

Module: Introduction**Page: Introduction****CC0.1****Introduction**

Please give a general description and introduction to your organization.

- Nestlé is the world's largest food and beverage company. We have more than 2000 brands ranging from global icons to local favourites, and we are present in 191 countries around the world. Nestlé's purpose is enhancing quality of life and contributing to a healthier future. We want to help shape a better and healthier world. We also want to inspire people to live healthier lives. This is how we contribute to society while ensuring the long-term success of our company. Our values are reflected in the way we do business, always acting legally and honestly with respect both for our own people and those we do business with.
- Creating Shared Value remains the fundamental guiding principle for how Nestlé does business. CSV is the strategy tool that Nestlé uses to operationalise and manage all the actions it takes to ensure it creates value for shareholders and for society.
- Our focus areas are firmly embedded in our purpose of enhancing quality of life and contributing to a healthier future. Individuals and families, our communities and the planet as a whole are interconnected, and our efforts in each of these areas are supported through our 42 specific commitments, the vast majority of which have been reframed and feature objectives to 2020. These commitments will, in turn, enable us to meet our ambitions for 2030 in line with the timescale of the Sustainable Development Goals (SDGs): to help 50 million children live healthier lives; to help to improve 30 million livelihoods in communities directly connected to our business activities; and to strive for zero environmental impact in our operations.
- The Nestlé Corporate Business Principles rule the way we do business and form the basis of our culture and values. The 10 principles, which provide the foundations for our commitments and our Create Shared Values strategy, incorporate the 10 United Nations Global Compact's (UNGC) Principles and are divided into five areas - consumers, human rights and labour practices, our people, suppliers and customers, and the environment.
 1. Nutrition, Health & Wellness: Our core aim is to enhance the quality of consumers' lives every day, everywhere by offering tastier and healthier food and beverage choices and encouraging a healthy lifestyle. We express this via our corporate proposition Good Food, Good Life.
 2. Quality assurance and product safety: Everywhere in the world, the Nestlé name represents a promise to the consumer that the product is safe and of high standard.
 3. Consumer communication: We are committed to responsible, reliable consumer communication that empowers consumers to exercise their right to informed choice and promotes healthier diets. We respect consumer privacy.
 4. Human rights in our business activities: We fully support the UNGC guiding principles on human rights and labour and aim to provide an example of good human rights and labour practices throughout our business activities.
 5. Leadership and personal responsibility: Our success is based on our people. We treat each other with respect and dignity and expect everyone to promote a sense of personal responsibility. We recruit competent and motivated people who respect our values, provide equal opportunities for their development and

advancement, protect their privacy and do not tolerate any form of harassment or discrimination.

6. Safety and health at work: We are committed to preventing accidents, injuries and illness related to work, and to protect employees, contractors and others involved along the value chain.

7. Supplier and customer relations: We require our suppliers, agents, subcontractors and their employees to demonstrate honesty, integrity and fairness, and to adhere to our non-negotiable standards. In the same way, we are committed to our own customers.

8. Agriculture and rural development: We contribute to improvements in agricultural production, the social and economic status of farmers, rural communities and in production systems to make them more environmentally sustainable.

9. Environmental sustainability: We commit ourselves to environmentally sustainable business practices. At all stages of the product life cycle we strive to use natural resources efficiently, favour the use of sustainably managed renewable resources, and target zero waste.

10. Water: We are committed to the sustainable use of water and continuous improvement in water management. We recognise that the world faces a growing water challenge and that responsible management of the world's resources by all water users is an absolute necessity.

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Fri 01 Jan 2016 - Sat 31 Dec 2016

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
United States of America
China
India
Mexico
Brazil
France
Spain
South Africa
Philippines
Pakistan
United Kingdom
Japan
Germany
Russia
Italy
Chile
Rest of world

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

CHF

CC0.6

Modules

As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Please see attach: - The Nestlé Corporate Business Principles - The Nestlé Policy on Environmental Sustainability - The Nestlé Annual Report 2016, The Corporate Governance Report 2016 - The Financial Statements 2016 - The Nestlé in society: Creating Shared Value and meeting our commitments 2016 Report. - The Nestlé Commitment on Climate Change - The Nestlé Commitment on Deforestation and Forest Stewardship - The Nestlé Commitment to reduce food loss and waste

Attachments

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment on Water Stewardship.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment%20on%20Water%20Stewardship.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Nestlé Corporate Business Principles.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Nestlé%20Corporate%20Business%20Principles.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment on Natural Capital.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment%20on%20Natural%20Capital.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment on climate change.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment%20on%20climate%20change.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment on Deforestation.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment%20on%20Deforestation.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/The Nestlé Policy on Environmental Sustainability.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/The%20Nestlé%20Policy%20on%20Environmental%20Sustainability.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment on Biofuels.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Commitment%20on%20Biofuels.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/Nestlé commitment to reduce food loss and waste.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/Nestlé%20commitment%20to%20reduce%20food%20loss%20and%20waste.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC0.Introduction/2016 Nestlé integrated reports.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC0.Introduction/2016%20Nestlé%20integrated%20reports.pdf)

Module: Management

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The highest level of direct responsibility for climate change is Mr. Magdi Batato, Executive Vice President of Operations. He is in particular responsible for Agriculture, Procurement, Manufacturing, Supply Chain, Quality Management, Health & Safety, Environmental Sustainability and Engineering. He is an Executive Board member and reports directly to Nestlé CEO Mr. Paul Bulcke.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Board/Executive board	Monetary reward	Emissions reduction project Emissions reduction target	The short-term bonus payout is linked to the forward-looking commitments, including climate change leadership commitment, published in the 2016 Nestlé in Society report. These commitments provide a clear sense of the strategic direction we are heading in and the standards to which we hold ourselves accountable. The monetary

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		Efficiency project Efficiency target Environmental criteria included in purchases Supply chain engagement	reward is linked to the continuous improvement of environmental performance of Nestlé. More specifically, the monetary reward is linked to Nestlé in Society commitments that include the GHG emission reduction Scope 1 & 2. The short-term bonus payout is determined by the degree of achievement of a number of annual operating objectives, including the reduction of GHG emissions.
Chief Operating Officer (COO)	Monetary reward	Emissions reduction target Energy reduction target Efficiency target Environmental criteria included in purchases Supply chain engagement	Meeting GHG emission reduction targets including Scope 1 & 2 emissions. The short-term bonus payout is determined by the degree of achievement of a number of annual operating objectives, including the reduction of GHG emissions.
Environment/Sustainability managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement	Meeting GHG emission reduction targets including Scope 1 & 2 emissions. The short-term bonus payout is determined by the degree of achievement of a number of annual operating objectives, including the reduction of GHG emissions.
Environment/Sustainability managers	Recognition (non-monetary)	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target	Recognition awards are given for outstanding energy consumption reduction projects that lead to air emission reduction, including GHG. For example, in 2016, Mexico has been awarded a Gold Certificate of Appreciation in recognition of their outstanding Greenhouse Gas reduction achievement in Zone AMS. Awards were also given to Brazil and Chile.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement	
Energy managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement	Meeting GHG emission reduction targets including Scope 1 & 2 emissions. The short-term bonus payout is determined by the degree of achievement of a number of annual operating objectives, including the reduction of GHG emissions.
Energy managers	Recognition (non-monetary)	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain	Recognition awards are given for outstanding energy consumption reduction projects that lead to air emission reduction, including GHG. For example, in 2016, recognition awards were given for successful energy reduction projects and savings in Central America, Colombia and Caribbean.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		engagement	
Energy managers	Other non-monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator	Non-monetary rewards, based on star ratings, are given to energy champions that have outperformed energy, GHG and water savings as part of the Environmental Target Setting. An Environmental Target Setting Initiative is a thorough analysis of the energy and water conversion & usage in our factories aiming at issuing an action plan, validated by the Factory Management & Market Technical Management, unlocking the energy and water saving potential. The exercise lasts 10 days on-site and aims at: analysing the energy/water conversion and use in the factory; identifying and documenting energy/water saving opportunities and establishing an action plan together with the factory and Market with clear accountabilities and timing.
All employees	Recognition (non-monetary)	Other: Training and Education on Environmental Sustainability at Nestlé.	Recognition certificates are given to all employees who successfully undertake the e-learning on Environmental Sustainability at Nestlé. The course provides information on climate change and how Nestlé is meeting its commitment to sustainable business practices.
Chief Purchasing Officer (CPO)	Monetary reward	Environmental criteria included in purchases	The Nestlé Supplier Code and Nestlé Responsible Sourcing Guidelines require suppliers to fulfil environmental requirements, including on Climate Change.
Buyers/purchasers	Monetary reward	Environmental criteria included in purchases	The Nestlé Supplier Code and Nestlé Responsible Sourcing Guidelines require suppliers to fulfil environmental requirements, including on Climate Change.

Further Information

Attachments

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC1.Governance/Nestlé Supplier Code.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC1.Governance/Nestlé%20Supplier%20Code.pdf)
[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC1.Governance/Nestlé Responsible Sourcing Guidelines.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC1.Governance/Nestlé%20Responsible%20Sourcing%20Guidelines.pdf)

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	All geographical areas are considered: All Zones (Europe, Americas and Asia, Oceania and Africa), All Globally Managed Business (Nestlé Nutrition, Nestlé Health Science, Nestlé Skin Health, Nestlé Waters, Nespresso and specific JVs) and in all Markets (Nestlé is operating in 86 countries).	> 6 years	

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Company level:

The Nestlé Group Enterprise Risk Management Framework (ERM) is used to identify and mitigate climate change risks and opportunities (CCRO) in order to minimize/seize their potential impact on the Group.

A top-down assessment is performed once a year to understand the company's mega-risks, to allocate ownership to drive specific actions around them and take relevant steps to address them. Any identified CCRO are assessed in relation to their magnitude of impact and likelihood.

The identification includes an assessment of external and internal environment in which the company operates. This may include business, social & physical, regulatory, reputational environment and key business drivers.

To identify material CCRO at company level, we use a materiality process; opinion-leader reputation research; surveys involving sustainability experts and consumers; feedback from stakeholder convening; extensive media scan; internal business impact survey; and our corporate risk map. E.g. outcomes of stakeholder

meeting are used to better understand potential gaps between internal and external perception on CCRO and their impact on reputation.

Asset level:

Site-specific assessments use ERM. The CCRO identification process includes use of structured techniques, e.g. flow-charting, system analysis, Fault tree studies or operational modelling, or more general techniques e.g. 'what-if' and scenario analysis. The identification of issues that may pose a risk/opportunity are documented, including the trigger effect, controls in place and their level of efficiency. This is supported by an expert team of engineers. Potential CCRO e.g. floods, droughts, interruption of supply caused by climate changes are assessed.

The Nestlé Global Property Loss Prevention Program provides an in depth identification of our exposure to property risks around the world climate change risks. This enables us to form decisions about the future standards of prevention and protection.

CC2.1c

How do you prioritize the risks and opportunities identified?

Nestlé determines priorities concerning risks and opportunities based on the assessment of the materiality and priority based on combined analysis of likelihood and impact. Likelihood has six levels: almost certain, highly probable, probable, fairly likely, unlikely, almost impossible, coded as A, B, C, D, E, F. Four impact ranges are defined: major, significant, moderate, negligible, coded as 4, 3, 2, 1. In addition to threats (negative impact/contribution), we also analyse the impact of opportunities (positive impact/contribution). Assessed risks by likelihood and impact are reflected on a Heat Map, which determines the different levels of priorities the company will take to mitigate risks and enhance the opportunities, including climate change. For example, all the risks coded (A,2), (A,3), (B,3), (C,3), (A,4), (B,4), (C,4), (D,4) are categorized as top priorities (high exposure) which are reported and concrete action plans to mitigate these threats must be in place.

Based in part on a media and competitive scan, we identify global megatrends, assessed their relevance to our Creating Shared Value focus areas and economic, environmental and social issues, and prioritise issues on a materiality matrix based on level of stakeholder concern and level of potential impact on Nestlé. In 2016, climate change i.e. reducing greenhouse gas emissions and contributing to the mitigation of, and adaptation to, the negatives effects of climate change, remains a central concern; stakeholder interest in climate change adaptation is rising as the effects of climate change begin to make themselves felt, particularly in rural communities.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i) How the business strategy has been influenced:

Business strategy is influenced through the internal communication process of Nestlé governance bodies that cover climate change risks and opportunities: Nestlé Operations Sustainability Council, Issues Round Table, Audit Committee, Risk Management Committee, R&D Council for Sustainability and Nutrition and Group Compliance Committee which are overseen by the Nestlé in Society Board quarterly. Climate change is one of the environmental sustainability topics of the Nestlé in Society Board, chaired by our CEO. It leads the development and implementation of Nestlé’s sustainability and climate change objectives and strategies at Group level, while reverting to the Executive Board for input and confirmation.

Business strategies adjustments are then discussed during these meetings. Implementation in the markets is done through the Nestlé Environmental Management system (NEMS). Management is accountable for NEMS implementation within their area of responsibility.

Our business strategy is linked to climate change risks and/or opportunities. We have policies, processes and controls that incorporate climate change risks and opportunities driven by regulation, physical and reputation aspects.

We are committed to environmentally sustainable business practices at all stages – making the right choices to protect the future by making the right choices in an environment where water is increasingly scarce, natural resources are constrained and biodiversity is declining. All of these elements are vital for feeding a growing world population and for Nestlé’s development. To help us optimise our environmental performance, we apply a life-cycle assessment approach.

Our most substantial business decision during 2016 is the publication of our 2030 ambition to strive for zero environmental impact in our operations. During 2016, our plant in Brazil achieved zero environmental impact on water, waste for disposal, and net carbon emissions.

- Reputational aspects of climate change influenced the decision to further expand the use of natural refrigerants in our industrial refrigeration systems and that all of our new ice cream chest, upright and island freezers worldwide will use natural refrigerants.
- Physical aspects of climate change influenced the decision that all new and renovated products need to assess their GHG performance along the value chain. In 2016, we evaluated GHG performance in more than 6600 projects scenarios using eco-design tools.

ii) Example how the business strategy has been influenced:

Business strategy has been influenced by the science based emissions reduction targets linked to our business strategy: By 2020: Reduce GHG emissions (scope

1&2) per tonne of product in every product category to achieve an overall reduction of 35% in our manufacturing operations vs 2010; Reduce GHG emissions by 10% in our distribution operations and in the 100 major warehouses we use vs 2014. The objectives are public.

iii) Aspects of climate change that have influenced the strategy

- Regulation aspects: Since we operate in different parts of the world, we take into account the relevant regulatory aspect. E.g. In Europe the EU Cap and Trade scheme, where Nestlé will be required to purchase certificates for its emissions from concerned factories during EU-ETS Phase III impacting the costs in factories participating in the scheme and affect their competitiveness among other Nestlé's factories. The active cost related to EU-ETS has been integrated in the business strategy.
- Physical aspects: change in temperature extremes, water availability, and need for climate change adaptation. E.g. some of our sites are located in vulnerable areas, like China, India and Mexico. Physical aspects have triggered the business strategy to have contingency plans, assessments and prevention measures for potential interruptions on business operations.
- Reputation aspects: While climate change mitigation remains a central concern, stakeholder interest in climate change adaptation is rising as the effects of climate change begin to make themselves felt. It is part of Nestlé's business strategy to actively manage its reputation with regard to climate change as consumer's perception on Nestlé's efforts can influence market share and share value.

iv) Short term strategy components that have been influenced by climate change

- Setting additional targets on climate change, i.e. reduction of GHG emissions beyond factories, moving to natural refrigerants.
- Sharing good practices on climate change adaptation
- Identifying climate change mitigation and adaptation as a key focus area of The Nestlé Policy on Environmental Sustainability.

v) Long term strategy components that have been influenced by climate change

- Setting 2030 ambition to strive for zero environmental impact in our operations.
- Incorporating GHG reduction and adaptation efforts along the value stream, including product design, procurement, manufacturing and packaging, logistics, consumption to support our long-term strategy to have a positive reputation with regard to climate change.
- Engaging with governments, farmers and other stakeholders to contribute via vulnerability assessments, action plans and strategies for different regions and sectors to climate change. This corresponds to strategic business targets to secure our value chain.
- Identifying practical adaptation actions and agricultural systems that can be implemented at farm level and provide technical assistance to farmers through our agronomists.
- Including enhanced resilience to climate change in our R&D programs. For example, Nestlé is also propagating and distributing coffee plant varieties that produce more beans and have a greater resistance to drought and certain diseases. E.g. The plantlets are particularly resistant to leaf rust, which has had a significant impact on Colombian coffee production over the past few years as a result of increasing temperatures and excessive rainfall.

vi) How the Paris Agreement has influenced the business strategy

We have set science-based 2020 GHG emission reduction targets in line with the Paris Agreement.

vii) Strategic advantage over your competitors

This is gaining strategic advantage over our competitors by delighting consumers with products with improved environmental performance, helping farmers to adapt and thus to have a more secure supply of better quality raw materials, and to continuously improving environmental performance which is recognised by stakeholders.

viii) Forward-looking scenario analyses: We use forward-looking scenario analyses, including a 2°C scenario, to inform businesses, strategy, and financial planning.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price on carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

We, at Nestlé, already put a price on carbon (scope 1 and Scope 2) to guide capital investment decisions for factories participating in EU Emission Trading Scheme (EU-ETS) and we publish this in our website; we also support the World Bank's Put a Price on Carbon Statement inviting companies to work with governments towards the long-term objective of a carbon price, and we also align with Business Leadership Criteria on Carbon Pricing championed by UN Global Compact requiring to set an internal carbon price, to publicly advocate the importance of carbon pricing, and to communicate on progress.

For example, we currently use carbon pricing as a tool to manage the risks and opportunities to our current operations participating in EU-ETS. This helps us to guide capital investment decisions for factories participating in EU-ETS. In 2016, Nestlé analyzed financial implications for its factories in EU-ETS Phase III. For investment decisions, the price of energy informs our business planning and strategies. This price includes the price of carbon.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations
Funding research organizations

Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Other: Harmonized methodology for the environmental assessment of food and drink, including GHG emissions	Support	<p>The European Commission launched a three-year pilot to develop a common environmental footprint methodology for 25 product categories and two business sectors. All three Nestlé applications to co-lead the development of Product Environmental Footprint Category Rules (PEFCR) were selected by the European Commission: Nestlé Waters for packaged water; Nespresso and Nescafé for coffee; and Nestlé Purina for pet food. This project objectives are to set up and validate the process of the development of PEFCRs, including the development of performance benchmarks to test different compliance and verification systems, and communication vehicles. In 2016, we continue to actively participate in the pilots, in the Technical Advisory Board and Steering Committee meetings. Related geographies: Europe and beyond. We also tested communication vehicles for petcare, coffee and waters products.</p>	<p>We support several initiatives around the world to establish scientifically reliable and uniform environmental assessment methodologies and communication tools, such as the European Food Sustainable Consumption and Production Round Table – an initiative that is co-chaired by the European Commission and food supply chain partners and supported by the UN Environment Programme (UNEP) and the European Environment Agency. Our desire to create a more sustainable world requires understanding, collaboration and action at many levels by governments, companies, brands and consumers. This drive also comes from consumers themselves, who want to understand the environmental impacts of their choices. We advocate favouring the development of a harmonized assessment methodology which has positive effects on tackling climate change. To define robust criteria for the provision of comprehensive environmental information including GHG emissions. This helps getting better information and understanding on climate change and helps therefore addressing the consequences of climate change. We advocate for harmonised and scientifically reliable methodology for food and drink products as well as suitable communication channels for consumers and other stakeholders.</p>
Other: No Deforestation	Support	<p>Nestlé believes that improving the sustainability of our raw materials will create shared value across the supply chain from local communities all the way through to consumers. The shared value will include inter alia maintenance and restoration of ecosystem services, improved farm economics, and stronger relations between the different</p>	<p>In our own Commitment on Deforestation and Forest Stewardship, we pledge that our products will not be associated with deforestation. This covers all the raw materials we use to make our products, and also packaging. Our Responsible Sourcing Guideline Framework for Forest-Based Materials has been</p>

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		<p>actors in the supply chain. It has therefore produced a commitment on forests in order to describe its commitments to both tackle deforestation and improve the standard of forest stewardship, through the responsible purchasing of products from forests and forested landscapes. We have taken a proactive role in tackling deforestation, particularly in the responsible sourcing of palm oil, through our work to drive traceability, our work directly with suppliers and our support for the goal of the Consumer Goods Forum (CGF) to mobilise resources within our respective businesses to help achieve zero net deforestation by 2020. We also assisted the CGF in setting up the Tropical Forest Alliance 2020, a public-private partnership between the CGF and the governments of the USA, United Kingdom, Norway, the Netherlands and others that aims to reduce tropical deforestation associated with key global commodities. Nestlé has also backed the New York Declaration on Forests, whose vision is to halt and reverse the loss of forests, and participated in various conferences and events to raise awareness, seek solutions and develop collaborative efforts across different sectors to tackle deforestation in key locations such as Africa, South East Asia and Latin America. In 2014, we endorsed CDP climate change initiatives including the commitment to remove commodity-driven deforestation from all supply chains by 2020. In early 2017 we were a signatory to a cocoa industry initiative to tackle deforestation in west Africa. Related geographies: worldwide.</p>	<p>developed to help procurement staff and suppliers implement our commitment. Five categories of raw material are central to our 'no deforestation' commitment, as they are considered to have the highest impact on deforestation and forest stewardship: palm oil, soya, cocoa, cattle and pulp and paper. Our approach to the challenge remains the same for all five: to work with suppliers and partners to map our supply chains back to the origin, then assess and develop our suppliers against our Responsible Sourcing Guideline. Other commodities including dairy products, coffee and cassava are also problematic in some places, and are being tackled accordingly country by country.</p>
Other: Air emissions reduction	Support	<p>Nestlé signed the Trillion Tonne Communiqué, which calls on governments: Set a timeline for achieving net zero emissions to keep cumulative emissions below one trillion tonnes of carbon from manmade CO2 Design a credible strategy to transform the energy system that matches our net zero ambitions. Create a plan for fossil fuels, especially coal. We will only be able to continue to use them if the emissions can be captured and stored.</p>	<p>As a signer of the Trillion Tonne Communiqué, we call on governments to create a plan for fossil fuels, especially coal. We have identified air emissions reduction as a key focus area of The Nestlé Policy on Environmental Sustainability.</p>
Other: No Deforestation, Climate Change information	Support	<p>Nestlé has endorsed CDP's six climate action initiatives, thereby committing to: • Adopt evidence-based GHG emissions reduction targets that will help limit global</p>	<p>Nestlé is committed to provide climate change leadership. Nestlé is continuously making efforts to improve the environmental performance of its operations in order to</p>

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		<p>warming to below 2°C, aided by the ‘Mind the Science, Mind the Gap’ methodology developed by CDP, UN Global Compact, the World Resources Institute and the WWF; • Having a strategy to procure 100% of electricity from renewable sources within the shortest practical timescale; • Removing commodity-driven deforestation from all supply chains; • Providing climate change information in mainstream corporate filings; • Responsibly engaging policy makers on climate change policy; and • Putting a price on carbon.</p>	<p>preserve natural resources and to be successful in the long term. Over the last 10 years, we have already made real progress, reducing direct GHG emissions per tonne of product by 39% while increasing production by 46%. We are on track to achieve our science-based 2020 objective, as we have reduced GHG emissions (Scopes 1 and 2) per tonne of product in every product category achieving an overall reduction of 22% in our manufacturing operations versus 2010.</p>
Other: HFC phase-out and replacement with natural refrigeration	Support	<p>Nestlé is leading the implementation of natural refrigeration in its industrial operations and is committed to use it in its commercial applications. As a member of the Consumer Goods Forum we actively participated in the development of the new refrigeration resolution (issued in Nov. 2016) calling for the inclusion of HFCs in the Montreal Protocol. We are also engaged to reduce the local existing barriers for the use of natural refrigerants in international standards (ISO TC 86, CEN TC 182) by being a member of Swiss Norm Committee NK181. Additionally, we are also engaged to reduce these barriers in national regulations (i.e. hydrocarbon charge limit increase in France from 150g to 500g).</p>	<p>We recognise that effective regulation is essential to ensure the equitable global phase down of HFCs and the removal of bans and barriers limiting the deployment of natural refrigerants in international and local regulations.</p>
Other: Food Loss and Waste reduction	Support	<p>In 2016, our CEO, Paul Bulcke, joined Champions 12.3, a coalition of government, industry and NGO influencers dedicated to accelerating progress towards halving food waste by 2030. Nestlé is indeed committed to further playing its part in helping to reduce food loss and waste to help contribute to a resource-efficient circular economy. This will allow us to secure our agricultural supplies while having a positive impact on society. We therefore engage with US EPA, EU Commission, UNEP/FAO.</p>	<p>As a company, we have guided the CGF to adopt the public resolution of halving food waste from their members’ own operations by 2025, five years ahead of UN SDG 12.3. To overcome one of the major challenges to measure food loss and waste, we steered the development of a major global and recognised protocol, the Food Loss and Waste Protocol (FLW Protocol) to coherently measure food loss and waste throughout the food chain. The Protocol, which was created on behalf of the CGF and together with the WRI, UNEP, FAO, the WBCSD, the EC and WRAP, was launched at the Global Green Growth Forum, held in Copenhagen, Denmark, in June 2016.</p>
Other: Climate Change	Support	<p>Nestlé is also one of 81 companies to sign the American Business Act on Climate pledge. The signatories are demonstrating their support for action on climate change</p>	<p>Nestlé has set ambitious targets for climate action, including target in reducing GHG emissions, energy consumption and water withdrawal per tonne of product,</p>

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		<p>and the conclusion of a climate change agreement in Paris that takes a strong step forward toward a low-carbon, sustainable future. By signing the American Business Act on Climate pledge, these companies are:</p> <ul style="list-style-type: none"> • Voicing support for a strong Paris outcome. The pledge recognizes those countries that have already put forward climate targets, and voices support for a strong outcome in the Paris climate negotiations. • Demonstrating an ongoing commitment to climate action. As part of this initiative, each company is announcing significant pledges to reduce their emissions, increase low-carbon investments, deploy more clean energy, and take other actions to build more sustainable businesses and tackle climate change. These pledges include ambitious, company-specific goals such as: <ul style="list-style-type: none"> o Reducing emissions by as much as 50 percent, o Reducing water usage by as much as 80 percent, o Achieving zero waste-to-landfill, o Purchasing 100 percent renewable energy, and o Pursuing zero net deforestation in supply chains. • Setting an example for their peers. <p>Today's announcements builds on the launch of the American Business Act on Climate Pledge in July. This fall, the Obama Administration will release a third round of pledges, with a goal of mobilizing many more companies to join the American Business Act on Climate Pledge. Related geographies: US</p>	<p>aiming to achieve zero waste for disposal by 2020 at our sites.</p>
Energy efficiency	Support	<p>Nestlé USA is a signatory of Ceres and its BICEP (Business for Innovative Climate & Energy Policy) coalition that urges federal policymakers to take action on climate change, asserting that a bold response to the climate challenge is "one of America's greatest economic opportunities of the 21st century." CERES public declaration calls to combat climate change, use less electricity, drive more efficient car, choosing clean energy and inventing new technologies. BICEP was founded on the belief that the energy and climate challenges facing the United States present vast opportunities, along with urgent risks, for U.S. businesses. A rapid transition to a 21st century, low-carbon economy will create new jobs and stimulate economic growth while stabilizing our planet's</p>	<p>We Nestlé, as a member of BICEP, seek long-term prosperity for our businesses, our economy, and the countries and communities in which we operate. We work in every state and our products and services are in the homes and impact the lives of Americans across the country. As individual companies, we have taken strong steps to reduce our emissions and become more energy efficient, but we recognize that the U.S. must act boldly and swiftly to enact effective energy and climate policies to address the challenges and seize the opportunities we face. Only the market certainty provided by clear policies will spur development of an efficient clean energy economy at the necessary scale, and allow the U.S. to remain globally competitive. We, Nestlé propose to: i)</p>

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		fragile climate. Related geographies: US	continue to target the reduction of GHG emissions from its direct operations. The emphasis at the factories will be on energy efficiency and to increase the amount of energy derived from sustainably-managed renewable sources. ii) Extend the scope of its GHG reduction efforts along the value chain, including sourcing of raw materials, manufacturing, packaging, distribution, and consumer use and beyond. iii) Identify the reduction potential and put in place programmes for the different GHGs, particularly CO2, methane, NOx and F-Gases. iv) Further reduction in waste in the supply chain. v) Implement a strategy to tackle deforestation associated with its procurement of agricultural commodities. The strategy includes protection for high carbon soils and forests.
Adaptation resiliency	Support	The United Nations Framework Convention on Climate Change (UNFCCC) commits all Parties to formulate, implement, publish and update adaptation measures, as well as to cooperate on adaptation. It provides for a variety of support mechanisms for the implementation of adaptation measures in developing countries. We are a partner of the UNFCCC Adaptation Private Sector Initiative, which seeks to share innovative solutions to climate change adaptation. Nestlé has been invited to share details of the agricultural assistance it is providing as part of the UNFCCC Private Sector Initiative, a long-term project that aims to encourage businesses to contribute in a sustainable and profitable way to an effective response to climate change. We provided UNFCCC with a case study on climate change adaptation. In 2016, we contributed to UNEP and Caring for Climate in the publication of the report Business and Climate Change Adaptation. Related geographies: worldwide	Increasingly, we are engaging with policymakers to catalyse and support business contributions to climate change adaptation for more resilient communities and societies – both to support their livelihoods and the environment, and to reduce the risk to the long-term supply of materials for our business. We are especially committed to helping farmers to adapt to climate impacts so they can continue to grow crops in the face of changing patterns of agricultural production. Our work to help cocoa and coffee farmers adapt to environmental challenges has been recognised as an example of best practice by the United Nations Framework Convention on Climate Change. In 2016, we continue to implement agroforestry practices to increase the resilience of Nespresso coffee supply chain while positively impacting natural capital and creating additional economic value.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
FoodDrinkEurope	Consistent	<p>Food and Drink manufacturers are committed to contributing fully to the policy objectives in the field of climate change and are undertaking a wide range of activities and investments to cut greenhouse gas emissions and energy use, as well as to consider adaptation measures. Position: An increase in the EU's greenhouse gas emissions reduction commitment beyond 20% by 2020 should be taken if other developed nations agree to take the same action and if developing countries agree to accept similar measures based on their respective capabilities. FoodDrinkEurope supports long-term emission reduction targets based on impact assessments leading up to a low carbon economy by 2050. Energy efficiency should be seen as an important driver for both climate change mitigation and competitiveness. Promotion of energy efficient technologies, such as Combined Heat and Power, is needed. Resource efficiency plays a key role in tackling climate change. Food and drink manufacturers are increasingly acting as bio-refineries often contributing to renewable energy production.</p>	<p>Nestlé is a member of the Board. We chair the Environmental Sustainability Committee of FoodDrinkEurope, which represents the European food and drink industry and has launched 'A Time to Act: Europe's food and drink industry shows action to address climate change' under Nestlé guidance. FoodDrinkEurope 'Environmental Sustainability Vision Towards 2030' report which featured Nestlé efforts to achieve zero net deforestation by 2020, source 100% certified sustainable palm oil by 2015. As stated in The Nestlé Policy on Environmental Sustainability, we use the most efficient technologies and apply best practices in order to further optimise energy, utilise sustainably managed renewable energy sources, and control and eliminate emissions, including greenhouse gases. In 2016, we led the development of the 'Every Meal Matters' guidelines, which encourage and make it easier for food manufacturers to donate their food surpluses to food banks; and 'The Ingredients for a Circular Economy' microsite, designed to clarify the relationship between food farming, manufacturing and consumption.</p>
WBCSD	Consistent	<p>The World Business Council for Sustainable Development (WBCSD) is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. It is involved in a number of key processes and dialogues around the world,</p>	<p>Nestlé is a member of the WBCSD and Magdi Batato, Executive Vice President of Operations, represents Nestlé in the WBCSD Council. We actively support the LCTPi work through the RE100 initiative as well as the low carbon freight action. With a solid framework and clear agenda,</p>

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		<p>particularly the United Nations Framework Convention on Climate Change. Its mission is to accelerate the transition to a sustainable world by making more sustainable businesses more successful. Its position regarding climate and energy is to accelerate the development of low-carbon technology solutions to stay below the 2°C ceiling. Its position regarding water is to ensure safe access to water, sanitation and hygiene (WASH) in the workplace. WBCSD vision 2050 must have include: Incorporating the costs of externalities, starting with carbon, ecosystem services and water, into the structure of the marketplace; Doubling agricultural output without increasing the amount of land or water used; Halting deforestation and increasing yields from planted forests; Halving carbon emissions worldwide (based on 2005 levels) by 2050 through a shift to low-carbon energy systems; Improved demand-side energy efficiency, and providing universal access to low-carbon mobility.</p>	<p>LCTPi is a unique, action-oriented program that brings together companies and partners to accelerate the development of low-carbon technology solutions to stay below the 2°C ceiling. We also support the WBCSD's pledge to ensure safe access to water, sanitation and hygiene (WASH) in the workplace. Nestlé has supported the WBCSD in its aim to reach 50 signatory companies by 2016. To date, 42 signatories have adopted the WASH Pledge, representing 2.5 million employees in Europe, the United States, Africa, Asia and the Middle East. Internally, we are committed to achieving and maintaining WASH for all our employees. In 2015, more than 90% of employees had access to WASH; this rose to an estimated 100% in 2016. We remain in the process of continuing self-assessments across our facilities, identifying and correcting gaps through action plans.</p>
European Food Sustainable Consumption and Production Round Table	Consistent	<p>The European Food Sustainable Consumption and Production Round Table objectives are centred around three main topics in the management of environmental sustainability along the European food chain:</p> <ul style="list-style-type: none"> •Identification of scientifically reliable and uniform environmental assessment methodologies for food and drink products, including product category specifications where relevant, considering their significant impacts across the entire product life-cycle; •Identification of suitable communication tools to consumers and other stakeholders, looking at all channels and means of communication; •Promotion of and reporting on continuous environmental improvement along the entire food supply chain and engaging in an open dialogue with its stakeholders. We actively participate in the consultations and steering meetings. 	<p>We, Nestlé, co-chair together with the European Commission the steering committee on behalf of the food sector. We support its position. We also support and shape the development of communications best practice and standards, working in collaboration with industry and government, and leading forums such as the European Food Sustainable Consumption and Production Round Table and FoodDrinkEurope.</p>

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
UN Global Compact	Consistent	<p>A global strategic policy initiative. It encourages businesses globally to adopt more sustainable responsible policies. In addition to its core environmental principles, the UN Global Compact is focusing on two of the most critical — and related — environmental issues of this century: climate change and water sustainability. In this regard, participants are encouraged to join the following engagement platforms: • Caring for Climate: The Global Business Leadership Platform – a voluntary and complementary action platform for companies seeking to demonstrate leadership on climate change. Caring for Climate demonstrates how committed business leaders can advance practical solutions, shape public opinion and government attitudes. • The CEO Water Mandate – a policy framework to assist companies in the development, implementation and disclosure of comprehensive water policies and practices — in partnership with civil society, UN agencies, specialized institutes, and public authorities.</p>	<p>Nestlé provides Communication on Progress towards UNGC goals and principles through our comprehensive yearly Nestlé in Society report, which describes the company's efforts implementing the Advanced criteria. We also provide relevant information through our Annual Report, Consolidated Financial Statements and our website, nestle.com. As a founding member of UNGC LEAD, a group of companies leading the way to a new era of sustainability. We also report progress against additional criteria of the Blueprint for Corporate Sustainability Leadership, a document designed to improve corporate sustainability performance. Nestlé's own Corporate Business Principles incorporate the UNGC's Ten Principles and we reflect the basic concepts of fairness, honesty and respect for people and the environment in all of our business actions.</p>
SAI Platform	Consistent	<p>The Sustainable Agriculture Initiative Platform is the main food industry initiative that supports the development of sustainable agriculture worldwide. It works towards building capacity based on research and development activities of its members, and communicates towards food industries as well as food chain stakeholders. Members of the jointly stewarded Sustainable Food Lab/SAI Platform Water Risk Collaboration have participated in and provided leadership for collective action at the watershed scale in California.</p>	<p>We co-founded SAI Platform in 2002 to promote sustainable agriculture at field level through six working groups (cereals; coffee; dairy; fruit; potatoes and vegetables; and water and agriculture). Nestlé support the Water Risk Assessment and Mitigation project initiated by the SAI Platform and the Sustainable Food Lab (SFL). Nestlé is a founding member of the California Water Action Collaborative (CWAC), which today consists of 19 companies and environmental organisations. Through our membership, we pursue collective action projects to improve California's water security for people, business, agriculture and nature. Nestlé Waters North America supports projects within each of the three CWAC focus areas of: returning water to the system; building social capital to improve trust across sectors; and driving corporate water stewardship to align with the Governor's</p>

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
			California Water Action Plan.
Climate Disclosure Standards Board	Consistent	The CDSB Framework is designed to help companies, disclose information about their climate change-related risks and opportunities, carbon footprints, carbon reduction strategies, and their implications for shareholder value in their mainstream financial reports.	We are a member of the CDSB's Technical Working Group. We are committed to disclose climate change information in conformance with the CDSB's framework.
Consumer Goods Forum	Consistent	The Consumer Goods Forum (CGF) is a global industry network that brings together the CEOs and senior management of over 650 retailers, manufacturers, service providers and other stakeholders across 70 countries. It is focused on advancing the industry through strategic priorities including sustainability. The CGF Resolution on Deforestation states: "As the Board of the Consumer Goods Forum we pledge to mobilise resources within our respective businesses to help achieve zero net deforestation by 2020. We will develop specific, time bound, and cost effective action plans for the different challenges in sourcing commodities like palm oil, soy, beef, paper and board in a sustainable fashion."	We actively participate on the Sustainability Steering Committee, Deforestation Alignment Group, US Government Deforestation Initiative, Palm oil, Soy, Paper Working Groups, Refrigeration, Sustainability - Measurements & Reporting group. In 2010, Nestlé made a 'no deforestation' commitment, stating that all of its products, globally, will not be associated with deforestation by 2020. This commitment was the first of its kind by a food company, and covers all the raw materials we use to make our foods and beverages, as well as our packaging, making traceability and transparency crucial. A significant number of traders and manufacturers have since followed our lead and developed sustainable palm oil policies and 'no deforestation' commitments of their own. Together with CGF, we are investigating how to help increase the recycling and recovery of used packaging in emerging and developing countries, beginning with a project to retrieve packaging from municipal solid waste. Nestlé is also actively participating in the ongoing debate on environmental information to consumer.
Consumer Goods Forum	Consistent	The CGF Resolution on Refrigeration states: "As individual member companies, we commit to the following in all commercial and industrial refrigeration equipment under our control along the food & beverage supply chain: In markets where viable, to install new equipment that utilise only natural refrigerants or alternative ultra-low GWP refrigerants, effective immediately; In markets where barriers to deployment exist, to engage with our suppliers,	We lead the development of CGF position. Nestlé's CEO co-chairs the CGF. We are an active member of the CGF's Sustainability Steering Committee, developing action plans to help achieve zero net deforestation by 2020, and mobilising resources to begin phasing out hydrofluorocarbon (HFC) refrigerants and replace them with natural refrigerant alternatives when purchasing point-of sale units and large refrigeration installations.

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		civil society, business partners and governments to overcome remaining technical, regulatory and other barriers in certain geographies and sectors, to enable the purchase of new equipment that utilise only natural refrigerants or alternative ultra-low GWP refrigerants as soon as possible and no later than 2025; Work to reduce the total equivalent environmental warming impact of our existing and new refrigeration systems, including (but not limited to) improving energy efficiency, optimising refrigerant charge sizes, and minimising refrigerant leaks; Develop individual targets and action plans to measure and achieve the above and regularly publish information on progress."	
Consumer Goods Forum	Consistent	The CGF Resolution on Food Waste states: "As the Board of The Consumer Goods Forum, we recognise that food waste is a major social, environmental and economic challenge. It undermines food security, contributes to climate change, consumes scarce natural resources such as water unnecessarily, and costs money. We are committed to doing our part to help reduce food waste. Our aim is to: 1. First prevent food waste, then maximise its recovery towards the goal of halving food waste(1) within our own retail and manufacturing operations by 2025, versus a 2016 baseline. 2. Contribute to the UN goals by 2030(2): • to halve per capita global food waste at the consumer level, • and to reduce food losses along production and supply chains including post-harvest losses and maximise the value of the remaining waste. We will achieve both by individual company initiatives, by engaging with our supply chains and end consumers (where material) and by working collectively in partnership with governments and NGOs".	We support this resolution and have contributed to its development. In 2016, 182 factories achieved zero waste for disposal, and we aim by 2020 to achieve zero waste for disposal in our sites.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

No

CC2.3e

Please provide details of the other engagement activities that you undertake

Engagement on climate change mitigation and adaptation activities undertaken with The Forest Trust (TFT)

i) description of the method of engagement: We entered into a partnership with The Forest Trust, a global non-profit organisation whose main focus has been to provide solutions to the issue of deforestation and to ensure the responsible sourcing of palm oil and pulp and paper.

ii) topic of the engagement: No deforestation. Nestlé ambition is to ensure that its products have not led to deforestation.

iii) nature of the engagement: We are the first global consumer goods company to become a TFT member. TFT help us to assess the implementation of our RSG on farms and plantations, and identify any issues that exist. Together with TFT, we have made major progress in engaging with leading suppliers – notably SimeDarby, Wilmar, Cargill and a collaboration between Golden AgriResources in Indonesia and Philippines – that have established traceable supply chains that are also assessed against the Responsible Sourcing Guideline. Nestlé and TFT have also been working on a major initiative: Rurality. Rurality aims to connect key stakeholders in palm oil supply chains, share innovation and knowledge, and connect farmers with bodies such as research centres and schools and to the consumers.

iv) actions advocated as part of engagement: Over 90% of the palm oil we source is traceable back to mills that process palm and 47% of is traceable back to the plantation. Our ambition is to achieve 70% traceability back to plantation level by the end of 2017. To facilitate measuring progress in this work, during 2016 we piloted technology developed by Airbus, the Forest Trust and SarVison to use satellites to determine the impact of deforestation programmes.

In parallel, four projects of the Rurality initiative began in 2016, involving over 400 farmers in Ghana, Côte d'Ivoire, Malaysia and Indonesia. Initial actions have included training on practical topics such as use of appropriate tools, safety equipment and fertilisers, organising field visits to success stories to share ideas, and building awareness of the importance of forest conservation. Supported by Nestlé's funding, Rurality will continue to grow in 2017.

In partnership with TFT, we map and assess supply chains of paper and board suppliers across high-priority countries – the USA, Brazil, China, Indonesia, Malaysia, India, Thailand, Vietnam, Chile, Japan and Mexico, and supplier countries in Europe and Central and West Africa. Supplier field visits are carried out to determine how companies in our supply chain are operating close to Intact Forest Landscapes and HCV areas. Field visits are also conducted to understand the role smallholders play as providers of raw material in the pulp and paper supply chain, and how companies are managing their out-grower schemes to meet our Responsible Sourcing Guideline. Projects to address assessment findings will begin in 2017.

Engagement on climate change mitigation and adaptation activities undertaken with Caring for Climate.

i) description of the method of engagement: Nestlé is a signatory of Caring for Climate which aims to advance practical solutions, share experiences, inform public policy as well as shape public attitudes.

ii) topic of the engagement: Climate risks and Opportunities and implementation of climate change solutions

iii) nature of the engagement: Nestlé commits to renewing its efforts to improve energy efficiency, reducing the GHG emissions of its products, setting voluntary targets and publicly reporting on progress in the spirit of continuous improvement, as well as supporting related initiatives by other leading international organisations.

iv) actions advocated as part of engagement: Our improvements have enabled us to reduce by 39% our emissions per tonne of product since 2006.

CC2.3f**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?**

To ensure that all of our direct and indirect activities that influence policy are consistent with our overall climate change strategy, we have established the governance of "Nestlé in society and CSV (Creating Shared Value)".

Within our general corporate governance structure, the Chairman, the Chief Executive Officer and other members of the Executive Board are ultimately responsible for the supervision and management of our role in society and CSV, supported by a number of other governance bodies, including our Operations Sustainability Council, Issues Round Table, Water Task Force, R&D Council for Sustainability and Nutrition, and the Group Compliance Committee.

In 2016, we created a new Nomination and Sustainability Committee. This Committee prepares the succession planning of the Board and periodically reviews other measures which ensure our company's sustainability and how its long-term strategy relates to our ability to create shared value.

Nestlé in Society Board

The Nestlé in Society Board is chaired by our CEO. It leads the strategic development and implementation of Creating Shared Value across our business, including for all societal commitments, objectives and strategies, and reverts to the Executive Board for input and confirmation. Specifically, the Board works to:

- Ensure all activities and workstreams align with Nestlé's positioning in society;
- Assess and draw appropriate conclusions from societal developments affecting Nestlé; and
- Further strengthen our credentials in Creating Shared Value, environmental sustainability and compliance.

CSV Council

The Nestlé CSV Council comprises 13 external members, whose expertise spans corporate social responsibility, strategy, sustainability, nutrition, water and rural development. The group advises Nestlé management on implementing Creating Shared Value and assesses our progress.

To ensure that all engagements are consistent with the overall Nestlé strategy on climate change, position statements are available and reflect Nestlé's official position on specific issues that may prompt questions from external stakeholders, such as the media and NGOs. The Nestlé Policy on Environmental Sustainability and The Nestlé Commitment on Climate Change are available to all employees and used them internally to align our position vis-à-vis climate change.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Additional text for question 2.1b: CCRO management reporting is integrated into existing reporting channels, communication with direct involvement of general management / board of directors is in place. Escalation process in case of emergency risk situations is in place and aligned with Group risk appetite. Risk linked to long-term business strategies are identified & assessed in each region based on quantitative metrics and documented in the Market Business Plan (MBP). MBPs are updated and validated by general management on an annual basis. MBPs are presented personally to general management once every 2-3 years and related risks are explicitly documented, using the group-wide ERM process. Functional leadership for CCR&O management does include all tangible & intangible risks, e.g. water and climate change-related CCRO are part of the Nestlé Group ERM, which is designed to identify, communicate, and mitigate risks in order to minimise their potential impact on the Group. If a Group-level intervention is required, responsibility for mitigating actions will generally be determined by the Executive Board. The day-to-day management of risks is the responsibility of line management; this applies equally to a business, a market or a function. Group Risk Management has functional responsibility which does include: - A centre of expertise, incl. a network of trained “facilitators” throughout Nestlé. - A resource efficient methodology using facilitated workshops to assess strategic, business/operational and/or project related risks. - A set of tools to provide an insight about how to apply the risk management process. - Support and training in risk management capability. - A regular update of ERM principles to ensure common terminology, aligned processes, minimal standards. - A regular benchmark and continuous improvement of ERM process. - A central repository allowing transparency and reporting. - Information on risk management for communication to stakeholders. - Regular risk and opportunity consolidation at Group level. Asset level: Nestlé has factories in 86 different countries and its products are sold in 191 countries in the world. Security, political stability, legal & regulatory, fiscal, macroeconomic, foreign trade, labour and/or infrastructure risk(s) could potentially impact upon Nestlé’s ability to do business in a country or region. Events such as a flood/droughts could potentially also impact upon the Group’s ability to operate. Any of these events could potentially lead to a supply disruption and impact upon Nestlé’s financial results. Please see attach: - The Nestlé Corporate Business Principles - The Nestlé Policy on Environmental Sustainability - 2016 Nestlé Integrated Annual Report Pack outlining the company’s performance last year and its future ambitions. Our integrated annual report pack, contains the company’s Annual Report 2016, the Corporate Governance Report 2016, the Financial Statements 2016 and the Nestlé in society: Creating Shared Value and meeting our commitments 2016 Report. -The Nestlé Commitment on Climate Change.

Attachments

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/2016 Nestlé Integrated Annual Report Pack.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC2.Strategy/2016%20Nestlé%20Integrated%20Annual%20Report%20Pack.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/Commitment on climate change.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC2.Strategy/Commitment%20on%20climate%20change.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/Nestlé Corporate Business Principles.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC2.Strategy/Nestlé%20Corporate%20Business%20Principles.pdf)

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/The Nestlé Policy on Environmental Sustainability.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/CC2.Strategy/The%20Nestlé%20Policy%20on%20Environmental%20Sustainability.pdf)

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target
Intensity target
Renewable energy consumption and/or production target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1+2 (market-based)	100%	12%	2014	7691187	2020	Yes, and this target has been approved as science-based by the Science Based Targets initiative	Absolute target on direct and indirect GHG emissions supported by our on-going 2020 GHG intensity target of 35% versus 2010 (see intensity target Int1). The science-based Sectoral Decarbonization approach was used to establish the target.
Abs2	Other: Scope 1+2(market-based)+3	100%	50%	2010	118312117	2050	Yes, and this target has been approved as science-based by the Science Based Targets initiative	The 2050 long term goal on scope 1+2+3 reflects Nestlé's commitment to help lead the global transition to a low-carbon economy in line with the global agreement achieved at COP21. The level of ambition is aligned with the 2°C pathway of the IPPC 5th Assessment report.
Abs3	Other: Scope 3	100%	8%	2014	111228768	2020	Yes, and this target has been approved as science-based by the Science Based Targets initiative	This is an interim milestone for scope 3 emissions to support progress towards the 2050 long term goal (Abs2), in line with the 2°C pathway.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1+2 (market-based)	100%	35%	Metric tonnes CO2e per metric tonne of product	2010	0.162	2020	Yes, and this target has been approved as science-based by the Science Based Targets initiative	Our 2020 commitment on GHG emissions was established using the science-based Sectoral Decarbonization Approach methodology, and requires that we reduce direct and indirect GHG emissions per tonne of product in every product category to achieve an overall reduction of 35% in our manufacturing operations versus 2010.
Int2	Scope 1+2 (market-based)	100%	5%	Metric tonnes CO2e per metric tonne of product	2015	0.137	2016	Yes, and this target has been approved as science-based by the Science Based Targets initiative	Nestlé established an annual intensity reduction target on direct and indirect GHG emissions of 5% from 2015 to 2016, aligned with the level of decarbonization required by the 2020 intensity target (Int1).

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Increase	3.0			The projected production volume in 2020 correspond to 69230646 tonnes. If the

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
					target "Int3" is achieved (0.105 tCO ₂ e per tonne of product emitted in 2020) and our assumption regarding the production volume in 2020 is correct, the absolute GHG emissions in 2020 will correspond to 7'293'604 tonnes of CO ₂ e. Considering that the GHG emissions in 2010 were 7'083'349 tCO ₂ e, this leads to an increase of 3.0% in absolute GHG emission in 2020 vs. 2010.
Int2	Decrease	2.9			If we apply the intensity target (0.130 tCO ₂ e per tonne of product) to the production volume of 2016 (55'788'908 tonnes), this represents projected absolute emissions of 7'260'531 tCO ₂ e. However, we emitted 7'478'944 tCO ₂ e in the baseline year. Therefore the intensity target reflects a decrease of 2.9% in absolute emissions

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
RE1	Electricity consumption	2015	7653407	8.1%		100%	Nestlé joined RE100 in 2014, thereby committing to having a strategy to procure 100% of electricity from renewable sources within the shortest practical timescale. Due to the lack of supply of renewable electricity in

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
							some regions where we operate, e.g. Greater China Region, it is not realistic to determine at this point in time a target year applicable worldwide.
RE2	Electricity consumption	2015	7653407	8.1%	2016	12%	This is an annual target towards our 100% target in the shortest practical timescale.

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	33%	65%	Our absolute emissions (scope 1+2) declined by 7.8% from 2014 to 2016, representing 65% of the 12% reduction target.
Abs2	15%	9%	Our absolute emissions (scope 1+2+3) decreased by 4.6% compared to the baseline.
Abs3	33%	28%	Our absolute emissions (scope 3) may vary due to change of output, methodological changes or emissions reduction activities. Emissions reduction activities have contributed to reduce our scope 3 emissions by 2.2%, which represents 28% of the 8% reduction ambition.
Int1	60%	62%	Our emissions per tonne of product declined by 21.6% from 2010 to 2016, which is 62% of the 35% reduction to be achieved by 2020. Therefore we are on track to meet our target in 2020.
Int2	100%	100%	Our emissions per tonne of product declined by 7.2% from 2015 to 2016, therefore we have exceeded our target of reducing emissions per tonne of product by 5%.
RE1		12.7%	Over the year 2016 we were at 12.7% renewable electricity against our goal of 100% in the shortest practical timescale.
RE2	100%	100%	Over the year 2016 we were at 12.7% renewable electricity against our annual target of 12%.

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

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

CC3.2a

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Company-wide	Packaging source optimisation programme	Avoided emissions	Other: By optimizing the weight and volume of our packaging materials, we avoid emissions. We began optimising packaging in 1991, since then, we have avoided using 794 355 tonnes of packaging material and saved			The emissions factors to estimate the amount of avoided emissions are taken from Ecoinvent 2.2 (Glass: 15.546445[MJ/kg], 0.864746 GHG/kg; Metal 94.50879[MJ/kg], 6.49064GHG/kg; Kraft unbleached 15.5 [MJ/kg],

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
			almost CHF 1.4 billion. We have also avoided more than 430 893 tonnes of CO2eq – equivalent to 91 679 cars being taken off the road for one year.			0.804 GHG/kg; HDPE 77.813831[MJ/kg], 1.680955 GHG/kg.) All materials assumed to be virgin materials. No recycled content taken into account. Consider the packaging materials mix, the average emission factor is 1.95 ton CO2e/ton of packaging.
Group of products	Processed food vs equivalent homemade food: Our food and beverages directly saves GHG emissions when compared with equivalent homemade food. For example, the preparation and consumption of NESCAFÉ help consumers reduce their carbon footprint when compared with drip filter coffee. By enjoying a cup of coffee NESCAFÉ instead of cup of drip filter coffee, 16.2g CO2e are saved through the entire value chain. Overall NESCAFÉ uses less energy and emits less GHG emissions than drip filter coffee mainly because it requires less green coffee per cup. The packaging source optimization programme saves packaging materials which results in avoiding Scope 1 and scope 2 GHG emissions	Avoided emissions	Other: The life cycle impact assessment is performed using the IMPACT 2002 method (using 100 years' time horizon for global warming) following ISO 14040/44 on life cycle assessment. The methodology is IPCC 2007 included in IMPACT 2002+ (Version v2.2). It assumes that every year 94 billion cups of Nescafe are enjoyed worldwide. The GWP taken from IPCC using 100 years horizon are: 1 for CO2; 25 for CH4 and 298 for N2O. Per year, an estimate of between 1500-1600 ktonne CO2e were avoided in 2016 by drinking Nescafé instead of drip filter coffee. The comparison between spray dried soluble coffee and alternatives has been published in a scientific paper			

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
			called "Life cycle assessment of spray dried soluble coffee and comparison with alternatives (drip filter and capsule espresso)".			
Product	Efficient coffee machine and better coffee extraction. This specifically refers to our new NESCAFÉ Milano 2 MTS 130 machine. The GHG emissions of a cup of coffee made by NESCAFÉ Milano are lower than cup of coffee made by the fresh brew of roasted generic coffee machine. Operating machines consume energy including when they are inactive (stand-by). Therefore, our coffee machine design has incorporated an efficient stand-by function, which can save energy consumption. Through saving energy, the GHG emissions are reduced. Scope 1 and Scope 2 emissions were avoided by a third party.	Avoided emissions	Other: In 2016, a new LCA analysis was conducted entitled: Comparative LCA of a cup of espresso: soluble "Ispirazione Italiana" coffee vs. roast and ground coffee. Comprehensive ISO- and Nestlé GI-compliant project. The study compared the environmental performance of a 40ml espresso served by a range of different machines of the Milano range with the new Ispirazione Italiana coffee vs conventional roast and ground coffee, served by a reference machine. It was conducted according to the requirements of ISO 14040 and 14044 for a comparative assertion, using an assumption of an out-of-home consumption in Europe. The calculation assumed that 60 coffees are prepared per machine per day in the default scenario, without sugar and/or cream. The GWP taken from			The energy mix in Europe is only considered to have 28% electricity production from coal (EIA 2013). On average, low GHG emissions electricity sources such as nuclear, hydropower and wind compose 46% of electricity production in Europe (EIA"2013).

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
			<p>IPCC using 100 years horizon are: 1 for CO₂; 25 for CH₄ and 298 for N₂O. The difference in terms of carbon footprint for a cup of coffee is 22 g of CO₂eq between a conventional R&G machine and Ispirazione Italiana in Milano MTS130 machine. On a month, the GHG emissions saved amount to 40kgr CO₂eq per Milano machine. The LCA assessment with the Milano 2 MTS 130 solution shows a 21% reduction of greenhouse gas emissions compared to roast & ground from a generic machine. The reason is a better extraction yield during soluble coffee manufacturing. Given the fact that the green coffee is modelled in the same way for R&G and Ispirazione Italiana soluble (55% from Colombia and 45% from Brazil), the impact of this stage is directly proportional to the amount of green coffee beans per espresso: 9.20 g green beans/cup for R&G vs. 5.97g green beans/cup for Ispirazione Italiana, which allows using about 35% less green coffee per</p>			

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
			cup. The Machine idle power and use stage consumption of Milano 2 MTS 130 is also lower than the generic machine, thus avoiding GHG emissions (28.6Wh/cup for R&G vs 24.7 Wh/cup with new solution).			

CC3.3

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

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	295	123521
To be implemented*	316	359288

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Implementation commenced*	420	144112
Implemented*	133	56057
Not to be implemented	37	19048

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	i) Nature of the activity: Use of efficient technologies to further optimise energy use and eliminate emissions: We are very actively improving our energy efficiency by implementing initiatives on a voluntary basis. The Nestlé Energy Target Setting aims to reduce our Scope 1 and 2	24597	Scope 1 Scope 2 (market-based)	Voluntary	1291000	5904000	4-10 years	6-10 years	As stated in The Nestlé Policy on Environmental Sustainability, we aim to use the most efficient technologies and apply best practices in order to further optimise energy and water consumption, minimise waste generation, utilise sustainably managed renewable energy sources, recover value

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	<p>emissions. An Energy Target Setting (ETS) is a thorough analysis of the energy and GHG emissions in our sites aiming at issuing an action plan, validated by the Factory Management & Market Technical Management, unlocking the energy and water saving potential. The exercise lasts 10 days on-site and aims at:</p> <ul style="list-style-type: none"> • Analysing the energy/water conversion and use in the factory • Identifying and documenting energy/water saving opportunities • Establishing an action plan together with the factory and Market with clear accountabilities and timing. ETS aims at issuing a roadmap of energy improvement projects covering building, industrial services and processes. Examples of energy- and 								<p>from by-products and control and eliminate emissions, including greenhouse gases.</p>

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	CO2eq-saving projects implemented in 2016 include: The installation of a new biomass boiler in Morocco, (12'238 t of CO2 annually); a new dryer heat recovery in USA (1'356 t CO2); and a more efficient energy recovery system in China (1'090 t CO2).								
Transportation: fleet	i) Nature of the activity: We aim to shift long-distance transportation from road to either rail or short-sea shipping, both of which result in significantly lower CO2 emissions. Nestle Waters USA have begun to move shipments from road to rail from their Poland Springs bottling facility in Maine, to the regional distribution centre in Massachusetts for onward delivery to Customers. Up to 4000 truck journeys move from road to rail reducing KMs travelled by road	5400	Scope 3	Voluntary	0	1000000	1-3 years	Ongoing	Striving to maximise the utilisation of truck capacity and optimising vehicle routing are important ways to ensure that we minimize the environmental impact of our logistics activities. Combined estimates of monetary savings and investments refer to the cited examples. Where possible, choosing less environmentally impactful modes such as rail and sea for transport of goods is an important way of reducing CO2 emissions Estimate of the investment required. No

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	transport by 500,000 and Co2 emissions by 5,400 tons. Nestlé Waters relies heavily on the non-road networks for efficient long-distance transportation. In 2016, 32% of its European distribution was by rail and ship.. Nestlé Waters constantly reviews opportunities to shift to rail transport, and achieved a 10% improvement in the carbon efficiency of its transport since 2010.								transport cost savings
Low carbon energy purchase	Nature of the activity: We utilise sustainably-managed renewable energy sources: We are investing in renewable energy systems on voluntary basis. Amongst them use of sustainably-managed biomass source to fuel our boilers. In 2016, Nestlé's worldwide operations now include 22 factories that use spent coffee	63000	Scope 1	Voluntary	945000	5000000	4-10 years	16-20 years	French boilers benefitted from state subsidies. The Annual monetary savings were estimated based on the Environmental target Setting assessment conducted in our factory in Challerange. The Assessment estimated that the installation of new Wood Fired Boiler resulted in reduction in energy, CO2, which corresponds to a cost

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	<p>grounds as a renewable fuel and 24 factories use wood chips. Thus, the share of renewable energy in our total on-site energy consumption has increased by 42% since 2010. Spent coffee grounds represent 20.7% of our renewable energy mix, compared with 26.4% for wood, and we purchase an estimated 29.6% of our electricity (7.6 PJ) from renewable sources. For example, in France, a fourth Nestlé factory has been converted, in 2016, to use spent coffee grounds and wood chips as a renewable energy to phase out coal used from steam generation. alternative to fossil fuel. With three other factories already obtaining between 88% and 94% of their thermal energy needs, Nestlé France has reduced by more than 40% of its direct</p>								avoidance of 155 kCHF per year.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	CO2 emissions since 2010.								
Transportation: fleet	Optimising distribution networks to reduce kms run: i) Nature of the activity: constant review of distribution network for ongoing efficiency improvement by making better usage of available transport load capacity, avoiding unnecessary km run for transport and using more efficient modes of transport. In 2016, we redesigned 11 distribution networks globally to improve efficiency. For example, In Portugal, collaboration with a major customer allowed the loading of the Customer's empty vehicles with product directly from our Factory. This approach reduced the KMs travelled by 225,000 and eliminated 180 tons of Co2 per year. In the Adriatic Region changes were made to	305	Scope 1	Voluntary	267000	0	<1 year	Ongoing	Collaborating with partners in the supply chain to capitalize on opportunities to share loads and reduce the number of empty trips is a good way of optimising transport capacity. Combined estimates of monetary savings and investments refer to the cited examples.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	increase vehicle load utilisation by adapting trailers to allow for the loading of extra pallets for Customer deliveries. The double stacking of pallets inside the trailers improved utilisation by 11%. Improvements were also made to the ordering and planning process to create more efficient customer orders without impacting Customer service levels. Further improvements are expected which will increase load utilisation up to 58%. This enhanced efficiency reduced Co2 by 125 tons, reduced product damages without impacting Customer satisfaction.								
Transportation: fleet	Increasing the vehicle load fill is a very effective lever to reduce costs of transportation and improve the environmental	1025	Scope 3	Voluntary	904000	1200000	1-3 years	Ongoing	Striving to maximise the utilisation of truck capacity and optimising vehicle routing are important ways to ensure that we minimize the

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	<p>performance. Our Cereal Partners business has focused on improving vehicle fill to make the most of every single truck's available capacity. With lightweight products it is critical to ensure that the whole volume of the vehicle is used. The approach is focused on getting three key things right – choose the right vehicle, get it full and work maximise the product quantity per pallet. Several Markets worked to use high-cube trucks, improve vehicle filling and to redesign products to completely fit the available pallet and space. Overall, an estimated 1600 truck journeys were eliminated, saving around 825 tons of Co2. In Australia we introduced larger capacity trailers and improved the planning of vehicles to better</p>								<p>environmental impact of our logistics activities. Combined estimates of monetary savings and investments refer to the cited examples.</p>

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	coordinate with supplier and Customer movements. These sustainable changes led to 22% improvements in load fill and a reduction of an estimated 200 tons of Co2, whilst saving an estimated CHF 420000.								

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Lower return on investment (ROI) specification	The energy and other related sustainability projects are assessed separately using various parameters, such as energy savings in absolute GJ, absolute CO2 emission avoidance, absolute water savings and ROI. Longer payback are accepted for emissions reduction activities (up to 5 years)
Dedicated budget for energy efficiency	The engineering projects for energy saving, energy efficiency and others related to environmental sustainability are assessed separately in the attribution of the budget.
Marginal abatement cost curve	All these abatement projects assessed for our factories are benchmarked considering the marginal cost of energy reduction. (GJ saved per CHF invested) and they are used to prioritize the projects. Monetary reward and incentives are linked to attainment of energy savings, thus of GHG reduction targets.

Method	Comment
Employee engagement	In addition to Environmental Sustainability managers, there are energy management functional roles at different levels that also contribute to drive investment in emission reduction activities. The technical manager sets market energy savings objectives for each Market in line with Corporate targets. The Chief Engineer defines the energy saving objectives for the factories and supports the factories in energy savings matters together with the Market Environmental Sustainability manager. The Industrial services engineer directly supports the factory. At a factory level, the factory engineer is responsible and drives the energy conservation program that monitors utilities consumption and implements projects targeting energy use reduction and cost savings. The factory engineer is also responsible for establishing the factory specific Energy performance Indicators (EPIs) and monitor and analyses of EPIs together with the factory Environmental Sustainability manager and the line managers.
Compliance with regulatory requirements/standards	Compliance is the foundation of how we do business and a non-negotiable requirement for everything we do. In addition to complying with laws and regulations, Nestlé has a strong set of values and principles that we apply across all the countries where we operate. Our overriding objective is to ensure that our investments are beneficial both for our shareholders and the countries where we do business.
Partnering with governments on technology development	We work with governments and technology development such as development of low grade temperature. We also work with major equipment suppliers and international organisations to continuously test and monitor different refrigerants in various applications. We are in collaboration with suppliers to explore alternative refrigeration options (e.g. Partnership with TwinBird)
Other	Setting strict targets and sharing best practices in our factories: The Nestlé Environmental Requirements are mandatory across our plants.
Dedicated budget for other emissions reduction activities	The engineering projects for energy saving, energy efficiency and others related to environmental sustainability are assessed separately in the attribution of the budget.
Internal price on carbon	We currently use carbon pricing as a tool to manage the risks and opportunities to our current operations participating in EU-ETS. This helps us to guide capital investment decisions for factories participating in EU-ETS. In 2016, Nestlé analysed financial implications for its factories in EU-ETS Phase III.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

For question CC3.3a, the tracking of the projects and the savings is done in SHE-PM.

Attachments

<https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC3.TargetsandInitiatives/nestle-environmental-performance-indicators-2016.xls>

<https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC3.TargetsandInitiatives/Definitions and Comments on 2016 CNEPI.pdf>

Page: CC4. Communication

CC4.1

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	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) in accordance with the CDSB Framework	Complete	We have attached our 2016 integrated annual report pack. This is Nestlé’s annual reporting pack and provides Nestlé audited financial and environmental results. This pack is sent to shareholders and is available in nestle.com. Our integrated annual report pack contains the Nestlé’s Annual Report 2016, the Nestlé in society: Creating Shared Value and meeting our commitments report 2016, the Financial Statements 2016, the Corporate Governance Report 2016, the Compensation Report 2016 and the Articles of Association of Nestlé SA. As each section is numbered separately, the provided page references refer to the page of the pdf, to avoid any confusions. *In section ‘Annual Review 2016’, you can find Nestlé’s performance on GHG reduction emissions since 2006 (pdf page 4), a new product range better for the environment (pdf page 30), new more efficient and sustainable operations in Hungary (pdf page 32), product made from certified sustainable cocoa (pdf page 35), a renovated plant which is zero GHG emissions thanks to a combination of solar panels, LED lighting, heat recapture	https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC4.1/2016 Nestlé Integrated Annual Report Pack.pdf	Please see enclosed the 2016 Nestlé Integrated Annual Report Pack available at www.nestle.com .

Publication	Status	Page/Section reference	Attach the document	Comment
		<p>and recycling technologies (pdf page 36); and information on our climate change (CC) risks and opportunities (pdf page 59-60). *In section 'Nestlé in society: Creating Shared Value and meeting our commitments report 2016', you can find information on our direct and indirect GHG emissions in the 2016 performance summary (pdf page 74), our performance on GHG reduction emissions since 2006 (pdf page 75), our 2030 ambition to striving to zero environmental impact in our operations (pdf page 82), our 2016 climate change performance in leading indices (pdf page 82), our commitments on climate change (pdf page 85), Investor benefits of our work on environmental sustainability (pdf page 110), our materiality matrix where we identify CC as a material issue (pdf page 118-119). It also highlights our progress to date and our objectives toward 2020 in areas of climate change leadership and GHG emissions reduction, including: Provide climate change leadership (pdf page 107), Promoting transparency and proactive long-term engagement in climate policy, Preserve natural capital, including forests (pdf page 110). *In section 'Financial Statements 2016' you can find information about our environmental provisions (pdf page 174-175).</p>		
In voluntary communications	Complete	<p>In the online 2016 Nestlé in Society full report complying with the 'in accordance – comprehensive' requirements of the GRI G4 Guidelines, we report: *In 'Our year in review' (pdf page 3), we describe our most important achievements of the year 2016 on GHG reduction; *our 2016 climate change performance in leading indices (pdf page 6), *our 'Materiality' assessment (pdf page 17,19-21), where CC has been identified as a material issue. We report where it may impact our value chain (pdf page 19), and how it aligns with SDGs (pdf page 21); *our commitment on climate change (pdf page 24); *our key performance indicators' (pdf page 29) include our direct and indirect GHG emissions performance; *our actions on climate change (pdf page 109, 112-117), we describe how we act on climate change; we provide detailed</p>	<p>https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC4.1/nestle-csv-full-report-2016-en.pdf</p>	<p>Please see enclosed the on-line 2016 Nestlé in Society report available at www.nestle.com.</p>

Publication	Status	Page/Section reference	Attach the document	Comment
		information on our CC objectives, our progress and our perspective (pdf page 113). We report progress on our aim to procure 100% of our electricity from renewable sources within the shortest practical.		
In voluntary communications	Complete	We have attached a pdf containing a print screen of our website (www.nestle.com) dated 03.05.2017 covering our commitment on climate change, our 2016 progress (under Nestlé in Society > Climate Change Leadership > “Our progress to date”). Our GHG emissions scope 1, 2 and 3 can be found in the section on our performance (“Performance>Environmental performance indicators”). Link to website: http://www.nestle.com/csv/performance/environmental-indicators)	https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC4.1/climate change section of the nestlé website.PNG	Please see Nestlé’s response to climate change and GHG emissions performance available at www.nestle.com .
In other regulatory filings	Complete	We have attached a pdf containing The Nestlé commitment on climate change available in nestlé.com . Full document attached is on climate change.	https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC4.1/Commitment on climate change.pdf	Please see enclosed our Commitment on climate change available at www.nestle.com .

Further Information

We already provide climate change information in mainstream corporate filings and reports, in conformance with the Climate Disclosure Standards Board Climate Change Reporting Framework requirements. In our 2016 integrated annual report pack, we state clearly that our business is based on sustainability – ensuring that our activities preserve our business as well as our environment for future generations. Our integrated annual report pack contains the Nestlé’s Annual Report 2016, the Nestlé in society: Creating Shared Value and meeting our commitments report 2016, the Financial Statements 2016, the Corporate Governance Report 2016, the Compensation Report 2016 and the Articles of Association of Nestlé SA. More specifically, it covers Corporate Governance and Compliance, Financial review, 2016 performance summary including environmental, social indicators, sections on nutrition, rural development, water, environmental sustainability and our people, human rights and compliance. It addresses all material issues which pose risks or present opportunities to Nestlé, balanced against the issues which our external stakeholder are most concern by. Our integrated annual report pack is sent to shareholders and is available in [nestlé.com](http://www.nestle.com). Environmental Sustainability material issues including climate change, water stewardship, resource efficiency and waste are covered in all sub elements of the 2016 integrated annual report pack. Our on-line reporting on Nestlé in Society includes also material environmental issues (climate change risk and opportunities), their estimated financial implications and measures we are taking to reduce risk and enhance opportunities related to climate change. Our online Nestlé in Society report is aligned to the Global Reporting Initiative (GRI) G4 guidelines. Our reporting on Nestlé in Society is subject to independent third-party assurance by Bureau Veritas. Together, they form an integral part of our overall communication on CSV, environmental sustainability and compliance performance and cover the UN Global Compact Advanced/LEAD

Communication on Progress requirements. In 2014, Nestlé has added 6 new commitments in environmental sustainability and water to the already existing 20 defined in 2013. This set of forward-looking commitments to society and on environment sustainability it aims to meet by 2016-2017 or earlier. The time-bound targets reflect Nestlé's ambitions to work collectively with other stakeholders to help address the global food and water crisis, and environmental sustainability challenges. Some of the targets on environmental sustainability include: • Direct GHG emissions: -35% per tonne of product by 2020 (vs 2010) resulting in absolute reduction • Zero Waste: achieve zero waste for disposal in our sites by 2020 • Water withdrawal: -35% per ton of product in every product category by 2020 (vs 2010) • Water stewardship: define water stewardship initiatives and start implementation in five high-priority locations by 2016 • Preserve natural capital, including forests: 40% of the volume of our 12 priority categories of raw materials will be assessed against our Responsible Sourcing Guideline requirements and is compliant, or improvement plans to preserve natural capital are ongoing by 2016. Note: Please note that pdf pages given are referred to the page in the pdf rather than the page number in the bottom-right

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation
 Risks driven by changes in physical climate parameters
 Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product labeling	The introduction of mandatory	Increased operational	>6 years	Direct	Very likely	High	Assuming that an ISO	The management methods include:	The costs associated with

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
regulations and standards	<p>requirements for food manufactures to provide access to detailed and in-depth product environmental information – including carbon footprint - to interested stakeholders (e.g. by having a dedicated webpage, on-packaging information or in advertising) may lead to a significant operational costs increase. This considers the cost of conducting specific Life Cycle Assessment (LCA) studies critically reviewed by third parties for different product SKU.</p> <p>Moreover, the lack of widely internationally accepted, science-based methodology to assess the environmental performance of products, including GHG emissions, can generate significant costs for businesses, especially in case they need to use different</p>	cost					<p>compliant LCA assessment with a third party reviewed costs CHF 40000 on average, and we communicate environmental information of 10000 products, we estimate that the potential financial implications of this risk amounts to around CHF 400 million in the 5-10 years' timeframe. This is based on an increase in cost.</p>	<p>i) To conduct GHG assessment faster, more efficient for every product development project, our multi-criteria eco-design tool – EcodEX, that covers both packaging and ingredients and can be applied to all product categories, is now used in all R&D sites. In 2016, we evaluated 6641 projects using eco-design tools</p> <p>ii) We advocate for international standards for assessment, databases and voluntary communication. In 2016, we continue to participate in the EU PEF pilot to set up and validate the process of the</p>	<p>these actions in 2016 were around 2.1 million CHF including: *CHF 78k for the co-development of ecodesign tools,*CHF 120k for roll out of EcodEX, *CHF 63k for RISE implementation, *CHF 455k for the participation of EU Product Environmental Footprint experimentation and *CHF 1409k for the cost associated with the preparation of the Nestlé in Society report. This does not include the cost of conducting the assessments and the investments in improvements programmes.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>methods or if they have to comply with different labelling and verification requirements for different countries and retailers. In France, a company would need to carry out an environmental assessment in line with the French method (BP X30-323); in the UK, it would need to apply the PAS 2050 or the WRI GHG Protocol; in Italy, it would need to join the governmental recognised carbon footprint scheme, and carry out yet another analysis. Governments such as France assessed the introduction of an obligation for producers to provide environmental data and information on specific aspects of the product. Greece, Thailand, China are considering to promote voluntary schemes and related</p>							<p>development of category rules for packed water, coffee and pet food, including the development of performance benchmarks to test different compliance and verification systems, and communication vehicles. iii) We co-chair with the European Commission the European Food Sustainable Consumption Production Round Table and actively participate in the development and testing of the EU PEF methodology protocol, scientifically reliable and harmonised environmental assessment methodologies for food and</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	tools emphasizing credible, substantiated environmental information. Nestlé has more than 10000 different products. New mandatory regulation on product environmental declaration can lead to increased costs. Providing consumers with accurate environmental information based on scientific evidence of a significant number of products will result in cost especially if the labels and methodologies are different between countries. So far, on its own initiative Nestlé has made life cycle analysis of its entire product category and by the end of 2016, we evaluated 6641 projects using eco-design tools.							drinks products. iv) We have Early warning systems to scan potential risks. These actions could reduce the magnitude of the impact of the risk in CHF 200 million over 5-10 years' timeframe.	
Other regulatory drivers	A rapid phase down of high global warming potential HFCs (hydrofluorocarbons)	Increased operational cost	>6 years	Direct	Very likely	Low-medium	We estimate that the potential financial	The management methods include: i) In 2016, we expanded the	We are phasing out synthetic refrigerants with high global

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	will help to meet the goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels as set out in the Paris Climate Agreement. The new Regulation (EU) No 517/2014 strengthens existing measures on fluorinated greenhouse gases HFCs, perfluorocarbons (PFCs), and sulphur hexafluoride (SF6) and introduces a number of far-reaching changes that will reduce emissions significantly. The Regulation requires companies to report on production, import, export, feedstock use and destruction of fluorinated greenhouse gases and other greenhouse gases that contain fluorine. We, at Nestlé, support the development and use of safe and efficient						implications of the risk amounts to around CHF 50 million in the 5-10 years' timeframe. This takes into account investment needed to move directly to natural refrigerants whenever replacement is needed instead of using drop-in refrigerants or other non-natural alternatives. The financial implication scale is minor to the company.	use of natural refrigerants by installing 47 new refrigeration systems. For example, in Guangzhou China, in 2016 we operated a CO2/ammonia cascade cold store. The CO2/ammonia cascade system confines ammonia charge to the machine room, providing a safer working environment for cold store operators and uses less energy than other systems. The 3200 m2 cold store also features other energy-saving technology such as variable temperature settings and built-in intelligent LED lights. ii) In 2016, every new	warming and ozone depleting potential such as HFCs. The costs associated with these actions in 2016 were around CHF 10 million in order to replace them with natural alternatives in our industrial refrigeration systems.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	natural refrigerant solutions for commercial applications and progressively phase out HFCs appliances. We have committed to expand the use of natural refrigerants, which do not harm the ozone layer and have a negligible impact on climate change, in our industrial refrigeration systems. This could lead to increased operational cost.							horizontal chest freezer Nestlé buys to store ice cream use natural refrigerants rather than synthetic refrigerants, where legally permitted. These new freezers represent 70% of Nestlé's total spend on freezers. They also consume 50% less energy than earlier models and are more efficient for customers to run. iii) In 2016, we actively participated in the Consumer Good Forum refrigeration group, and published a case study.	
Other regulatory drivers	The availability of water and land for agriculture directly affects our business.	Other: Increased competition of scarce	1 to 3 years	Direct	Likely	Low	We have estimated that the financial implications	To manage the risk we have the following methods: i) We	The costs associated with these actions are estimated at CHF

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Policy incentives designed to reduce GHG emissions and the reliance on fossil fuels may promote biofuels. Nestlé depends on raw materials to manufacture its products. Thus, the production of liquid biofuel which relies on the use of food crops such as corn, rapeseed, sugar and palm oil pose some risks to Nestlé. - Biofuels will aggravate the water crisis. The water intensity of biofuel crops will put additional stresses on surface and ground water supplies and act as competition to other water users, particularly the water needed to grow food. For example, according to a study by the US Department of Energy, up to 9,100 litres of water are required to produce one litre of biodiesel. This will therefore add</p>	resources					<p>amounts to around CHF 15 - 35 million a year. This only includes the impact due to the increased cost of sugar. We have not yet estimated the financial implications of the other related risks. The financial implication scale is minor to the company.</p>	<p>take all possible & practical measures not to use liquid biofuel derived from first generation agricultural products within its operations. We raise awareness on the dangers of using agricultural commodities, and the conversion of forests for the production of biofuels. ii) We advocate for governments to put food security and water stewardship considerations first when considering biofuels; adopt strict environmental and social criteria for biofuels; invest in other strategies for reducing reliance on fossil fuels for transport, and</p>	<p>26 million in 2016. This includes the cost associated with our Responsible Sourcing program only</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>up to the structural overuse of freshwater and temporary drought affecting crops and food prices. -Biofuels exacerbate deforestation. Deforestation is estimated to contribute to almost 20% of global greenhouse gas emissions and adds to biodiversity loss (UN-REDD Programme). According to the agricultural practices used, there may be no net GHG benefits from converting agricultural crops to biofuels, whilst the conversion of forests or land for biofuels may lead to emissions that are higher than fossil fuels (in addition to losses in biodiversity). According to the OECD, the use of palm oil is expected to more than double over the coming decade, with around 9% of global palm oil production absorbed by the biofuel industry</p>							<p>invest in research on credible alternatives to agricultural based biofuels. e.g. in 2016, our chairman continued to advocate putting food security and water stewardship consideration first when considering biofuels. He emphasized on the fact that with our current growing demand for water a 30% shortfalls in global cereal production may arise by 2030, leading to famine and turmoil. iii) We are committed to implement responsible sourcing in our supply chain. In 2016, 61% of our total volume was sourced from suppliers</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	in 2021. -Biofuels also might lead to increase in food prices. For example, the Brazilian ethanol program has affected the price of sugar. According to OECD-FAO data, Brazilian ethanol from sugar cane has grown threefold since 2000. The expectation is a further expansion of 16% likely to occur by 2025. This expansion of sugar cane going into motor fuel production contributed greatly to 230% increase in prices from 2005 to today using the trailing five-year average.							compliant with the Nestlé Supplier Code. iv) We are committed to no deforestation. In 2016, 91% of our total volume of palm oil was traceable back to the mil, and 57% responsible sourced. As a member of the Consumer Goods Forum, we also support its commitment to help achieve zero-net deforestation by 2020.	
Cap and trade schemes	The first and the largest international cap and trade system to reduce industrial GHG emissions is the European Emission Trading Scheme (EU ETS), currently in Phase III and running until 2020. Nestlé has 17 factories participating in EU	Increased operational cost	1 to 3 years	Direct	Virtually certain	Low	Nestlé analysed financial implications for its factories in EU ETS Phase III. Assuming a CO2 price of 15 CHF/t in 2020, financial implication of the EU-ETS is estimated at a	The management methods to reduce GHG emissions include: i) Improve energy efficiency; E.g., In Avenches, Switzerland, we reduce 1.4 GWh of the site's electricity	The costs associated with these actions include the investment of about CHF 100k in environmental savings projects in our factories.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	ETS, with a net positive emissions balance at the beginning of Phase III. However, Nestlé will be required to purchase certificates for its factories emissions.						cumulated CHF 7 - 8m during Phase III, based on an increase in cost (increase in production and so in emissions compensated by standard efficiency measures, without major investments in emissions reduction), down from CHF 24-30m estimated during Phase II, due to CO2/t price decrease. The financial implication scale is minor to the company.	consumption by optimising the operational parameters at the Nespresso Production Centre. ii) Switch to cleaner fuels and invest in renewable sources. E.g., In France, a fourth Nestlé factory has been converted to use wood as a renewable alternative to fossil fuel. In 2016, Nestlé Switzerland achieved 100% renewable electricity for its factories. iii) With the help of our Energy Target Setting Programme, our plants use efficient technologies and apply best practices to optimise energy consumption;	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								utilise sustainably-managed renewable energy sources, where economically viable; recover energy from by-products; and control and aim to eliminate emissions.	

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation extremes and droughts	The fifth assessment report by the Intergovernmental Panel on Climate Change (IPCC) states	Reduction/disruption in production capacity	1 to 3 years	Direct	More likely than not	High	We estimate that the potential financial implications due to floods affecting our	At Nestlé we take a comprehensive approach to assess and mitigate risk related to changes in physical climate	The costs associated with these actions include the loss prevention programme and specialist

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	that warming of the climate system is unequivocal and that each of the last three decades has been successively warmer at the earth's surface than any preceding decade since 1850. The increased frequency of extreme weather events, such as storm surges and droughts, is consistent with the latest IPCC modelling. The damage to economic assets, such as industrial infrastructure, agriculture and key global supply chains, caused by such extreme weather events is becoming more evident, as is the fragility of the global logistics						operations, and business interruption of the three highest exposed sites are estimated between CHF 330m and CHF 440m per site. In 2016, 66 sites have been classified as being exposed to High Flood Risk with a total potential loss of more than 1bn CHF. The financial implication scale is high to the company.	parameters that could result in our operations disruptions. The management methods used include: i) In 2016, risk engineers experts inspected more than 200 Nestlé sites providing recommendations to improving standards of prevention to flooding, when relevant. ii) The Nestlé Global Property Loss Prevention Programme provides a consistent view of our exposure to property risks around the world to floods and storms, enabling us to make informed decisions about the future standards of prevention and protection	engineers visiting the sites which amount to CHF 1.5 million in 2016. These costs include the sites visits and recommendations by specialists and exclude the cost of the implementation of the recommended measures.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>and mobility systems. Climate change may induce changes in natural resources and increase the occurrence and frequency of floods which can then affect our direct operations. We have identified more than 170 Nestlé factories located in areas of potential flood hazard (high to medium risk). Flood related losses have significantly increased over the past years. While the origin of the floods and the meteorological conditions that lead to flooding usually cannot be prevented, the effects of flooding and the extent of damage it can cause can be</p>							<p>throughout Nestlé sites when relevant. iii) Flood emergency plans are in place on a case by case in Nestlé sites exposed to flooding from any source.</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>controlled or reduced. Flood exposures can be present almost anywhere. Whether a facility is located in a mountain valley, in a basin, along a lake, river, channel, ditch or adjacent to the sea, the potential of flooding needs to be considered. Flood sources can include heavy rain, melting snow, tropical cyclones (typhoons or hurricanes), and obstructed waterways due to water-borne debris or ice. These sources can lead to flash flooding, surface water overflow, riverine flooding, seiche (water level changes in lakes), tidal flooding, coastal storm surge, and</p>								

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	tsunamis. This can lead to property damage and/or business interruption increasing the operational cost. For example, a recent flood in Philippines caused damage to the entire Nestlé factory complex (including damaged stocks and assets, rework stocks from the coffee production, labor cost during shutdown, damaged spare parts, recovery expenses and repair cost for the fence) and resulted in an estimated loss of CHF 3.5m.								
Induced changes in natural resources	Changing temperatures and precipitations patterns may affect Nestlé's	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Very likely	High	The potential financial impact due to mid-long term supply chain	The management methods used include: i) Nestlé has developed an exposure related	The cost associated with these actions is estimated at CHF 600 million until

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	factories and assets and lead to decreased availability of critical raw materials in the supply chain, especially agricultural commodities. As Nestlé relies on raw material (coffee, sugar, cocoa, cereals etc.), this change may lead to the increased operational cost or even disrupt the business operations along the entire value chain of Nestlé.						disruption or / interrupting process along the value chain due to climate change has been estimated at a very high level. The directional estimate is approximately CHF 300 - 500 million of revenue. This estimate is based on the Enterprise Risk Management Framework and is the result of the aggregation of individual "Top-Down" assessments of 21 Markets / Globally Managed Businesses, which have identified the	database where floods and other natural hazards exposures and actions plans are documented and continuously updated. ii) We have policies, processes and controls in place to mitigate such risks. Business continuity plans are in place. Nestlé commits to work with the Sustainable Agriculture Initiative Platform and the Sustainable Food Lab to implement the Water Risk Assessment and Mitigation collaboration initiative in at least one sourcing area of agricultural raw materials by 2016. In Vietnam, to address the groundwater scarcity, Nestlé's five-year	2020 (CHF 114.7m in 2016) which include The Nestlé Cocoa Plan and The Nescafé Plan investment in key rural development initiatives.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							decreased availability of raw materials in the supply chain due to changes in precipitations and droughts as a potential threat over a 3 year outlook.	partnership with the Swiss Agency for Development and Cooperation served more than 50k farmers to improve irrigation practices since 2011. iii) In 2016, Nestlé purchases our main raw materials directly from 719k small-scale suppliers. We encourage farmers to implement climate change adaptation and mitigation and promote farms' resilience to climate change through the NESCAFÉ Plan. v) As part of the Nestlé Cocoa Plan, we put our plant science expertise to work; in 2016, 2.2 million high-yield, disease-resistant plantlets were distributed to farmers through the Nestlé Cocoa	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Plan, and 28.9 million through the Nescafé Plan. These actions are expected to ensure the long term availability of raw materials and therefore reduce the magnitude of impact of the risk to lower over the 6-10 years' timeframe.	
Tropical cyclones (hurricanes and typhoons)	The 5th Assessment report by the Intergovernmental Panel on Climate Change (IPCC) states that 'In urban areas, climate change is projected to increase risks for people, assets, economies and ecosystems, including risks from heat stress, storms and extreme precipitation, [...] and storm surges (very high	Reduction/disruption in production capacity	1 to 3 years	Direct	More likely than not	Medium-high	We estimate that the potential financial implications of the risk amounts to between CHF 70k and 200m. This assumes a Probable Maximum Loss (PML) for a site that has its property damaged and Business interruption of 12 months.	At Nestlé we take a comprehensive approach to assess and mitigate risk related to changes in physical climate parameters that could result in our operations disruptions. The management methods used include: i) In 2016, 115 sites were assess as being highly exposed to storms. The method applied is a case by case evaluation of the	The cost of the risk exposure assessment is the same as for the floods (CHF 1.5 million in 2016) as the specialist engineers visits are not specific to one risk in particular and takes into account a holistic view. This does not include the cost of the implementation of the recommended measures.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	confidence). Severe thunderstorms are one of the primary causes of catastrophic loss in the United States. In 2016, the most affected region in terms of wind-related events was in Americas. For example, in April 2016, a tornado struck the Nestlé Water Factory in North America resulting in a CHF 86.3 million loss due to property damage and business interruption. Storms pose a risk to Nestlé, as sites can be damaged and potentially production could be interrupted.						The total of all PML calculated for the sites being exposed to High Storm risk is estimated to be CHF 1.298bn (Property Damage and Business Interruption combined).	critical sites to evaluate the Wind Hazard Level and both the structural and non-structural resilience. Recommendations are then provided by the experts including roofing improvements, and glazing and cladding wind design evaluation. ii) During 2016, experts visited 227 sites providing recommendations to improving standards of prevention to storm surges when relevant.	
Change in mean (average) temperature	Our long-term success depends on the water resources that	Inability to do business	>6 years	Direct	Likely	Medium-high	We have estimated that the potential	At Nestlé we take a comprehensive approach to assess and	The cost associated with these actions is estimated at CHF

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
e	<p>supply our business operations and support the livelihoods of suppliers and consumers. Melting ice, rising sea levels, more frequent and severe droughts and floods are part of the environmental changes that face the food industry and make it more exposed to climate change than others. Indeed, Nestlé's key raw materials are sourced from nature and closely linked with the environment: a lack of water, combined with changing climate patterns, will impact vegetation distribution, abundance and yields, so we need to implement good</p>						<p>direct financial implication due to lack of water in a site is between CHF 150 - 250 million. This would negatively impacting our revenue due to potential business disruptions. This estimate assumes that the business interruption lasts more than 12 month and affects one site only.</p>	<p>mitigate risk related to changes in physical climate parameters that will result in water scarcity in different areas. The management methods used include: i) We have action-oriented dialogue with different stakeholders, from farmers to policymakers, to help formulate strategies aimed at addressing the water 'overdraft' e.g. we have played a leading role such as in the 2030 Water Resource Group; We have developed a global Water Stewardship Master Plan at a corporate level, and started to formulate local plans in Pakistan, California, Mexico, South Africa and</p>	<p>31.6 million in 2016. This includes the investment for water-saving programmes in our factories. This does not include the cost of undertaking the Water Resource Reviews, nor the engagement and supply chain initiatives.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>management practices and find new ways to reduce risks. Water crisis was identified as a global risk of high concern in the WEF 2016 Global risks report. A significant decline in the quality and quantity of fresh water combines with increased competition among resource-intensive systems, such as food and energy production poses risk to business. Water shortages will impede supply of agricultural raw materials, disrupt manufacturing sites and unable consumers to prepare and enjoy products. In 2016, we have identified and prioritised 24 high-priority</p>							<p>India; ii) In 2016, 516 water-saving projects were run in our factories saving 3.2 million m³. There are now 5 factories with zero water technology implemented in Mexico, Brazil, USA and South Africa iii) In 2016, we continued to implement the Responsible Sourcing Guidelines for 12 of our key commodities and extension of our Water Guidelines for Suppliers of Agricultural Raw Materials. iv) In 2016, we documented 7 water projects implemented in our supply chain in the Sustainable Agriculture Initiative best practices. These actions are expected to create</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	manufacturing facilities that are located in areas of severe water stress and/ or represent a significant portion of our annual water withdrawals.							value for shareholders and society and reduce the magnitude of the impact of the risk to low over 10 years' timeframe.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	According to our materiality assessment, climate change is considered as an issue of increasing concern to stakeholders. If stakeholders perceived that Nestlé is not	Reduced demand for goods/services	1 to 3 years	Direct	More likely than not	Medium-high	A negative local or global impact on Nestlé image / reputation / credibility could lead to longstanding negative impact on stakeholder relationships and a reduction	The management methods include: i) Proactively engage and collaborate with stakeholders including regulators, customers, business partners, civil society organisations to define, implement	The cost associated with these actions is estimated in CHF 1409k in 2016. These costs include: *the organization of stakeholder convenings, *the publication of environmental

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>living up to their expectations, this could lead to a loss in reputation thus decrease demand for our products. In 2016, we engaged SustainAbility, an independent think tank and strategic advisor, to re-assess Nestlé's material issues. Working together with Accenture for perspective on the commercial impact of material issues, they applied a structured method to quantify the relative materiality of the issues. The method allowed for greater precision in the scoring and ranking of our material issues than in previous years.</p>						<p>of demand for our products. The financial implication of reputational loss due to inaction on climate change is complex to quantify from a financial impact perspective. A directional banding of approximately CHF300 – 500 million revenue loss is estimated. Note this also includes the impact of changing consumer behaviour as it is difficult to separate from reputation. This estimate is based on assessments by 25 of our Markets, covering approximately 40% of Nestlé Group NNS,</p>	<p>and evaluate solutions to the complex climate change challenges we face. E.G., in 2016, we continue to support the initiative of “Caring for Climate”, and participated at several high-profile events organised around Global Compact +15 on business commitment to furthering climate change action. ii) We disclose in our website, integrated annual report pack and on-line Nestlé in Society reports, our activities to mitigation and adaptation. Our on-line Nestlé in Society reports 2016 is in line with GRI G4 guidelines. iii) Work actively with governments, trade bodies and NGOs to assess and test responsible approaches to</p>	<p>case studies, *the preparation and writing of the Nestlé in Society report, *the identification of material issues and the assurance of information disclosed in the Nestlé in Society Report. This figure does not include the cost of improvement projects that result in GHG emission reduction in 2016.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>which specifically identified this as a potential threat. The time horizon considered in the assessments is 3 years.</p>	<p>provide environmental information, including to consumers. iv) Regular stakeholder convenings focus on issues specific to our company, including climate change and delivering our commitments. In 2016, representatives of NGOs, academia, government and international organizations attended our stakeholder convening in Geneva. We proactively engage in activities that could either directly or indirectly influence policy on climate change through direct engagement, trade associations and funding research organizations including The Consumer Goods</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Forum, FoodDrinkEurope, WBCSD and the UNFCCC.	
Changing consumer behavior	<p>Changing consumer behaviour patterns towards products that are perceived as better for the environment than Nestlé products could result in a declining demand for products perceived GHG-intensive. Recent studies from Nielsen and Deloitte show that millennials are most willing to pay more for products and services seen as sustainable or coming from socially and environmentally responsible companies. Consumers would like to know if the food</p>	Reduced demand for goods/services	1 to 3 years	Direct	More likely than not	High	<p>A reduction of demand for our products due to consumer's perceptions that the Manufacturing of Nestlé products might have an impact on the environment (e.g packaging, use of natural resources, non-recyclability of coffee pods) is complex to quantify from a financial impact perspective and challenging to separate the impact from the "Reputation" risk driver. The directional banding of approximately CHF300 – 500 million revenue loss estimation</p>	<p>The management methods include: i) To further optimise the environmental performance of our products, we continued the development of EcodEX, a multi-criteria ecodesign tool that covers both packaging and ingredients in all product categories. ii) We continue to invest in new packaging options. E.g. replacing a triple layer of PE, aluminium and PET with a duplex structure in Nescafé Creamy White soluble coffee packets saves Nestlé Philippines 188 tonnes of material a year. iii) To provide meaningful and accurate products' environmental</p>	<p>The costs associated with these actions in 2016 were around 2.1 million CHF including: *CHF 78k for the co-development of ecodesign tools, *CHF 120k for roll out of EcodEx, *CHF 63k for RISE implementation, *CHF 455k for the participation of EU Product Environmental Footprint experimentation and *CHF 1409k for the cost associated with the preparation of the Nestlé in Society report. This does not include the cost of conducting the assessments and the investments in improvements</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>they eat is produced in an environmentally responsible way. They might request food manufacturers to disclose environmental performance of their products. The risk is that consumer's behaviour changes towards competitors companies that are perceived as products having lower carbon footprint than Nestlé. Consequently, this could lead to a potential reduction in the demand for our products. A Consumer Insight study by Data Monitor estimates that 47% of consumers are highly attentive to packaging information about</p>						<p>detailed under the "Reputation" risk driver also includes the impact of changing consumer behaviour.</p>	<p>performance to consumers, we launched a communication programme worldwide Nestlé Beyond the Label. E.g. Nestlé Professional created a tool that helps customers understand and compare the environmental performance with parameters such as: the type of coffee machine chosen and the type of cup used. iv) We implemented the automatic power-off function or stand-by mode to all Nespresso consumer machine. E.g., PIXIE, U and Inissia, three recent machines, automatically switch off after 9 minutes of inactivity, consuming 60% less energy than A-ranked. v) Engaging consumers. E.g.</p>	<p>programmes.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	how a product is manufactured.							Nestlé Waters has established the Recycling Generation to encourage recycling behaviour change. These actions could reduce the magnitude of impact of the risk by reducing the financial implication by 50%.	
Other drivers	According to FAO, food waste is the third emitter of GHG globally after China and USA. The GHG emissions of food produced and not eaten are estimated to 3.3 Gtonnes of CO2e. If 1/3 of the food produced is lost and wasted every year, then significant amounts of GHG emissions will be emitted annually that may	Other: Reduced supply of agricultural raw materials	1 to 3 years	Indirect (Supply chain)	More likely than not	Low-medium	The financial implication of food wastage in the supply chain, especially for milk, is estimated at CHF 40 million a year in increasing costs. The estimate is based on the cost incurred in storage tanks, chill centers and veterinary aid.	The management methods include: i) At R&D stage, Nestlé developed high-yield, drought and disease resistant coffee and cocoa plants, to reduce farmers loss due to disease or climate-related issues; we initiated a research project in France to grow carrots more uniformly shaped to reduce waste in harvesting, and carrots with higher dry matter content to reduce waste in processing. ii) At	The costs are estimated at CHF 33 million in assistance to around 83 600 farmers. Of this, CHF 28.9 million was direct financial assistance such as investment loans, operational loans, advanced payments, subsidised interest rates and bank guarantees.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>exacerbate environmental challenges. When looking at milk losses in particular, FAO estimates that milk waste can make up approximately up to 40-65% of total food waste some countries. For Nestlé, this poses a risk as milk losses can reduce the availability of milk supply to our collections points. In addition, milk losses contribute to the generation of Scope 3 GHGs. In the traditional networks, losses of milk are in the order of 16% - 27% according to FAO. In the milk supply chain, we've provided cooling facilities to farmers in developing</p>							<p>agricultural stage, Nestlé provide technical advice and training to farmers. E.g. Our Grains Quality Improvement Project is working towards a 60% reduction in mycotoxin contamination levels in the cereal grains we source for our cereal brands in Central and West Africa. iii) We have developed creative solutions to help consumers use leftovers, e.g., doughs (pizzas, pasties, etc.) that can be filled with leftover food from the fridge. These methods can reduce food waste and GHG emissions and therefore the magnitude of the risk is eliminated in a 5 years' timeframe.</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>countries that have reduced milk losses. In Pakistan, in the district of Renala, we have more than halved the losses of milk between the cooling facilities and the factory. As stated by the FAO, the average global emissions from milk production, processing and transport is estimated to be 2.4 CO₂-eq. per kg of FPCM (fat and protein corrected milk) at farm gate. By implementing these initiatives, Nestlé saved more than 4.5 million CO₂e. Nestlé may face scarcity of raw materials and water, and threaten its food business, if no actions are taken.</p>								

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product labeling regulations and standards	New regulations and initiatives to provide environmental communication to consumers based on scientific evidence are expected in some countries (e.g. European Union, France, Belgium, Sweden, Germany, Greece, China, Thailand, Japan, Mexico). For example, a	Increased demand for existing products/services	1 to 3 years	Direct	Virtually certain	High	The opportunities driven by product labeling regulations and standards can increase demand for existing products. The estimated financial implications of this opportunity could be circa between CHF 450-850 million per year, in increase in	To exploit this opportunity, our management methods include: i) We use the most efficient technologies to further optimise energy and water consumption. E.g. In 2016, we reduced our GHG emissions and water use per tonne of product by 39% respectively since 2006. ii) We participate in the	The costs associated with these actions in 2016 were around 2.1 million CHF including: *CHF 78k for the co-development of ecodesign tools,*CHF 120k for roll out of EcodEx, *CHF 63k for RISE implementation, *CHF 455k for the participation of EU Product Environmental Footprint experimentation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>recent public EU consultation assessed the effectiveness of potential mandatory provision of environmental information to consumers in different patterns. Among consumers with high awareness of climate change, this represents an opportunity for Nestlé for its processed food considering that in general it has a better environmental performance as compared to equivalent home made products. For example, a Life Cycle Assessment (LCA) showed</p>						<p>revenue. This assuming that this can result between 0.5-1% of sales increase.</p>	<p>development of harmonised methodologies to assess environmental performance. E.g. in 2016 we participated in the European Commission pilot to develop a common environmental footprint methodology for product categories. iii) We provide meaningful and accurate environmental information to consumers about our products. E.g. we launched a communication programme worldwide: Nestlé Beyond the Label. In 2016, fact based environmental information is accessible in 131 countries.</p>	<p>and *CHF 1409k for the cost associated with the preparation of the Nestlé in Society report. This does not include the cost of conducting the assessments and the investments in improvements programmes.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>that a cup of soluble coffee has a better environmental performance than a cup of drip filter coffee. Demand could thus increase for Nestlé products due to the labelling regulations and standards. This could lead to an increased demand for our products. Nestlé has already conducted LCA for all its products categories and incorporated ecodesign tools at the earliest stage in the development of its new and renovated products.</p>							<p>iv) We systematically assess the environmental performance of our product categories. E.g. We have rolled EcodEx, a multi-criteria eco-design tool that covers both packaging and ingredients and can be applied to all product categories. In 2016, we have continued the development of EcodEX to improve existing functionalities and improve user friendliness. These measures can enhance the magnitude of the opportunity by helping us to reduce the GHG emissions</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								associated with our products, taking actions to improve which can result in economic saving.	
Cap and trade schemes	Cap and trade schemes present incentives to cutting greenhouse gas emissions cost-effectively through energy efficiency projects in our factories which reduce GHG emission. In 2016, Nestlé had 17 factories in the European Union in Spain, Portugal, Germany, Hungary, Italy, UK and France participating in the European Trading Scheme.	Reduced operational costs	1 to 3 years	Direct	Virtually certain	Low	Potential financial implications for Nestlé are estimated at CHF 2.4 - 3m by 2020, taken in account specific actions for CO2 emission reduction that are planned. This assumes that all planned efficiency measures are implemented and the carbon price increase to 15 € per t of CO2 by 2020. The financial implication scale is minor	To exploit this opportunity, our management methods include: i) To set a CO2 taskforce that closely monitor the EU-ETS development. ii) To reduce our emissions by investing in more efficient technology, e.g. environmental improvements project in factories resulted in saving more than 50k t of CO2e in 2016. Examples of our greenhouse gas emission	The costs associated with these ETS measures are estimated at CHF 82 million in energy savings projects in our factories for 2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Nestlé has ended Phase II (end 2012) in a surplus position, which means Nestlé's sites generated less emission than allowances received. It represents an opportunity to reduce operational cost. The cost of allowances is expected to rise as demand increases and the amount of allowances available on the market decreases. The new technologies we are implementing and the experience acquired in cap and trade schemes in EU is an opportunity for</p>						to the company.	<p>reduction projects include: In the United States, more than 20% of the total electricity used by our PetCare plants came from renewable resources, such as solar, wind and hydroelectricity. Nestlé Mexico currently meets 80% of its electricity needs through wind power, one of the first food companies in Mexico to do so; since April 2016, our entire grid-supplied electricity in the UK and Ireland has been sourced from renewable sources, including wind; Nestlé's worldwide</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	other worldwide factories. This is also an opportunity of an additional competitive advantage in other countries may put in place GHG emissions reduction mechanisms (e.g. Australia-China).							operations now include 22 factories that use spent coffee grounds as a renewable fuel, and 24 factories use wood chips. Thus, the share of renewable energy in our total on-site energy consumption has increased by 42% since 2010.	
Other regulatory drivers	In 2016, 197 countries adopted an amendment to phase down HFCs under the Montreal Protocol in Kigali. Under the amendment, countries committed to cut the production and consumption of HFCs by more than 80	Reduced operational costs	3 to 6 years	Direct	Very likely	Medium-high	We estimate that the potential financial implications of the opportunity amounts to around CHF 300 million in the 5-10 years' timeframe. This will help reduce operation cost in the future as Nestlé has	At Nestlé, we are fully committed to providing leadership on climate change. We have taken decisive steps in the area of refrigerants and achieved a broad expansion of the use of safe and natural refrigerants. We believe that	We are phasing out synthetic refrigerants with high global warming and ozone depleting potential such as HFCs, and in 2016 we have invested around CHF 9.9 million to replace them with natural alternatives in our industrial refrigeration systems.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>percent over the next 30 years. The ambitious phase down schedule will avoid more than 80 billion metric tons of carbon dioxide equivalent emissions by 2050—avoiding up to 0.5° Celsius warming by the end of the century—while continuing to protect the ozone layer. Also regulations to phase out HFCs have entry into force in for example US and the European Union. Companies that use already safe natural refrigerant alternatives for industrial</p>						<p>already invested that amount to use natural refrigerants in its industrial refrigeration installations and have implemented new solutions to improve their performance.</p>	<p>business is part of the solution and that industry wide, collaborative efforts are pivotal to scale efforts and make lasting change. To exploit this opportunity, our management methods include: i) In 2016, we expanded the use of natural refrigerants by installing 47 new refrigeration systems in, for example, Japan, Cameroon, China, Pakistan, Indonesia, Hungary, France, Switzerland, UK, USA, Brazil, Colombia and Chile. ii) In 2016, we</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	refrigeration installations and have implemented new solutions to improve their performance will already comply with new regulations.							continued to operate carbon dioxide/ ammonia (CO2/NH3) cascades systems in the UK and US. This technology has become our standard worldwide for low temperature applications such as coffee freeze drying, frozen food manufacture and cold storage. iii) Our Nestlé global refrigeration experts contribute to transfer knowledge worldwide, facilitating the implementation of natural refrigeration systems. To overcome the barriers to	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								wide-scale adoption of more climate-friendly refrigeration, we continue to work with major equipment suppliers and organizations to test and monitor different refrigerants in various applications. iv) In 2016, we actively participated in the Consumer Good Forum refrigeration group, and have been piloting and implementing natural refrigeration systems all over the world, and with positive results.	
Other regulatory drivers	The EU Directive on disclosure of non-financial	Other: To publish environmental information to stakeholders	1 to 3 years	Direct	Likely	Unknown	A strong track record in climate change	To exploit this opportunity, our management methods	The cost associated with the preparation of the Nestlé in

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and diversity information entered into force in December 2014 and the European Commission is now preparing guidelines for companies. First reports are to be published in 2018 (on financial year 2017). The new Directive requires companies to explain how specific environmental, social and governance criteria have a material impact on business operations. The issues companies will be reporting on may influence not only the business operations	provides an opportunity to Nestlé, as external stakeholders' expectations about Nestlé environmental responsibility can be lived up.					leadership can contribute to improved reputation of Nestlé in the eye of public. This can affect the reputation of Nestlé amongst key opinion leaders in climate change. The implication can be estimated in an increase of 20% in the total mentions of "Company with best approach on environmental impact" among key opinion leaders. Consumers may buy more Nestlé products which could translate in a better bottom line. This is	include: i) We continually strive to improve the environmental performance of our product and activities. In 2016, we tracked our environmental performance indicators in every site in our advanced system SHE-PM. This information is used to report the GHG emission performance over the time. II) We also provide fact based information on environmental sustainability in 131 countries. iii) At a global level Nestlé published its 2016 Nestlé in Society report which includes environmental	Society report amounts to CHF 1409k. These costs include the organization of stakeholder convenings, the publication of environmental case studies, the preparation and writing of the Nestlé in Society report, the identification of material issues and the assurance of information disclosed in the Nestlé in Society Report. This does not include the environmental improvement projects that result in GHG emission reduction in 2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	directly, but also company's future profitability. Nestlé has 114 factories in Europe, so a mandatory requirement to publish environmental information to stakeholders provides an opportunity to Nestlé, as external stakeholders' expectations about Nestlé environmental responsibility can be lived up.						very difficult to measure.	material issues. These measures can enhance the magnitude of the opportunity by improving the reputation of Nestlé leadership on climate change which may result in sales increase.	

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in temperature extremes	Nestlé relies on agricultural raw materials (e.g. coffee, cocoa, milk, sugar, soy) and the changes in extreme temperatures may favour the growth of some of them by increasing their yield and extend their harvesting period. To secure long term supply of raw materials, we work to ensure the development of Nestlé's suppliers, and make significant contributions to helping small farmers, including women farmers. This presents a competitive opportunity to Nestlé. By helping farmers secure long term availability, farmers increase the output from their limited resources, and improve the	Other: Ensure supply of key agricultural raw materials	>6 years	Indirect (Supply chain)	More likely than not	High	Climate change can result in increased production of key raw materials which can result in increased long term supply of key raw materials. Increasing supply of coffee, cocoa and other raw materials can represent a positive financial implication on our revenues of CHF 500 million. This was estimated considering revenues of those product categories and percentage of increase in supply if methods are in place to optimise the opportunity. The financial implication scale is minor to the company.	To exploit this opportunity, our management methods include: i) We employ technical advisors who train and consult on agricultural practices and farm business management practices to the farmers. E.g. In 2016, 363 000 farmers were trained through capacity-building programmes. ii) In 2016, we distributed 28.3m high yielding, disease-resistant coffee plantlets to farmers in order to help them increase the output of their limited resources and improve the quality of their product. We need to support local supplier so they can provide us with raw materials. This helps building prosperous local	The cost associated with these actions amounts to CHF 600 million which include the cost of those methods up to 2020. On top of that CHF 23 million of financial support was provided to farmers, 13.9m was invested in plant science and CHF 35 million was spent on activities with cocoa and coffee farmers in 2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>quality of their product so they can receive a higher price. This is a win-win opportunity as this provides Nestlé with a reliable supply of high-quality raw materials. In northern Europe, for example, climate change is expected to bring sugar yield increases of around 1 t/ha, for the period 2021-2050 according to the Hadley climate change model. Considering that the global demand for sugar is expected to rise by 2020, and that land competition due to ethanol production made out of sugar canes may increase, new sourcing regions presents an opportunity as</p>							<p>societies by providing employment, increasing skill levels and enabling technology transfer. iii) To find improved ways to control plant diseases. E.g. Nestlé produces coffee seedlings in a disease-free environment and supplies them to farmers to replace old, less productive, disease-prone coffee trees. These measures are expected to enhance the magnitude of the opportunity to high as well as this also results in the business growing.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Nestlé will be able to source some from regions where it was impossible to grow before. This can result in a secure supply of raw materials and also a decrease in operational cost related to transportation.								
Change in temperature extremes	Natural resources are constrained. Improving our efficiency, quality and productivity, translates into doing more with fewer resources and less waste. In particular, optimising packaging materials improve the overall environmental performance of the product and result in cost savings.	Reduced operational costs	1 to 3 years	Direct	Likely	Medium-high	We estimate that the potential financial implications of this opportunity amounts to between CHF 300 - 500 million in the 5-10 years' timeframe. We began optimising packaging in 1991, ahead of our competitors; since then, we have avoided using 794 355 tonnes of packaging material and saved almost CHF 1.4 billion. We have also	To exploit this opportunity, our management methods include: i) A support by our Packaging Environmental Sustainability Network, comprising 11 core team members and 251 affiliates. The network provides scientific support, information and training on environmental sustainability. In 2016, it helped train 682 Nestlé employees on one or more of the key	In 2016, the cost associated with the licenses and maintenance of Ecodesign tools to improve the environmental performance of our products amounted to CHF 120k and the co-development of it to be CHF 78k.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>avoided more than 430 893 tonnes of CO₂eq – equivalent to 91 679 cars being taken off the road for one year.</p>	<p>focus areas. ii) We improve the environmental performance of our packaging across their life cycle through our eco-design tools. To date, we have evaluated 6641 projects and 19297 scenarios, covering packaging and product development. iii) We continually seek innovative approaches to packaging. A recent example was our re-design to produce new lightweight bottles for our market-leading Vittel and Contrex bottled water brands. Our Packaging Development team identified several design modifications, including conversion to a shorter neck finish that enabled us to</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								lower the weight of the 1.5 litre bottles from 31.0 g to 25.5 g – a 17% saving. In terms of total PET saved from all bottles, that is the equivalent of 2708 tonnes of plastic. Our initial tests for the new bottles, known as Ecoshape (Vittel) and Greenlight (Contrex), combined with our EasyGrip cap, showed clear consumer preference for the optimized packaging. As a result, we started manufacturing the bottles for both brands, launching to market in 2016.	
Change in precipitation extremes and droughts	Water is becoming increasingly scarce, and water is vital for feeding a growing world population and for the development of Nestlé. We are	Other: Doing more with fewer resources and less waste	>6 years	Direct	Likely	Medium	The financial implications are estimated between CHF 100-150 million in a 10 years timeframe. This consider the estimated savings	To exploit this opportunity, our management methods include: i) As stated in The Nestlé Policy on Environmental Sustainability we aim to use the	In 2016, the costs associated with all these projects are estimated at approximately CHF 100 million in total.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>committed to the continual improvement of the environmental performance of our activities, products and services. Specific to our food and beverage business we focus on water preservation, natural resources efficiency, biodiversity conservation, air emissions reduction, climate change adaptation, and zero waste. Improving our efficiency, quality and productivity, translates into doing more with fewer resources and less waste. More specifically, our work in environmental sustainability provides opportunities to make cost savings by</p>						<p>resulting from selected 500 environmental performance improvement projects implemented in the reporting year.</p>	<p>most efficient technologies and apply best practices in order to further optimise energy and water consumption, minimise waste generation, utilise sustainably managed renewable energy sources, recover value from by-products and control and eliminate emissions, including greenhouse gases.</p> <p>ii) In 2016, Nestlé has reduced GHG per tonne of product by 39% since 2006. In 2016, we implemented or began the implementation of more than 500 environmental saving projects in our operations that led to aprox. GHG reduction of 200k tonne of CO2 eq., 645k m3 of water</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	improving our resource use efficiency – including raw and packaging materials, energy and water – and by avoiding waste. So that Nestlé products will be also better for the environment along the value chain.							saved and 1736kJ saved. This is part of our commitment to reduce GHG emissions (Scope 1 and 2) per tonne of product in every product category to achieve an overall reduction of 35% in our manufacturing operations versus 2010 by 2020. For example, in 2016 in Switzerland, an energy recovery project resulted in 535 tonne of CO2 eq. Other examples of CO2eq-saving projects implemented in 2016 include: The installation of a new biomass boiler in Morocco, (12'238 t of CO2 annually); a new dryer heat recovery in USA (1'356 t CO2); and a more efficient energy recovery system in China	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								(1k t CO2). These measures are expected to enhance the magnitude of the opportunity to high as well as this also results in the business growing.	

CC6.1c

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behavior	In 2016, we provided information to our consumers and other interested stakeholders on packaging, brand websites and corporate websites in 131 countries. We have deployed Quick	Increased demand for existing products/services	3 to 6 years	Direct	Likely	High	According to the 2015 Nielsen Global Corporate Sustainability Report, sales of consumer goods from brands with a demonstrated commitment to sustainability have grown more than 4% globally, while	To exploit this opportunity, our management methods include: i) We assess the environmental performance of our products using eco-design tools. In 2016, more than 6000 projects were evaluated.	In 2016, the costs associated with these management methods is estimated at CHF 100million. These include the cost associated with the preparation of the Nestlé in Society report, co-development

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Response (QR) codes in 50 countries, linking packaging to mobile websites that contain related, user-friendly content. Research confirms that increasingly consumers are considering social and environmental dimensions in their purchase decisions, and willing to pay extra for sustainable offerings. Media, NGOs, retailers and out-of-home operators are further sensitizing consumers to these issues. Today more than ever, consumers and customers are looking to understand the</p>						<p>those without grew less than 1%. Assuming that this opportunity could increase sales around 0.5%, we estimate the potential financial impact on CHF 350-450 million on revenue.</p>	<p>The use of LCA results to inform our consumers and other interested stakeholders. We also provide them with advice on how to avoid food waste and how to reuse, recycle or dispose of packaging. Many of our products highlight their environmental sustainability aspects stating ingredients, production methods and adherence to standards, including our Responsible Sourcing Guideline. ii) In 2016, we implemented more than 150 Environmental Target Setting projects in our factories to improve the</p>	<p>of ecodesign tools, roll out of EcodEx, implementation of selected Environmental improvements projects implemented in our factories.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>social and environmental dimensions of the brands they support and the companies behind those brands. Committing to sustainability might just pay off for consumer brands, according to the 2015 Nielsen Global Corporate Sustainability Report. In the past year alone, sales of consumer goods from brands with a demonstrated commitment to sustainability have grown more than 4% globally, while those without grew less than 1%. Consumers in Latin America, Asia, Middle East,</p>							<p>environmental performance of our products. iii) In 2016, we provided information to our consumers and other interested stakeholders on packaging, brand websites and corporate websites in 131 countries. We have deployed Quick Response codes in 50 countries, linking packaging to mobile websites that contain related, user friendly content. iv) In 2016 we published the Nestlé in Society report highlighting our commitment to environmental sustainability.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and Africa are 23%-29% more willing to pay a premium for sustainable offerings. By 2020, Nestlé has committed to improve the availability and consistency of fact-based environmental information for consumers on our digital and other channels.								
Reputation	Based in part on a media and competitive scan, we identified that climate change mitigation remains a central concern for stakeholders and consumers. Consumers are more likely to take purchasing decisions linked to the environmental impacts of what they buy. Nestlé	Increased demand for existing products/services	Up to 1 year	Direct	Virtually certain	Medium-high	Creating Shared Value is our way of delivering a long-term positive impact for shareholders and for society, through everything we do as company. Considering the fact that our total group sales was CHF 89.4 billion in 2016, the consequences of such an impact is considered	To exploit this opportunity, our management methods include: i) In our operations we continue to identify and implement projects to improve our environmental impact by reducing non-renewable energy consumption, GHG emissions, avoiding waste	The cost associated with the preparation of the Nestlé in Society report amounts to CHF 1409k. This does not include the environmental improvement projects that result in GHG emission reduction in 2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>has been recognised as a company leader that cares for the environment. Our strong commitments to climate protection and resilience initiative will help building trustful partnerships with our customers, consumers and stakeholders. As Nestlé is taking leadership approach in climate change, this can result in an increase in reputation and increased demand for our products. By continuing to communicate our actions and performance on climate change (Nescafé plan and Nestlé</p>						significant.	<p>and improving the environmental performance of our products. E.g.: In 2016, we reduced direct GHG emissions per tonne of product by 39%. 16.9% of the total on-site energy consumption was coming from renewable sources. ii) We provide fact-based environmental information to consumers in 131 countries, enabling them to make informed choices and improve their own environmental impacts. In 2016 we published the Nestlé in Society report highlighting our commitment to climate change leadership.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Cocoa plan, Nestlé in society report) we will be able to take advantage of this opportunity. At the same time, our actions could impact our human resources management by recruiting competent employee engaged to our environmental commitments.							These measures are expected to increase the reputation that consumers have of Nestlé and therefore increase the magnitude of the impact.	
Other drivers	In order to further understand and reduce the waste occurring in our value chain, we initiated a milk loss and waste mapping exercise in Pakistan, applying the draft Food Loss and Waste Accounting and	Other: Enhanced relation with suppliers and the provision of right quantity of milk at the expected quality level	>6 years	Indirect (Supply chain)	More likely than not	Low-medium	The financial implication due to avoided milk losses in Pakistan can be evaluated at around 50 million CHF per year. Note: The estimated benefits do not include the yield improvements. Farmers, milk traders are the major	Range of actions implemented that help to reduce food loss and waste along the dairy supply chain include: Provide adequate cooling, storage and transportation systems; Train farmers and share best	The cost adds up to around CHF 40 million per year for the actions listed in the management method. This cost is borne by the food manufacturer.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Reporting Standard. Reporting our data in conformance with the FLW Standard has been a valuable process that allowed us to identify quantities and destinations for each type of milk loss and waste along the value chain. The Pakistani dairy sector was chosen because of its complexity, the high volumes involved, and because it provided an opportunity to test the efficiency of our dairy hub model. In total, Nestlé processes 480 kilotonnes of milk a year, sourced mainly from traditional</p>						<p>beneficiaries from this. Food manufacturer secures supply of milk at the right quality. This enhances the relationship with suppliers and the provision of right quantity of milk at the expected quality level.</p>	<p>practices amongst them on practices that help avoid pre-harvest losses and reduce post-harvest losses; Work with feed suppliers to improve feed quality that help avoid pre-harvest losses through yield improvement; Implement lean management and problem solving methodologies to identify, reduce and report losses. For each stage of the value chain, we analysed all potential causes of loss and waste. Losses and waste were quantified (either through direct observation or interviews with</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	small farms but also some larger operations.							farmers, retailers, consumers, and others) and extrapolated across the value chain.	

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Thu 01 Jan 2015 - Thu 31 Dec 2015	3704351
Scope 2 (location-based)	Thu 01 Jan 2015 - Thu 31 Dec 2015	3926377
Scope 2 (market-based)	Thu 01 Jan 2015 - Thu 31 Dec 2015	3737984

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

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

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fifth Assessment Report (AR5 - 100 year)
CH4	IPCC Fifth Assessment Report (AR5 - 100 year)
N2O	IPCC Fifth Assessment Report (AR5 - 100 year)
HFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
PFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
Other: CFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
Other: HCFCs	IPCC Fifth Assessment Report (AR5 - 100 year)
Other: Halons	IPCC Fifth Assessment Report (AR5 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
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Further Information

Excel spreadsheet with emission factors for question CC7.4

Attachments

<https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC7.EmissionsMethodology/Nestlé 2016 Emission Factors-CDP.xlsm>

Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

3607901

CC8.3

Please describe your approach to reporting Scope 2 emissions

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

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO₂e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
3736579	3482617	

CC8.4

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?

Yes

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Head offices	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	While emissions from office activities may eventually be included in Nestlé's inventory, we currently focus on our most material emissions, and these occur in our industrial activities.
R&D	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	While emissions from R&D activities may eventually be included in Nestlé's inventory, we currently focus on our most material emissions, and these occur in our industrial activities.
Some recently acquired factories	Emissions excluded due to a recent acquisition	Emissions excluded due to a recent acquisition	Emissions excluded due to a recent acquisition	Some recent acquisitions have not yet implemented the reporting system to track the emissions at corporate level. While the Nestlé Environmental Requirements sets a maximum time frame of three years for new acquisitions to implement and comply with the reporting of environmental data, the majority of them start reporting in the first two years after their acquisition.
Distribution centers and transportation	Emissions are not relevant	Emissions are not relevant	Emissions are not relevant	All the data related to transportation and distribution activities are tracked in a separate system from activity data related to manufacturing. The majority of our transportation and distribution activities are also outsourced (~90%). For practical reasons, emissions occurring from Nestlé's own transportation and distribution activities (i.e. not outsourced, which are a minority) are calculated and aggregated with the outsourced activities as a whole and are therefore included in scope 3 emissions (question CC14).

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Data Gaps Data Management	Data is manually entered in our tracking and reporting tool on a monthly basis. This involves the risk of human errors or unintended mistakes in the system use.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Data Gaps Data Management	Data is manually entered in our tracking and reporting tool on a monthly basis. This involves the risk of human errors or unintended mistakes in the system use.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Data Gaps Data Management	Data is manually entered in our tracking and reporting tool on a monthly basis. This involves the risk of human errors or unintended mistakes in the system use.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC8.6a/Nestle CDP Verification statement 2017_31.05.17_Issued_V2.0.pdf	All document	ISO14064-3	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Market-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC8.7a/Nestle CDP Verification statement 2017_31.05.17_Issued_V2.0.pdf	All document	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year change in emissions (Scope 1)	This was part of the assurance of Nestlé's 2016 annual report.
Year on year change in emissions (Scope 2)	This was part of the assurance of Nestlé's 2016 annual report.
Year on year change in emissions (Scope 1 and 2)	This was part of the assurance of Nestlé's 2016 annual report.
Year on year change in emissions (Scope 3)	This is part of the assurance of our answer to the CDP 2017 questionnaire.
Year on year emissions intensity figure	This was part of the assurance of Nestlé's 2016 annual report.
Financial or other base year data points used to set a science-based target	This was part of the assurance of Nestlé's annual report in the years from which data points were used for science-based target setting.
Progress against emissions reduction target	This was part of the assurance of Nestlé's 2016 annual report.
Change in Scope 1 emissions against a base year (not target related)	This was part of the assurance of Nestlé's 2016 annual report (change against base year 2010).
Change in Scope 2 emissions against a base year (not target related)	This was part of the assurance of Nestlé's 2016 annual report (change against base year 2010).
Product footprint verification	As per our communication policies: all product footprints that are used for external claims and communications are third- party verified.
Emissions reduction activities	This was part of the assurance of Nestlé's 2016 annual report.

Additional data points verified	Comment
Renewable energy products	This is part of the assurance of our answer to the CDP 2017 questionnaire.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
United States of America	700464
China	289453
India	186366
Mexico	172210
Brazil	162437
France	149820
Spain	149547
South Africa	146901
Philippines	139319
Pakistan	135416
United Kingdom	127174
Japan	93901
Germany	82394
Russia	80687
Italy	77370
Chile	74102
Rest of world	840340

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

- By business division
- By facility
- By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Cereal Partners Worldwide	81752
Nestlé Skin Health	4880
Nespresso	6619
Nestlé Nutrition	158388
Nestlé Health Science	5388
Nestlé Waters	134111
Other Nestlé Food	3216763

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
ES PL Girona	95830	41.9878	2.793
CN PL Yinlu Xiamen	75635	24.738217	118.14
PK PL Sheikhpura Factory	73500	31.42	73.58
US PL Nestle Anderson	64629	40.042454	-85.740477
IN PL Moga	63046	30.821253	75.150604
US PL Bloomfield Nppc-gp	61997	36.875363	-89.871318
ZA PL Estcourt	60114	-29.007803	29.870603
PH PL Cagayan de Oro Factory	57429	8.475004	124.730444

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
PK PL Kabirwala Factory	56552	30.372120	71.883432
CN PL Yinlu Anhui	53253	32.297333	118.315949
US PL King William Nppc-gp	49110	37.687157	-77.013762
JP PL Himeji Factory	48094	34.896607	134.734424
MX PL Toluca - Cafes y Culin.	46682	19.289575	-99.617103
US PL Freehold	46009	40.259088	-74.275648
ID PL Kejayan	44878	-7.708246	112.861328
IN PL Nanjangud	44115	12.141711	76.65993
NG PL Agbara	41400	6.502305	3.091294
ES PL La Penilla	38718	43.315900	-3.879900
MX PL Lagos de Moreno-Lacteos	38332	21.358775	-101.926003
RU PL Kuban Coffee	38250	45.6435	38.9487
Rest of facilities	2510328		

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Milk products and Ice cream	1100145
Powdered and Liquid Beverages	865502
PetCare	519293
Nutrition and Health Science	409327
Prepared dishes and cooking aids	302612
Confectionery	276911
Water	134111

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes 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)
United States of America	1280478	1248887	2459688	167631
China	462521	480061	799786	15522
India	121539	139935	153652	280
Mexico	145212	54020	281514	177885
Brazil	57650	20567	422866	202364
France	35285	29094	550853	0
Spain	28926	9529	118159	78074
South Africa	100188	100242	118890	0
Philippines	116071	85475	201163	23461
Pakistan	6553	6690	15753	0
United Kingdom	126659	48539	283425	166594
Japan	33514	24397	58590	0
Germany	123049	114704	288020	0
Russia	85050	122024	201148	0
Italy	38033	0	110884	110884
Chile	54842	47415	113429	0
Rest of world	921009	951038	2058180	19812

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

- By business division
- By facility
- By activity

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Cereal Partners Worldwide	94818	89517
Nespresso	1151	1291
Nestlé Nutrition	149134	143626
Nestlé Health Science	2909	355
Nestlé Skin Health	3908	1266
Nestlé Waters	568977	575026
Other Nestlé Food	2915682	2671536

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
US PL Nestle Anderson	88984	98110
CN PL Yinlu Hubei	93217	96867
CN PL HFC Dongguan GF	59854	64523
CN PL Yinlu Xiamen	55091	59388
US PL Little Chute	47303	52155
US PL NW Mecosta Factory	41629	44041
US PL Mt Sterling	42244	42903

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
RU PL Kuban Coffee	28771	41870
ID PL Kejayan	41435	38608
US PL Oklahoma City Nppc	36686	38133
US PL NW Hawkins Factory	35171	36558
CN PL Yinlu Shandong	33412	34766
US PL NN Fort Smith	32819	34113
US PL NW Hollis Factory	29805	34050
IN PL Moga	29461	33983
US PL Burlington	29929	32999
DE PL Nonnweiler ND	33545	31812
US PL Solon	28617	31552
US PL Denver Nppc	36069	31333
IN PL Nanjangud	27052	31204
Other sites	2885485	2573649

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Confectionery	445047	389200
Milk products and Ice cream	799418	753134
Nutrition and Health Science	325121	284226
PetCare	488709	423467
Powdered and Liquid Beverages	655765	608276

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Prepared dishes and cooking aids	453542	449289
Water	568977	575025

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

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

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	27233
Steam	609288
Cooling	0

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

64779591

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Anthracite	2723445
Diesel/Gas oil	2279359
Liquefied petroleum gas (LPG)	2018366
Lignite	616820
Natural gas	42612862
Residual fuel oil	6669533
Landfill gas	197290
Other: Spent Coffee Grounds	3340554
Wood or wood waste	4321206
Biogas	156

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Energy attribute certificates, Renewable Energy Certificates (RECs)	166594	0	Nestlé UK purchases Guarantees of Origins to power its sites on renewable electricity, and will move to direct PPA once the wind farm they have commission will come on line in 2017.
Contract with suppliers or utilities, with a supplier-specific emission rate, not backed by electricity attribute certificates	233079	0	"Nestlé Guatemala consumed electricity generated from hydro power. Nestlé Brazil covers about half of its electricity consumption with green power; the origin of the electricity in the trades is guaranteed by Brazil's National Electrical Energy Agency."
Contract with suppliers or utilities, supported by energy attribute certificates	193576	0	"Nestlé Spain and Nestlé Italy cover their electricity consumption with Guarantees of Origin as part of their power purchase agreement with E.ON. A Purina site in the US buys a Green-e certified green electricity product."
Direct procurement contract with a grid-connected generator or Power Purchase Agreement (PPA), where electricity attribute certificates do not exist or are not required for a usage claim	221569	0	"Nestlé has a power purchase agreement with CISA-GAMESA, allowing approximately 85% of the total electricity consumed by Nestlé factories in Mexico to be supplied by wind power. The power purchase agreement entered into force in 2012 and started to deliver its environmental benefits since July 2012. A Purina site in the US has a direct power purchase agreement with a hydro project."
Direct procurement contract with a grid-connected generator or Power Purchase Agreement (PPA), supported by energy attribute certificates	147689	0	A Waters factory in the US has a direct PPA backed by renewable energy certificates.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
7604830	7599478	5352	5352	5352	

Further Information

The RE100 Reporting Spreadsheet was sent via email to Shailesh Telang on 8th June 2017.

Page: CC12. Emissions Performance

CC12.1

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

Decreased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	7.2	Decrease	In the reporting year 2016, 538'014 tCO ₂ e were reduced by our emissions reduction projects. Our total Scope 1 and 2 emissions in the previous year were 7'478'924 tCO ₂ e. Therefore, we arrived at a 7.2% decrease: $(538'014/7'478'924)*100 = 7.2\%$. Indeed, if Nestlé had produced its 2016 production volume with the same carbon intensity as in 2015, it would have emitted 7.68 million tonnes CO ₂ e in 2016; but as a result of our

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
			emission reduction activities, we emitted 7.09 million tonnes CO2e which leads to a 7.2% decrease in emissions. In our operations we continue to reduce GHG emissions by improving energy efficiency, switching to cleaner fuels and investing in renewable sources, such as biomass as well as solar and wind energy. We increased the use of renewable fuels (+1.5% from 2015 to 2016) and the use of renewable electricity (+51.3% from 2015 to 2016). Recent initiatives include: • The UK and Ireland: since April 2016, our entire grid-supplied electricity in the UK and Ireland has been sourced from renewable sources, including wind; • Mexico: Nestlé Mexico currently meets 80% of its electricity needs through wind power, one of the first food companies in Mexico to do so. • We opened Switzerland's largest agricultural biogas facility next to our Henniez bottling plant. The new plant uses 25 000 tonnes of agricultural fertiliser from 27 local farms, to which will be added 3800 tonnes of organic waste raw material generated by Nespresso and Nescafé. The plant will produce 4 million kWh of electricity and 4.5 million kWh of heat, avoiding annual emissions of 1750 tonnes of CO2. • Nestlé Waters opened a new bottled water plant in 2016 that showcases 'smart' technology: the Vera Naturae plant derives all its energy from environmental sources – generating zero CO2 emissions. We achieved this through photovoltaic systems, LED lighting, and heat recovery and retention systems."
Divestment			
Acquisitions	1.1	Increase	
Mergers			
Change in output	0.9	Increase	Excluding the Acquisitions (see the item "Acquisitions" above), the increase in output in 2016 resulted in an increase in absolute GHG emissions. Data used for the calculation: In 2016, the production volume increased by 0.5 million tonnes. If no measures had been introduced, by using the same efficiency as in 2015, the emissions related to this additional production volume would be 0.06 million tonnes CO2e, that is, 0.9% increase compared to 2015 (7.47 million tonnes CO2e).
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.000079	metric tonnes CO2e	89469000000	Market-based	5.9	Decrease	"A 5.9% decrease of our emissions per unit of revenue was achieved thanks to our emissions reduction activities. As explained in 12.1a under "Emissions reductions activities", we aim to use the most efficient technologies and apply best practices in order to further optimise energy, utilise sustainably managed renewable energy sources, recover value from by-products and control and eliminate emissions, including greenhouse gases. Our environmental reporting is based on operational control. The intensity calculation would require to adapt 2015 and 2016 revenue figures so they reflect the same organizational boundary as the emissions data. However, we cannot disclose financial figures that are different from the official ones communicated publicly. We therefore need to adapt the environmental scope specifically for this question in order to have a consistent numerator and denominator. A recent change in our accounting rules now requires to exclude joint ventures, which is why emissions related to our joint ventures must be removed from the environmental scope as explained above. After performing all these adaptations, we have a decrease in CO2e emissions of 5.9% per unit of revenue."

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.127	metric tonnes CO2e	metric tonne of product	55788908	Market-based	7.2	Decrease	"A 7.2% decrease of our emissions per tonne of product was achieved thanks to our emissions reduction activities. As explained in 12.1a under "Emissions reductions activities", we aim to use the most efficient technologies and apply best practices in order to further optimise energy, utilise sustainably managed renewable energy sources, recover value from by-products and control and eliminate emissions, including greenhouse gases. Recent initiatives include: • The UK and Ireland: since April 2016, our entire grid-supplied electricity in the UK and Ireland has been sourced from renewable sources, including wind; • Mexico: Nestlé Mexico currently meets 80% of its electricity needs through wind power, one of the first food companies in Mexico to do so; • We opened Switzerland's largest agricultural biogas facility next to our Henniez bottling plant. The new plant uses 25 000 tonnes of agricultural fertiliser from 27 local farms, to which will be added 3800 tonnes of organic waste raw material generated by Nespresso and Nescafé. The plant will produce 4 million kWh of electricity and 4.5 million kWh of heat, avoiding annual emissions of 1750 tonnes of CO2. • Nestlé Waters opened a new bottled water plant in 2016 that showcases 'smart' technology: the Vera Naturae plant derives all its energy from environmental sources – generating zero CO2 emissions. We achieved this through photovoltaic systems, LED lighting, and heat recovery and retention systems."

Further Information**Page: CC13. Emissions Trading**

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO₂e	Details of ownership
European Union ETS	Fri 01 Jan 2016 - Sat 31 Dec 2016	226321	69876	359722	Facilities we own and operate

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Our strategy for complying with the EU ETS includes improving energy efficiency, switching to cleaner fuels (from coal to gas, for example) and investing in renewable sources, such as spent coffee grounds and wood from sustainably managed forests as well as solar and wind energy, and the purchase of carbon credits.

In cases when those measures may not provide the amount of reductions necessary to comply with regulations, our strategy includes the purchase of carbon credits.

Nestlé EU-ETS strategy is to remain compliant considering the following action plan:

1. Facilities which might face a credit deficit submitted an action plan to fulfil their EU-ETS allowances.
2. Evolution of CO2 emissions and progress on the corresponding action plans set by facilities are analysed on a quarterly basis.
3. Potential climate projects in emerging markets are continuously identified to create Certified Emission Reductions (CER) since these CERs could offset potential deficits of Nestlé facilities in Europe or be traded on the Carbon credit market and create additional revenues for Nestlé.

At the end of 2016, 18 Nestlé factories were participating and considered in scope of the EU ETS Phase III. The situation on emissions and allowances of each factory is closely managed and analysed by Environmental Managers in each country on a monthly basis. The information is sent to Nestlé Corporate on a quarterly basis, where a multifunctional team (Engineering, Environmental Sustainability, Group Risk Management, Commodity Purchasing, Finance and Zone EMENA) analyse the information received and take decision on specific action plans. The result of the meeting and the established action plans and guidelines are communicated to different countries and factories involved in the scheme.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit origination	Fossil fuel switch	Graneros Plant Fuel Switching project	CDM (Clean Development Mechanism)	11400	11400	Not relevant	Voluntary Offsetting

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	68739495	<p>1. Data used As input to the calculations, the amounts of purchased raw materials, packaging materials, finished/semi-finished goods and services were considered. The inputs were aggregated into sub-categories (158 for raw materials; 52 for packaging materials; 17 for finished goods; 5 for services) . A representative dataset and its GHG emission factor were assigned to each input sub-category. 2. Methodology The amount of materials purchased is multiplied by the emission factor of the assigned datasets. The results are aggregated to obtain the GHG emissions associated to the respective categories and sub-categories. The sources of emission factors are: World Food LCA Database (v.3.1), ecoinvent v.2.2 and v.3.2, Agribalyse, Agrifootprint, and Nestlé internal LCA databases. For selected raw ingredients, the input data was disaggregated so as to consider best practices (coffee, cacao, soy, palm oil) or regions (milk sourced from specific countries). In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. A contribution analysis was performed to identify the largest contributors to the overall results. In the case of packaging materials, it was necessary to apply an extrapolation factor of 27%, to account for the total purchases. For services,</p>	92.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			Input/Output modelling was used, whereby the expenditure in CHF was linked to the respective GHG emissions of the types of services purchased. 3. Quality The quality of the primary data used is high. The quality of the emissions data has improved compared to previous assessments, given that more representative GHG emission factors were used and the level of resolution increased. As a result, the emissions data can be considered of intermediate quality.		
Capital goods	Relevant, calculated	926364	1. Data used As input to the calculations, the amounts of purchased fixed assets and consumables were considered. The inputs were aggregated into 42 sub-categories. 2. Methodology Input/Output modelling was used, whereby the expenditure in CHF was linked to the respective GHG emissions of the types of fixed assets and consumables purchased. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. A contribution analysis was performed to identify the largest contributors to the overall results. 3. Quality The quality of the primary data used is high. The Input/Output model has a reference date of 20202, hence the extrapolation to 2016 values entails uncertainty. As a result, the emissions data can be considered of intermediate quality.	100.00%	
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	1497281	1. Data used As input to the calculations, the amounts of purchased fossil fuels (solid, liquid and gaseous), wood, and electricity were considered. The inputs were aggregated into 4 sub-categories. 2. Methodology The amount of fuels and electricity purchased is multiplied by their respective emission factors. The results are aggregated to obtain the GHG emissions associated to the	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>respective categories and sub-categories. The sources of emission factors are: ecoinvent v.2.2 for fossil fuels and wood; DEFRA (2015) for electricity generation, transformation and distribution, and losses. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. A contribution analysis was performed to identify the largest contributors to the overall results. 3. Quality The quality of the primary data used is high. The emission factors associated to electricity pertain to 2015 rather than 2016. As a result, the emissions data can be considered of intermediate quality.</p>		
Upstream transportation and distribution	Relevant, calculated	2419966	<p>1. Data used As input to the calculations, the amounts of purchased materials (Category 1) are used as primary data, multiplied by secondary data regarding their transportation to manufacturing facilities. 2. Methodology Three default distances were used to estimate the contribution to the overall GHG emissions coming from upstream transportation and distribution. The total amount of materials purchased was allocated to three market sizes, and multiplied by default distances representing these as follows: a) 20% of materials purchased by small sized markets; distance travelled: 200 km by road transport b) 30% of materials purchased by medium sized markets; distance travelled: 300 km by road transport c) 50% of materials purchased by large sized markets; distance travelled: 1500 km by road transport. The sources of emission factors are: ecoinvent v.2.2 for road transport. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. 3. Quality The quality of</p>	0.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			the primary data used is high. Secondary data is used for distance travelled and mode of transport. As a result, the emissions data can be considered of low quality.		
Waste generated in operations	Relevant, calculated	123618	1. Data used As input to the calculations, the amounts of waste generated in operations and their respective end of life routes were considered. The inputs were aggregated into 5 sub-categories. A representative dataset and its GHG emission factor were assigned to each input sub-category. 2. Methodology Transport from the factories to the disposal facilities was considered for materials going to landfill, incineration, composting and other disposal methods (35 km travelled by road transport). The amount of waste materials is multiplied by the emission factor of the assigned datasets. The results are aggregated to obtain the GHG emissions associated to the respective categories and sub-categories. The sources of emission factors are: ecoinvent v.2.2. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. A contribution analysis was performed to identify the largest contributors to the overall results. 3. Quality The quality of the primary data used is high. Secondary data (assumptions) are taken to estimate transport emissions. The emission factors are secondary data, but are not geographically representative (no differentiation of efficiencies or variation in EOL methods per country). As a result, the quality of the calculated results can be qualified as intermediate.	100.00%	
Business travel	Relevant, calculated	289254	1. Data used Air travel: As input to the calculations, the global report from BCD travel agency for Nestlé was	85.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>considered. It details all trips taken and distances travelled and covers 85% of air travel. Car rental: As input to the calculations, the report from the rental agencies for Europe and USA was considered. The data used covers 98% of reported car rental. Emission factors for air travel were multiplied by the distances travelled in 2016. 2. Methodology The travel distances were separated into two categories: short haul (< 3500 km or 5 h flight) and long haul (> 3500 km or 5 h flight). According to Nestlé Travel Policy, short haul distances are travelled for normal employees in economy class, whereas long haul distances are travelled in business class. Top level managers and VIPs have a different allocation: short haul is travelled in business class and long haul in first class. The data provided does not allow for a differentiation of classes booked. For the model, a base situation is assumed, assuming economy and business class. Therefore, the emissions associated to business travel are multiplied by a factor of 2.2 (DEFRA, 2016) to account for the additional space taken up by business class in a plane. The sources of emission factors are: ecoinvent v.2.2 for air travel. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. 3. Quality The quality of the primary data used is high. As a result, the emissions data can be considered of high quality.</p>		
Employee commuting	Relevant, calculated	587618	1. Data used As input to the calculations, the total number of employees working in Nestlé in 2016 was considered. Commuting was sub-divided into 5 sub-categories depending on the most used means of transportation; a	85.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			mean commuting distance of 20.6 km was also considered (IBM, 2011 - Frustration Rising: IBM 2011 Commuter Pain Survey). The data covers 85% of commuting options. Emission factors for road transport (personal vehicle, motorbike) and public transport (bus, train) from ecoinvent v.3.2 were used. 2. Methodology The average distance commuted in total (20.6 km, one way; 41.2 km return) was multiplied by the number of employees and the annual number of working days (230). The total distance travelled was then assigned to the 5 sub-categories of commuting as follows: a) Driving own car: 55% b) Car sharing: 5% (assuming 2 persons in the car) c) Riding a motorbike: 5% d) Taking the bus: 13% e) Taking the train: 7% The sources of emission factors are: ecoinvent v.2.2 for air travel. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. 3. Quality The quality of the primary data used is high. Secondary data is used to allocate the various means of transportation used by employees. As a result, the estimated GHG emissions can be qualified of intermediate quality.		
Upstream leased assets	Not relevant, explanation provided				Our standard business model and operation is such that we normally operate our own assets. Upstream leased assets have a negligible contribution to our mission.
Downstream transportation and distribution	Relevant, calculated	3265924	1. Data used 2015 data, as 2016 data is not yet available. For transport with own fleet, the reported fuel consumption is converted into CO2 emission using DEFRA emission	40.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>factors. For outsourced transportation, we use as primary data information per transportation lane (distance, number of shipments, transport vehicle, tonnage transported) collected per market/business. For outsourced road transport, the fuel consumption is estimated using average fuel consumption per vehicle type for the reported transport distance, which is then converted into CO2 emission using DEFRA factors. For non-road transport (always outsourced), the transportation volume is calculated in tonne.kms, which are then converted to CO2 emission using standard DEFRA factors. For warehousing, basic data is number of pallet spaces in markets or business per warehouse type (ambient, refrigerated, chilled, frozen). 2. Methodology Per reporting market, the CO2 emissions for transportation are summed up and shown with the following KPIs: absolute CO2 emissions, CO2 effectiveness (kg CO2e per tonne sold), CO2 efficiency (g CO2e per tonne.km), average distribution distance, breakdown to transport modes based on tonne.km transported (road, combined, rail, sea, air). The data of the reporting markets is aggregated separately for water and non-water businesses. The global CO2e emissions for transportation are extrapolated to the complete sold volume, using separately the average CO2 effectiveness for non-water business and for water business. For warehousing, the total energy consumption (assumption "electricity only") is estimated based on the number of pallet spaces multiplied with an average energy consumption per pallet per year, different per warehouse type (based on a separate reporting, which is done for the globally 100 biggest warehouses used by</p>		

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			Nestlé). The electricity consumption is converted into indirect CO2 emission using country specific indirect CO2e emission factors. Extrapolation to global level for warehousing by applying the average CO2 emission per tonne of product to the remaining volume of products sold. 3. Quality The quality of the primary data is average to high. However, as only 40% of the global distributed volume is reported and considering a wide variation of CO2 effectiveness across different countries, the extrapolation to global volume is considered average.		
Processing of sold products	Not relevant, explanation provided				Most of our products are sold for direct consumption, which therefore does not involve further industrial processing. Processing of sold products have a negligible contribution to our emissions.
Use of sold products	Relevant, calculated	24494702	1. Data used As input to the calculations, sales figures by product category and country were used (tons of product sold). The greenhouse gas emissions corresponding to the use phase were modelled using representative Life Cycle Assessment studies carried out by Quantis for Nestlé products (secondary data). These emissions account for electricity and water consumption. 2. Methodology One representative product per product category was selected for this calculation. An estimate of the use stage GHG emissions was obtained by multiplying the electricity and water consumed during the use stage by the country or region specific emission factors using IPCC 2007, GWP100	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			(secondary data) in the software SimaPro. The source of emission factors is ecoinvent v.3.2. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. 3. Quality The quality of the primary data used is high (product categories sold per country). The assumptions used to model the use phase per product category introduce uncertainty, considering that within product categories the use phase can vary significantly (sub-categories, local variations in consumption practices). As a result, the estimated GHG emissions can be qualified of low quality.		
End of life treatment of sold products	Relevant, calculated	2883425	1. Data used As input to the calculations, sales figures by product category and country were used to calculate the number of products sold (same initial data used for Category 11). The GHGs emission factors used are taken from ecoinvent 2.2, using IPCC 2007, GWP100 (secondary data). 2. Methodology One to three representative products (brands) per branch were selected for this calculation. Packaging contributing to approximately 90% of the packaging mass per product was categorized into the following types: aluminium, cardboard, glass, paper and plastic. The remaining 10% were modelled as plastic waste. The waste treatment processes were based on global averages. Additionally, loss rates for these food products were included. 3. Quality The quality of the estimated GHG emissions is low given that large global generalizations were made as well as the use of a limited number of representative products for all categories.	0.00%	
Downstream	Not relevant,				Our standard business model

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
leased assets	explanation provided				and operation is such that we normally operate our own assets. Downstream leased assets have a negligible contribution to our emissions.
Franchises	Not relevant, explanation provided				Our standard business model and operation is such that we normally do not have any Franchises. Franchises have a negligible contribution to our emissions.
Investments	Relevant, calculated	565114	<p>1. Data used As input to the calculations, the investments made by Nestlé in various companies were considered, as well as the percentage of ultimate capital shareholdings by Nestlé in these companies. In the case of L'Oréal, Aguas CCU and Clover Waters, data reported directly by the companies on their Scope 1 & 2 assessments was considered. In the case of Lactalis, data reported by Danone on its Scope 1 & 2 emissions was taken as a proxy.</p> <p>2. Methodology Two approaches were followed: a) Direct reporting on Scope 1 & 2 GHG emissions by companies: Data reported by L'Oréal and Aguas CCU was multiplied by the share of Nestlé investments, in order to obtain the Nestlé share of emissions that are accounted within Nestlé's Scope 3. In the case of Clover Waters, data reported by Clover Industries Ltd was multiplied by an economic factor (25%), which accounts for the revenues coming from its Clover Waters division. This value was then multiplied by the share of Nestlé investments, in order to</p>	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>obtain the Nestlé share of emissions that are accounted within Nestlé's Scope 3. In the case of Lactalis, data reported for Danone's Scope 1 & 2 was taken as a proxy of its emissions, given that both operate in the dairy sector. The emissions reported by Danone were divided by its revenues, to obtain a factor of [tons CO2-eq / EUR]. This factor was then multiplied by Lactalis' revenues in year 2015. This value was then multiplied by the share of Nestlé investments, in order to obtain the Nestlé share of emissions that are accounted within Nestlé's Scope 3. b) Input/Output modelling: The investments in CHF made by Nestlé were linked to the respective GHG emissions of the sectors wherein these were made. In all cases, the results are calculated using the IPCC 2007 GWP 100 characterization factors. 3. Quality Data directly reported by the companies is of high quality. Using data as proxy (Lactalis case) incorporates uncertainty, resulting in data of intermediate quality. The Input/Output model has a reference date of 2020, hence the extrapolation to 2016 values entails uncertainty. As a result, the emissions data can be considered low.</p>		
Other (upstream)	Not relevant, explanation provided				The categories already disclosed on cover the majority of our emissions.
Other (downstream)	Not relevant, explanation provided				The categories already disclosed on cover the majority of our emissions.

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/CC14.2a/Nestle CDP Verification statement 2017_31.05.17_Issued_V2.0.pdf	All document	ISO14064-3	100

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Change in output	2.2	Increase	Changes in the composition and volume of purchased goods and services between 2015 and 2016 led to a 2.2% of increase in the Scope 3 GHG emissions related to this category.
Purchased goods & services	Emissions reduction activities	1.1	Decrease	The increased share of raw materials purchased through our Responsible Sourcing program and which include a no-deforestation policy (coffee, coca, palm oil, soy beans) allowed to reduce associated between 2015 and 2016 leading to a 1.1% of decrease in the Scope 3 GHG emissions related to this category.
Purchased goods & services	Change in methodology	23.7	Decrease	The decrease in Scope 3 GHG emissions for raw materials can be explained by the following reasons: - Changes in data aggregation in the model for 2016, as compared to the aggregation used in the model for 2015. - Inclusion of the share of responsibly sourced coffee, cacao, palm oil and soy beans in the models for 2015 and 2016.
Capital goods	Change in methodology	110.5	Increase	The input correction factor of the Input/Output model was updated to adapt the emission factor from the 2002 database to 2016 CHF spent. In addition, three services previously accounted in Category 2 as capital good are now reported in Category 1 as purchased services. A different aggregation of data was used in the model for 2016.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in output	2.2	Increase	This increase is explained by the increase in the production volume from 2015 to 2016.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	4.7	Decrease	If Nestlé had produced its 2016 production volume with the same scope 3 emissions intensity in this category as in 2015, it would have emitted 1'569'205 tCO ₂ in 2016 for this category of emissions. However, as a result of our emissions reduction activities, we emitted 1'497'281 tCO ₂ , that is, which represents a 4.7% decrease in this category compared to the 1'535'590 tCO ₂ baseline in 2015. In our operations we continue to reduce GHG emissions by improving energy efficiency, switching to cleaner fuels and investing in renewable sources, such as spent coffee grounds and wood from sustainably managed forests as well as solar and wind energy.
Upstream transportation & distribution	Change in output	2.0	Decrease	Changes in the composition and volume of purchased goods and services between 2015 and 2016 led to a 2.0% decrease in the Scope 3 GHG emissions related to this category.
Waste generated in	Change in	2.2	Decrease	This increase is explained by the increase in the production volume from 2015 to 2016.

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
operations	output			
Waste generated in operations	Emissions reduction activities	27	Decrease	If Nestlé had produced its 2016 production volume with the same scope 3 emissions intensity in this category as in 2015, it would have emitted 168'101 tCO2 in 2016 for this category of emissions. However, as a result of our waste reduction activities, we emitted 123'618 tCO2, which represents a 27% decrease in this category compared to the 164'500 tCO2 baseline in 2015. Avoiding waste through the entire life cycle of our products is an important priority for Nestlé, as part of our commitment to preserve natural resources and to eliminate food wastage along the value chain. Our goal is zero waste and full recovery of unavoidable by-products. With 39% of our factories having achieved zero waste for disposal in 2016 (this represents 182 factories), we are on track to meet our public commitment of zero waste for disposal in our sites by 2020. In 2016, we have reduced our waste for disposal by 36% compared to 2015.
End-of-life treatment of sold products	Change in output	1.0	Increase	Changes in the composition and volume of products sold in 2015 and 2016 account for an increase of 1.0 % in the Scope 3 GHG emissions for this category. No update was made to the model nor the emission factors used to calculate the Scope 3 GHG emissions in this category.
Investments	Change in methodology	91.2	Decrease	The Scope 3 GHG emissions in 2016 were calculated using a different method than the one used in 2015. In 2016, the GHG emissions associated to some investments were calculated using the Input/Output model, which was updated to reflect 2016 CHF spent. The Scope 1 & 2 GHG emissions from L'Oreal, Aguas CCU and Clover Waters were taken directly from their reported data; for Lactalis, the Scope 1 & 2 GHG emissions reported by another company of the same sector were taken as a proxy and adjusted based on turnover.
Business travel	Change in methodology	1.0	Increase	The model in 2016 accounts for a different way of categorizing long haul and short haul air travel. Long haul travel is classified as that lasting at least 5 h and in business class. This change in model accounts for a 1.0% increase in the Scope 3 GHG emissions associated to this category.
Business travel	Change in output	2.1	Decrease	This increase is explained by the decrease in the headcount from 2015 to 2016.
Business travel	Emissions reduction activities	12.2	Increase	Changes in the intensity of business travel in 2016 compared to 2015 led to a 12.2 increase in the Scope 3 GHG emissions in this category.
Employee commuting	Change in	82.9	Increase	The model in 2016 accounts for a different way of representing how employees

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
	methodology			commute daily to work. Driving, car sharing, riding a motorbike, taking the bus and taking the train are modelled using global statistics for the usage of each commuting mode. This change in model accounts for 82.9 % increase in the Scope 3 GHG emissions for this category.
Use of sold products	Change in methodology	6.7	Decrease	Changes in the background emission factors for electricity in the countries where Nestlé products are consumed account for the decrease of 6.7% in the Scope 3 GHG emission factors in this category. Moreover, less proxy factors were used in the 2016 model.
Downstream transportation and distribution	Change in output	2.4	Increase	Data for 2016 is not available yet therefore 2015 data is used. Changes in the composition and volume of products stored and dispatched between 2014 and 2015 led to a 2.4% increase in the scope 3 emissions related to this category.
Downstream transportation and distribution	Emissions reduction activities	2.8	Decrease	Data for 2016 is not available yet therefore 2015 data is used. If Nestlé had dispatched its 2015 products with the same scope 3 emissions intensity in this category as in 2014, it would have emitted 3'358'877 tCO2 in 2015 for this category of emissions. However, as a result of our distribution optimization activities, we emitted 3'265'924 tCO2, which represents a 2.8% decrease in this category compared to the 3'279'917 tCO2 baseline in 2014. We strive to ensure that 'no vehicle leaves empty', improving the efficiency of our transport while reducing unnecessary journeys. We also redesigned several local distribution networks to improve efficiency.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

Suppliers

1) Engagement method:

- i) the Nestlé Responsible Sourcing Audit Programme which requests key vendors to demonstrate compliance with Nestlé's environmental standards through independent third party audits;
- ii) the Nestlé Responsible Sourcing Traceability Programme which implements transparency in our extended supply chains back to the farm or feedstock, by implementing our commitments on climate change or no deforestation. The Nestlé Responsible Sourcing Guidelines of milk and dairy production drive improvements in GHG mitigating by the promotion of energy-efficiency, use of renewable energy, as well as establishment of biodigesters where required.
- iii) the Nestlé Farmer Connect Programme which provides technical assistance on sustainable production methods. For example, for coffee we work with 4C working with farmers and promoting the use of renewable energy and energy conservation.

2) The strategy for prioritizing engagements takes into consideration both Tier 1 suppliers and extended value chain and key raw materials.

- i) The Nestlé Responsible Sourcing Audit Programme focuses on covering all Tier 1 suppliers.
- ii) The Nestlé Responsible Sourcing Traceability programme: establishes transparent supply chains back to the origin and develop suppliers that meet our commitments and policies. It focuses on 12 raw material categories that have been selected as a result of a sustainability risk assessment of significant material spend categories. All these categories having a major impact on GHG emissions and reductions (cattle, poultry, palm oil, soybean, dairy, eggs etc)
- iii) Direct from farmer –The strategy covers our main agricultural raw ingredients: milk, cocoa and coffee.

3) Measures of success

- i) % of the total volume sourced from audited and compliant Tier 1 suppliers. In 2016, 61% of total volume was sourced from suppliers compliant with the Nestlé Supplier Code:
- ii) % of volume traceable and compliant with Nestlé RSGs: In 2016, 61% of purchased volumes of our 12 key commodities are traceable. For example, around 91% of Palm Oil we procure is traceable back to the mill.
- iii) Number of farmers trained: In 2016, 363000 farmers were trained through capacity-building programmes, of which 113 446 coffee farmers and 57 000 cocoa farmers. We will continue providing technical assistance. In 2016, 140 933 tonnes of cocoa and more than 200 000 tonnes of coffee were sourced directly from farmers through Farmer Connect. In 2016, we sourced 180 148 tonnes of coffee, 100% in line with 4C baseline sustainability standard from farmer connect.

Customers

1) Engagement method: We engage with customers on GHG and climate change strategies through meetings, consultations. For example, we engage with Walmart to provide our input to the Sustainability Category Profile. Nestlé Professional LCA communication tool was updated to help customers choose the best coffee machines in terms of GHG emissions and energy consumption. We also engage with our customers through CDP supplier platform where we provide detailed information on the GHG emissions of our products and proposed collective areas of opportunities for the reduction of GHG emissions.

2) The strategy for prioritizing engagement is based on materiality analysis and the results of LCA of our products, including coffee, bottled water and petcare. For CDP supply chain we prioritize based on the request received. In 2016, we continued to engage with all customers that requested us specific information on GHG through the CDP supplier programme.

3) We measure success with the number of engagement with our customers including the number of customers we engaged through the CDP supplier programmes.

Other partners in the value chain: Consumers

1) Engagement method: We help consumers make informed choices through credible, substantiated communication. We use relevant contact points such as digital, packaging and point-of-sale to inform consumers of action they can take when using our products and handling used packaging. We use Twitter and other social media to listen and respond to consumers on environmental issues that matter to them. We support and shape the development of environmental communication best practices and standards, working in collaboration with industry, government and public forums.

2) The strategy for prioritizing engagement is based the results of life cycle analysis of main products categories which show that the consumer use phase is significant. For example, a recent LCA of the new Nescafe Milano 2 MTS130 machine helped us identify that the consumer phase has a share of the GHG

emissions due to the cup washing and machine cleaning. The NESCAFÉ Plan focuses on responsible consumption.

3) We measure success by means of Nestlé reputation as being considered as a brand that cares for the environment. For 2016, in 19 out of 33 countries assessed, Nestlé had a better score than the industry average on the statement "cares for the environment".

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Collaboration/innovation	5000	95%	Please note that the number of suppliers is 10000, however the system doesn't allow to add numbers greater than 5000. The impact of our engagement with suppliers have led to: •GHG reduction of more than 55'000 metric tonnes of CO2 equivalent (from 68'796'039 in 2015 to 68'739'495 in 2016) in in purchased goods and services; •719 000 farmers trained in good agricultural practices. Our emphasis was on helping them grow safe, high-quality raw materials, using training designed to produce effective impacts; •28.9 million leaf-resistant coffee trees have been distributed in Colombia. In addition, the Nespresso AAA Sustainable Quality™ Program, developed in collaboration with the Rainforest Alliance, aims to protect the highest-quality coffees required for Nespresso Grands Crus, preserve the environment and enhance farmer welfare. CRECE, an independent consulting and research firm in Colombia, applied its sustainability index to both farms participating in the AAA Program and a sample of non-AAA farms. The result: AAA farms topped non-AAA farms in every category. Of the AAA farms surveyed, including those that have obtained Rainforest Alliance certification, 22.6% had better social conditions, 52% better environmental conditions and 41% better economic conditions than non-AAA farms.

CC14.4c

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

For more information on Nestlé Responsible Sourcing Programme, please see: <http://www.nestle.com/csv/rural-development-responsible-sourcing> Further information for question 14.4a: Other stakeholders i)Methods of Engagement: Communication on the topic of environmental sustainability is an increasingly important part of our corporate communication strategy involving media relations and engagement with nongovernmental organisations, special interest groups, governments and public authorities. Our Nestlé in Society website features our activities on environmental sustainability and water. ii)A strategic priority for us is to engage stakeholders and develop key partnerships. Our proactive engagement with stakeholders on environmental topics includes regular external stakeholder convenings and meetings. We also seek to nurture constructive relations with organisations critical of the Company's environmental performance. iii)We measure success with the numbers of stakeholder's convenings and meetings. The strategy for prioritizing engagement; we encourage our businesses to identify the stakeholders that are most important to their business at a national level. Our engagement at the global level is coordinated centrally, through the CSV Forum and stakeholder convenings. These stakeholder events inform our materiality process. Measure of success: Our objectives in 2016 were to understand stakeholder expectations and concerns; report back on previous convenings; and stimulate fresh thinking and prioritise key actions on Creating Shared Value and climate change. The convenings, which were facilitated by SustainAbility, were attended by more than 60 external expert stakeholders from multi-lateral agencies, non-governmental organisations (NGOs), industry associations, government representatives, farmer associations, academics, investors and social entrepreneurs. The convenings were also attended by Nestlé staff from its headquarters and the host country. The stakeholders were drawn from a wide range of NGOs, academic centres, governmental and intergovernmental organisations, think tanks, consultancies and social enterprises working in Nestlé's CSV focus areas of nutrition, water and rural development, as well as human rights and compliance

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Magdi Batato	Executive Vice President of Operations - Chief Operating Officer (Head of Operations)	Chief Operating Officer (COO)

Further Information

Module: FBT

Page: FBT1. Agriculture

FBT1.1

Are agricultural activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT1.1a

Please explain why agricultural activities are not relevant to your climate change disclosure

FBT1.2

Are the agricultural activities that you have identified as relevant undertaken on your own farm(s), elsewhere in your value chain, or both?

Elsewhere in value chain

FBT1.2a

Please explain why agricultural emissions from your own farms are not relevant

FBT1.3

Do you account for greenhouse gas emissions from agricultural activities undertaken on your own farm(s) as part of the global gross Scope 1 emissions figure reported in CC8.2, and/or the Scope 2 figure reported in CC8.3a of the core climate change questionnaire?

FBT1.3a

Please select the form(s) in which you wish to report the greenhouse gas emissions produced by agricultural activities (agricultural emissions) undertaken on your own farm(s)

FBT1.3b

Please report your total agricultural emissions produced on your own farm(s) and identify any exclusions in the table below

Scope	Agricultural emissions (metric tonnes CO2e)	Methodology	Exclusions	Explanation	Comment
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FBT1.3c

Please report your agricultural emissions produced on your own farm(s), disaggregated by category, and identify any exclusions in the table below

Emissions category	Agricultural emissions (metric tonnes CO2e)	Methodology	Exclusions	Explanation	Comment
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FBT1.3d

Please explain why you do not account for greenhouse gas emissions from agricultural activities undertaken on your own farm(s), and describe any plans for the collection of this data in the future

FBT1.4

Do you implement agricultural management practices on your own farm(s) with a climate change mitigation and/or adaptation benefit?

FBT1.4a

Please identify agricultural management practices undertaken on your own farm(s) with a climate change mitigation and/or adaptation benefit. Complete the table

Activity ID	Agricultural management practice	Description of agricultural management practice	Climate change related benefit	Comment
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FBT1.4b

Does your implementation of these agricultural management practices have other impacts? Complete the table

Activity ID	Impact on yield	Impact on cost	Impact on soil quality	Impact on biodiversity	Impact on water	Other impact	Description of impacts	Comment
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FBT1.4c

Do you have any plans to implement agricultural management practices in the future?

FBT1.4d

Please detail your plans to implement agricultural management practices in the future

FBT1.5

Is biogenic carbon pertaining to your own farm(s) relevant to your climate change disclosure?

FBT1.5a

Please report biogenic carbon data pertaining to your own farm(s) in the table below

CO2 flux	Emissions/ Removals (metric tonnes CO2e)	Methodology	Exclusions	Explanation	Comment
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FBT1.6

Do you account for greenhouse gas emissions from agricultural activities in your value chain as part of the Scope 3 category "Purchased goods and services" reported in CC14.1 of the core climate change questionnaire?

Yes

FBT1.6a

Please report these agricultural emissions from your value chain and identify any exclusions in the table below

Scope	Agricultural emissions (% of the emissions reported in the category "Purchased goods and services")	Exclusions	Explanation	Comment
Scope 3	91-100%	N/A		

FBT1.6b

Please explain why you do not account for greenhouse gas emissions from agricultural activities in your value chain as part of the Scope 3 category "Purchased goods and services" reported in CC14.1 of the core climate change questionnaire

FBT1.7

Do you encourage your agricultural suppliers to undertake any agricultural management practices with a climate change mitigation and/or adaptation benefit?

Yes

FBT1.7a

Please identify agricultural management practices with a climate change mitigation and/or adaptation benefit that you encourage your suppliers to implement. Complete the table

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
1	Other: Promoting more environmentally sustainable agriculture: We use RISE, an indicator- and interview-based method for assessing the sustainability of farm operations across the economic, social and environmental dimensions. It serves the holistic evaluation of the sustainability of agricultural production at farm level.	Promoting more environmentally sustainable agriculture: We use RISE, an indicator- and interview-based method for assessing the sustainability of farm operations across the economic, social and environmental dimensions. It serves the holistic evaluation of the sustainability of agricultural production at farm level.	Knowledge sharing Operational	Thousands of Nestlé agronomists work out in the field, building relationships with the farmers who supply us and benefit from the good practice and guidance from various RISE studies. To Nestlé, the main benefit of RISE application is a contribution to more sustainable production and supply of agricultural raw materials. This process serves farmers and Nestlé alike and thus is the way to secure continuous	Emissions reductions (mitigation) Increasing resilience to climate change (adaptation) Other: Increase productivity	Another example of RISE initiative was in Mexico, one of Nestlé's largest dairy markets where agriculture faces big challenges. As 77% of freshwater withdrawal is for agriculture, and climate change is expected to cause more frequent droughts and a loss of productive surface, there is urgent need for robust production systems. A first RISE study was conducted among a total of 30 Nestlé milk suppliers with more following in the next years. The studies showed, that some farm energy usage improvement opportunities patterns. The number of biodigestors increased to 28. Concerned by these results, Mexican farmers built large biogas digesters, benefiting from support by the Mexican government and by Nestlé

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
				<p>manufacturing processes. For example, Nestlé's Calf Management Programme in Sri Lanka is helping to promote the growth rate of calves, which may lead to earlier and higher milk production. Calves in Sri Lanka are often underweight because of inappropriate feeding practices, so they are more vulnerable to disease, and experience weaning and gestation much later, delaying milk production. Supported by the Government Animal Production and Health Department, Nestlé implemented a Calf Management Programme to enhance productivity through improved farm animal health and welfare. Thirty-one farms and 50 healthy calves under three months old were selected for the programme in March 2014. In training sessions and</p>		<p>Mexico. In Querétaro, three biodigesters now produce 2400 m3 of methane per day, reducing the net amount of electricity from the grid by 90%, while decreasing environmentally harmful emissions of ammonia and methane.</p>

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
				workshops, farmers were taught the principles of calf management and best farming practices, such as gradually replacing milk with hay, fresh grass and concentrate feed during weaning. Between May and September 2014, the calves' average weight rose from 40 kg to 95 kg, and their average growth rate reached 450 g/day. By halving the weaning time and doubling their daily weight gain, the time it takes to reach gestation could be reduced by a year.		
2	Water Management	We support farmers in improving quality and yields, soil and leaf analysis, wastewater management, gender and youth empowerment, improvements in traceability, as well as preparing them for compliance with 4C and Sustainable Agriculture Network standards in the case	Knowledge sharing Operational	The Nescafé Plan has been rolled out in several countries since it started, and was active across 20 countries in 2016. Our Nescafé business has a broad geographical scope covering most of the coffee belt (which straddles the equator between the tropics of Cancer and Capricorn) across Latin America,	Increasing resilience to climate change (adaptation)	For more information regarding the Nescafé Plan, please see: http://www.nestle.com/csv/rural-development-responsible-sourcing/nescafe-plan

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
		of coffee.		Africa, Asia and Oceania. In fact, we purchased 204163 tonnes of Farmer Connect coffee in 2016 from 191372 farmers, of which 180148 tonnes were responsibly sourced (4C verified). In total, we sourced 480 000 tonnes of Responsibly Sourced (mostly 4C-verified but also other voluntary sustainability standards) in 2016, representing 55% of our entire green coffee volume. We also distributed 28.9 million plantlets in 2016, taking our cumulative total to 129 million.		
3	Biodiversity considerations	Conservation of biodiversity: The clearing of native species and forest cover often associated to coffee production can disrupt the ecological balance of the farm. Nestlé supports the conservation of biodiversity, including protected or endangered native	Knowledge sharing Operational Other: Conservation of biodiversity	Ecuador exports about 65% of the fine cocoa produced worldwide. However, its unique floral cocoa is under threat, due to farming practices that are substituting local trees with other varieties that have better yields. The majority of the floral variety, known as nacional, are controlled by smallholders, who	Other: Conservation of biodiversity	

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
		flora and fauna by maintaining forest cover and native species on several key areas of the farm.		have reacted to decreased crop yields by planting the new breeds. As part of the Nestlé Cocoa Plan, our objective is to ensure the long-term, responsible supply of cocoa beans from Ecuador to Nestlé, while improving social and environmental conditions for farmers, their families and communities. Through the plan, we improve farmers' technical skills, using workshops, classroom and field training, and certification programmes. We also encourage the planting of nacional and other cocoa trees to reforest and improve biodiversity, and have distributed approximately 700000 nacional plants to farms since 2009. The Nestlé Cocoa Plan has had a direct impact on farmers. In 2016, 57000 cocoa farmers were trained. By the end of the year, 699 farms		

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
				were UTZ certified for social and responsible farming. To ensure a sustainable supply of good-quality cocoa, we plan to continue increasing the amount of cocoa purchased through the Nestlé Cocoa Plan. In 2016, we purchased 140933 tonnes of cocoa – 34% of our total – through the plan, and will increase this annual figure to 150000 tonnes in 2017.		
4	Other: Soil	We support farmers in improving quality and yields, soil and leaf analysis, wastewater management, gender and youth empowerment, improvements in traceability, as well as preparing them for compliance with 4C and Sustainable Agriculture Network standards in the case of coffee.	Knowledge sharing Operational	The 4C of conduct sets out 28 principles that cover environmental sustainability including soil conservation: Topsoil erosion can cause productivity losses and threaten the sustainability of farmland. Nestlé has soil conservation practices in place.	Other: Soil Conservation	
5	Low carbon energy use	We support farmers in improving quality and yields, soil and leaf analysis, wastewater	Knowledge sharing Operational	The 4C of conduct sets out 28 principles that cover environmental sustainability including	Emissions reductions (mitigation)	

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
		management, gender and youth empowerment, improvements in traceability, as well as preparing them for compliance with 4C and Sustainable Agriculture Network standards in the case of coffee.		energy: The use of non-renewable sources of energy, such as oil and gas, is increasingly expensive. It is also a leading cause of air pollution and climate change. Energy use is monitored throughout the 4C unit. A conservation strategy is designed and proactive measures, such as using more efficient devices, are put in place. Efficient energy use means immediate lower costs. It also contributes to long-term sustainability by reducing the use of off-farm energy sources.		
6	Agroforestry	Agro-forestry strengthens the resilience of coffee-farming areas to the threats of climate change and environmental degradation, and addresses the landscape impacts of growing coffee. The trees interact with crops, creating more diverse, productive	Knowledge sharing Operational	Through the Nespresso AAA Sustainable Quality™ Program, Nespresso and Rainforest Alliance have been making coffee production more sustainable and improving farm ecosystems for more than 10 years. The programme, run in collaboration with Rainforest Alliance and	Increasing resilience to climate change (adaptation) Other: Avoid soil degradation	Nespresso sources a very specific coffee quality through the AAA Program, buying from the same farmers every year. However, enduring droughts in Brazil and Colombia (together with a transport strike in the latter) have resulted in insufficient availability of AAA coffee. Consequently, Nespresso was obliged to buy non-AAA coffee in 2016, but with exactly the same specifications. Nespresso aims to purchase 100% AAA coffee by 2020, and is actively expanding the AAA Program in

Activity ID	Agricultural management practice	Description of agricultural management practice	Your role in the implementation of this practice	Explanation of how you encourage implementation	Climate change related benefit	Comment
		and profitable land use systems.		<p>Pur Project, also offers farmers personalised technical assistance, free locally produced plantlets and a cash incentive for each tree planted. At the end of 2016, Nespresso was sourcing 74% of its coffee through its AAA Sustainable Quality™ Program, with more than 290000 hectares of farmland under active sustainable management. Nespresso plans to source 100% of its coffee from its AAA Sustainable Quality™ Program by 2020. It is also implementing innovative welfare solutions for farmers, such as a pilot retirement savings plan in Colombia.</p>		Ethiopia and Kenya to reach this objective.

FBT1.7b

Does the implementation of these agricultural management practices in your value chain have other impacts? Complete the table

Activity ID	Impact on yield	Impact on cost	Impact on soil quality	Impact on biodiversity	Impact on water	Other impact	Description of impacts	Comment
1	Not evaluated	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Not evaluated	In the example of Queretaro, Mexico, three biodigestors now produce 2400m ³ of methane per day, reducing the net amount of electricity from the grid by 90%, while decreasing the environmental harmful emissions of ammonia and methane. Now, the numbers of biodigestors have increased to 28.	Nestlé agricultural advisors continue to work with farmers, building capacities regarding nutrient, water and soil management, livestock husbandry and renewable energies. The long-standing good relations between farmers and agricultural advisors continue to be a key factor in the dissemination of measures to improve farm sustainability
2	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Not evaluated	Water conservation and preservation means cleaner surface water and securing the long-term water supplies of underground aquifers. Both are key to the long-term sustainability of coffee production and processing.	Nestlé helps farmers implementing water conservation and preservation strategies, such as better irrigation systems and efficient wet milling.
3	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Not evaluated	By conserving biodiversity, this helps maintaining the ecological balance of the farm. Moreover, it can also create favourable climate conditions for crops and prove effective in reducing diseases and pests.	We also encourage the planting of national and other cocoa trees to reforest and improve biodiversity, and have distributed approximately 700000 national plants to farms since 2009.
4	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact		Evaluated - beneficial impact	The 4C units apply soil conservation practices to reduce erosion. Preventing erosion helps maintaining productivity, cleaner waterways and a more sustainable farm.	These can be contour planting, construction of terraces, permanent soil cover or others depending on local conditions.
5	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Alternative sources of energy, such as solar, wind, hydropower and biomass are tapped in 4C units. Innovative machinery or equipment using renewable	Using alternative sources of energy means cleaner air and long-term savings on fuel. It is also a concrete contribution in the fight against climate change.

Activity ID	Impact on yield	Impact on cost	Impact on soil quality	Impact on biodiversity	Impact on water	Other impact	Description of impacts	Comment
							sources of energy, such as solar coffee driers, are used.	Inefficient energy use means higher operating costs and depletion of natural resources.
6	Not evaluated	Not evaluated	Evaluated - beneficial impact	Evaluated - beneficial impact	Evaluated - beneficial impact	Not evaluated	The Agro-forestry programme helps: Protect natural ecosystems and preserve biodiversity; • Regulate water availability by limiting evaporation and soil erosion; • Improve water quality, reduce soil pollution and enhance soil fertility; • Generate economic benefits for farmers through crop diversification and carbon certification; and • Support the production of shade-grown coffees required for Nespresso's Grands Crus.	In 2014, Nespresso piloted its approach in two areas where it had long provided technical assistance: the Huehuetenango cluster in Guatemala and the Cauca region of Colombia. The pilot has been extended in 2016 to the Olam region in Indonesia. For the future, the aim is to plant 1 million trees with TechnoServe in Ethiopia and Kenya (2016-2018)

FBT1.7c

Do you have any plans to engage with your suppliers on their implementation of agricultural management practices?

Yes

FBT1.7d

Please detail these plans to engage with your suppliers on their implementation of agricultural management practices

Responsible Sourcing Audit Programme: Our key vendors are requested to demonstrate compliance with Nestlé's environmental standards through independent third-party audits. If corrective actions are required, Nestlé, together with auditors, guides vendors in upgrading their practices.
Responsible Sourcing Traceability Programme: Promoting transparency in our extended supply chain back to the farm or feedstock to support our commitments on: no deforestation, responsible use of water, sustainable fisheries and animal welfare; and addressing other specific environmental aspects.
Farmer Connect: Through Farmer Connect, our direct sourcing programme, we support farmers and farming communities with technical assistance on sustainable

production methods. We also promote the efficient delivery of raw materials to the factory.
Sustainable Agriculture Initiative at Nestlé: The initiative focuses on sharing best practices and lessons learned within our agricultural supply chain.

Further Information

Page: FBT2. Processing

FBT2.1

Are processing activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT2.1a

Please explain why processing activities are not relevant to your climate change disclosure

FBT2.2

Are the processing activities that you have identified as relevant undertaken in your direct operations, elsewhere in your value chain, or both?

Direct operations

FBT2.2a

Please explain why emissions from processing activities in your direct operations are not relevant

FBT2.3

Do you account for emissions from processing activities in your direct operations as part of the global gross Scope 1 emissions figure reported in CC8.2 and/or the Scope 2 figure reported in CC8.3a of the core climate change questionnaire?

Yes

FBT2.3a

Please report these emissions from processing activities in your direct operations and identify any exclusions in the table below

Scope	Emissions from processing activities (metric tonnes CO2e)	Exclusions	Explanation	Comment
Scope 1	3607901	Some recently acquired factories	Some recent acquisitions have not yet implemented the reporting system to track the emissions at corporate level. While the Nestlé Environmental Requirements sets a maximum timeframe of three years for new acquisitions to implement and comply with the reporting of environmental data, the majority of them start reporting in the first two years after their acquisition.	
Scope 2	3482617	Some recently acquired factories	Some recent acquisitions have not yet implemented the reporting system to track the emissions at corporate level. While the Nestlé Environmental Requirements sets a maximum timeframe of three years for new acquisitions to implement and comply with the reporting of environmental data, the majority of them start reporting in the first two years after their acquisition.	

FBT2.3b

Please explain why you do not account for emissions from processing activities in your direct operations, and describe any plans for the collection of this data in the future

FBT2.4

Do you account for emissions from processing activities in your value chain as part of the Scope 3 category "Purchased goods and services" and/or "Processing of sold products" reported in CC14.1 of the core climate change questionnaire?

Further Information

Page: FBT3. Distribution

FBT3.1

Are distribution activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT3.1a

Please explain why distribution activities are not relevant to your climate change disclosure

FBT3.2

Are the distribution activities that you have identified as relevant undertaken in your direct operations, elsewhere in your value chain, or both?

Both direct operations and elsewhere in value chain

FBT3.2a

Please explain why emissions from distribution activities in your direct operations are not relevant

FBT3.3

Do you account for emissions from distribution activities in your direct operations as part of the global gross Scope 1 emissions figure reported in CC8.2 and/or the Scope 2 figure reported in CC8.3a of the core climate change questionnaire?

No

FBT3.3a

Please report these emissions from distribution activities in your direct operations and identify any exclusions in the table below

Scope	Emissions from distribution activities (metric tonnes CO2e)	Exclusions	Explanation	Comment
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FBT3.3b

Please explain why you do not account for emissions from distribution activities in your direct operations, and describe any plans for the collection of this data in the future

All the data related to transportation and distribution activities are tracked in a separate system from activity data related to manufacturing. The majority of our transportation and distribution activities are also outsourced (~90%). For practical reasons, emissions occurring from Nestlé's own transportation and distribution activities (i.e. not outsourced, which are a minority) are calculated and aggregated with the outsourced activities as a whole and are therefore included in scope 3 emissions.

FBT3.4

Do you account for emissions from distribution activities in your value chain as part of the Scope 3 category "Upstream transportation and distribution" and/or "Downstream transportation and distribution" in CC14.1 of the core climate change questionnaire?

Yes

Further Information

Page: FBT4. Consumption

FBT4.1

Are emissions from the consumption of your products relevant to your climate change disclosure?

Yes

FBT4.1b

Please explain why emissions from the consumption of your products are not relevant to your climate change disclosure

FBT4.1a

Do you account for emissions from the consumption of your products as part of the Scope 3 category "Use of sold products" and/or "End of life treatment of sold products" in CC14.1 of the core climate change questionnaire?

Yes

Further Information

Please see Nestlé in Society report 2016

Attachments

[https://www.cdp.net/sites/2017/42/12942/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/FBT4.Consumption/nestle-csv-full-report-2016-en.pdf](https://www.cdp.net/sites/2017/42/12942/Climate%20Change%202017/Shared%20Documents/Attachments/ClimateChange2017/FBT4.Consumption/nestle-csv-full-report-2016-en.pdf)

CDP 2017 Climate Change 2017 Information Request