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## Introduction

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### 0.1

#### Introduction

Please give a general description and introduction to your organization

- Nestlé is the world's leading Nutrition, Health and Wellness company. Nestlé is committed to increasing the nutritional value of our products while improving the taste. Nestlé achieves this through its brands and with initiatives like the Nutritional Compass and 60/40+.
- Creating Shared Value is the basic way we do business, which states that in order to create long term value for shareholders, we have to create value for society.
- But we cannot be either environmentally sustainable or create shared value for shareholders and society if we fail to comply with our Business Principles. Nestlé is committed to the following 10 Business Principles in all countries, taking into account local legislation, cultural and religious practices:
  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 United Nations Global Compact's (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.

### 0.2

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### 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
Sun 01 Jan 2012 - Mon 31 Dec 2012

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### 0.3

#### Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country
United States of America
Mexico
India
China
United Kingdom
South Africa
Brazil
Germany
France
Spain
Philippines
Malaysia

Select country
Chile
Russia
Australia
Italy
Pakistan
Japan
Rest of world

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#### 0.4

##### **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

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#### 0.6

##### **Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors, companies in the oil and gas industry and companies in the information technology and telecommunications sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email [respond@cdproject.net](mailto:respond@cdproject.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. If you wish to view the questions first, please see <https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

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#### **Further Information**

Please see attach:

- The Nestlé Corporate Business Principles
- The Nestlé Policy on Environmental Sustainability
- 2012 Nestlé Integrated Annual Report Pack outlining the company's performance last year and its future ambitions. The integrated full Annual Report pack

contains the company's 2012 Financial Statements, 2012 Corporate Governance report and the 2012 Nestlé in society: Creating Shared Value and meeting our commitments report.

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## Attachments

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/Introduction/Corporate-Business-Principles-EN.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/Introduction/Corporate-Business-Principles-EN.pdf)

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/Introduction/Po - The Nestlé Policy on Environmental Sustainability.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/Introduction/Po%20-%20The%20Nestle%20Policy%20on%20Environmental%20Sustainability.pdf)

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/Introduction/Nestlé 2012 Integrated Annual Report Pack.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/Introduction/Nestle%202012%20Integrated%20Annual%20Report%20Pack.pdf)

## Management

### 1. Governance

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#### 1.1

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

Individual/Sub-set of the Board or other committee appointed by the Board

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#### 1.1a

**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. José Lopez, Executive Vice President of Operations and GLOBE (Global Business Excellence). He is in particular responsible for 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. Since January 2010, Mr. Lopez is a member of the Advisory Board of the University of Cambridge's Programme for Sustainability Leadership. Since January 2011, Mr. Lopez is a member of the Supervisory Board of Cereal Partners Worldwide.

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#### 1.2

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

Yes

1.2a

**Please complete the table**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Board/Executive board	Monetary reward	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.
Chief Operating Officer (COO)	Monetary reward	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.
Management group	Monetary reward	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	Monetary reward	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.
Other: Environmental sustainability managers	Monetary reward	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.
Facility managers	Monetary reward	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.
Business unit managers	Monetary reward	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)	Recognition awards are given for outstanding energy consumption reduction projects that lead to air emission reduction, including GHG.
Energy managers	Recognition (non-monetary)	Recognition awards are given for outstanding energy consumption reduction projects that lead to air emission reduction, including GHG.
Energy managers	Other non-monetary	Non-monetary rewards, based on star ratings, are given to energy champions that have outperformed energy, GHG and water savings as part of the Energy Target Setting. An Energy Target Setting Initiative is a

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
	reward	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.
Facility managers	Recognition (non-monetary)	Recognition awards are given for outstanding energy consumption reduction projects that lead to air emission reduction, including GHG.

### Further Information

For more information on Corporate Governance, Please see  
<http://www.nestle.com/Investors/CorporateGovernance/Pages/Corporate-Governance.aspx>

Please find enclosed our 2012 Nestlé integrated full annual report pack.

### Attachments

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/1.Governance/Nestlé 2012 Integrated Annual Report Pack.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/1.Governance/Nestlé%202012%20Integrated%20Annual%20Report%20Pack.pdf)

## 2. Strategy

### 2.1

**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

#### 2.1a

## **Please provide further details**

### **a. Scope of process**

Our culture combines a long-term mindset with short-term action. It encompasses a passion for quality – in products, in relationships, in everything we do. It is focused on competitiveness, calculated risk-taking and opportunities; and an unwavering determination to deliver our goals, while creating value for society as a whole.

Nestlé has in place an Enterprise Risk Management (ERM) process, which is applied across the enterprise, designed to identify potential events that may affect the company, to manage risk and opportunities, and to provide reasonable assurance regarding the achievement of objectives. Climate Change is an integrated part of the risk and opportunity assessment of ERM.

ERM enables Nestlé Management to raise risk and opportunities awareness, to anticipate risks/opportunities early and to make sound business decisions throughout the Group by understanding relative business impact of different types of risks and opportunities, root causes and correlations among interdependent risks/opportunities or major impact of the company on its social and physical environment including climate change.

ERM aims at identifying & quantifying tangible (financial, operational, physical, human assets, etc.) and intangible (reputation, human rights, brand image, intellectual property, etc.) risks and opportunities in a transparent manner. Regulatory, consumer behaviour changes (brand image) and weather related (natural hazards) climate change risk /opportunities are assessed.

Nestlé has established a Standard for Crisis Preparedness and Management where is mentioned that Nestlé's first priority is to detect emerging issues as well as real, presumed or perceived incidents related to its business, employees and production sites, and to prevent them from turning into crisis. However, if Nestlé does face a crisis, it is important to manage it in a professional and efficient manner. Thus, Nestlé operates on the basis of two important principles:

\* Crisis Prevention: - to address threatening issues and incidents as early as possible.

\* Crisis Management: - to safeguard its consumers, employees, reputation and brands, - to prevent negative impact on its share price and customer/consumer relations, - to prevent restrictive regulation.

### **b. How risks/opportunities are assessed at a company level**

At a company level, ERM is applied systematically top-down in each Zone, Globally Managed Business, in all Markets; on strategic planning; on a bottom-up approach, for projects in innovation & renovation, M&A, divestiture, major capital spending, restructuring, and finally on an ad hoc basis in many other areas. All risks/opportunities are assessed in relation to their magnitude of impact and likelihood.

### **c. How risks/opportunities are assessed at an asset level**

Site specific assessments, using also the ERM process, are performed under the leadership of the site manager, involving a management team (site, advisor, corporate if needed).

Nestlé has factories in 86 different countries and its products are sold in more than 194 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. To assess the magnitude of the impact we consider the likelihood and impacts of the risk/opportunities. Regular monitoring and ad hoc business continuity plans are established in order to mitigate against such an event.

### **d. Frequency of monitoring**

Monthly: The Issues Round Table meets on a monthly basis under the chairmanship of R&D and Operations Executive Board Members. It reviews in particular emerging regulations, e.g. on refrigeration, and issues, e.g. deforestation, related to Climate Change. Action plans are established.

### **e. Criteria for materiality/priorities**

ERM is 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 analyze the impact of opportunities (positive impact/contribution). With assessment of likelihood and impact, all threats and opportunities are coded, like (C, 3). A likelihood/impact matrix (with both threats and opportunities) 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 have identified global megatrends, assessed their relevance to our Creating Shared Value focus areas and economic, environmental and social issues, and prioritised issues on a materiality matrix based on level of stakeholder concern and level of potential impact on Nestlé. In 2012, 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, particularly in rural communities.

**f. To whom are the results reported**

Company level results including climate change related risks and opportunities are reported to the Executive Board via Zone Management. Asset level results are reported to country managers. The results on climate change of the Group ERM are presented annually to the Executive Board and to the Audit Committee, and conclusions reported to the Board of Directors. In the case of an individual risk assessment identifying a risk which requires action at Group level, an ad hoc presentation is made to the Executive Board. GHG emissions and progress against targets are reported monthly to the EBM.

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## 2.2

### Is climate change integrated into your business strategy?

Yes

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## 2.2a

### Please describe the process and outcomes

Climate change has influenced our strategy and is integrated in our business strategy. Our business strategy is linked to emission reduction targets and to climate change risk and opportunities.

#### 1. The process

Climate change has been identified as one issue of particular importance for Nestlé.

The internal communication process to influence the business strategy is through Nestlé governance bodies such as the 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 Creating Shared Value (CSV) Alignment Board quarterly. Climate change is one of the environmental sustainability topics of the CSV Alignment Board, chaired by our CEO Paul Bulcke. It leads the development and evolution of Nestlé's sustainability and climate change objectives and strategies at Group level, while reverting to the Executive Board for input and confirmation.

This board oversees the strategic implementation of CSV including climate change across all Nestlé businesses. Implementation in the markets is done through the Nestlé Environmental Management system (NEMS). Management is accountable for NEMS implementation within their area of responsibility.

Climate change risks and opportunities are escalated through different levels of the governance bodies. Climate change issues are escalated through the Nestlé environmental management network and line managers through the zones. Business strategies adjustments are then discussed during these meetings.

The CSV Alignment Board liaises and ensures coherence with our CSV Advisory Board composed of internationally recognized experts in climate change who give independent input to our activities. Regular stakeholder convenings covering climate change form an important part of our engagement processes

The Executive Board monitors on a monthly basis the evolution of GHG emissions and GHG savings projects in all markets and the progress against GHG targets.

## **2. Aspects**

Climate change has influenced our strategy and is integrated in our business strategy. Our business strategy is linked to emission reduction targets and to climate change risk and opportunities.

Climate changes poses risks to Nestlé but at the same time opportunities as we aim to constantly lower the GHG emissions associated with the production and distribution of food and beverages, and to design products that help consumers reduce their own GHG emissions in the use of our products. We also work with farmers to improve their resilience to climate change.

The following aspects of climate change have influenced Nestlé's strategy:

- Regulation aspects: A typical example is the EU Cap and Trade scheme. Nestlé will be required to purchase certificates for its emissions from concerned factories during EU-ETS Phase III. The cost of allowances is expected to rise as demand increases and the amount of allowances available on the market decreases due to carbon leakage measures benefiting large emitters. It might impact the production costs in factories participating in the scheme and affect their competitiveness among other Nestlé's factories. The active cost reduction related to EU-ETS has been integrated in the business strategy.
- Physical aspects: change in temperature extremes, water availability, and influence to agriculture. E.g. some of these sites are located in vulnerable areas, like China, India and Mexico. It has been integrated in the business strategy that physical aspects cause no interruption 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, particularly in rural communities. 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.

### **3. Climate change has influenced our strategy in the short term (1years) as follows:**

- We implemented a strategy to tackle deforestation associated with our procurement of agricultural commodities (e.g. palm oil, soy) to support a positive climate change influence and reputation which is part of our overall strategy.
- Through our Sustainability by Design Programme, we systematically assess and optimise the environmental performance across the entire value chain at the earliest stage in the development of new and renovated products.
- We are committed to target the reduction of GHG emissions from our direct operations, with an emphasis on energy efficiency which is part of our business strategy, cleaner fuel, renewable energy and expanding the rollout of natural refrigerants. Our business strategy is linked to an emissions reduction target. Our goal is to reduce by 2015 direct GHG emissions per tonne of product by 35% vs. 2005 resulting in an absolute reduction of GHG emissions.
- We disclose in our website, integrated annual report pack and on-line Nestlé in Society reports, our activities to mitigation and adaptation.
- We work actively with governments, trade bodies and NGOs to assess and test responsible approaches to provide environmental information, including CO2 to consumers.

### **4. Climate change has influenced our strategy in the long term (4-5 years) as follows:**

On mitigation, we:

- Extend the scope of GHG reduction 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.
- Identify the reduction potential and enhance programs for the different GHGs, particularly CO2, methane, NOx and F-gas.

On adaption, we:

- Engage 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.
- Identify practical actions and agricultural systems that can be implemented at farm level and provide technical assistance to farmers through our agronomists.
- Include enhanced resilience to climate change in our R&D programs
- Synthesize information on climate adaption, and findings from our own work, and share this with farmers, governments and other stakeholders, in order to improve knowledge on climate adaption.

In 2012, we updated the Nestlé Policy on Environmental Sustainability which states clearly that climate change is a key focus area.

## **5. Strategic advantage**

We have strategic advantage over our competitors because we will increase Nestlé value by ensuring long-term availability of raw materials and water, more secure supply of better quality raw materials, producing products with improved environmental performance, consumer preference for our products and sustainable, profitable growth and to continuously improving environmental performance. This lies in the fact that we will manage better the risks and opportunities of climate change.

**6. Substantial business decisions made influenced by climate change**

a) Deforestation: We are committed to use only palm oil from sustainable sources by 2015 and to help achieve zero net deforestation by 2020. The deforestation commitment includes preservation of “high carbon stock” forests and “high carbon stock” soils. Reputational aspects of climate change influenced this decision.

b) We use safe natural refrigerant alternatives for industrial refrigeration installations. We carefully design, build and operate all our refrigeration systems, and continuously investigate ways to improve performance. We subscribe to the Consumer Goods Forum Resolution to ‘take action to mobilise resources within our respective businesses to begin phasing out HFC refrigerants as of 2015, and replace them with non-HFC refrigerants (natural refrigerant alternatives) where these are legally allowed and available for new purchases of point-of-sale units and large refrigeration installations’. Regulatory aspects of climate change influenced this decision.

2.2b

Please explain why not

2.3

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

- Direct engagement
- Trade associations
- Funding research organizations
- Other

2.3a

**On what issues have you been engaging directly?**

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
Other:	Support	In 2012, we participated in the European public consultation on	We support several initiatives around the world to establish

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
Sustainable consumption		<p>"Delivering more Sustainable Consumption and Production". The European Commission (EC) wants to gather views on the possible introduction of EU wide measures related to Sustainable Consumption and Production. Nestlé proactively provided feedback on the Green Public Procurement, and the Environmental Footprint of Products. In 2012, we also continued our proactive collaboration with the EC to test their product environmental footprint (PEF) methodology on Nespresso, Nescafé, Vittel, Kitkat and Purina. We presented the results at the 6th Society of Environmental Toxicology and Chemistry (SETAC) World Congress. The EC used these results in developing a harmonised methodology for assessing products in the European Union, called PEF. In 2012, we continued to participate in voluntary initiatives to provide consumers with environmental information about our products, including participation in a national experiment on environmental communication to consumers in France, launched by the French Ministry of Ecology, Sustainable Development, Transport and Housing. In 2012, our focus within the French experiment was to evaluate the effectiveness of our environmental communication – particularly in relation to products such as Vittel, Nescafé and Nespresso – and to understand consumer receptivity to information concerning GHG emissions, water and biodiversity. Consumption and Production Round Table. In 2012, we participated in the development of international recognised standards for the development of carbon and water footprint. We continue our support for initiatives to develop scientifically reliable and consistent communication tools for consumers, such as the European Food Sustainable. Last year, we also actively participated in the development of the ENVIFOOD protocol, the harmonised methodology for the life cycle assessment of food and drinks products along their value chain, for testing purposes launched by the European Food Sustainable Consumption and Production Roundtable. Related geographies: Europe These engagements have resulted in the publication of a harmonised methodology for Europe and beyond.</p>	<p>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 at EU level. 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 negative 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>
Adaptation resiliency	Support	<p>During the Rio+20 Corporate Sustainability Forum in Brazil, José Lopez, Executive Vice President for Operations, outlined the link between food security and sustainable agriculture and</p>	<p>On adaptation we propose to: *Engage with governments, farmers and other stakeholders to develop vulnerability assessments, action plans and strategies for different regions</p>

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
		<p>provided a number of recommendations for governments to consider. We take part in public dialogue: for example, we are a partner of the Adaptation Private Sector Initiative of the United Nations Framework Convention on Climate Change (UNFCCC); In 2012, we provided case studies on private sector engagement to the UN Environment Programme Green Economy Initiative and most recently the UNFCCC as part of an online tool that showcases how businesses and communities can adapt to the inevitable effects of climate change. We also showcased how we are helping farmers to adapt to climate change at the United Nations Climate Change Conference in Doha in November 2012. Through the Sustainable Agriculture Initiative at Nestlé (SAIN), we share best practices and lessons learned. Our Agriculture department co-ordinates the SAIN network and shares SAIN cases with all our sourcing specialists as well as represents us in inter-professional organizations such as the Sustainable Agriculture Initiative. Related geographies: Worldwide.</p>	<p>and sectors to climate change. * Participate in the public policy dialogue to support liberalisation of agricultural trade to enable market-led adaptation to changing regional pattern of agricultural production *Identify practical actions and agricultural systems that can be implemented at farm level and provide technical assistance to farmers through our farm advisors. Particular emphasis will be given to water stewardship. *Include enhanced resilience to climate change in our plant breeding programmes, in order to be able to provide farmers with improved genetic material. *Develop early warning systems and monitor climate changes at farm and landscape levels. *Synthesise information on climate adaptation, and findings from our own work, and share this with farmers, governments and other stakeholders, in order to improve knowledge on climate adaptation</p>
Other: Biofuels	Support	<p>Nestlé believes that rather than focussing on biofuels, other strategies for reducing the use of fossil fuels for transport should be the focus of government policies and the advocacy strategies of NGOs. These should include stricter fuel efficiency standards, incentives for alternative fuels and technologies, as well as investment in public transportation and the infrastructure for the electrification of transport. In 2012, Nestlé's chairman and CEO continued to 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 invest in research on credible alternatives to agricultural based biofuels. Related geographies: Worldwide. In particular in Europe, the Directive on biofuels has been updated and now the directive aims to ensure the use of sustainable biofuels only, which generate a clear and net GHG saving without negative impact on biodiversity and land use.</p>	<p>Biofuels should only be accepted when they: do not threaten food security; are able to demonstrably and significantly reduce GHG emissions; do not pose significant land use or significant water allocation and stewardship issues; and when they do not risk conservation conflicts. To facilitate this Nestlé believes that research on credible alternatives to the use of agricultural crops for biofuels is needed, such as the utilisation of wood, agricultural and forestry residues and algae (second and third generation biofuels). For its part Nestlé commits to: • Take all possible &amp; practical measures not to use liquid biofuel derived from first generation agricultural products within its operations (trucks, factories, cars etc). • Raise awareness on the dangers of using agricultural commodities, and the conversion of forests for the production of biofuels. • 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 invest in research on credible alternatives to agricultural based biofuels. • Improve energy efficiency within its operations.</p>
Other: Sustainable	Support	<p>Through our engagement with the World Economic Forum, an independent, international organisation, we play an active part</p>	<p>At the World Economic Forum annual meeting in Davos, Switzerland in January 2012, Nestlé Chairman Peter Brabeck-</p>

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
agriculture		<p>in working with business, political, and academic thought leaders to help shape global, regional and industry agendas. We are a founding member of the Sustainable agriculture initiative SAI platform. At the World Economic Forum annual meeting in Davos, Switzerland in January 2012, Nestlé Chairman Peter Brabeck-Letmathe highlighted the global water shortage in relation to agriculture sourcing and production. Related geographies: worldwide</p>	<p>Letmathe highlighted the global water shortage in relation to agriculture sourcing and production. Mr Brabeck-Letmathe warned that over the next two decades, the water shortfall would reduce global cereal production by a third and could trigger social unrest. He proposed collaboration and sustainable intensification of agriculture as a way to solve the world's water crisis and feed its growing population.</p>
Energy efficiency	Support	<p>In 2012, Nestlé USA signed a statement from Ceres and its BICEP (Business for Innovative Climate &amp; 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 fragile climate. Related geographies: US</p>	<p>We Nestlé propose to:</p> <ul style="list-style-type: none"> <li>•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.</li> <li>•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.</li> <li>•Identify the reduction potential and put in place programmes for the different GHGs, particularly CO2, methane, NOx and F-Gases.</li> <li>•Further reduction in waste in the supply chain.</li> <li>•Implement a strategy to tackle deforestation associated with its procurement of agricultural commodities. The strategy includes protection for high carbon soils and forests.</li> </ul> <p>We, the members 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.</p>

2.3b

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

Yes

2.3c

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?
Consumer Goods Forum	Consistent	<p>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. CGF Resolution on Deforestation "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." CGF Resolution on Refrigeration "As the Board of the Consumer Goods Forum, we recognise the major and increasing contribution to total greenhouse gas emissions of HFCs and derivative chemical refrigerants. We are therefore taking action to mobilize resources within our respective businesses to begin phasing-out HFC refrigerants as of 2015 and replace them with non-HFC refrigerants (natural refrigerant alternatives) where these are legally allowed and available for new purchases of point-of-sale units and large refrigeration installations." CGF Objective on Measurement "The objective of the CGF members is to achieve a common global system for measuring of environmental impacts starting with greenhouse gases (GHG) for the lifecycle of the products and services. Although we are starting with greenhouse gases, we plan to extend our work over time to cover other sustainability issues (e.g. water)."</p>	<p>Nestlé's CEO is a member of the Board of Directors of the CGF. We actively participate on the Sustainability Steering Committee, Deforestation Alignment Group, US Government Deforestation Initiative, Palm oil, Soy, Paper Working Groups, Refrigeration, Sustainability -Measurements &amp; Reporting group. We contributed to the CGF resolution to 'take action to mobilise resources within our respective businesses to begin phasing out HFC refrigerants as of 2015 and replace them with non-HFC refrigerants where these are legally allowed and available for new purchases of point-of-sale units and large refrigeration installations'. We also support the commitment on no deforestation and the CGF objective on measurement. Nestlé is also actively participating in the ongoing debate on environmental information to consumer. We contributed to the development of the consumer communication glossary defining terms used in environmental sustainability by the Consumer Goods Forum.</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?
Food Drink Europe	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 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. It recently launched an 'Environmental Sustainability Vision Towards 2030' report which featured our efforts to achieve zero net deforestation by 2020, source 100% certified sustainable palm oil by 2015. We aim to 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.</p>
WBCSD	Consistent	<p>As a global organization, the World Business Council for Sustainable Development (WBCSD) is involved in a number of key processes and dialogues around the world, particularly the United Nations Framework Convention on Climate Change (UNFCCC). The WBCSD has been present at the annual Convention of Parties (COP) since 1995 and has a leading business role at COP 15 in Copenhagen in 2009. Climate change can only be resolved through cooperation that includes all elements of society, in particular between governments and business. A new global climate agreement will be essential to establishing the right framework conditions that will deliver long-term, large scale greenhouse gas reductions. WBCSD recommendations are based on the view that it is essential that a new international agreement on climate change is agreed in 2010 to provide a</p>	<p>We recently rejoined the WBCSD whose wide ranging work touches on areas of key importance for us, from issues of environmental sustainability to social and economic development. José Lopez, the Executive Vice President of Operations, now represents us in the WBCSD Council. As a first major action following renewed membership, we became the first signatory to the WBCSD's Manifesto for Access to Safe Water, Sanitation and Hygiene at the Workplace.</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>framework for climate legislation and action that offers clarity, predictability and a level-playing field for business. This should include:</p> <ul style="list-style-type: none"> <li>• A global target (cap) on emissions by 2050 and pathways to get there;</li> <li>• Developed country commitments to deep emissions reductions and emissions reduction plans for developing countries;</li> <li>• Establishing a framework that provides strong incentives for the development and deployment of the clean technologies that will be necessary to enable the world to move towards a low carbon economy;</li> <li>• Policy measures to promote technology innovation and diffusion;</li> <li>• A framework to help accelerate clean technology diffusion in developing countries;</li> <li>• A signal that the carbon markets will continue beyond 2012, and that a global carbon market with a price on carbon will be established;</li> <li>• Adaptation funding</li> <li>• Support for reducing emissions for deforestation and forest degradation - REDD.</li> </ul> <p>Tackling climate change requires an integrated approach that addresses the issues of competitiveness and economic sustainability, energy security, the environment and development, as well as adaptive capacity for inevitable climate impacts.</p>	
European Food Sustainable Consumption and Production Round Table	Consistent	<p>The European Food Sustainable Consumption and Production Round Table (RT) 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"> <li>• 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;</li> <li>• Identification of suitable communication tools to consumers and other stakeholders, looking at all channels and means of communication;</li> <li>• Promotion of and reporting on continuous environmental improvement along the entire food supply chain and</li> </ul>	<p>We, Nestlé, co-chair together with the European Commission the steering committee on behalf of the food sector. Last year, the European Food Sustainable Consumption and Production RT launched a report on Continuous Environmental Improvement and finalise the development of the ENVIFOOD protocol, the harmonised methodology for the life cycle assessment of food and drinks products along their value chain, for testing purposes.</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?
		engaging in an open dialogue with its stakeholders. We actively participate in the consultations and steering meetings.	

**2.3d**

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

No

**2.3e**

**Do you fund any research organizations to produce public work on climate change?**

Yes

**2.3f**

**Please describe the work and how it aligns with your own strategy on climate change**

We support the Cambridge Programme for Sustainability Leadership and its Natural Capital Leaders Platform, which brings together leading thinkers and practitioners in the search for pragmatic and practical solutions.

In 2012, the Cambridge Programme for Sustainability Leadership published its Natural Capital Leadership Compact. We are a signatory to this and we have been active in publicising it, speaking at events at the Rio Sustainability Conference and explaining our approach. As part of our commitment on Natural Capital, we are collaborating with other companies on the valuation of externalities and in 2013 we expect to report more formally on the valuation of natural capital.

The Natural Capital Leaders Platform convenes companies with significant environmental impacts and dependencies who are taking action to review, value, redesign strategies, set targets and report on natural capital use. The goal of the companies is to reflect the external costs incurred in product lifecycles onto their balance sheets and to communicate these to society.

Through engagement with policymakers and collaborative working groups, Nestlé and other members aim to:

- Identify impact and reliance on key ecosystem services such as climate stability, soil health, fresh water and biodiversity;
- Place a financial value on these services that reflects their true cost to society (in lieu of effective pricing signals from policy and regulatory frameworks); and
- Manage their demands on these services thoughtfully like other forms of asset, moving from a culture of doing less harm to the natural world to contributing positively to its renewal.

Another example of a successful policy dialogue is the 2030 Water Resources Group initiated at the World Economic Forum, which involves the International Finance Corporation of the World Bank Group, McKinsey & Company, and a consortium of business partners. Under the leadership of Nestlé Chairman Peter Brabeck-Letmathe, the Water Resources Group seeks new insights into water scarcity, explores the opportunities and costs of possible solutions, and fosters results-based stakeholder dialogue. It has established and successfully tested a new methodology, the water cost curve, which guides policymakers in making the best possible choices to balance demand and supply in any given watershed. What started essentially as a private sector initiative is now being adopted by a growing number of regional bodies, with a multi-stakeholder approach as one of its key features.

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## 2.3g

### **Please provide details of the other engagement activities that you undertake**

Other engagement activities undertaken include the following partnerships:

**The Forest Trust:** In 2010, we entered into a partnership with The Forest Trust (TFT), a global non-profit organisation whose main focus has been to provide solutions to the issue of deforestation. We are the first global consumer goods company to become a TFT member. We work together to ensure the responsible sourcing of palm oil and pulp and paper.

**Proforest:** Proforest helps companies, government departments, non-governmental and civil society organisations to achieve the sustainable use of the world's natural resources. We're working together to develop and implement Responsible Sourcing Guidelines (RSGs) on sugar.

**Conservation International:** We are working with Conservation International to develop Responsible Sourcing Guidelines for soy.

**United Nations Global Compact (UNGC):** UNGC is a strategic policy initiative for businesses committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. We are one of 56 companies invited to join the UN GC LEAD initiative (see below). We are also a founding signatory of the CEO Water Mandate and a member of the Human Rights and Labour Working Groups and the Supply Chain Advisory Group.

Our Corporate Business Principles incorporate the 10 UN Global Compact (UNGC) Principles on Human Rights, Labour, the Environment and Corruption. They reflect the basic concepts of fairness, honesty and respect for people and the environment in all our business actions. We reiterate our strong support to the UN Global Compact, its 10 Principles and to its Blueprint for Corporate Sustainability Leadership.

### **UNGC LEAD**

This is a leadership platform comprising a select group of about 56 UN Global Compact "champion" companies. LEAD is deeply integrated into other UN Global Compact engagement opportunities – including, notably, the approximately 90 Global Compact Local Networks; the six global working groups as well as the Caring for Climate and CEO Water Mandate initiatives. Companies that participate in the LEAD are committed to implement the Blueprint for Corporate Sustainability Leadership developed in 2010. We are a founding participant and member of the LEAD Steering Committee and participate in several LEAD Task Forces, such as:

- UNGC Sustainable Agriculture Business Principles: UNGC and the Food and Agriculture Organization (FAO) have initiated a process aimed at the development of global voluntary business principles on sustainable agriculture for companies as well as governments and other stakeholders. The objective of this process will be to develop a common understanding and agreement on what resources and impacts are needed from the global community to transform markets and agricultural supply systems and advance sustainable agriculture globally. We were one of the 20 companies that participated in the first meeting of the voluntary business principles organized by the UNGC and FAO in September 2012.
- UNGC Advisory Group on Supply Chain Sustainability: This Advisory Group aims to inform and advise its members on common issues and solutions for supply chain sustainability across UN Global Compact issue areas and issues of importance. This will include the availability of practical tools and resources including guides, training, and reference documents. We are a member of this Advisory Group and participated throughout the year in its work streams on traceability and human rights.

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### 2.3h

#### **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, Audit Committee, Risk Management Committee, R&D Council for Sustainability and Nutrition, and the Group Compliance Committee.

#### **CSV Alignment Board**

We have also established a quarterly CSV Alignment Board, chaired by our Chief Executive Officer, Paul Bulcke. This board is an umbrella organisation that oversees the strategic implementation of Creating Shared Value across all our businesses. It leads the development and evolution of our CSV and sustainability objectives and strategies at Group level including climate change, while reverting to the Executive Board for input and confirmation. It also liaises with and ensures coherence with our CSV Advisory Board, which gives external input to our activities.

#### **CSV Advisory Board**

The Nestlé Creating Shared Value Advisory Board, created in 2009, brings together external experts in corporate strategy, nutrition, water and rural development and climate change to assess our progress and discuss CSV opportunities and challenges.

The CSV Advisory Board currently has 12 members. They are appointed for three years, and meet annually. In addition to advising the Chairman and CEO on our CSV agenda, the Board members also participate in our annual CSV Global Forum and select the winner of the Nestlé Prize in Creating Shared Value.

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### 2.3i

Please explain why you do not engage with policy makers

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### Further Information

- Food Drink Europe's detailed position is available at: [http://www.fooddrinkeurope.eu/uploads/statements\\_documents/Final\\_climate\\_change.pdf](http://www.fooddrinkeurope.eu/uploads/statements_documents/Final_climate_change.pdf)
- WBCSD: <http://www.wbcsd.org/newsroom/faq.aspx>
- For more information on governance, please see <http://www.nestle.com/csv/nestle/governance>

Please find enclosed below the Nestlé Policy on Environmental Sustainability and Nestlé commitment on climate change.

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### Attachments

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/2.Strategy/Nestlé Commitment on climate change.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/2.Strategy/Nestlé%20Commitment%20on%20climate%20change.pdf)  
[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/2.Strategy/Nestle-CSV-Full-Report-2012-EN.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/2.Strategy/Nestle-CSV-Full-Report-2012-EN.pdf)  
[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/2.Strategy/Po - The Nestlé Policy on Environmental Sustainability.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/2.Strategy/Po%20-%20The%20Nestlé%20Policy%20on%20Environmental%20Sustainability.pdf)

## 3. Targets and Initiatives

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### 3.1

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

Absolute and intensity targets

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### 3.1a

**Please provide details of your absolute target**

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
Abs 1	Scope 1	100%	2%	2011	3806467	2012	Nestlé established a specific absolute target on direct GHGs while our demand for product continue to rise: Continue decoupling direct CO2 emissions, i.e. absolute direct greenhouse gas emissions reduction of 2% on a comparable basis by 2012. The GHG emissions in 2011 were 3806467 tonne CO2e.

### 3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
Int 1	Scope 1	100%	35%	metric tonnes CO2e per metric tonne of product	2005	118.4	2015	Nestlé established a specific target on GHGs reduction: Continue decoupling of energy generation and CO2 emissions, i.e. greenhouse gas emissions reductions of 35% on a comparable basis by 2015. The GHG emissions in 2005 were 4'305'111 tonne CO2e, that is, 118.4 tonne CO2e per tonne of product.

### 3.1c

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
Int 1	Decrease	5			The average percentage change of our production volume over the last 7 years (2005-2012) corresponds to 4.5% (production volume in 2005 is 36.4 million tonnes and in 2012 it is 47.7 million tonnes). If we assume that this average percentage change remains constant until 2015, the production volume in 2015 will correspond to 53.3 million tonnes. Moreover, if the target "Int1" is achieved (76.96 kg of direct CO2e per tonne of product emitted in 2015) and our assumption regarding the production volume in 2015 is correct, the absolute direct GHG emissions in 2015 will correspond to 4.1 million tonnes of CO2e. Knowing that the direct GHG emissions in 2005 were 4.3 million tonnes of CO2e, this yields to a 5% decrease in the absolute direct GHG emission in 2015 vs. 2005.

### 3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
Int 1	70%	96%	Per tonne of product, we reduced our Scope 1 GHG emissions from 118.4 tonnes of CO2e per tonne of product in 2005 to 77.7 tonnes of CO2e per tonne of product in 2012.
Abs 1	100%	100%	We have decreased our direct GHG emissions by 2.6% since 2011. In 2012, we have thus exceeded our target.

### 3.1e

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

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3.2

**Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?**

Yes

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3.2a

**Please provide details (see guidance)**

[Packaging source optimisation programme & Processed food vs equivalent homemade food](#)

**i) How the emissions are/were avoided**

Our food and beverages directly saves GHG emissions when compared with processed food which often has a better environmental performance than equivalent homemade food. The use of our product instead of drip filter coffee would help consumers reduce their carbon footprint. By enjoying a cup of coffee NESCAFÉ instead of cup of drip filter coffee, 16.2 gCO<sub>2</sub>e 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.

**ii) An estimate of the amount of emissions**

Per year with a 2011 baseline, an estimate of 2313254 tonne of CO<sub>2</sub>e were avoided in 2012 by drinking Nescafe instead of drip filter coffee.

Per year with a 2011 baseline, an estimate of 70479 tonnes of CO<sub>2</sub>e were avoided in 2012 by our packaging source optimisation programme.

**iii) The methodology, assumptions, emission factors and global warming potentials**

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 day 400 million cups of Nescafe are enjoyed worldwide. The GWP taken from IPCC using 100 years horizon are: 1 for CO<sub>2</sub>; 25 for CH<sub>4</sub> and 298 for N<sub>2</sub>O.

For packaging source optimisation programme, the emissions factors 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], 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 CO<sub>2</sub>e/ton of packaging.

The comparison between spray dried soluble coffee and alternatives has been published in a scientific paper called "Life cycle assessment of spray dried soluble coffee and comparison with alternatives (drip filter and capsule espresso)"

**iv) CERs or ERUs**

In this case, we don't consider generating CERs or ERUs within the framework of CDM or JI (UNFCCC). However, the environmental savings contribute towards a better environment.

[Efficient coffee machines](#)

**i. How the emissions are/were avoided**

This refers to our coffee machines of our Nescafé Dolce Gusto and Nespresso business. Operating machines consume energy including when when they are



inactive (stand-by). Therefore, our coffee machine design has incorporated an efficient stand-by function, which can save approximately 15%–25% of total energy consumption. Through saving energy, the GHG emissions are reduced.

**ii. An estimate of the amount of emissions**

The estimate of the amount of emissions avoided is 30kg and 36kg CO<sub>2</sub>e per year per machine of Nespresso and Nescafé Dolce Gusto machines respectively. This considers that the Nespresso and Nescafé Dolce Gusto machines have a stand-by mode which is designed to save 140 Wh per day and 167 Wh per day (12hours) respectively compared with machines without the stand by design function.

Taking a 2011 baseline, for Nespresso coffee machine without the standby on for 12 hours, the energy consumption to keep the machine ready to use is 140 Wh per day, which is equivalent to 30kg CO<sub>2</sub>e per year. This means, with this stand-by function, the avoided GHG emission for this coffee machine is 30kg CO<sub>2</sub>e every year.

Taking a 2011 baseline, for Nescafé Dolce Gusto machine left on for 12 hours, the energy consumption to keep the machine ready to use is 167 Wh per day (12hours), which is equivalent to 36kg CO<sub>2</sub>e per year. This means, with this stand-by function, the avoided GHG emission for this coffee machine is 36kg CO<sub>2</sub> every year.

**iii. The methodology, assumptions, emission factors and global warming potentials**

The calculation methodology was developed in-house and the CO<sub>2</sub>e savings were estimated per year by multiplying the energy savings of the stand-by mode machine by emission factors as indicated below.

The calculation process for Nespresso machine is as follows:

Annual electricity consumption: 140 Wh x 365 days = 51.1 kWh

- Take the emission factor of 587 gCO<sub>2</sub>/kWh for indirect GHG emission by electricity consumption.
- Global Warming Potential takes 1 for CO<sub>2</sub> according to IPCC report.
- Annual GHG emission caused by this electricity consumption: 51.1 kWh x 587 gCO<sub>2</sub>/kWh = 30 kgCO<sub>2</sub> per year.

The calculation process for Nescafé Dolce Gusto is as follows:

Annual electricity consumption: 167 Wh x 365 days = 60.95 kWh

- Take the emission factor of 587 gCO<sub>2</sub>/kWh for indirect GHG emission by electricity consumption.
- Global Warming Potential takes 1 for CO<sub>2</sub> according to IPCC report.
- Annual GHG emission caused by this electricity consumption: 60.95 kWh x 587 gCO<sub>2</sub>/kWh = 36 kgCO<sub>2</sub> per year.

**iv) CERs or ERUs**

We don't consider generating CERs or ERUs within the framework of CDM or JI (UNFCCC)

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**3.3**

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

Yes

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**3.3a**

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	853	173000
To be implemented*	90	35000
Implementation commenced*	0	0
Implemented*	149	101000
Not to be implemented	116	146000

### 3.3b

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)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
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 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: • 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.	77000	17000000	40000000	4-10 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	As an integral part of Nestlé Continuous Excellence, we use i-nexus, a project-management system, to report any type of improvement projects, including energy savings. ETS aims at issuing a roadmap of energy improvement projects covering building, industrial services and processes. ii) This activity aims to reduce scope 1 and 2 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected life time :10 years				
Low carbon energy purchase	i) 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 2012, 20 Nescafé factories are using coffee grounds from manufacturing process as a source of renewable energy. In 2012, 16 Nestlé factories used wood as a source of renewable energy. Spent coffee grounds represent 3.4% of total on site energy consumption, wood represents 3.1%, and an estimated 5.7% can be attributed to the purchase of electrical energy generated from other renewable sources. For example, Nestlé France's Challerange factory, which produces milk powder for Dolce Gusto capsules, now operates a wood-fired boiler using woodchips sourced from forests certified by the Programme for the Endorsement of Forest Certification (PEFC) meeting 96% of the plant's fuel needs. This initiative generates approximately 8,000 tonnes CO2 savings per year and will help us to minimise the impact of energy price increases. Two other wood-fired boilers came on at our Rosières (mashed potatoes) and Herta St Pol (sausages and hams) factories by the end 2012. These three wood boilers together will make CO2 savings of 25% for Nestlé France. ii) This activity aims to reduce scope 1&2 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected lifetime: 20 years	19000	5000000	24000000	4-10 years
Fugitive emissions reduction	i) Nature of the activity: Phasing out the use of non-natural refrigerant with natural refrigerant: As part of our internal policy on voluntary basis, we are phasing out the use of non-natural refrigerant with natural refrigerant. So we are replacing our refrigeration plants with NH3 and CO2 refrigerant systems. ii) This activity aims to reduce scope 1 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected lifetime : 20 years	8488	0	4500000	4-10 years
Transportation: fleet	i) Nature of the activity: Using telematic systems to monitor driving behaviours Telematic systems – similar to the black boxes in aeroplanes – remotely collect data	2595	1150000	1500000	1-3 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	<p>on how vehicles are being driven as well as their engine performance. In 2011, Nestlé Switzerland assessed five telematic systems in 66 trucks. The tests showed that telematic encourages safer driving behaviours and improves environmental performance, which in turn reduces our operational costs. In parallel, Nestlé Waters North America (Nwana) and our Direct Store Delivery in the US carried out similar pilots. Based on Nwana's pilot results, reduction in idle time could save as much as CHF 910000 in fuel costs and approximately 2,595 tonnes of CO2 emissions. The engine diagnostics information could lead to CHF 136500 in yearly maintenance savings. Nwana plans to install telematic across its whole fleet of 1,600 route trucks in 2013. Similar savings are expected by our Direct Store Delivery in 2013. Following these successful tests in North America and Switzerland, telematics systems are now also being rolled out in other regions. ii) This activity aims to reduce scope 1 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected lifetime: these are trials only so far. If successful, investments will be done in coming years.</p>				
Transportation: use	<p>i) Nature of the activity: Promoting long distance transportation in Europe by rail and short-sea: We aim to shift long-distance transportation from road to either rail or short-sea shipping, both of which result in significantly lower air emissions. In our European operations, this shift has delivered a reduction of approximately 5,300 tonnes of CO2e in the last year. Despite these achievements, much of our short-to-medium distance transportation continues to be by road. To mitigate its effects, we are: optimising truck efficiency (with new engines, aerodynamic devices and eco-driving training); increasing the load factor to optimise transport capacity; avoiding empty runs; and exploring alternative vehicles (smaller delivery vehicles, electric engines, hybrid vehicles, alternative fuels such as compressed natural gas, liquefied petroleum gas, methane or hydrogen). ii) This activity aims to reduce scope 1 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected lifetime: 10 years. Investments are done by third party, so Investment and payback period are not available.</p>	5300	0	0	
Energy efficiency: Building fabric	<p>i) Nature of the activity: We voluntarily recommend applying an integrated approach similar to LEED in all new construction. This will cover not only the insulation of the building but all the environmental criteria, like materials, transportation, etc. ii) This</p>				4-10 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	<p>activity aims to reduce scope 1, 2 and 3 emissions iii)Voluntary/mandatory: This measure is a voluntary measure iv)Expected lifetime: the building is expected to last for 50+ years. E.g. Our Buxton water factory in UK, which invested 51 million CHF in a new bottling and warehousing plant, was awarded BREEAM Certification. Our Chiapa de Corzo social block in Mexico was awarded LEED platinum.</p>				
Behavioral change	<p>i)Nature of the activity: As part of the Nestlé Policy on Environmental Sustainability, we educate all employees to live by the Nestlé corporate business principle on environmental sustainability We make Nestlé resourceful and therefore, we: • train all employees on The Nestlé Policy on Environmental Sustainability; • create conducive workplace conditions that help all employees take personal responsibility for protecting the environment by promoting application of this policy to day-to-day activities at the workplace as well as at home; • ensure environmental sustainability is covered as part of relevant training, workshops and meetings to raise commitment of our employees, suppliers, business partners and the community at large; • promote corporate and personal responsible behaviour towards the environment through publishing success stories and recognizing positive initiatives to embed these practices within Nestlé and the local community. Incentive video and tips are available for each employee at the HQ via our intranet and the screens displayed in the building; they show way to save energy and reduce greenhouse gas (GHG) emissions by example relying on natural light - simply by opening the curtains or blinds, limiting the business travels through use of teleconference and videoconference or using public transport, bicycle, or walk and drive only when necessary. ii)This activity aims to reduce scope 1, 2 and 3 emissions. iii)Voluntary/mandatory: This measure is a voluntary measure iv)Expected lifetime: it is expected to last 10 years.</p>				
Behavioral change	<p>i) Nature of the activity: Employee training and engagement: We give employees detailed guidelines and instructions relating to The Nestlé Policy on Environmental Sustainability, via the Company intranet. We also regularly communicate progress, performance and good practice through this and other channels, including face-to-face meetings. Engagement through e-learning: Employees receive training on the relevant procedures as part of their induction and on-the-job coaching. To make this training engaging for non-specialists, we have developed a special e-learning training tool on environmental sustainability. This has now been deployed to just under 2,000</p>				

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	<p>employees worldwide. In addition, our 'Environmental Sustainability at the Centre' initiative aims to build awareness and promote positive change at our headquarters. Engagement at Nespresso: MyEcolaboration™, is an employee engagement initiative launched by Nespresso to encourage innovation, collaboration and commitment to our sustainability initiative, Ecolaboration™. So far, the programme has reached more than 1,000 employees and has generated 407 ideas. Other examples of employee engagement in 2012 As part of our engagement we:</p> <ul style="list-style-type: none"> <li>• Launched the Nestlé Environmental Sustainability Leadership workshop to drive behavioural change in different business units.</li> <li>• Held a Global Safety, Health and Environmental Sustainability conference. Environmental Managers from 70 different countries participated.</li> <li>• Launched a video of ideas around mobility, food waste avoidance, recycling, business travel and energy-saving measures at the global headquarters, which has been replicated in some countries.</li> <li>• Organised a 'Save Paper' campaign and many lunch-time conferences with external guest speakers open to all employees.</li> </ul> <p>ii) This activity aims to reduce scope 1 &amp; 3 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected lifetime: ongoing. We are committed to environmental awareness training to employees. We will continue to promote different training to employees worldwide.</p>				
Product design	<p>i) Nature of the activity: Systematically assessing the environmental performance of our products including GHG emissions: Our Nestlé Product Development Process requires the monitoring of the evaluation of environmental performance of all new innovation and renovation projects through the Nestlé Environmental Sustainability Index – which incorporated carbon footprint. To optimise the environmental performance of our packaging, we continue to use the Packaging Impact Quick Evaluation (PIQET) tool for the eco-design of our packaging and the Global Environmental Footprint (GEF) tool for bottled water. To make the life cycle assessment process faster, more efficient and applicable to every product development project, we have started the roll out of an eco-design tool called EcodEX, a multi-criteria eco-design tool that covers both packaging and ingredients and can be applied to all product categories. Designed in partnership with software developer Selerant, EcodEX assesses different scenarios across a range of environmental indicators such as water, greenhouse gas emissions, non-renewable energy and</p>				

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	minerals and ecosystem impact. It will also help us understand the trade-offs associated with our environmentally informed choices. It will help us make environmentally informed choices on everything from ingredients to packaging to end-of-life options by systematically embedding environmental considerations into the way we make our products. We will continue roll-out of EcodEX out in 2013. ii) This activity aims to reduce scope 1,2,3 emissions iii) Voluntary/mandatory: This measure is a voluntary measure iv) Expected lifetime: ongoing. As stated in the updated Nestlé Policy on Environmental Sustainability, we are committed to the systematic assessment and optimisation of environmental impacts in the design of new and renovated products. In 2013 we will continue to further roll EcodEX.				

### 3.3c

#### 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. In 2012, we approved to invest CHF 121 million in environmental sustainability projects including the reduction on GHG emissions.
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.
Internal incentives/recognition programs	Monetary reward and incentives are linked to attainment of energy savings, thus of GHG reduction targets.

Method	Comment
Employee engagement	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. The Chief Engineer defines the energy saving objectives for the factories and supports the factories in energy savings matters. 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.
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, and are currently monitoring over 11 000 hydrocarbon ice cream freezers in seven countries. 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: In 2012, we updated our Nestlé Environmental Requirements, which are mandatory across all our operations involved in handling products. Whilst their primary application is in those jurisdictions where environmental legislation is non-existent or under-developed, they must be met where applicable by all such operations regardless of location.
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.

3.3d

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

#### Further Information

For more information, please find enclosed the following documents:

\*Nestlé Environmental Performance Indicators 2012

\*Definitions and comments on Environmental Performance Indicators 2012



For more information on Environmental Sustainability at Nestlé please visit:  
<http://www.nestle.com/csv/Environment/Pages/Environmentalsustainability.aspx>

## Attachments

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/3.TargetsandInitiatives/CNEPI\\_2012\\_FINAL\\_online\\_version.xlsx](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/3.TargetsandInitiatives/CNEPI_2012_FINAL_online_version.xlsx)  
[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/3.TargetsandInitiatives/Definition\\_and\\_Comments\\_on\\_2012\\_CNEPI\\_FINAL.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/3.TargetsandInitiatives/Definition_and_Comments_on_2012_CNEPI_FINAL.pdf)

## 4. Communication

### 4.1

**Have you published information about your company'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	Page/Section reference	Attach the document
In mainstream financial reports (complete)	We have attached our 2012 integrated annual report pack. It contains the company's 2012 Annual Report, 2012 Financial Statements, 2012 Corporate Governance report and the 2012 Nestlé in society: Creating Shared Value and meeting our commitments report. In section 'annual report', you can find information on our emissions (pdf page 4) and on our CC risks and opportunities (pdf page 8). In section '2012 Nestlé in society:', you can find information on our emissions (pdf page 63), on our CC risks and opportunities (pdf page 107) and on targets (pdf page 112). In section 'financial statements', you can find information on our environmental provisions (pdf pg 199)	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation1/Nestlé%202012%20Integrated%20Annual%20Report%20Pack.pdf">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation1/Nestlé 2012 Integrated Annual Report Pack.pdf</a>
In voluntary communications (complete)	See the followings section in the online Nestlé in Society full report GRIA+. *Climate change section (pdf page 193-197). Nestlé presents key environmental data, including direct and indirect GHG emissions performance. *Manufacturing section (pdf page 170-175) with details on initiatives taken to improve	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation2/Our%20online%20reporting%20on%20Nestlé%20in%20SocietyGRIA+2012-EN.pdf">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation2/Our online reporting on Nestlé in SocietyGRIA+2012-EN.pdf</a>

Publication	Page/Section reference	Attach the document
	energy efficiency (energy savings initiatives) and investment in refrigeration system.*Targets section (pdf page14)*Materiality section (pdf page17)*Indicators (pdf page 21)	
In voluntary communications (complete)	We have attached a pdf containing a print screen of our website dated 29.05.2013 www.nestle.com covering our commitment on climate change (“What we stand for”), 2012 actions (“What we’re doing”), GHG emissions scope 1, 2 and 3 (“How we’ve performed”) and planned actions for the future (“What we plan to do”).Full document attached is on climate change.	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation3/Climate%20change%20section%20in%20Nestl%C3%A9.com%20website.pdf">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation3/Climate change section in Nestlé.com website.pdf</a>
In voluntary communications (complete)	We have attached a pdf containing the Nestlé commitment on climate change available in nestlé.com. Full document attached is on climate change.	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation4/Nestl%C3%A9%20Commitment%20on%20climate%20change.pdf">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Investor-4.1-PublishedInformation4/Nestlé Commitment on climate change.pdf</a>

#### Further Information

In our 2012 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 company's 2012 Annual Report, 2012 Financial Statements, 2012 Corporate Governance report and the 2012 Nestlé in society: Creating Shared Value and meeting our commitments report. More specifically, it covers Corporate Governance and Compliance, The Nestlé Roadmap to Good Food, Good Life, and Financial review, 2012 performance summary including environmental, social indicators, a section on environmental sustainability, rural development, water and nutrition. 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.

Environmental Sustainability material issues including climate change are covered in all sub elements of the 2012 integrated annual report pack, including the 2012 Financial Statements, 2012 Corporate Governance report in the section of Provisions and contingencies.

Our on-line reporting on Nestlé in Society includes also 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) 3.1 guidelines. The GRI has verified our report as meeting level A+. 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 2012, Nestlé has published a set of forward-looking commitments to society and on environment sustainability it aims to meet by 2020 or earlier. The company has identified 30 goals in the areas of nutrition, water, rural development, sustainability and compliance in its new report, 'Nestlé in Society: Creating Shared Value and meeting our commitments 2012'.

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:

- Water withdrawal: -40% per ton of product by 2015 (vs. 2005)
- Greenhouse gases emissions: -35% per ton of product by 2015 (vs. 2005)
- Energy efficiency: -25% per ton of product by 2015 (vs. 2005)
- Biodiversity: palm oil only from sustainable sources by 2013 and zero net deforestation by 2020

## Risks and Opportunities

### 5. Climate Change Risks

#### 5.1

Have you identified any climate change risks (current or future) 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

#### 5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Re 1	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. During this period, drastic GHG emissions reductions will be asked to emitters. Manufacturing industry will receive 80% of its	Increased operational cost	1-5 years	Direct	Virtually certain	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>allowances free of charge in 2013 but this will decrease annually to 30% in 2020. Nestlé has 21 factories participating in EU ETS, with a net positive emissions balance at the beginning of Phase III. However, Nestlé will most probably be required to purchase certificates for its factories emissions. Allowances not allocated for free will be auctioned, or bought from resellers. With the reduction of granted allowances, and the newcomers in the Phase III, the cost of allowances is expected to rise. Increased operational costs in factories participating in the scheme are thus expected. Some other countries have implemented similar Cap and Trade mechanism, like Japan, or Tax schemes like Australia, and some are considering it or on the point to launch it, like the USA and China. Moreover the EU aims to link up the ETS with compatible systems around the world to form an expanded international carbon market. Cap and trades schemes will lead to an increase of the whole production costs for Nestlé.</p>					
Re 2	Product labeling regulations and standards	<p>The introduction of mandatory requirements for food manufactures to provide access to detailed and in-depth environmental information – including carbon footprint - for interested stakeholders (e.g. by having a dedicated webpage, on-packaging information or in advertising) may lead to an increase of operational costs including the cost of LCA studies critically reviewed. Moreover, the lack of widely internationally accepted, science-based definition to assess the environmental performance of products, including GHG emissions, can generate significant costs for businesses, especially in case they need to use different methods or if they have to comply with 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 Switzerland, it would need to apply the Swiss approach (currently under development); in Italy, it would need to join the governmentally recognised carbon footprint scheme, and carry out yet another analysis. Governments such as France are assessing the introduction of an obligation for producers to provide</p>	Increased operational cost	6-10 years	Direct	Very likely	High

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>environmental data and information on specific aspects of the product. France has experimented environmental labelling of products, with the outcome to possibly make it mandatory in a near future. French Parliament, based on the assessment of this experimentation, will draw concrete propositions in 2013. Greece, Thailand, China are considering to promote voluntary schemes and related 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 all our 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 conducted in 2012 2350 life cycle assessments of its products.</p>					
Re 3	Other regulatory drivers	<p>Nestlé relies on raw materials for the manufacturing of its products; the availability of land for agriculture and water availability directly affects its business. Policy incentives designed to reduce GHG emissions may promote biofuels. However, ethanol and biodiesel industries compete with the food industry for the usage of corn, sugar cane and vegetable oils. In Europe, about 60% of rapeseed oil is being used for biodiesel production (Financial Times August 12 2012, quoting FAO). 7-10% of the total palm oil supply is used for the production of palm methyl ester (biodiesel). Brazil uses about 50% of its cane output for ethanol production and 40% of US corn goes to ethanol. Since 2007, the support for the biofuels industry has grown, in the form of blending mandates and tax incentives. Further to that, the large scale expansion of these agricultural raw materials for biofuel production will aggravate the problem of water scarcity, as every litre of biofuel made from irrigated maize or soybeans requires between 500 and 5,000 litres of water. This will, in the long term, cause an unsustainable boost in the use of freshwater by agriculture, which already uses 70% of available sources. Producing biofuels can consume between 20-100% of the total quantity of water now used worldwide for</p>	Other: Increased competition of scarce resources	1-5 years	Direct	Likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>agriculture. The impact of extreme droughts in major agricultural production areas, such as those that affected the United States in 2012, is a stark reminder of this link. According to a study of the US Department of Energy, up to 9,100 litres of water are required to produce one litre of biodiesel. This adds up to the structural overuse of freshwater and temporary drought affecting crops and food prices. The result is clear that biofuel production has had a massive impact on the increasingly fragile water-for-food equation and on the livelihoods of the most vulnerable people in the world. Therefore, this poses a potential impact to Nestlé as we procure agricultural raw materials and rely on water along the entire value chain of our products.</p>					

### 5.1b

**Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk and (iii) the costs associated with these actions**

#### Re1

##### **(i) the potential financial implications of the risk before taking action**

Nestlé has analysed the financial implications for its factories in EU ETS Phase III. Assuming a CO2 price of 10.2CHF/tonne in 2020 (progressive price from CHF 4.8 in 2013 to CHF 10.2 in 2020), the financial implication of the EU-ETS is estimated to be CHF 8.4 - 9 million 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 24-30 million. estimated last year due to CO2 ton price drastic decrease. Biggest impact for Nestlé might come from 5 coffee factories. These amounts take into account the usage of positive balance of allowances of Phase II.

##### **(ii) the methods you are using to manage this risk**

We implemented projects to reduce GHG emissions by improving energy efficiency, switching to cleaner fuels and investing in renewable sources. With the help of our Energy Target Setting Programme, our plants use efficient technologies and apply best practices to optimise energy consumption; utilise sustainably-managed renewable energy sources, where economically viable; recover energy from by-products; and control and aim to eliminate emissions, including greenhouse gases.

- For example, in 2012 in France, Challerange factory has commissioned a wood fired boiler using only woodchips from sustainably managed forests from the region. Approximately 96% of the plant's fuel needs are now met with wood. This boiler reduces annually about 8000 tons of CO2e and helps minimise the impact of an increase in the energy cost. The same has been implemented in 2012 in the factories St Pol and Rosières.
- In UK, we are using our Fawdon factory as a pilot to test energy efficient techniques which we hope to scale up and use in other factories and over the next two

years the aim is to reduce GHG emissions by 50%.

- In Germany, measures already implemented to reduce the CO<sub>2</sub>e include the installation of high pressure ammonia heat pump for heating of office building (500 t CO<sub>2</sub>e/year); low temperature heat supply (6900t CO<sub>2</sub>e/year).

-In Girona, Spain, we will install a spent coffee ground boiler to reduce GHG emissions further.

- These actions will reduce the magnitude of CO<sub>2</sub> credit costs impact by CHF 3 – 3.6 Million over 1-5 years timeframe.

**(iii) the costs associated with these actions**

The cost of these emission reduction activities accounted for CHF 121 million which include the investment of about CHF 82 million in energy savings of about 2 million GJ and the reduction of approximately 173,000 tonnes of CO<sub>2</sub>e.

**Re 2**

**i) the potential financial implications of the risk before taking action**

Our Company has an unmatched geographic presence, and an unrivalled portfolio of brands and high quality products. The introduction of mandatory requirements to provide access to detailed and in-depth environmental information for interested stakeholders will lead to an increase of operational cost including Life Cycle Assessment (LCA) studies critically reviewed. Assuming that a ISO compliant LCA assessment cost CHF 25000 on average , and we communicate environmental information of 10000 products, we estimate that the potential financial implications of the risk amounts to around CHF 250 million in the 5-10 years timeframe. This is based on an increase in cost.

**(ii) the methods you are using to manage this risk**

- We advocate for international standards for assessment, databases and voluntary communication. We actively participate in the development of international recognised, scientific based methodologies to assess the environmental performance of our products (e.g. ISO 14046 on Water footprint)

- We co-chair with the European Commission the European Food Sustainable Consumption Production Round Table to establish scientifically reliable and harmonised environmental assessment methodologies for food and drinks products.

- In 2012 in France, we continue participating in a national initiative, led by the French Government, to communicate with French consumers about GHG emissions, water and biodiversity. At European Level, in 2012 we participated on a similar test on consumer goods launched by the European Commission.

-In Japan, we contributed to the development of a national standard on product environmental footprint.

- We have completed LCAs for all our product categories to identify the environmental impacts of our major product categories, including their packaging.

- To make the life cycle assessment process faster, more efficient and applicable to every product development project, we have started the roll out of an eco-design tool called EcodEX, a multi-criteria eco-design tool that covers both packaging and ingredients and can be applied to all product categories. In 2012, we rolled out EcodEx, partnering with recognised LCA scientists and experts.

- We have implemented RISE (Response-Inducing Sustainability Evaluation) to assess the sustainability of agricultural production in 18 countries.

- Our Packaging Impact Quick Evaluation Tool assists in the selection of the most appropriate packaging for many products, allowing a factual comparison of the environmental impact of different packaging choices across a range of environmental indicators. Globally, in 2012 we completed more than 2300 eco-design analyses.

- These actions will reduce the magnitude of the impact of the risk in CHF 100 million over 5-10 years timeframe.

**(iii) the costs associated with these actions**

The costs associated with these actions were in 2012 around CHF 2200K including CHF 1100k for the co-development of ecodesign tools, CHF 700k for RISE implementation, CHF 100k for the World Food Database Project, CHF 80k for costs of the licences of tools to assess the environmental performance of packaging, CHF 162k for the participation of experimentation mentioned above.

**Re3**

**(i) the potential financial implications**

The financial impact is estimated to be CHF 46 - 70 million a year based on an increase in cost of goods sold. The primary catalyst is the increased cost of corn due to the US ethanol program, followed by correlated raw material costs to corn and biofuel program impact on the price of tallow. We estimate that the price of CBOT corn is CHF 1.38 a bushel due to the ethanol program, all things being equal.

**(ii) the methods you are using to manage this risk**

Nestlé is concerned by the production of liquid biofuel which relies on the use of food crops such as corn, rapeseed oil, sugar and palm oil. Nestlé believes that allocating agricultural land and water to biofuel production will severely impact food and water security. Biofuels also might lead to increase in food prices. To manage the risk, we have the following methods:

-We favour the research of third generation biofuels.

-We take all possible & practical measures not to use liquid biofuel derived from first generation agricultural products within its operations (e.g. trucks, factories, cars).

-We raise awareness on the dangers of using agricultural commodities, and the conversion of forests for the production of biofuels. In 2012, Nestlé's chairman and CEO continued to 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 invest in research on credible alternatives to agricultural based biofuels.

-We improve energy efficiency within our operations: In our factories, we are continuing to pursue energy efficiency, as well as increasing the amount of energy derived from renewable sources. As part of our Energy Target Setting Initiative, we completed 36 energy-saving projects in 2012. We identified more than 850 projects, comprising a total investment of about CHF 82 million. These projects have resulted in annual energy savings of about 2 million GJ and a reduction of approximately 173,000 tonnes of CO2e. Our "Greening the Supply Chain" programme has helped over 170 business partners to implement energy conservation programs, among others.

-These actions have reduced the magnitude of the risk impact in CHF 9.5 Million over 1-5 years timeframe.

**(iii) the costs associated with these actions**

The costs are estimated at CHF 110 million in 2012.

5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Ph 1	Change in precipitation extremes and droughts	Changing temperatures and precipitations patterns may lead to decreased availability of critical raw materials in the supply chain, especially agricultural commodities. As Nestlé business relies on raw material (coffee, sugar, cocoa, cereals etc.), this change will lead to the increased operational cost or even disrupt the business operations along the entire value chain of Nestlé. For example, the Western Cape region in South Africa has experienced severe droughts over the past few years. This led to the fact that important local water reservoirs such as the Wolvedans dam in Mossel Bay recorded water levels as low as 10% at the height of the drought. This had a direct impact on	Increased operational cost	6-10 years	Indirect (Supply chain)	Very likely	Medium-high



ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		Nestlé's operations in South Africa as less water at a higher price was available to Nestlé. The Nestlé Mossel Bay factory reduced its water consumption by more than 50% during this period, through re-using the water recovered from the milk evaporation process. Financial impact due to major supply chain disruption and interrupting process along the value chain due to climate change is expected for our company.					
Ph 2	Other physical climate drivers	Our long-term success depends on the water resources that 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 its 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 management practices and find new ways to reduce risks. Water shortages will impede supply of agricultural raw materials, disrupt manufacturing sites and unable consumers to prepare and enjoy products. Changing and unstable weather patterns such as temperature increases and limited rainfall could generate more drought incidences and pose some challenges to existing agricultural production systems. Coffee production could be affected as the coffee tree requires very reliable rainfall patterns for its growth and development which is a risk to Nestlé's successful coffee business. In addition coffee trees might, in the future, face additional challenges in some areas due to climate change, for example heat stress, pest pressure and water availability. In Italy, Nestlé is a direct buyer from many Italian agricultural producers, and particularly relies on locally grown vegetables for its Buitoni frozen vegetable range La Valle degli Orti. We therefore have a direct interest in helping local growers to adopt the best irrigation solutions, so they increase production, continue to supply quality raw materials to Nestlé and support their local communities. The use of drip irrigation and automated watering technology has maximised crop yields and, at the same	Inability to do business	>10 years	Direct	Likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>time, saved irrigation water. We have achieved an improvement in yield, quality and virtual water content of our tomatoes, and at the same time, kept the investment payback time down to one or two years. Farmers also benefit from lower water bills. Nestlé also cooperates in a project with key Italian stakeholders, such as water utility companies, farmers' associations, local producers, the Agriculture Ministry's Commission and others, to investigate local agricultural water policies.</p>					
Ph3	Induced changes in natural resources	<p>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 124 Nestlé factories located in areas of potential flood hazard. 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 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 tsunamis. This can lead to property damage and/or business interruption increasing the operational cost. For example, floods in the UK in 2012 caused some damages as torrential rainfall filled rainwater drainage systems to capacity causing them to overflow. All operations were affected to some extent in the initial hours after the event but, however the other parts of the factory were able to resume operations relatively quickly. The main concern was related to the 45 ovens which were in process at the time and which had to be closed down due to inundation of the below ground air flow voids underneath each oven. The five day cooking cycle for the sweets in process at the time was thus interrupted. The cost were estimated on CHF 610000 which includes repairs to buildings</p>	Increased operational cost	1-5 years	Direct	More likely than not	High

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		and fixtures and fittings, stock loss, additional labour costs, additional power, laboratory testing costs.					

## 5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

### Ph 1

#### i) the potential financial implications of the risk

The financial impact due to major supply chain disruption and interrupting process along the value chain due to climate change are estimating at CHF 146 million increase in cost. This is estimated based on the magnitude of the impact and the potential likelihood of occurrence of decreased availability of raw materials in the supply chain due to changes in precipitations and droughts. This estimate is based on Nestlé Group Enterprise Risk Management Framework. It involves the aggregation of individual "Top-Down" assessments of Zones, Globally Managed Businesses, and all markets.

#### ii) the methods you are using to manage this risk

By securing the long term supply of raw materials abundance triggered by climate change, we will continue delighting consumers with our products globally. The measures taken to manage the risk:

- Nestlé investigates possible impacts on its activities of such changes on a case by case basis when conducting risk assessments. In addition, Nestlé has developed an exposure related database where floods and other natural hazards exposures and actions plans are documented and continuously updated. In order to assure the continuous supply of its main commodities, one of the initiatives Nestlé has in place is working with suppliers.
- Our methods include purchasing our main raw materials directly from more than 690 000 small-scale suppliers in 2012. Our network of 1100 sourcing staff and agronomists and more than 12000 support staff offered support, training and technical assistance to the farmers who supply us.
- The NESCAFÉ Plan provides support to farmers regarding climate change. By working with the Sustainable Agriculture Network, we encourage farmers to implement climate change adaptation and mitigation and promote farms' resilience to climate change.
- As part of the Nestlé Cocoa Plan, we are putting our plant science expertise to work; in 2012 distributed 1 100 000 higher-yielding, disease resistant cocoa plantlets.
- In Central America we have elaborated a list of substitution materials if the stock cover is affected. In Colombia, we reinforced simulation exercises; and defined contingency plans for sourcing, alternative distribution routes.
- In Australia, we established alternative sourcing plan for coffee sourcing.
- We established business continuity plans for the areas that could be potentially affected. We also tested management capabilities.
- Launching a Nespresso AAA Sustainable Quality database to gather, analyse and share information about sustainability with coffee farmers, to help them plan for the future. It allows us to tailor support in environmental management to farmers' individual needs, as well as providing a global overview of our program implementation and the adoption of sustainability best practice.
- In order to ensure long term supply, Nestlé helps farmers adapt to future environmental challenges in the frame of the NESCAFÉ Plan. Nestlé R&D Tours took this

issue as a priority to initiate research programs focusing on improving the drought tolerance or “water use efficiency” of coffee. Drought tolerance has different physiological and genetic components. Their combination into new selected plants could lead to increased drought tolerance. Thus understanding the potential relations between physiological parameters and drought tolerance in coffee will help in identifying drought tolerant coffee plants for Arabica and Robusta coffees. -These actions are expected to ensure the long term availability of raw materials and therefore reduce the magnitude of impact of the risk to low over the 6-10 years timeframe.

**iii) the costs associated with these actions**

The cost associated with these actions is estimated at CHF 600 million until 2020 which include The Nestlé Cocoa Plan and The Nescafé Plan investment in key rural development initiatives. In 2012, the cost associated with cocoa and coffee programmes to farmers was circa CHF 44 million and the investment of direct financial assistance was CHF 33.6 million.

**Ph 2**

**(i) the potential financial implications of the risk before taking action**

We have estimated that the potential financial implication include the loss of investment of factory ranging between CHF 50 to 150 million negatively impacting our revenue due to potential disruptions.

**(ii) the methods you are using to manage this risk**

At Nestlé we take a comprehensive approach to assess and mitigate risk related to changes in physical climate parameters that will result in water scarcity in different areas. These include:

- 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.
  - In 2012, 489 water-saving projects were run in our factories saving 6.5 million m3 and 16 Water Resources Review programme were conducted at Nestlé sites.
  - In 2012, 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. We implemented a further 10 projects associated with water in 2012 in our supply chain.
  - In Nicaragua we have been working with farmers to protect local water sources. 128 milk producers have received training on the importance of protecting water springs.
  - In Lagos de Moreno dairy plant in Mexico, in 2012, we implemented more efficient process to further reduce water use, located in an area of water scarcity, where water is being recovered from the milk of the cow and used in service areas.
  - In Nestlé Philippines, an initiative to collect clean water for use in secondary applications such as the cooling tower and garden irrigation resulted in water savings estimated at 26% of the total factory requirements in 2012.
  - In Nestlé Pakistan, new technology implemented to recover water (40,000 m3) will help us save water and energy.
  - In Nestlé North America, by optimising reverse osmosis recovery, our factory in California provides recovered water for reuse by waters users, such as landscape irrigation and industrial manufacturing.
  - In Nestlé Uzbekistan, water use was significantly reduced through a range of measures including mapping water use to identify losses throughout the bottling process and implementing programmable logic control to automatically balance withdrawal with production needs.
  - Nestlé Waters UK opened its state-of-the-art production facility in Buxton in 2012. The water bottling plant has been designed with cutting-edge features to help reduce water use, enabling the wastewater from production and cleaning processes to be recovered and recycled.
- These actions are expected to create value for shareholders and society and reduce the magnitude of impact of the risk to low over 10 years timeframe.

**iii) the costs associated with these actions**

In 2012, the cost associated with these actions is estimated at CHF 45 million. This includes CHF 35 million for the new cutting-edge water factory and CHF 10 million for water-saving and cleaning programmes.

**Ph 3**

**(i) the potential financial implications of the risk before taking action**

The financial implications due floods affecting our operations have been estimated in CHF 2.4 billion which assumes that the 124 properties identified under flood hazards are completely damaged and business is disrupted. The higher potential implications are in Thailand and Japan with potential losses of CHF 380 and 335 million respectively. The estimated average damage per factory is CHF 25 million leading to increased costs and decrease in revenue.

**(ii) the methods you are using to manage this risk**

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 Nestlé Global Property Loss Prevention Programme provides a consistent view of our exposure to property risks around the world to floods, enabling us to make informed decisions about the future standards of prevention and protection throughout Nestlé sites. Risk engineers experts inspect on a regular basis Nestlé sites and provide recommendations to improving standards of prevention to flooding. Flood emergency plans are in place in Nestlé sites exposed to flooding from any source.

-These actions will reduce the magnitude of impact of the risk by reducing the financial implication by 25%.

**iii) the costs associated with these actions**

The loss prevention programme amounts to CH 1.4 million in 2012.

5.1e

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Oth 1	Changing consumer behaviour	Consumers' environmental awareness is growing. They would like to know if the food they eat are produced in an environmentally responsible way. Consumers increasingly want companies to behave more responsibly and provide sustainable products at the right price and performance (Source, WEF More with Less: Scaling Sustainable Consumption and Resource Efficiency, 2012). They request food manufacturers to disclose environmental performance of their products and make informed choice when they decide to buy. The risk is that consumer's behaviour changes towards companies that are perceived as products having lower carbon footprint than Nestlé. 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 how a product is manufactured. According to The Regeneration Consumer Study, developed by BBMG, GlobeScan and SustainAbility, in Brazil, China, Germany, India, UK and US, a majority of consumers globally agree or strongly agree that they would "purchase more products that are environmentally and socially responsible" if they "performed as well as, or better than, products they usually buy". In addition, respondents in	Reduced demand for goods/services	1-5 years	Direct	More likely than not	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		developing markets are significantly more likely to feel a sense of “responsibility to purchase products that are good for the environment and society,” compared to those in developed markets (82% to 49%, respectively). Similarly, six in ten consumers in developing markets are “willing to pay more for products with social and environmental benefits,” compared to the one-fourth of consumers in developed markets willing to do so (60% to 26%, respectively). In France, the government launched an initiative to communicate the environmental performance, disclosing the GHG of different products. Nestlé is participating with Nescafé, Nespresso and Vittel. As part of the European Food Sustainable consumption and production” we prepared a tool that provides aligned guidance for the European food chain on methodological and communication issues based on common principles. In Singapore, Nestlé has launched the world’s first free, mobile application for iPhone and Android devices to help people recycle waste packaging correctly and helping them reduce GHG by doing so.					
Oth 2	Other drivers	Increasing constraints on carbon emissions and amplified scarcity of resources could lead to a loss of future economic output. According to the FAO, about one third of food produced for human consumption – approximately 1.3 billion tonnes per year – is lost or wasted. Food waste, specifically, milk losses generates wastage of resources such as water, energy, and superfluous GHG emissions. For Nestlé, 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. A brief illustration of the impact is that in the traditional networks, losses of milk are in the order of 16% - 27% according to FAO. Nestlé, with its system of collecting directly from farmers, has succeeded in bringing these losses down to less than 0.6%. Based on the total amount of directly purchased milk per year by Nestlé (in countries such as Pakistan, India, China and others, i.e., in relatively difficult climatic conditions), and further based on the GHG emission estimated for producing milk on a farm, this reduction in milk losses means savings in the order of 2 million	Other: Reduced supply of agricultural raw materials.	1-5 years	Indirect (Supply chain)	More likely than not	Low-medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		tonne CO2e per year. Nestlé will face scarcity of raw materials and water, and threaten its food business, if no actions are taken.					
Oth 3	Reputation	According to our materiality assessment, climate change has been considered as an issue which could pose risks to Nestlé. Climate change mitigation, deforestation and climate change adaptation is an issue of increasing concern to stakeholders. If stakeholders perceived that Nestlé is not delivering on these issues, this could lead to a loss in reputation thus decrease demand for our products. We have worked with SustainAbility, an independent think tank and strategic advisory firm, to identify and prioritise the issues deemed most important to our company and its stakeholders. In 2012, we developed our methodology to determine our material issues by involving SustainAbility and GlobeScan, a global research firm specialising in sustainability. To understand the positioning and movement of issues, we used opinion-leader reputation research; surveys involving sustainability experts and consumers; feedback from stakeholder convenings; our engagement events; an extensive media scan; an internal business impact survey; and our corporate risk map.	Reduced demand for goods/services	1-5 years	Direct	More likely than not	Low

## 5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

### Oth1

#### (i) the potential financial implications of the risk before taking action

A reduction of demand for our products due to consumers perceptions that the carbon footprint of our products is not as low as competitors can result in reduced demand of products. The financial implication of consumer change behaviours can result in loss in reputation due to climate change. This is estimated to CHF 19.4 million losses in revenue and it is based on Nestlé Group Enterprise Risk Management Framework. It involves the aggregation of individual "Top-Down" assessments of Zones, Globally Managed Businesses, and all markets.

**(ii) the methods you are using to manage this risk**

Nestlé's method to manage this risk is to continuously optimise the carbon footprint of our products and improving the amount of environmental information to consumers in relation to our products based on scientific information. To further optimise the environmental performance of our products:

–Nestlé invested significantly to develop an ecodesign tool. We continue to use PIQET (Packaging Impact Quick Evaluation Tool) that assists in the selection of the most appropriate packaging for many products. PIQET is a streamlined Lifecycle Assessment (LCA) tool, which follows LCA methodology but pre-defines some of the decisions that would normally require an experienced LCA practitioner, to reduce the time taken to generate rapid feedback on the environmental performance of design options.

– In 2012, we rolled out the development of EcoDex, a multi-criteria ecodesign tool that covers both packaging and ingredients in all product categories, partnering with recognised LCA scientists and experts. EcoDex takes into account the entire life cycle of our products, using environmental indicators such as climate change, land use, ecosystem quality, mineral and non-renewable resources and water consumption.

– We have implemented RISE (Response-Inducing Sustainability Evaluation) to assess the sustainability of agricultural production in 18 countries (Mexico, Nicaragua, Panamá, Dominican Rep, Ecuador, Venezuela, Chile, China, Brazil, Spain, Switzerland, Pakistan, Morocco, Poland, Colombia, Argentina, India, Indonesia)

To further improve the amount of environmental information to consumers in relation to our products based on scientific information, we have taken the following action

- In 2012, in France, we updated an online NESCAFÉ LCA Communication tool to increase consumer awareness and help them improve their environmental performance when using our products.

- In the UK, NESCAFÉ launched a new efficient and optimised refill pack which requires 50% less Lorries to transport them.

- In US and UK, Purina launched a campaign to incentivise consumer to recycle their pet food can.

- An LCA helped us to identify areas of improvement in NESCAFÉ Dolce Gusto. By implementing the new eco-mode (auto standby after 20 minutes), our new machine range, Melody, has reduced in 32% the GHG emissions per 120 ml cup and compared to the first model launched in 2006.

- In North America, we launched the Environmental Life Cycle Assessment of Drinking Water Alternatives & Consumer Beverage Consumption. This allows consumers comparing the environmental impacts of bottled water with a range of other beverage types.

- Nespresso Ecolaboration communication programme focuses on three areas: coffee sourcing, capsule recycling and GHG emission reduction. Since 2009, all new Nespresso machine ranges have all been equipped with an energy-saving mode, and from 2011, all our machines have an automatic power off function, which automatically switches off after nine minutes of inactivity, consuming 40% less energy than previous models.

Nespresso 'Ecolaboration' program has its own online site, with information about the coffee, capsules, packaging, carbon footprint, and sustainability partners. The site includes not only written information, but pictures, videos, and interviews with key stakeholders.

- In the UK, Nestlé has developed light-weight water bottles. The new packaging will be launched in 2012 after a CHF 51 million investment in a new bottling plant in Buxton. The PET bottles are to be introduced for the Buxton Natural Mineral Water and Nestlé Pure Life brands. With a shorter neck and more ergonomic shape the new design uses 25% less material than preceding packs. The new plant houses the bottling and warehousing under one roof to reduce environmental impact through the supply chain.

- These actions are expected to reduce the magnitude of impact of the risk in CHF 5 million as these actions will reinforce Nestlé reputation on climate change mitigation.

**(iii) the costs associated with these actions**

The costs are estimated in CHF 400k a year including the license of Eco-designs tools, and LCA communication tools.

**Oth2**

**(i) the potential financial implications of the risk before taking action**

The financial implication of the food waste in the supply chain, especially for milk, are estimated at CHF 20 million a year in increasing costs. The estimate is based on the reduction of GHG related with the milk losses reduction.

**(ii) the methods you are using to manage this risk**

These losses can be reduced through greater investment in technology. In many developing countries including Brazil, Chile, China, India, Mexico and Pakistan we work directly with small-scale dairy producers and cooperatives. Farmers supply our milk factories directly, and Nestlé provides facilities and support to develop the



local supply chain. This includes local collection, storage and chilling facilities, providing a reliable route to market and product quality assurance.

-In Indonesia, around 32 000 dairy farmers supply milk to Nestlé's Kejayan factory through 31 dairy cooperatives. We also work at farm level: our agronomists and vets provide technical advice and training to farmers, and we provide access to financial assistance for them to expand their operations.

-These methods (i.e. providing cooling facilities and training) can reduce food waste and GHG emissions and therefore the magnitude of the risk is eliminated in a 5 years timeframe.

**(iii) the costs associated with these actions**

The costs are estimated at CHF 18 million including CHF 11 million in storage tanks, chillers centres, and veterinary aid invested in China and CHF 7 million in biodigestors to recover energy from waste in Mexico.

**Oth3**

**(i) the potential financial implications of the risk before taking action**

A loss in reputation can lead to a reduction of demand for our products. The financial implication of reputation loss of stakeholders due to inaction on climate change is estimated to CHF 19 million loss in our revenue and it is based on Nestlé Group Enterprise Risk Management Framework.

**(ii) the methods you are using to manage this risk**

Nestlé's methods to manage this risk is to proactively engage and partner with stakeholders including regulators, scientists, customers, business partners, civil society organisations and the community, in order to define, implement and evaluate solutions to the complex climate change challenges we face.

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 was granted a GRI A+.

We work actively with governments, trade bodies and NGOs to assess and test responsible approaches to provide environmental information, including CO2 to consumers.

In 2012, in India we held our 2012 Global CSV Forum. Opinion leaders from South Asia and beyond discussed how governments worldwide could work with civil society on climate change. More than 450 government, civil society and business representatives took part.

Regular stakeholder convenings focus on issues specific to our company, including climate change and delivering our commitments.

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, Consumer Goods Forum, Food Drink Europe, WBCSD, European Food Sustainable Consumption and Production Round Table, World Economic Forum and the UNFCCC.

These actions are expected to reduce the magnitude of impact of the risk in CHF 19 million as these actions will reinforce Nestlé reputation on climate change.

**(iii) the costs associated with these actions**

The cost associated with these actions amounts to CHF 1.6 m.

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5.1g

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

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5.1h

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

5.1i

Please explain why you do not consider your company to be exposed to 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

## 6. Climate Change Opportunities

6.1

**Have you identified any climate change opportunities (current or future) 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

6.1a

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
Re 1	Cap and trade schemes	Cap and trade schemes present incentives to cutting greenhouse gas emissions cost-effectively through	Reduced operational costs	1-5 years	Direct	Virtually certain	Low-medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		energy efficiency in our factories which reduced GHG emission. By end of 2012, Nestlé had 21 factories in the European Union in Spain, Portugal, Germany, Hungary, Italy, UK and France participating in the European Trading Scheme. 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 and an incentive for even continuing reducing CO2e emissions in each site. This rewards also our continuous improvements and investments processes in place. Nestlé will certainly be required to purchase certificates for its emissions in Phase III. The cost of allowances is expected to rise as demand increases and the amount of allowances available on the market decreases. The fact that Nestlé will have to buy EU ETS credits from 2018 (forecast) generates an additional incentive to reduce the total CO2e emissions in order to reduce as well the total costs of credits which will have to be bought. The new technologies we are implementing and the experience acquired to reduce GHG emissions in EU will also be implemented in our others worldwide factories and this will be clearly an additional competitive advantage where other countries will put in place GHG emissions reduction mechanisms (e.g. Australia-China).					
Re 2	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 recent public EU consultation assessed the mandatory provision of environmental information to consumers. China plans to establish a national standard on product environmental performance including GHG. The French Ministry of Ecology and Sustainable Development launched an initiative to communicate with French consumers about GHG	Increased demand for existing products/services	1-5 years	Direct	Virtually certain	High

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		emissions, water and biodiversity. A similar test on consumer goods has been launched by the European Commission. 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 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 different categories and incorporated ecodesign tools at the earliest stage in the development of its new and renovated products.					

## 6.1b

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions**

### Re 1

#### **i) the potential financial implications of the opportunity**

Cap and trade schemes present incentives to cutting GHG emissions cost-effectively. By putting a price on each tonne of carbon emitted, the EU ETS is driving investment in low-carbon technologies. By taking action now, and invest in energy efficient methods we will reduce the money needed to buy credits. In 2012, we emitted 445k tonnes of CO<sub>2</sub>e in the factories participating in EU-ETS. We estimate that the EU will give us emission allowances for a fraction of our emissions, leaving us to find ways to cover the difference. It is estimated that potential financial implications for Nestlé would be CHF 8.4 -9 million by 2020 if no specific actions for CO<sub>2</sub> emission reduction are taken. This is estimated with an increasing price from 4 (2013) to 10 (2020) euro per tonnes of CO<sub>2</sub>. By 2020 we estimate we will need to buy ½ million credits which will imply a cost of CHF 5.4 million., if all planned efficiency measures are taken, showing an opportunity of cost of CHF 2.4 -3 million reduction in our expenses.

#### **(ii) the methods you are using to manage this opportunity**

To exploit this opportunity, we have been taking measures such as setting a CO<sub>2</sub> taskforce that closely monitor the EU-ETS development and to reduce our emissions by investing in more efficient technology. Challerange factory has commissioned a wood fired boiler using only woodchips from sustainably managed forest from the region. Approximately 96% of the plant's fuel needs are met with wood. This boiler reduces about 8000 tons of CO<sub>2</sub>e a year and will help minimise

the impact of energy cost increases. This flexibility ensures that emissions are reduced in the most cost-effective way.

In Germany, solar panels cover now the roof of Singen distribution centre, and buildings were installed with new thermal insulation and lightning systems. Solar panels produce now more than the consumption of the buildings, and the electricity surplus of 350 mWh is sold back to the grid. Renewable energy has fully replaced external energy supply. The positive balance leads to a CHF 120'000 benefit yearly. Added to this, a reduction of 690t of CO<sub>2</sub>e is realised yearly, providing a CO<sub>2</sub> neutral balance of the installation in only 2,5 years. The transportation of some cereals goods produced in Poland to be delivered in Portugal has moved from trucks to boats. Despite a transit time increased by 4 days, each year 20t of CO<sub>2</sub>e are avoided, with a reduction of transportation costs of CHF 15'600.

In UK market we have developed a programme for implementation of Energy Target Setting. This will identify realistic projects to increase energy efficiency and provide GHG savings. We continue to progress the lighthouse project at Fawdon site which is aimed at “zero carbon” manufacturing. We have set a 30% carbon reduction target by 2020 from a 2006 baseline.

In Italy, the Ruspino factory has achieved a saving of CHF168k due to the rationalization of the production of compressed air. The San Giorgio in Bosco factory has realized a saving of CHF 588k in energy costs, through the implementation of a series of small projects to reduce energy consumption in the use compressed air on bottling plants, blowing bottles, lighting factory, heating plant and refrigeration units for cold rooms.

In Nestlé Mexico, energy efficiency measures have led to annual savings of 343 tonnes of CO<sub>2</sub>e and CHF 93K savings in energy costs. The project use water heated with natural gas instead of steam making the process more efficient.

In Ferentino Factory, a new hot water system has been installed saving 900 tons of CO<sub>2</sub>e per year.

In Purina factories, through our Energy Target Setting Initiative, we saved in 2012 more than 5700 tons of CO<sub>2</sub>e through various projects, a few of them are lighting replacement and steam system insulation.

These measures aforementioned have resulted in energy savings which have enhanced the opportunity.

### **(iii) the costs associated with these actions**

The cost associated with these measures are estimated at CHF 15 million. This includes capital cost of measures implemented in 2012. In addition, in the UK, we would estimate that the management of the EU-ETS is about 0.25 FTE per annum. In addition fees and subsistence payments to the regulator can amount to CHF40K per year. The full process of ETS for sites involved in EU-ETS will approach CHF 300K.

## **Re 2**

### **i) the potential financial implications of the opportunity**

We have been conducting LCAs to identify the environmental impacts of our major product categories, including their packaging. Our experience put us in a position to understand and take action to improve the impact of your products and work with our business partners to continuously improve the environmental performance of our products. The opportunities driven by product labelling regulations and standards can increase demand for existing products (estimated in 0.5% in annual sales) which can have additional revenue estimated on CHF 400 million per year.

### **(ii) the methods you are using to manage this opportunity**

We continuously enhance the environmental information we provide to consumers about our products, based on scientific evidence. This increased transparency not only helps consumers decide what to purchase, but also enables them to reduce their environmental impact when preparing and using our products, including minimising energy and water use. Providing more environmental information could increase demand for products.

- We launched the development of EcodEx, an eco-design tool that covers both packaging and ingredients in all product categories, EcodEx takes into account the entire life cycle of our products, using environmental indicators such as climate change and non-renewable resources.
- We systematically assess the environmental performance of our different product categories in order to continuously improve it, e.g. through eco-design tool such as Packaging Impact Quick Evaluation Tool.
- Nestlé France is currently participating in a European initiative, to test the ENVIFOOD protocol developed by the European Commission for our Nescafé products. For example, the GHG emissions of a cup of Nescafé are estimated at 28.4gr CO<sub>2</sub>e along the entire life cycle.
- Nestlé is actively participating in the ongoing debate on environmental information to consumer. We contributed to the development of the consumer communication glossary defining terms used in environmental sustainability by the Consumer Goods Forum.
- Purina One Beyond, a recently launched dog and cat food range in the US, uses packaging made from at least 92% renewable materials. Consumers have received the brand and its messaging very favourably.
- These measures can enhance the magnitude of the opportunity by helping us to reduce the GHG emissions associated with our products, taking actions to

improve which can result in economic saving. For example, a new packaging material for Crunch and Galak chocolate in Italy has resulted in reduction of GHG emissions and annual savings of CHF 193k.

- Part of the Nescafé Plan, we have launched new Nescafé refill packs made from a combination of aluminium-foil and plastic film. The optimised design uses 34% less packaging materials than our previous refill but still retains 150 grams of coffee. The innovation has enabled us to double the volume of coffee packs on a pallet meaning fewer pallets and fewer lorries to transport the same volume of coffee. In the UK, we expect to reduce our use of lorries by 50%, thereby reducing greenhouse gas emissions from distribution by 35%. The new packs also consume less water and energy in their manufacturing. The benefits go beyond our operations since the compact refills have better on-shelf efficiency for retailers and are easier to carry and store for shoppers.

- In Singapore, we continue to offer the world's first free mobile application for iPhone and Android devices to help consumers correctly dispose of, recover or recycle their packaging. The 123Recycle application scans a product's barcode to provide information on how to sort and dispose of the different parts of its packaging. The application can be downloaded from the iTunes app store or from the Android market

**(iii) the costs associated with these actions**

The annual cost of these actions is estimated at CHF 2 million which includes the development of ecodesign tools,, LCAs and communication tools.

6.1c

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Ph 1	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 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,	Other: Ensure supply of key agricultural raw materials	>10 years	Indirect (Supply chain)	More likely than not	High

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		new sourcing regions presents an opportunity as Nestlé will be able to source some from regions where it was impossible to grow before. This can results in a secure supply of raw materials and also a decrease in operational cost related to transportation.					
Ph 2	Change in temperature extremes	Change in temperature extreme can result in an increase of sales of refreshing products such as ice creams and bottled water in hot areas. For example, ice creams sales in Switzerland traditionally peak between April and September, depending on weather conditions. Ice creams sales have soared in breaking summer temperatures. In the USA, hot weather during summer helped boost demand for ice cream parlours, impulse ice cream sales and bottled waters. In North America, the following Nestlé Waters products such as Poland Spring, Ice Mountain and Zephyrhills presented growth. Summer 2012 was the third hottest summer in the US on record according to the National Oceanic and Atmospheric Association. In turn, consumers decided to buy ice cream and water to cool down, benefiting sales of our products. In hot extreme temperatures, water is a healthy hydration option to maintain the body constant internal temperature. We estimate that change in temperature increases can result in an opportunity with a positive impact driven by increase demand for existing Nestlé water and ice creams products. In 2012, sales of Nestlé waters increased 6.4% organic growth. In emerging markets such as Turkey, Egypt, Mexico and Thailand, double digit growth was achieved.	Increased demand for existing products/services	1-5 years	Indirect (Client)	More likely than not	High

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions

## **Ph 1**

### **i) the potential financial implications of the opportunity**

Climate change can result in increasing production of key agricultural raw materials which can result in increase in long term supply of key agricultural raw materials. Increasing the supply of coffee, cocoa and other agricultural raw materials can represent a positive financial implication on our revenues of CHF 500 million. This has been estimated taken in consideration the revenues of those products categories and the percentage of increase in supply if methods are in place to optimise this opportunity.

### **ii) the methods you are using to manage this opportunity**

- Nestlé makes significant contributions to helping small farmers, increase the output from their limited resources, and improve the quality of their product so they can receive a higher price. Indeed, we need to support local supplier development so that, over time, they can provide us with the raw materials that we use. As well as directly benefitting farmers, this helps building more prosperous local societies by providing employment, increasing skill levels and enabling technology transfer. This starts with Nestlé's world-class research facilities in Tours, France, and Abidjan, Côte d'Ivoire, and continues with field trials in the local agro-ecosystems where their plants are located. Nestlé employs a large number of technical advisors who provide training and consultation on agricultural practices and farm business management practices to the farmers from whom it buys.

- Nestlé scientists have found improved ways to control plant diseases which can severely reduce a farmer's production and, in turn, income. Nestlé produces coffee seedlings in a disease-free environment and supplies them to farmers to replace old, less productive, disease-prone coffee trees.

In Colombia, Nestlé worked with coffee growers to replace their lower-yielding disease-prone varieties, centralised the washing process and offered farmers a premium price for delivering higher-quality coffee beans. By replacing the traditional approach to washing the coffee beans on the farm with a centralised washing facility, the quality of the coffee increased, the quantity of water used declined, environmental damage from the washing effluent was reduced and the coffee growers received a higher price for the higher-quality coffee beans they delivered to Nestlé – a win for the farmers, a win for the environment and a win for Nestlé.

- In 2012, 273,808 farmers were trained through capacity-building programmes and 44,000 farmers benefitted from financial assistance

- We have developed the SAN Climate Change module on adaptation in coffee farming to help farmers maximise their capacity to adapt to climate change.

Increasing yields of sugar due to climate change in UK and France can decrease the importing cost for those materials in those countries.

These measures are not expected to enhance the magnitude or the likelihood of the opportunity.

### **iii) the costs associated with these actions**

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 21 million of direct financial assistance was provided to farmers in 2012.

## **Ph 2**

### **i) the potential financial implications of the opportunity**

Increasing temperatures can influence consumers behaviour to demand more refreshing products such as ice cream and bottle water. Increased demand for bottled water and ice creams as a result of temperature increase can result in additional sales of CHF 350 million per year and hence an increase in our revenue. This is calculated assuming that the sales of ice-cream and bottled beverages will increase in 2-3% per year.

### **ii) the methods you are using to manage this opportunity**

To optimise the opportunity, we work to ensure that our ice creams and bottle water products are produced, packaged and distributed in the right place and time to delight consumers that seek a refreshing product under increased temperatures.

We have operations and marketing plan in place to ensure the increase of distribution, availability of ice creams and bottle waters and clear visibility plan in these places where climate change will result in increase in temperatures. Execution plans involved that adequate, communication on time.

To enhance the opportunity we use consumer insights to understand what they desire under these temperature conditions. In fact, the Nestlé range of ice cream products offers delights and pleasures and also can be refreshing. For example, Eskimo Monkey ice cream sales were successful in Thailand. In USA, Skinny Cow indulgence brand as double sales.

In addition, in places with increasing temperatures, we have developed our first solar assisted powered ice cream freezer cabinets. Today, we have 25 units in operation in field trials in Australia and China.

We invest in innovation and product development based on a deep understanding of consumer expectations. At the Nestlé Waters' Product Technology Centre, located at the Vittel factory compound in France, we employ a team of 80 researchers, including nutritionists, hydrogeologists, biochemists, microbiologists, and



experts in packaging and packaging materials.

For our prepared waters, we utilise a “60/40 methodology” as a method of ensuring that Nestlé Waters products are the preferred beverage choice of consumers.

We aim to achieve 60% product preference against key competitors in a blind consumer taste test. A panel of consumers is specially trained for this sensory assessment. For each selected product, taste attributes are established and profiled against those of a competitor product. In our innovation, renovation and product development processes, the 60/40 preference is an important prerequisite for the launch of new or updated products.

These measures are expected to enhance the magnitude of the opportunity to high as this also results in the business growing.

**iii) the costs associated with these actions**

These costs are estimated at CHF 35 million which include cost of marketing and sales.

**6.1e**

**Please describe the opportunities that are driven by changes in other climate-related developments**

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Oth 1	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 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 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.	Increased demand for existing products/services	Current	Direct	Virtually certain	Low
Oth 2	Changing consumer behaviour	Among the agricultural raw materials that Nestlé uses to manufacture finished food products, some are forest-risk commodities such as palm oil and paper. As awareness of	Increased demand for existing products/services	Current	Indirect (Client)	More likely than not	Low

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		the public is increasing, eliminating deforestation along the whole supply chain of Nestlé can lead to increase in our products sales by demonstrating our commitments. By making a serious attempt to raise the bar in the corporate actions against deforestation and by achieving in 2012 80% of RSPO certified sustainable palm oil bought, two years ahead of our public commitment, this will potentially lead to increased demand for existing products .					

6.1f

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions**

**Oth 1**

**i) the potential financial implications of the opportunity**

We have estimated that this opportunity can result in a positive financial implication of CHF 7 million on our revenue. This estimation is based on Nestlé Group Enterprise Risk Management Framework. It involves the aggregation of individual “Top-Down” assessments of Zones, Globally Managed Businesses, and all markets which have identified this as a potential opportunity.

**(ii) the methods you are using to manage this opportunity**

According to our annual materiality analysis, stakeholders are concerned about the provision of products and services in a way that reduces greenhouse gas emissions.

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 and improving the environmental performance of our products including packaging. We have implemented a series of methods to reduce GHG emission of our products. This include:

- In the UK we have made extensive changes to our distribution centre and transport network. Our transport operations are now in-house and we use only two regional distribution centres to deliver the full range of products. This has resulted in 38% improved trailer fill from factory to distribution centre, 20% improved trailer fill from distribution centre to customer and reduction of around 640 tonnes of CO2e equivalent.
- In our European operations, shifting from road to rail and short-sea shipping has delivered a reduction of approximately 2400 tonnes of CO2e in 2012. An additional 5300 tonnes of CO2e were also saved as a result of optimising vehicle loads and sourcing.
- In 2012, photovoltaic panels, which generate electricity from solar energy, were installed on the roofs of the Singen and Weiding warehouses in Germany. At both sites, around 50% more energy was produced in 2011 than consumed onsite.
- The installation of LED lighting systems in warehouses in Poland and Russia has reduced energy consumption by more than 60%, with a corresponding reduction in indirect GHG emissions. Power efficient heat insulation, which has been used in the roof of a distribution centre in Kinel, Russia, now delivers yearly energy savings of more than 75 707 kWh.
- The use of coffee grounds as a renewable fuel in 20 of our 32 NESCAFÉ factories resulted in a reduction of more than 230'000 tonne of CO2e in 2012.

- The Nestlé packaging optimisation programme resulted in 2012 in avoidance of 70500 tonnes CO<sub>2</sub>e.
  - In 2012, Nestlé contributed to the United Nations Framework Convention on Climate Change Adaptation Private Sector Initiative by presenting a business case study to help raise awareness about the engagement of the private sector in this field.
- We continue to communicate in a meaningful and accurate way based on scientific evidence about our climate change actions and performance:
- We disclose every year in the CDP Investor Programme, Annual Report and Nestlé in society report (GRI A+ granted).
  - We proactively engage with stakeholders through convenings. In 2012, 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 attended.
  - The Nescafé campaign in the UK emphasised climate change benefits, with the claim of '50% fewer lorries'. Other sustainability messages, such as our commitment to the Nescafé Plan, appear on different versions of the products. As well as increasing sales and market share, research has shown that the campaign has made our target buyers think more positively about the Nescafé brand.
  - These measures are expected to increase the reputation that consumers have on Nestlé and therefore increase the magnitude of the impact. In addition, some of these measures have contributed to economic saving estimated in more than CHF 94000 in 2012.

**(iii) the costs associated with these actions**

The cost associated with these action amounts to CHF 121 million in environmental improvements including GHG emission reduction in 2012.

**Oth 2**

**i) the potential financial implications of the opportunity**

We have estimated that this opportunity can result on a positive financial implication of CHF 3 million on our revenue. This has been estimated by considering the likelihood and the impact of increasing reputation and demand of our products for our commitment on environmental sustainability and specifically on combating deforestation.

**(ii) the methods you are using to manage this opportunity**

- Deforestation contributes to around 20% of GHG emissions, therefore we are committed to use only palm oil from sustainable sources by 2015 and to help achieve zero net deforestation by 2020. The deforestation commitment includes preservation of "high carbon stock" forests and "high carbon stock" soils. Nestlé's innovative partnership work with The Forest Trust to combat deforestation connected to palm oil production was voted a Silver Winner in the Best Green Collaborative Initiative Award category at the 2011 International Green Awards™.
- In 2012, 80% of our palm oil purchases came from sustainable sources. Our actions focus on establishing traceable supply chains and on assessing and developing suppliers against the Resources Sourcing Guidelines. We systematically identify and exclude companies owning or managing plantations linked to deforestation.
- By 2013, we have committed to achieve 100% RSPO certified sustainable palm oil, two years ahead of our public commitment.
- In 2012, the countries we operate within Europe delivered a breakthrough in engaging 100% of its paper and board suppliers and to assess their performance at both the forest level and the mill level. This is a significant step towards eliminating unwanted fibre sources from our supply chains. We developed a Supplier RSG scorecard, consisting of both a fibre traceability database and a paper mill environmental performance database that is being used for more than 180 of our paper supply chains to define RSG action plans.
- These measures are expected to increase the reputation that consumers have on Nestlé and therefore increase the magnitude of the opportunity.

**(iii) the costs associated with these actions**

The cost associated with these action amounts to CHF 1.5 million which includes the RSPO membership and internal costs.

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

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6.1h

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

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6.1i

Please explain why you do not consider your company to be exposed to 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

## **GHG Emissions Accounting, Energy and Fuel Use, and Trading**

### **7. Emissions Methodology**

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7.1

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

<b>Base year</b>	<b>Scope 1 Base year emissions (metric tonnes CO2e)</b>	<b>Scope 2 Base year emissions (metric tonnes CO2e)</b>
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Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base yearemissions (metric tonnes CO2e)
Sat 01 Jan 2011 - Sat 31 Dec 2011	3806467	3233547

## 7.2

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)

## 7.2a

If you have selected 'Other', please provide details below

## 7.3

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

Gas	Reference
Other: CFC - 11	Other: IPCC First Assessment Report

Gas	Reference
Other: CFC - 12	Other: IPCC First Assessment Report
Other: HCFC - 123	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC - 125	Other: IPCC First Assessment Report
Other: HFC - 134 a	Other: Intergovernmental Panel on Climate Change supplementary
Other: HFC 143 a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HCFC 22	IPCC Second Assessment Report (SAR - 100 year)
Other: HCFC 401 a	IPCC Second Assessment Report (SAR - 100 year)
Other: HFC 404 a	IPCC Third Assessment Report (TAR - 100 year)
Other: HFC 407a	IPCC Third Assessment Report (TAR - 100 year)
Other: HFC 407c	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HCFC 408a	IPCC Second Assessment Report (SAR - 100 year)
Other: HFC 410 a	IPCC Third Assessment Report (TAR - 100 year)
Other: HFC 410 b	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 413 a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 417 a	IPCC Second Assessment Report (SAR - 100 year)
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 422 a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 422 d	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 426 a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 434 a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: HFC 507 a	IPCC Fourth Assessment Report (AR4 - 100 year)

#### 7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference

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**Further Information**

Nestlé has developed an internal tool, Safety Health and Environment Performance Management (SHE-PM), through which factories enter monthly their environmental information; in particular energy and refrigerants consumption data and which calculate corresponding GHG emissions. SHE-PM is an intranet reporting tool for all Nestlé plants and has been used since the end 2012 for the reporting of safety and environment performance indicators, replacing the previous reporting system called NEST (Nestlé Environment & Safety Performance Tracking Tool). SHE-PM provides a tool designed to allow plants and markets to measure and manage their safety and environment performances. The data collection and reporting is based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. For answer 7.4, please find in attachment the excel file containing the data required.

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**Attachments**

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/Nestlé 2012 Emission Factors-CDP.xlsx](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/7.EmissionsMethodology/Nestlé%2012%20Emission%20Factors-CDP.xlsx)

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**8. Emissions Data - (1 Jan 2012 - 31 Dec 2012)**

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**8.1**

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

Financial control

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**8.2**

**Please provide your gross global Scope 1 emissions figures in metric tonnes CO<sub>2</sub>e**

3706080

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**8.3**

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

3391319

#### 8.4

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

Yes

#### 8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Head Offices	Scope 1 and 2	Nestlé does not have a reporting system to track emissions from Head Offices yet, but we are in the process of implementing one. However, emissions from Head Offices are insignificant compared to Group emissions.
R & D	Scope 1 and 2	Nestlé does not have a reporting system to track emissions from R&D sites yet, but we are in the process of implementing one. However, emissions from R&D sites are insignificant compared to Group emissions.
Distribution Centres	Scope 1 and 2	Nestlé does not have a reporting system to track emissions from Distribution Centres yet, but we are in the process of implementing one. However, these emissions are estimated on a yearly basis, but the information for 2012 is not available yet.
Factories	Scope 1 and 2	Some recent acquisitions that have not yet implemented the new reporting system to track the emissions at corporate level. For new acquisitions, the Nestlé Environmental Requirements sets a time frame for compliance with the implementation of tracking system at corporate level.

#### 8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Other: Uncertainty in Data received	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.	More than 2% but less than or equal to 5%	Other: Uncertainty in Data received	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.

## 8.6

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

Third party verification or assurance complete

### 8.6a

**Please indicate the proportion of your Scope 1 emissions that are verified/assured**

More than 90% but less than or equal to 100%

### 8.6b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Investor-8.6b-VerificationDetails1/Nestle%20CDP%20Statement%20Scope%201%20-%20ISSUED%2029.5.13.doc">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Investor-8.6b-VerificationDetails1/Nestle CDP Statement Scope 1 - ISSUED 29.5.13.doc</a>

#### 8.6c

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

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

#### 8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Third party verification or assurance complete

#### 8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

More than 90% but less than or equal to 100%

#### 8.7b

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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.7b-C3-RelevantStatement/Investor-8.7b-VerificationDetailsS21/Nestle%20CDP%20Statement%20Scope%20-%20ISSUED%2029.5.13.doc">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/Investor-8.7b-VerificationDetailsS21/Nestle CDP Statement Scope 2 - ISSUED 29.5.13.doc</a>

8.8

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

Yes

8.8a

**Please provide the emissions in metric tonnes CO2**

683750

## 9. Scope 1 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)

9.1

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

Yes

9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
United States of America	632069
Mexico	234299
India	231808
Brazil	205842
China	190890
France	183261
Spain	154278
United Kingdom	148766
Philippines	135275
South Africa	127856
Pakistan	124447
Japan	108382
Chile	106100
Germany	96824
Italy	87503
Rest of world	938480

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9.2

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

- By business division
- By facility

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9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
Cereal Partner Worldwide	67896
Dairy Partners America	142447
Nespresso	4953
Nestlé Nutrition	135124
Nestlé Professional	17470
Nestlé Waters	140952
Other Nestlé Food	3197238

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
CN PL Shuangcheng	108179		
ES PL Girona	102472		
IN PL Moga	76951		
PH PL Cagayan de Oro Factory	69235		
PK PL Kabirwala Factory	66969		
MX PL Toluca - Cafes y Culin.	63832		
PK PL Sheikhpura Factory	57229		
US PL Freehold	53370		
JP PL Himeji	50612		
US PL Bloomfield Nppc-gp	49107		
ZA PL Estcourt	48146		
ID PL Kejayan	47067		
MX PL Coatepec	46956		
PH PL Cabuyao Factory	46186		

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
JP PL Shimada	45855		
FR PL Dieppe	44772		
MX PL Lagos de Moreno-Lacteos	43492		
US PL Anderson	43329		
IN PL Nanjangud	42873		
GB PL Hayes (Coffee)	38481		
Rest of factories	2560967		

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9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)

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9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

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9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)
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## 10. Scope 2 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)

### 10.1

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

Yes

### 10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
United States of America	1301642	2368736	0
Mexico	143370	266445	53148
United Kingdom	142338	342936	0
China	141025	206674	0
South Africa	137858	158839	0
Germany	130817	325543	0
Australia	128963	124963	0
India	112383	123175	0
Malaysia	100486	184627	0
Russia	98028	163443	0
Thailand	62631	122115	0
Brazil	56109	488507	0
Chile	53798	124270	0
Indonesia	52825	74498	0
Israel	50024	69089	0

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Rest of world	679022	2340183	83355

## 10.2

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

By business division  
By facility

### 10.2a

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

Business division	Scope 2 emissions (metric tonnes CO2e)
Cereal Partners Worldwide	104651
Dairy Partners Americas	31266
Nespresso	946
Nestle Nutrition	116667
Nestle Professional	32128
Nestle Waters	582230
Other Nestlé Food	2523431

### 10.2b

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



Facility	Scope 2 emissions (metric tonnes CO2e)
US PL Anderson	89445
US PL Little Chute	53776
ID PL Kejayan	44260
US PL NW Hawkins Factory	43771
US PL Gaffney	42936
US PL Davenport Nppc	42567
US PL Solon	41998
US PL NW Mecosta Factory	41532
MY PL NMM-Shah Alam	37497
IN PL Moga	37397
US PL Mt Sterling	37011
US PL Oklahoma City Nppc	36758
ZA PL East London	34907
RU PL Timashevsk	33920
US PL Atlanta Nppc	33045
US PL Burlington	32517
US PL Denver Nppc	31750
IN PL Nanjangud	31577
US PL Laurel	30950
US PL Fort Wayne	30649
Rest of Factories	2583056

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)

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10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)
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## 11. Energy

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11.1

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

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

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11.2

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

Energy type	MWh
Fuel	18079961
Electricity	7019183
Heat	31247
Steam	433618
Cooling	0

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11.3

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

Fuels	MWh
Anthracite	100899
Brown coal	157520
Butane	23330
Other: Cocoa Residue	13983
Diesel/Gas oil	661625
Other: Hard Coal	757733
Other: HFO	2672048
Landfill gas	61432
Other: LFO	226165
Liquefied petroleum gas (LPG)	276636
Methane	43721
Natural gas	11357797
Propane	46634
Other: Spent coffee ground	879555
Wood or wood waste	800883

#### 11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
Power Purchase Agreements (PPA) not backed by instruments	53148	We signed a power purchase agreement with CISA-GAMESA, allowing 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.
Tracking instruments, Guarantees of Origin	83355	San Pellegrino in Italy covered its entire electricity usage in 2012 with Guarantees of Origin.

## 12. Emissions Performance

12.1

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

Increased

12.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	5.2	Decrease	If Nestlé had produced its 2012 production volume with the same carbon intensity as in 2011, it would have emitted 7.43 million tonnes CO2e in 2012. However, as a result of our emission reduction activities, we emitted 7.06 million tonnes CO2e (excluding the influence of system change – see item “Change in methodology” below), which leads to a 5.2% decrease in emissions. 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, utilise sustainably managed renewable energy sources, recover value from by-products and control and eliminate emissions, including greenhouse gases. 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. In 2012, the following projects yielded to: - Nestlé France’s Challerange factory now operates a wood-fired boiler using woodchips sourced from forests certified by the Programme for the Endorsement of Forest Certification generates approximately 8,000 tonnes CO2e savings per year. - Three wood boilers installed in Rosières and Herta ST-Pol and the one in Challerange together will make CO2 savings of 25% for Nestlé France. - a new boiler at Nestlé Chile’s Osorno factory uses wood sourced from local forests certified by the National System of Wood Certification of Chile and prevents the emission of 10,400 tonnes of CO2e per year compared to an equivalent boiler using non-renewable sources. - In Mechanicsburg factory (Purina North America), through our Energy Target Setting Initiative we saved in 2012 more than 5700 tons of CO2e through various projects (e.g. lighting replacement and steam system insulation). - We have now phased out more than 92% of refrigerants with high global warming and ozone depleting potential in our industrial operations. In Nestlé México, a project using indirect heating with water heated with natural gas instead of steam brings annual savings of 343 tonnes of CO2e. In Ferentino Factory, a new hot water system was installed, saving 900 tons of CO2e per year. In Purina factory, through our Energy Target Setting Initiative, we saved in 2012 more than 5700 tons of CO2e through various projects.
Divestment			
Acquisitions			

Reason	Emissions value (percentage)	Direction of change	Comment
Mergers			
Change in output	5.5	Increase	The increase in output in 2012 resulted in an increase in absolute GHG emissions. Data used for the calculation: In 2012, the production volume increased in 2.5 million tonnes. If no measures had been introduced, by using the same efficiency as in 2011, our absolute emissions would be 7.43 million tonnes CO2e. Deducting the calculated 2011 emissions (7.04 million tonne CO2e), we see the increase of emissions due to change of output is 0.38 million. tonnes CO2e (5.5%).
Change in methodology	0.32	Increase	0.49% of 2012 results (7.09 million tons CO2e) is due to the system change and the update of the emissions factors. This gives emissions of 7.06 million tons of CO2e for 2012. This yield to a 0.32% increase regarding 2011 data (7.04 million tons) due to the change of system.
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

## 12.2

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
77.0	metric tonnes CO2e	unit total revenue	8.53	Decrease	The intensity figure is expressed in tonne of CO2e per million of CHF revenue. GHG emissions scope 1 and 2 decreased mainly because of emissions reduction initiatives. 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.

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
					As part of our Energy Target Setting Initiative, we completed 36 energy-saving projects in 2012. We identified more than 850 projects, comprising a total investment of about CHF 82 million. These projects have resulted in annual energy savings of about 2 million GJ and a reduction of approximately 173'000 tonnes of CO2 equivalent.

12.3

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
20.9	metric tonnes CO2e	FTE employee	2.71	Decrease	The intensity figure is expressed in tonne of CO2e per employee. The GHG emissions intensity scope 1 and 2 by FTE employee decreased because of emissions reduction initiatives. Through our energy efficiency efforts and the expansion of renewable energy use, the GHG per FTE employees decreased by 2.71% in 2012. 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. Per employee, we reduced our Scope 1 and 2 GHG emissions from 21.5 tonne of CO2e in 2011 to 20.9 tonne of CO2e per employee in 2012. The total number of employees increased from 327'537 in 2011 to 339'397 in 2012.

12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
148.8	metric tonnes CO2e	metric tonne of product	4.4	Decrease	The intensity figure is expressed in tonne of CO2e per tonne of product. GHG emissions scope 1 and 2 decreased mainly because of emissions reduction initiatives. Through our energy efficiency efforts and the expansion of renewable energy use, our GHG emission Scope 1 and Scope 2 remained stable at 7 million tonnes of CO2e in 2012, although the production volume increased by 2.5 million tonnes. Per tonne of product, we reduced our Scope 1 and 2 GHG emissions from 155.7 tonnes of CO2e in 2011 to 148.8 tonnes of CO2e in 2012.

### 13. Emissions Trading

#### 13.1

Do you participate in any emissions trading schemes?

Yes

#### 13.1a

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	Tue 01 Jan 2008 - Mon 31 Dec 2012	2868633	0	2388493	Facilities we own and operate

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**13.1b****What is your strategy for complying with the schemes in which you participate or anticipate participating?**

EU-ETS process: At the end of 2012, 21 Nestlé factories were participating in the EU ETS Phase II. 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 Services, Commodity Purchasing, Finance and Zone Europe) 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.

Nestlé EU-ETS strategy is to remain net seller of allowances, at least during Phase II. We have therefore developed the following action plan:

1. Facilities which might face a deficit submitted an action plan before the end of 2008 in order to fulfil their EU-ETS allowances before the end of 2012.
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. From 2008 to January 2012, 4 factories have left the scheme, because of the reduction of their rated thermal input below 20 MW, related to investments in more efficient technologies.

Due to our commitment to reducing GHG emissions from our operations by 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, the verified emissions are lower than the allowances.

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

Yes

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**13.2a**

**Please complete the table**



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

#### Attachments

[https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/13.EmissionsTrading/Nestle-CSV-Full-Report-2012-EN.pdf](https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/13.EmissionsTrading/Nestle-CSV-Full-Report-2012-EN.pdf)

## 14. Scope 3 Emissions

### 14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Relevant, calculated	43379571	i. Data used: We used the total global raw materials, packaging and finished goods purchases broken down in 35 purchasing categories as primary data. For each category, a GHG emission factor (secondary data) from a representative product is selected. ii. Methodology: The mass purchased is multiplied by the selected emission factor to obtain a screening assessment of the GHGs emissions associated with each category. The databases	62%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			used are ecoinvent 2.2 or Quantis internal database of processes built during previous LCA performed for Nestlé (both using IPCC 2007 GWP 100). This allows identifying the purchasing categories that are likely to be contributing most to the impact. iii. Quality: The quality of the primary data used is high. However, due to the simplification involved in the modelling, the quality of the emissions data is considered as average.		
Capital goods	Relevant, calculated	1478408	i. Data used: The primary data used are the purchases from fixed assets and IT supplies for 2012 in monetary terms, broken down in 28 sub-categories. Each category is associated with an economic sector from the environmentally-extended Input-Output Model Open IO v1.4 (secondary data). The model, originally for 2002 was adjusted to inflation, evolution of the purchasing power parity and of energy efficiency of the global economy for 2008. ii. Methodology: The amount spent in each sub-category is then multiplied by the sector unit GHGs emission factor. iii. Quality: The quality of the primary data used is high. However, due to the simplification involved in the modelling, the quality of the emissions data is considered as average.	0%	
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	1518473	i. Data used: The primary data used are the types and quantities of fuels and electricity purchased worldwide in 2012. Secondary data are used for upstream and T&D GHGs emission factors. For electricity, T&D losses and heat losses, GHGs emissions are specific to each country or region. The activity data come from Nestlé's internal reporting tool. The GHGs emission factors are derived from Nestlé's internal database of emission factors for electricity generation and from ecoinvent 2.2, using the IPCC 2007 GWP100 method. ii. Methodology The emissions are calculated by multiplying fuel quantities and electricity purchased by upstream and T&D GHGs emission factors.	100%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			Transportation emissions for relevant fuels are included. iii. Quality: The quality of the primary data used is high and the quality of the secondary data is medium. The quality of the emissions data is considered as medium.		
Upstream transportation and distribution	Relevant, calculated	2183325	i. Data used: For the assessment of this category's emissions, the quantity of goods purchased provided for category 1 (purchased goods and services) was used as secondary activity data. ii. Methodology: Three default distances (200km, 300km and 1500km) were used to estimate the potential scale of GHGs emissions to reflect small, medium and large countries. 20% of each category is assumed to be distributed in small markets, 30% in the medium markets and 50% in the large markets. All transportation is assumed to take place by truck. The emission factor for truck transportation comes from ecoinvent 2.2 (IPCC 2007 GWP100). iii. Quality: Due to the simplification involved in the modelling and the use of secondary data only, the quality of the emissions data is considered as average.	0%	
Waste generated in operations	Relevant, calculated	292474	i. Data used: The primary data used for this category are the mass of waste generated in production centres, excluding office waste. ii. Methodology: The waste flows are broken down in 13 different waste treatment methods. Each treatment is associated with an emission factor to assess the GHGs emissions (secondary data) from the treatment (ecoinvent 2.2, IPCC 2007 GWP100). iii. Quality: The quality of the primary data used is high. However, due to the simplification involved in the modelling (no geographical differentiation on the waste treatment was made), therefore the overall quality of the emission is estimated as medium.	100%	
Business travel	Relevant, calculated	204969	i. Data used and ii. Methodology: - Plane: The GHGs emissions report provided by the travel agency used by Nestlé covers approximately 75% of the global travels (primary data). A linear extrapolation of the emissions to	74%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			100% was performed. Emissions were calculated using DEFRA guidelines. - Car: The GHGs emissions report from the car rental company used by Nestlé covers 15 countries and 35% of Nestlé global number of employees (primary data). This report cover distances travel, types of car and GHGs emissions factors (primary data). Again, a linear extrapolation to 100% of the employees is performed, assuming that the behaviour of business travel is similar between countries. - Train: The GHGs emissions report from the Swiss national railways company for Nestlé's travels was used. This data covers approximately 50% of the Swiss business travels by train. These emissions were multiplied by 30 to get to an estimate of the GHGs emissions for the whole Nestlé group. The environmental data provided were extracted from the software Mobitool (all primary data). iii. Quality: The quality of the primary data used for plane travel is high, which is by far the biggest contributor for this category of emissions. However, the overall quality of the emissions is estimated as medium due to the uncertainty linked with the extrapolation and the methods used for the calculation of the GHG emissions from cars and train.		
Employee commuting	Relevant, calculated	255067	i. Data used and ii. Methodology: The primary data used covers the total number of employees per country and region. Two different commuting scenarios were considered: one for North Americans (Canadian and US employees only) and one for the remaining countries which is based on European commuting (secondary data). 2011 DEFRA Guidelines for Company GHGs reporting were used for this category (IPCC 2007 GWP 100). iii. Quality: Due to the generalization of these calculations and the fact that no primary commuting data were available, the quality of reported emissions data is average.	0%	
Upstream leased	Not relevant,				We usually operate our own

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
assets	explanation provided				assets. Upstream leased assets have a negligible contribution to our emissions.
Investments	Relevant, calculated	5691163	i. Data used and ii. Methodology: Eight companies in which Nestlé has an investment but no financial control are taken into account. When disclosed, the scope 1 and 2 emissions of the invested company were collected and the share of emissions corresponding to Nestlé's investment were calculated and reported (primary data). When no GHGs emission disclosure was available, the economic sector of the company invested in was selected in the Input/Output model Open IO v1.4 (secondary data). The emissions were calculated by multiplying the investee's turnover by their sector's unit emissions and reported according to Nestlé's investment in the company. This methodology accounts for the cradle-to-gate emissions of the investees and therefore includes some of the investee's upstream scope 3 GHGs emissions. iii. Quality: The overall quality of emissions is estimated as average, due to the uncertainty inherent to the Input/Output modelling.	1%	
Downstream transportation and distribution	Relevant, calculated	2805752	i. Data used: For transport with own fleet, the reported fuel consumption is converted into CO2e-emission using DEFRA standard emission factors. For outsourced transportation, we use as primary data information per transportation lane (distance, number of shipments, transport vehicle, tonnage transported), which is 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 CO2e-emission using DEFRA factors. For non-road transport (always outsourced), the transportation volume is calculated in tonne.kms, which are then converted to CO2e-emission using standard DEFRA factors. For warehousing, basic	0%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			<p>data is number of pallet spaces in markets or business per warehouse type (ambient, refrigerated, chilled, frozen).</p> <p>ii. Methodology: Per reporting market, the CO2e-emissions for transportation are summed up and shown with the following KPIs: absolute CO2e-emissions, CO2e-effectiveness (kg CO2e per tonne sold), CO2e-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 CO2e-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 70 biggest warehouses used by Nestlé). The electricity consumption is converted into indirect CO2e-emission using country specific indirect CO2e-emission factors. Extrapolation to global level for warehousing by applying the average CO2e-emission per tonne of product to the remaining volume of products sold. iii. 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 CO2e-effectiveness across different countries, the extrapolation to global volume is considered average.</p>		
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. The processing of sold products has a

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					negligible contribution to our emissions.
Use of sold products	Relevant, calculated	6784313	i. Data used: Sales figures by branch and brand were used to derive the total number of products sold. The greenhouse gas emissions from the use stage of these products were collected from LCA (Life Cycle Analysis) results performed by our consultant Quantis (secondary data). ii. Methodology: One to three representative products (brands) per branch were selected for this calculation. An estimate of the use stage emissions was performed obtained by multiplying the estimated number products sold by their unit use stage GHGs emissions using IPCC 2007, GWP100 (secondary data). iii. Quality: The data quality of reported emissions data is average due to the global generalization and the limited number of products that were modelled.	0%	
End of life treatment of sold products	Relevant, calculated	996988	i. Data used: Sales figures by branch and brand were used to extrapolate the total number of products sold. The GHGs emission factors used are taken from ecoinvent 2.2, using IPCC 2007, GWP100 (secondary data). ii. 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: aluminum, cardboard, glass, paper and plastic. The remaining 10% were modeled as plastic waste. The waste treatment processes were based on global averages. Additionally, loss rates for these food products were included. iii. Quality: The data quality of reported emissions data is average due to the global generalization and the limited number of products that were modelled.	0%	
Downstream leased assets	Not relevant, explanation provided				We usually operate our own assets. Downstream leased assets have a negligible

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					contribution to our emissions.
Franchises	Not relevant, explanation provided				Our standard business model and operation do not involve franchising. Franchises have a negligible contribution to our emissions.
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.

#### 14.2

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

Third party verification or assurance complete

#### 14.2a

**Please indicate the proportion of your Scope 3 emissions that are verified/assured**

More than 90% but less than or equal to 100%

#### 14.2b



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

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/42/12942/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/Investor-14.2b-VerificationDetails1/Nestle%20CDP%20Statement%20Scope%203%20-%20ISSUED%2029.5.13.doc">https://www.cdproject.net/sites/2013/42/12942/Investor CDP 2013/Shared Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/Investor-14.2b-VerificationDetails1/Nestle CDP Statement Scope 3 - ISSUED 29.5.13.doc</a>

14.3

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

Yes

14.3a

Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	4.02	Decrease	Emission reductions in this category: 60'162 tCO <sub>2</sub> = 4.02% Our production increased by 5.5% while our energy consumption increased only by 0.6% as a result of our emissions reduction activities. This implies a reduction of our fuel- and energy- related scope 3 emissions. If Nestlé had produced its 2012 production volume with the same scope 3

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				emissions intensity in this category as in 2011, it would have emitted 1.58 million tonnes CO <sub>2</sub> e in 2012 for this category of emissions. However, as a result of our emissions reduction activities, we emitted 1.52 million tonnes CO <sub>2</sub> e, which represents 4.02% of 2011 emissions in this category.
End-of-life treatment of sold products	Emissions reduction activities	7.07	Decrease	Emission reductions in this category: 70'479 tCO <sub>2</sub> = 7.07% Reducing packaging is part of our emissions reduction activities. Our packaging optimization programme saved 47'100 tonnes of packaging material, which corresponds to 70'479 tCO <sub>2</sub> avoided. This is a reduction of 7.07% compared to our 2011 emissions. For instance, as part of the Nescafé Plan, we have launched new Nescafé refill packs made from a combination of aluminium-foil and plastic film. The optimised design uses 34% less packaging materials than our previous refill but still retains 150 grams of coffee. The innovation has enabled us to double the volume of coffee packs on a pallet meaning fewer pallets and fewer lorries to transport the same volume of coffee.
Waste generated in operations	Emissions reduction activities	4.12	Decrease	Emission reductions in this category: 12'564tCO <sub>2</sub> = 4.12% Reducing waste is part of our emissions reduction activities. Our ultimate goal is zero waste and full recovery of unavoidable by-products. In 2012, 39 factories generated zero waste for disposal (22 factories in 2011); we generated 315 kilotonnes of waste and 1'430 kilotonnes of by-product (reused, recycled or recovered), which lead to 155'740 tCO <sub>2</sub> and 136'735 tCO <sub>2</sub> respectively by applying specific emission factors to the different waste and by-product categories. We can estimate 2011 emissions by multiplying 2011 total waste and total by-product by 2012 CO <sub>2</sub> emission intensity of waste and by-product respectively. This leads to a total of 305'038 tCO <sub>2</sub> for 2011. 2012 emissions (292'474 tCO <sub>2</sub> ) represent a 4.12% reduction, which is the result of our focus on zero waste and by-product recovery/reuse/recycling.
Business travel				We have begun to estimate this category only in 2012.
Employee commuting	Change in output	2.78	Increase	Our headcount increased, which resulted in an increase of our emissions related to employee commuting.
Purchased goods & services	Emissions reduction activities			We have begun to estimate this category only in 2012. However, we do have significant emission reduction activities implemented through our Responsible Sourcing program. Indeed, in addition to improving the living conditions of our suppliers, this program allows us to reduce the environmental impact of our supply chain. Some examples of these activities: - 89.5% of our suppliers complied with the Nestlé Supplier Code. - We've sourced 11% of our cocoa through the Nestlé Cocoa Plan, trained more than 270,000 farmers and distributed more than 1,000,000 high-yield, disease-resistant cocoa plantlets. - We've helped 14 cocoa cooperatives achieve UTZ or Fair Trade certification. - We've purchased

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				133,000 tonnes of green coffee through Farmer Connect, trained more than 48,000 farmers on sustainable coffee farming and distributed 12 million coffee plantlets in 2012. - 80% of the palm oil we purchased this year was RSPO compliant, out of which about 13% was traceable RSPO certified oil and 67% had GreenPalm certificates. - More than 8,000 farmers joined the Nespresso AAA Sustainable Quality™ Program in 2012 and we've sourced 68% of Nespresso coffee through the AAA Sustainable Quality™ Program.
Capital goods				We have begun to estimate this category only in 2012.
Upstream transportation & distribution				We have begun to estimate this category only in 2012.
Investments				We have begun to estimate this category only in 2012.
Downstream transportation and distribution	Emissions reduction activities			We could only provide 2011 data as an estimate for 2012 (2012 data not yet available), and therefore were not able to compare 2012 against 2011. However, we implement a range of emissions reduction activities: - Optimise distribution networks and route planning across all our operations globally - Explore opportunities to promote transport shifts, for example by using sea and rail instead of road - Expand driver training, both from a safety and environmental efficiency perspective - Use telematics and the latest technology on our vehicles where practical, and recommend our suppliers to do the same - Explore alternative engines such as electric cars - Support the development and use of safe and efficient natural refrigerant solutions for commercial applications, and progressively phase out HFCs appliances, and - Implement-energy saving initiatives in our distribution warehouses.
Processing of sold products				This source is not relevant and was excluded from our assessment.
Use of sold products				We have begun to estimate this category only in 2012.
Downstream leased assets				This source is not relevant and was excluded from our assessment.
Franchises				This source is not relevant and was excluded from our assessment.
Other (upstream)				This source is not relevant and was excluded from our assessment.
Other (downstream)				This source is not relevant and was excluded from our assessment.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in output	5.53	Increase	Our production increased by 5.5% from 2011 to 2012, as well as the scope 3 emissions related to this category.

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Upstream leased assets				We have begun to estimate this category only in 2012.

#### 14.4

**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

#### 14.4a

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

We engage along the value chain of our products on GHG emissions and climate change strategies, from farm to consumers and beyond. The strategy for prioritising engagement is based on the stage of the life cycle stage of our products and is based on the materiality assessment conducted every year. Our proactive engagement with stakeholders on topics including climate change includes regular external stakeholder convenings and meetings.

**Suppliers**

i)Methods of engagement:

- the Nestlé Responsible Sourcing Audit Programme which requests key vendors to demonstrate compliance with Nestlé’s environmental standards through independent third party audits;
- the Nestlé Responsible Sourcing Traceability Programme which promotes transparency in our extended supply chains back to the farm or feedstock, by implementing our commitments on climate change. The Nestlé Responsible Sourcing Guidelines of milk and dairy production drive improvements in GHG mitigating by the promotion of energy-efficiency, and use of renewable energy
- 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.

ii)The strategy for prioritizing engagements:

The Nestlé Responsible Sourcing Audit Programme focuses on the major Tier 1 suppliers.

The Nestlé Responsible Sourcing Traceability programme: We have a programme to establish 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

Direct from farmer –The strategy covers our main agricultural raw ingredients: milk, cocoa and coffee.

We engage with 100 of our packaging suppliers which represent 80% through the CDP Supplier programme.

iii)Measures of success

The Nestlé Responsible Sourcing Audit Programme % of Key Responsible Sourcing Suppliers Audited against Nestlé Supplier Code: In 2012, 2061 first tier suppliers were audited. By 2015, we will complete 10 000 responsible sourcing audits.

The Nestlé Responsible Sourcing Traceability programme: % of volume traceable and compliant with Nestlé RSGs: In 2012, 80% of our palm oil was sustainably sources and we will achieve 100% RSPO certified sustainable pal oil, two years ahead of our public commitment.

- the Farmer Connect Programme Number of farmers trained: In 2012, 48 000 coffee farmers and 27 000 cocoa farmers were trained. We will continue providing technical assistance.

% of volume traceable: In 2012, 46 000 tonnes of cocoa and more than 133 000 tonnes of coffee were sourced directly from farmers through Farmer Connect. By 2015, we will source 100 000 tonnes of Cocoa and 18000 tonnes of coffee, 100% in line with 4C baseline sustainability standard from farmer connect.

Customers

i)Methods of Engagement: 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 (SCP). Nestlé Professional LCA communication tool was launched 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.

ii)The strategy for prioritizing engagement is based on materiality analysis and the results of LCA of our products. In 2012, we provided input to Walmart to develop the SCP for coffee based on the identification of our main hotspot along the value chain based in LCAs. In 2012, we decided to engage with all customers that requested us specific information on GHG through the CDP supplier programme.

iii)We measure success with the number of engagement with our customers including the number of customers we engaged through the CDP supplier programmes. In 2012, we engaged with 100 packaging suppliers representing 80% of our spent in packaging.

Consumers

i)Methods of Engagement: We help consumers make informed choices through credible, substantiated communication. We leverage relevant contact points (e.g. digital, packaging and point-of-sale) to inform consumers of action they can take when using our products and handling used packaging. We support and shape the development of environmental communication best practices and standards, working in collaboration with industry, government and public forums.

ii)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 LCA of soluble coffee help us identify that the consumer phase has a share of the GHG emissions due to the water boiling and cup washing. The NESCAFÉ Plan focuses on responsible consumption.

iii)We measure success by means of Nestlé reputation as being considered as a brand that cares for the environment. Last year in 23 out of 29 countries assessed, Nestlé had a better score than the industry average on the statement “cares for the environment”.

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14.4b

**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**

Number of suppliers	% of total spend	Comment
4200	80%	Responsible Sourcing Audit: Total supplier base is 164'000; In use and regrouped under same family, total family supplier base is 25'000, while 90% of Nestlé spend is represented by 8'025 suppliers
52	90%	Palm oil
456357	50%	Milk purchasing, especially directly from farmers, is a shared value activity that we have been undertaking for more than 140 years. We have always understood that if we want a constant supply of high-quality, fresh milk, we need to work in partnership with our farmers. In exchange for this, we offer our farmers access to market and regular demand for their product, as well the support for them to grow together with our business. We sourced more than 14.4 million tonnes of fresh milk equivalent with 50% of the volume coming from our milk districts we set up in more than 30 countries.
3	11%	Soya 11% of spend is covered by the suppliers we engaged with.
15	17%	Sugar 15 suppliers in Brazil, Mexico and India. At least 17% of global sugar spend, based on data available.
260	34%	Paper and board Number of suppliers in the priority countries of Brazil, China, Europe, India, Indonesia, Malaysia and USA, all suppliers in Europe. 34% of total spend
52854	68%	Coffee sourced by Nespresso from AAA Sustainable Quality™ program in 2012 was 68%. The Nespresso AAA Sustainable Quality™ Program was launched in 2003, in collaboration with Rainforest Alliance. It is founded on the conviction that the best way to protect in the long-term the highest quality coffees that meet the specific Nespresso aroma profile required for its Grands Crus is to encourage sustainable farming practices and secure farmers' livelihoods. The AAA Program attracts major partners who recognise this approach as an innovative and effective way to create shared value for all stakeholders, and has resulted in high loyalty rates from producers. Through the AAA Program, Nespresso has invested in specific initiatives that help: -Process consistently high quality coffees -Produce sustainable coffee, and -Improve farmers' livelihoods and optimising farm productivity. Nespresso's objective is to source 80% of its coffee from its AAA Program by the end of 2013. By the end of 2012, Nespresso was on track with 68% of its coffee coming from the AAA Program. A network of more than 200 dedicated agronomists worked closely with farmers on the ground. As a result, more than 240,000 hectares of farmland were part of an active sustainable management programme at the end of 2012.

#### 14.4c

**If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data**

How you make use of the data	Please give details
Use in supplier scorecards	We use suppliers' GHG emissions to help suppliers to improve their environmental impact. In particular, we use RISE (Response-Inducing Sustainability Evaluation), an indicator and interview-based method to assess the sustainability of farm operations across economic, social and environmental dimensions. Environmental issues considered as part of the RISE assessments include soil use, nutrient flows, water use, energy use and our impact on climate change and biodiversity and plantlet production. A new version, RISE 2.0, was developed between 2009 and 2011 to further improve the tool and make it available in different languages. RISE now evaluates the sustainability of agricultural production through ten indicators ranging from action needed to good performance. Based

How you make use of the data	Please give details
	<p>on these assessments we have a broad range of activities that differ from country to country. They include, among others:            *Veterinary services *Support to feeding / silage production / pasture establishment *Water treatment and management *Improved milk collection (e.g. solar panels at chilling stations) *Animal fertility checks *Support to silvopastoral farming *Biogas digesters and systems (where appropriate), and *Incentive schemes for more environmentally sustainable farming practices.</p>
Identifying GHG sources to prioritize for reduction actions	<p>We use supplier GHG emission data for our Life cycle assessment studies. Understanding lifecycle impacts, including GHG sources along the value chain, allows us to optimise the environmental performance of our products (i.e. reducing GHG) by systematically assessing product categories along the whole value chain. This is especially important at product development stage where design interventions can have a big impact later along the value chain. For example, a product level life cycle assessment of Herta ham revealed the highest environmental impact areas to be agriculture and animal breeding, factory production, and packaging. This knowledge has helped the team maintain or set improvement plans. For example: As part of carefully selecting its suppliers, audits by external, independent professionals are conducted to verify standards. For each charcuterie product, the Herta brand ensures its origin and responsible animal welfare practices. New incentives encourage farmers to improve the high environmental impact of their farming practices. All Herta factories are certified against ISO 14 001:2004. At Saint-Pol-sur-Ternoise, a wood boiler – supplied with sustainably grown wood – will reduce CO2 emissions by 80%. Packaging optimisation has delivered improved environmental impact while maintaining product quality, safety and convenience, and minimising food waste. Specific achievements include a 20% reduction in pie pastry packaging in 2010–2011. In 2011, Herta became the first charcuterie brand in France to launch packaging containing recycled materials (60% of Le Bon Paris Ham and 100% of Tendre Noix Ham packs contained some recycled materials). Le Bon Paris – 25% de sel packs contained 20% recycled content equalling more than 25 million packs and 550 tonnes of recycled content. In 2012, efforts extended across 60 million packs. We have signed a partnership with Eco-Emballages to support more work on recyclable packaging.</p>
Other	<p>We use supplier GHG emission data as an input for Nestlé sustainability category profiles (SCPs). Nestlé SCPs describe the environmental hotspots, including in climate change, biodiversity and water and energy use along the value chain of product categories and our primary activities to address these hotspots and related impacts, and improve environmental performance along the value chain. Our SCPs are so far available for the following product categories: instant coffee, bottled water, wet and dry pet food, ambient food, milk and dark chocolate. Our SCPs may also help employees to better understand the environmental attributes of our products, continually improve their environmental performance and increase the visibility of our initiatives. The profiles are also used for internal training and stakeholder engagement. For example, for instant coffee, we have identified that the main hotspots are in agriculture, manufacturing and the use phase. In agriculture, the main impacts arise in coffee cultivation, harvesting production and treatment while, in the use phase, impacts are related to the energy and water use for the preparation of Nescafé. To address these hotspots the Nescafé Plan focuses on three areas: responsible farming, responsible production and responsible consumption. We are working with the Rainforest Alliance, the Sustainable Agriculture Network (SAN) and the Common Code for the Coffee Community (4C) to transform coffee farm management to benefit current and future generations of farmers. Specific measures include doubling the amount of coffee bought directly from farmers and distributing 220 million high-yield, disease-resistant coffee plantlets. We are continuing to expand our technical assistance programme, which incorporates training on aspects contained within the Supplier Code and covers more than 19,000 farmers a year. We are working in many ways to improve our environmental performance. We are employing natural refrigerants, converting waste into energy, and using cleaner energy sources. In 20 out of 32 of our Nescafé factories we use coffee grounds as a renewable fuel saving the emissions of 247 thousand tonnes of CO2 per year. Our factory in Orbe, Switzerland, generated zero waste in 2012 and we are continuing to work towards 'zero waste to landfill' in other Nescafé factories.</p>

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14.4d

Please explain why not and any plans you have to develop an engagement strategy in the future

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### Further Information

For more information on Nestlé Responsible Sourcing Programme, please see: <http://www.nestle.com/csv/responsible-sourcing>

Further information for question 14.4b:

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 2012 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.

### Sign Off

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Please enter the name of the individual that has signed off (approved) the response and their job title

Pascal Gréverath, Nestlé AVP, Head of Environmental Sustainability



