fuel delivery modules and their components as well as catalytic converters and systems for after-treament of exhaust-gas and selective catalytic reduction (SCR) dosing.

Hybrid Electric Vehicle supplies the main components for powertrain electrification in



hybrid and electric vehicles. This business unit's top priority is tailor-made electrification – a cost-efficient strategy for powertrain electrification that is suitable for all vehicle types.

Sensors & Actuators is committed to reducing emissions of carbon dioxide and pollutants. This is made possible by sensors and actuators working in combination with advanced engine management systems.

Transmission develops and produces pioneering electronic and electromechanical control units for all relevant transmission types and powertrain applications. Products range from high-end systems to cost-optimized solutions for growth markets.

Other groups of products include: Electrified drive systems, Electronic enginemanagement systems, Direct injection and turbocharging, Exhaust-gas aftertreatment

# Are these low-carbon product(s) or do they enable avoided emissions? Avoided emissions

# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Greenhoue Gas Protocol, ISO 14040

# % revenue from low carbon product(s) in the reporting year

40

### Comment

40% of our sales is related to products that avoid CO2 emission (categories: Green Tires, Powertrain product and Lightweight products)

### Level of aggregation

Group of products

## **Description of product/Group of products**

Continental Tires: Every Continental tire combines safety with individual requirements, for example minimized rolling resistance (less fuel consumption and CO2 emissions) and maximized driving comfort. Continental's Commercial Vehicle Tires customers benefit many times over from using Continental tires. Firstly, the tires demonstrate a high mileage performance and help to substantially improve fuel economy thanks to their low rolling resistance. Secondly, they can be retreaded as part of the ContiLifeCycle concept saving resources. ContiTechs Conveyor Belt Group provides solutions for reducing energy consumption and CO2 emissions. Its smooth-running ContiTech conveyor belts, for example, have an ultra-energy-optimized design.

# Are these low-carbon product(s) or do they enable avoided emissions? Avoided emissions



# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Greenhoue Gas Protocol, ISO 14040

# % revenue from low carbon product(s) in the reporting year

40

#### Comment

40% of our sales is related to products that avoid CO2 emission (categories: Green Tires, Powertrain product and Lightweight products)

## Level of aggregation

Group of products

## **Description of product/Group of products**

ContiTechs Elastomer Coatings is the world leader for diaphragms for fuel management systems, life raft materials and climate-neutral printing blankets. Further examples: • SCR technology for truck exhaust gas treatment (catalytic reduction of NOx) • The first drive belt made of renewable raw materials • Solar hoses and tanks help convert solar energy • Air bellows make it possible to generate energy from wave power • Bearing elements enhance the efficiency of wind power plants

# Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Greenhoue Gas Protocol, ISO 14040

# % revenue from low carbon product(s) in the reporting year

40

## Comment

40% of our sales is related to products that avoid CO2 emission (categories: Green Tires, Powertrain product and Lightweight products)

## Level of aggregation

Group of products

## **Description of product/Group of products**

Continental recently started to network existing solutions such as Chassis & Safety components and Interior components that enable drivers to use partly or fully automated driving solutions. These solutions will enable vehicle drivers to drive even safer while reducing the use of resources. In addition, intelligent traffic solutions (ITS) will use



existing telematics and infotainment solutions in order to avoid traffic jams or find "green routes" in order to optimize fuel consumption.

# Are these low-carbon product(s) or do they enable avoided emissions? Avoided emissions

# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Greenhoue Gas Protocol, ISO 14040

## % revenue from low carbon product(s) in the reporting year

40

### Comment

40% of our sales is related to products that avoid CO2 emission (categories: Green Tires, Powertrain product and Lightweight products)

## Level of aggregation

**Product** 

## **Description of product/Group of products**

Mild hybrid system for reduced fuel consumption that improve efficiency is another focus of our development work. In order to comply with the increasingly strict emissions standards, Continental has developed a mild hybrid system with a 48-volt on-board power supply. A small electric motor reduces the burden on the gasoline or diesel engine in various different driving situations. The mild hybrid system with a 48-volt on-board power supply that reduces fuel consumption by one-fifth is relatively cost-effective and can be used in all vehicle classes. Production began in Europe, Asia and the U.S.A. in 2016.

# Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Greenhoue Gas Protocol, ISO 14040

## % revenue from low carbon product(s) in the reporting year

40

### Comment

40% of our sales is related to products that avoid CO2 emission (categories: Green Tires, Powertrain product and Lightweight products)

## Level of aggregation



#### Group of products

#### **Description of product/Group of products**

With respect to lightweight components to reduce fuel consumption, our aim is to visibly reduce both our consumption of natural raw materials and the energy demand of our products. This is why we initiated the flagship project Highly Efficient CO2, which systematically drives the development of lightweight vehicle components, thus significantly reducing the consumption of raw materials during the production and the consumption of fuel when driving. This development initiative generates further savings through energy-efficient components. A combination of energy recovery and efficiency management helps to dramatically reduce a vehicle's fuel consumption even further.

Continental's Chassis Components business unit specializes in integrated systems in chassis management, active safety and driving efficiency. It develops and produces solutions for electronic-based active chassis technology, which assists the driver in keeping the vehicle under control in all driving situations. Electric steering generates significant fuel savings for all vehicle categories. The intelligent gas pedal AFFP® makes CO2 reduction more tangible for the driver.

## Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Greenhoue Gas Protocol, ISO 14040

#### % revenue from low carbon product(s) in the reporting year

40

#### Comment

40% of our sales is related to products that avoid CO2 emission (categories: Green Tires, Powertrain product and Lightweight products)

## C5. Emissions methodology

#### C5.1

#### (C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

#### Scope 1

#### Base year start

January 1, 2016

#### Base year end

December 31, 2016



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

793,896

#### Comment

We choose 2016, because this was the first year in which we calculated and included Scope 3 emissions in our footprint.

#### Scope 2 (location-based)

#### Base year start

January 1, 2016

#### Base year end

December 31, 2016

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

2,251,763

#### Comment

We choose 2016, because this was the first year in which we calculated and included Scope 3 emissions in our footprint.

#### Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

## C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

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

## **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)

882,752

Start date

January 1, 2018

**End date** 

December 31, 2018

Comment

## C6.2

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

#### Row 1

#### Scope 2, location-based

We are reporting a Scope 2, location-based figure

#### Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

#### Comment

Currently, market-based emission reporting is in the validation process, with the development phase not yet finished. After verification of data quality by a third-party, Continental will disclose these figures as well.

Where the GHG protocol has data gaps with regard to our plants worldwide, we use DEFRA emission factors (GOV.UK DEFRA Department for Environment, Food & Rural Affairs) for company reporting. Emission factors used are stored in the software tool SoFi TS of Think Step, which we are using globally across all facilities (mapping of emission factors attached).

## C6.3

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

#### Reporting year

Scope 2, location-based

2,407,733



#### Start date

January 1, 2018

#### **End date**

December 31, 2018

#### Comment

## C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

### **C6.5**

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

#### Purchased goods and services

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

9,349,579

#### **Emissions calculation methodology**

Calculation has been performed in line with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard of GHG Protocol. Purchased goods and services have been based on the vast variety of components and materials used in our products in combination with supplier and industry data (e.g. volume of procured natural rubber multiplied by average tCO2 per t natural rubber).

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

100

#### **Explanation**

The data input is from our IT system and refelects the exact amount of the purchased material.

#### Capital goods

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**



Significant capital goods have not been purchased or acquired by the reporting company in the reporting year. In the process of calculating a total carbon footprint this category was excluded from deeper calculation as it was estimated to contribute to less than 1% to total Scope 3 emissions.

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

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

650,722

#### **Emissions calculation methodology**

Amount of MWh was multiplied by the conversion factors according to the Greenhouse Gas Protocol. Data Source is our global reporting tool. Input data is verified by KPMG.

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

100

#### **Explanation**

#### **Upstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

1,074,666

## **Emissions calculation methodology**

The figure above was calculated based on the spend based method. The amount of total spending was multiplied by the appropriate conversion factors according the Greenhouse Gas Protocol. Data input "Spendings" is part of our SAP system and a verified financial KPI.

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

100

#### **Explanation**

#### Waste generated in operations

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**



16,046

#### **Emissions calculation methodology**

The weight of generated waste was multiplied by the appropriate conversion factors according the Greenhouse Gas Protocol. Data was obtained from our global reporting sytem and verified by KPMG.

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

100

#### **Explanation**

#### **Business travel**

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

117,310

#### **Emissions calculation methodology**

The amount of miles provided by our travel partner was calculated by the appropriate emission factor according the Greehouse Gas Protocol. Data was obtained from our busness travel partner system and represents the complete range of business trips.

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

100

#### **Explanation**

#### **Employee commuting**

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

Scope 3 from employee commuting was not considered relevant from a management perspective. Nevertheless, the CO2-intensity of commuting is reduced by providing transport capacities (mainly busses). Furthermore, public transport for commuting is supported by several programs (e.g. with job tickets). Though the category is not considered relevant, it remains a matter of focus within our business.

#### **Upstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided



#### **Explanation**

Upstream leased assets are not relevant as Continental does not lease facilities. The amount of energy consumption is reported in Scopes 1 and 2.

#### **Downstream transportation and distribution**

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

590,349

#### **Emissions calculation methodology**

The figure above was calculated using the spend based method. The amount of total spending was multiplied with the appropriate conversion factors according to the Greenhouse Gas Protocol.

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

100

#### **Explanation**

#### Processing of sold products

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

Continental delivers its manufactured components in a state at which they are no longer processed further. The components are simply assembled whole into vehicles and therefore processing was not calculated.

#### Use of sold products

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

100,000,000

#### **Emissions calculation methodology**

The product portfolio of Continental includes numerous products and solutions which are assembled into vehicles as final products. Emissions associated with the end use of these products dominates this emission category as well as the entire footprint of the products we manufacture, and include the Scope 1 emissions of our customers and the final automobile consumers.

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



100

## **Explanation**

### End of life treatment of sold products

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

Our products are assembled into vehicles. The entire process is regulated in the End of Life vehicle directive and is in the responsibilty of the car manufactures. Therefore, this category is not calculated.

#### **Downstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

Continental has no downstream leased assets. Therefore these emissions are considered to be 0.

#### **Franchises**

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

Continental does not license relevant franchise operations. Therefore these emissions are considered to be 0.

#### Investments

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

Continental did not have any significant investments in the reporting year relevant to Scope 3. This category is estimated to contribute to far less than 1% to total Scope 3 emissions.

#### Other (upstream)

#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

There are no further relevant upstream categories.

#### Other (downstream)



#### **Evaluation status**

Not relevant, explanation provided

#### **Explanation**

There are no further relevant downstream categories.

### C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Nο

## C<sub>6</sub>.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

744

Metric numerator (Gross global combined Scope 1 and 2 emissions)

3,290,485

#### **Metric denominator**

unit total revenue

Metric denominator: Unit total

44,249,200,000

## Scope 2 figure used

Location-based

% change from previous year

1.36

### **Direction of change**

Increased

#### Reason for change

Organic growth of the company through acquisitions and greenfields.



## C7. Emissions breakdowns

## C7.1

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

No

## C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
China	434,056
Germany	185,357
United States of America	166,992
Other, please specify	96,347
Rest of the world	

## C7.3

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

By business division

### C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)		
Division Tire	441,730		
Division ContiTech	344,588		
Automotive Group	96,434		

## 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)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market- based approach (MWh)
Other, please specify global	2,407,733	0	5,751,791	202,428



## C7.6

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

By business division

## C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Division Tire	1,061,034	0
Division ContiTech	543,922	0
Automotive Group	802,777	0

## 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?

Increased

## 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	73,494	Decreased	2.2	The amount of purchased renewable energy was 2.2 % which was calculated based on the total renewable energy procured from the previous year.
Other emissions reduction activities	58,664	Decreased	1.7	CO2 reduction projects were summed up and percentage was calculated based on the total CO2 emissions
Divestment	0	No change	0	
Acquisitions	784,000	Increased	23	Total CO2 emissions of Continental was set as 100%.



				The amount of the acquisistion since base year 2013 was calcualted and summed up seperately. This figures is 23% percent of the total emissions.
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

## C7.9b

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

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 undertakes this energy-related activity
Consumption of fuel (excluding	Yes
feedstocks)	



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

## C8.2a

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

	Heating value	MWh from renewable sources	MWh from non- renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	4,119,806	4,119,806
Consumption of purchased or acquired electricity		202,428	4,580,415	4,782,843
Consumption of purchased or acquired heat		0	25,663	25,663
Consumption of purchased or acquired steam		0	933,172	933,172
Consumption of self- generated non-fuel renewable energy		6,288		6,288
Total energy consumption		208,716	9,659,062	9,867,778

## C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No



Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

## C8.2c

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

### **Fuels (excluding feedstocks)**

Natural Gas

#### **Heating value**

HHV (higher heating value)

### Total fuel MWh consumed by the organization

3,577,025

#### Comment

### **Fuels (excluding feedstocks)**

Heavy Gas Oil

#### **Heating value**

HHV (higher heating value)

## Total fuel MWh consumed by the organization

57,991

## Comment

#### **Fuels (excluding feedstocks)**

Fuel Oil Number 2

#### **Heating value**

HHV (higher heating value)

#### Total fuel MWh consumed by the organization

66,569

#### Comment



### **Fuels (excluding feedstocks)**

Fuel Oil Number 1

## **Heating value**

HHV (higher heating value)

### Total fuel MWh consumed by the organization

51,641

#### Comment

### **Fuels (excluding feedstocks)**

Coal

## **Heating value**

HHV (higher heating value)

## Total fuel MWh consumed by the organization

184,451

#### Comment

## **Fuels (excluding feedstocks)**

Lignite Coal

#### **Heating value**

HHV (higher heating value)

### Total fuel MWh consumed by the organization

34,087

#### Comment

### **Fuels (excluding feedstocks)**

Wood

#### **Heating value**

HHV (higher heating value)

## Total fuel MWh consumed by the organization

13,620



#### Comment

### **Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

### **Heating value**

HHV (higher heating value)

## Total fuel MWh consumed by the organization

93,631

#### Comment

### **Fuels (excluding feedstocks)**

Diesel

#### **Heating value**

HHV (higher heating value)

## Total fuel MWh consumed by the organization

32,229

#### Comment

### **Fuels (excluding feedstocks)**

Motor Gasoline

#### **Heating value**

HHV (higher heating value)

## Total fuel MWh consumed by the organization

8,562

#### Comment

## C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

#### Coal

#### **Emission factor**



93.84

Unit

kg CO2 per GJ

### **Emission factor source**

Defra 2018

#### Comment

#### Diesel

#### **Emission factor**

69.3

Unit

kg CO2 per GJ

### **Emission factor source**

GHG Protocol/IEA (05/2018)

Comment

#### **Fuel Oil Number 1**

#### **Emission factor**

78.8

Unit

kg CO2 per GJ

#### **Emission factor source**

Defra (02/2018)

Comment

#### **Fuel Oil Number 2**

#### **Emission factor**

78.8

Unit

kg CO2 per GJ

## **Emission factor source**

Defra (02/2018)

#### Comment



## **Heavy Gas Oil**

#### **Emission factor**

89.3

Unit

kg CO2 per GJ

#### **Emission factor source**

Defra (02/2018)

Comment

## **Lignite Coal**

#### **Emission factor**

101

Unit

kg CO2 per GJ

#### **Emission factor source**

GHG Protocol/IEA (05/2018)

Comment

## **Liquefied Petroleum Gas (LPG)**

#### **Emission factor**

63.1

Unit

kg CO2 per GJ

#### **Emission factor source**

GHG Protocol/IEA (05/2018)

Comment

#### **Motor Gasoline**

#### **Emission factor**

69.3

Unit

kg CO2 per GJ

#### **Emission factor source**

GHG Protocol/IEA (05/2018)



#### Comment

#### **Natural Gas**

**Emission factor** 

56.25

Unit

kg CO2 per GJ

**Emission factor source** 

GHG Protocol/IEA (05/2018)

Comment

#### Wood

**Emission factor** 

109.6

Unit

kg CO2 per GJ

**Emission factor source** 

Defra 2018

Comment

## C8.2e

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	6,288	6,288	6,288	6,288
Heat	4,119,806	4,119,806	0	0
Steam	0	0	0	0
Cooling	0	0	0	0



## C8.2f

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

#### Basis for applying a low-carbon emission factor

Off-grid energy consumption from an on-site installation or through a direct line to an off-site generator owned by another company

#### Low-carbon technology type

Solar PV

Wind

Hydropower

Region of consumption of low-carbon electricity, heat, steam or cooling

North America

MWh consumed associated with low-carbon electricity, heat, steam or cooling 6,288

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

## C9. Additional metrics

### C9.1

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

## **Description**

Waste

#### Metric value

419,426

### **Metric numerator**

**Tonnes** 

Metric denominator (intensity metric only)

% change from previous year



10

#### **Direction of change**

Increased

### Please explain

Higher product output as well as an increase in the amount of packaging materials from inputs.

#### **Description**

Waste

#### **Metric value**

9.5

#### **Metric numerator**

**Tonnes** 

### Metric denominator (intensity metric only)

Millon € revenue

#### % change from previous year

13

### **Direction of change**

Increased

#### Please explain

Higher product output as well as an increase in the amount of packaging materials from inputs.

### **Description**

Energy usage

#### **Metric value**

9,869,150

#### **Metric numerator**

MWh

### Metric denominator (intensity metric only)

### % change from previous year

42

### **Direction of change**

Increased



#### Please explain

Acquistions and new greenfields causes a higher energy demand

#### **Description**

Energy usage

#### **Metric value**

223

#### **Metric numerator**

MWh

## Metric denominator (intensity metric only)

Millon € revenue

#### % change from previous year

3

### **Direction of change**

Decreased

#### Please explain

Energy efficiency measures combined with positive developments in sales resulted in a decrease for the relative metric.

## C10. Verification

### C10.1

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

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

## C10.1a

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

#### Scope

Scope 1



#### Verification or assurance cycle in place

Annual process

## Status in the current reporting year

Complete

#### Type of verification or assurance

Reasonable assurance

#### Attach the statement

Conti18CDPLetter.pdf

Ocnti18\_CDP Letter.pdf

### Page/ section reference

Verification of data on page 2

#### Relevant standard

ASAE3000

## Proportion of reported emissions verified (%)

100

#### Scope

Scope 2 location-based

#### Verification or assurance cycle in place

Annual process

## Status in the current reporting year

Complete

#### Type of verification or assurance

Reasonable assurance

#### Attach the statement

Conti18CDPLetter.pdf

Onti18\_CDP Letter.pdf

#### Page/ section reference

Verification of data on page 2

#### Relevant standard

ASAE3000

#### Proportion of reported emissions verified (%)

100



## C10.1b

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

#### Scope

Scope 3- all relevant categories

#### Verification or assurance cycle in place

Annual process

### Status in the current reporting year

Complete

#### Attach the statement

Conti18CDPLetter.pdf

Onti18\_CDP Letter.pdf

### Page/section reference

Verification of data on page 2

#### Relevant standard

ASAE3000

### C<sub>10.2</sub>

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

Yes

## C10.2a

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

Oconti18\_CDP Letter.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Year on year emissions intensity figure	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf
C8. Energy	Year on year emissions intensity figure	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf



C4. Targets and performance	Year on year change in emissions (Scope 1 and 2)	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf
C9. Additional metrics	Other, please specify Waste absolute	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf
C9. Additional metrics	Other, please specify Waste intensity	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf
C9. Additional metrics	Other, please specify Water absolute	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf
C9. Additional metrics	Other, please specify Water intensity	ASAE3000	Verification of data on page 2 Conti18CDPLetter.pdf

## C11. Carbon pricing

## C11.1

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

Yes

## C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations. EU ETS

## C11.1b

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

#### **EU ETS**

% of Scope 1 emissions covered by the ETS

13.6

Period start date

January 1, 2018

Period end date

December 31, 2018

Allowances allocated



120,449

#### Allowances purchased

10,000

#### Verified emissions in metric tons CO2e

168,556

#### **Details of ownership**

Facilities we own and operate

#### Comment

## C11.1d

# (C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Our strategy is (in order of listing):

- 1. Avoiding CO2-emissions by using improved (efficient) equipment
- 2. Installation of cogeneration equipment (combined heat and power)
- 3. Purchasing of allowances (if necessary)

#### C11.2

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

No

## C11.3

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

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

## C12. Engagement

### C12.1

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

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

#### C12.1a

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



#### Type of engagement

Compliance & onboarding

#### **Details of engagement**

Included climate change in supplier selection / management mechanism

### % of suppliers by number

85

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

50

### % Scope 3 emissions as reported in C6.5

50

#### Rationale for the coverage of your engagement

Climated-related metrics are part of the supplier evaluation process and it is part of the decision making process. We expect an optimization of environmental performance from all of our strategic supplier engagements at a minimum.

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

We have seen positive feedback from our custommers and a greater awareness within our supply chain affiliates.

#### Comment

#### 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

85

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

50

### % Scope 3 emissions as reported in C6.5

50

#### Rationale for the coverage of your engagement

We need to understand the situation within our supply chain in order to initiate a program focusing on climate-related issues.

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



Online surveys are a binding instrument for suppliers prior their engagement. The response rate is high and demonstrate the importance of this topic.

#### Comment

#### Type of engagement

Innovation & collaboration (changing markets)

#### **Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services

### % of suppliers by number

0.1

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

0.1

#### % Scope 3 emissions as reported in C6.5

0.1

#### Rationale for the coverage of your engagement

Through intense direct cooperation we are able to convince our suppliers to engage with sustainability issues.

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

Through this engagement we have seen a reduction of CO2 emissions from the targeted partners and an increase in resource efficiency in general. At this stage we do not make use of specific emission reduction or efficiency targets, but instead assess the direction of change of these two indicators.

#### Comment

## C12.1b

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

#### Type of engagement

Education/information sharing

#### **Details of engagement**

Share information about your products and relevant certification schemes (i.e. Energy STAR)



#### % of customers by number

100

## % Scope 3 emissions as reported in C6.5

15

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

Continental is delivering parts and services to reduce carbon emissions. Approximately 40 % of our business is related to climate friendly products that result in avoided emissions.

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

This strategy is high impact and used to achieve the mandatory emissions standards set for vehicles.

## C12.1c

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

We initiated and oversee two projects with governmental organisations including one with the GIZ to reduce deforestation within our supply chain and another with the DEG to encourage other sustainable practices within our supply chain.

### C12.3

# (C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

Funding research organizations

#### C12.3a

#### (C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support with major exceptions	Development of less fuel-consuming systems for the automotive industry is a never ending improvement and often limited by materials, production techniques and economic restrictions. Improvement of auto componentns is a step by step process and normally needs more time than politicians are accepting in legislative drafts. Involvement of associations can attenuate policy actions providing improved boundary conditions for the industry concerned.	Reduction CO2 Emissions



Carbon tax	Support with	B20 Argentina	Global carbon
	major		price and
	exceptions		trading
			system

### C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

### C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

#### **Trade association**

**ETRMA** 

#### Is your position on climate change consistent with theirs?

Consistent

#### Please explain the trade association's position

Continental supports the EU climate change policy, but points out that improvements of products towards those that consume less fuel often involves some trade offs that have to be recognized. For example, improving the rolling resistance of tires leads to longer breaking distances. This classical trade off can only be solved by intensive R&D efforts, which consumes a great deal of time and money.

## How have you influenced, or are you attempting to influence their position?

Rolling resistence as well as by using an energy label.

#### **Trade association**

**VDA** 

#### Is your position on climate change consistent with theirs?

Consistent

#### Please explain the trade association's position

The development of less fuel-consuming systems for the automotive industry is a never ending improvement and often limited by materials, production techniques and economic restrictions. The improvement of parts is a step by step process and normally needs more time than politicians are accepting in their legislative drafts/requirements. The involvement of associations can attenuate policy actions by providing improved boundary conditions for the industry concerned.



## How have you influenced, or are you attempting to influence their position? Emission standards in transport.

## C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

## C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Control is carried out by Continental corporate organisations and their continuous control processes, the organisation for standards and regulations and the environmental organisation and its management system control process (according to ISO 14001). Continental is a member of the World Business Council for Sustainable Development WBCSD. Continental is part of the Tire Platform in the WBCSD Work Program and actively supports tire and tire material-related sustainability topics (e.g. ecological and climate benefits of nanomaterials in products as well as safe use of nanomaterials in production and during product use). Continental's climate strategy is in line with the WBCSD strategy for more sustainable products and production (e.g. Corporate Environmental Targets regarding energy and water consumption, CO2-emissions, waste generation and recovery).

#### 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, in line with the CDSB framework (as amended to incorporate the TCFD recommendations)

#### **Status**

Complete

#### Attach the document

annual-report-data 2018.pdf

annual-report-2018-data.pdf

Page/Section reference

Page 51 ff

#### **Content elements**

Governance



Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

### Comment

#### **Publication**

In other regulatory filings

#### **Status**

Complete

#### Attach the document

Combined Corporate Non-Financial Statement part of annual report

nnual-report-2018-data.pdf

U sustainability-report-2018-data.pdf

## Page/Section reference

Page 48

#### **Content elements**

Governance

Strategy

**Emissions figures** 

**Emission targets** 

Other metrics

#### Comment

#### **Publication**

In voluntary sustainability report

### **Status**

Underway – previous year attached

#### Attach the document

sustainability report data 2018.pdf

Usustainability-report-2018-data.pdf

## Page/Section reference

Page 36



#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

Other metrics

#### Comment

## C14. 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.

## C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Dr. Elmar Degenhart, Chief Executive Officer	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.

### SC0.1

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

	Annual Revenue
Row 1	44,400,000,000



## SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

## SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	DE	00054390

## SC1.1

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

## SC1.2

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

## SC1.3

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

Allocation challenges	Please explain what would help you overcome these challenges
Doing so would require we disclose business sensitive/proprietary information	Each customer knows the amount of sales they have with our company. Each customer can allocate the emissions we publish in detail on CDP
Customer base is too large and diverse to accurately track emissions to the customer level	Each customer knows the amount of sales they have with our company. Each customer can allocate the emissions we publish in detail on CDP

## SC1.4

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

No



## SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Each customer knows the amount of sales that they have with our company. Each customer can allocate the emissions we publish in detail on CDP. The effort and the complexity within Continental's Organisation is to high to do so.

## SC2.1

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

### SC2.2

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

### SC3.1

No

(SC3.1) Do you want to enroll in the 2019-2020 CDP Action Exchange initiative? No

### SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2018-2019 Action Exchange initiative?

No

## SC4.1

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

No, I am not providing data

## Submit your response

In which language are you submitting your response? English

Please confirm how your response should be handled by CDP

Public or Non-Public Are you ready to submit the Submission submitting to additional Supply Chain Questions?



I am submitting my	Public	Investors	
response		Customers	

## Please confirm below

I have read and accept the applicable Terms