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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

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
Sat 01 Jan 2011 - Sat 31 Dec 2011

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
France
Brazil
United Kingdom

Select country
China
Spain
Philippines
Germany
Japan
Italy
Russia
Switzerland
Australia
Canada
Rest of world

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

0.5

Please select if you wish to complete a shorter information request

0.6

Modules

As part of the Investor CDP information request, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors and companies in the oil and gas industry 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 be marked as default options to your information request. If you want to query your classification, please email 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>.

Further Information

Please see attach:

- The Nestlé Corporate Business Principles
- The Nestlé Policy on Environmental Sustainability
- Nestlé Annual Report 2011
- Nestlé Creating Shared Value Report 2011

Attachments

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/Introduction/The Nestlé Policy on Environmental Sustainability.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/Introduction/The%20Nestl%C3%A9%20Policy%20on%20Environmental%20Sustainability.pdf)

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/Introduction/Nestlé Corporate Business Principles__Spanish.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/Introduction/Nestle_Corporate_Business_Principles__Spanish.pdf)

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/Introduction/2011-Annual-Report-.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/Introduction/2011-Annual-Report-.pdf)

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/Introduction/Nestlé Creating Shared Value Report 2011.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/Introduction/Nestl%C3%A9%20Creating%20Shared%20Value%20Report%202011.pdf)

Module: Management [Investor]

Page: 1. Governance

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

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.

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	Incentivised performance indicator
Board/Executive board	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2
Chief Operating Officer (COO)	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2
Management group	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2
Energy managers	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2
Environment/sustainability managers	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2

Who is entitled to benefit from these incentives?	The type of incentives	Incentivised performance indicator
Facility managers	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2
Business unit managers	Monetary reward	Meeting GHG emission reduction targets including Scope 1 & 2

Further Information

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

Attachments

https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/1.Governance/Nestlé Corp_Governance_Report_2011_EN.pdf

Page: 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 (see guidance)

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 for business.

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.

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) risk /opportunities are also 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, also 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 83 different countries and its products are sold in more than 140 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, eg. on refrigeration, and issues, eg. deforestation, related to Climate Change. Action plans are established.

e. Criteria for materiality/priorities

Materiality/priority is 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. 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. 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.

f. To whom are the results reported

Company level results are reported to the Executive Board via Zone Management. Asset level results are reported to country managers. The results 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.

2.2

Is climate change integrated into your business strategy?

Yes

2.2a

Please describe the process and outcomes (see guidance)

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 important 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 Sustainability Council 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 CSV Alignment Board, chaired by our CEO Paul Bulcke. It leads the development and evolution of Nestlé's CSV and sustainability 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.

Climate change risks and opportunities are escalated through different levels of the governance bodies. Business strategies adjustments are then discussed during these meetings.

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 change 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 its procurement of agricultural commodities (e.g. palm oil, soy) to support a positive climate change reputation which is part of our overall strategy.
- Through our Sustainability by Design Programme, R&D systematically optimizes the environmental performance across the entire value chain at the earliest stage in the development of our 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 goal is to reduce GHG emissions on a comparable basis by 5% by 2015.
- We disclose in our website and report, 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 government, farmers and other stakeholders to contribute vulnerability assessment, 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.

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

- 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.
- 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. Regulatory aspects of climate change influenced this decision.

2.2b

Please explain why not

2.3

Do you engage with policy makers to encourage further action on mitigation and/or adaptation?

Yes

2.3a

Please explain (i) the engagement process and (ii) actions you are advocating

We engage with policy makers to encourage further action on mitigation and adaptation

Topic: Climate change mitigation and adaptation

i) Engagement method

Being part of leading sustainability organizations dealing with climate change and participating in trade associations. We are a partner of the United Nations Private Sector Initiative on climate change adaptation. We participate of The Prince of Wales' Corporate Leaders Group on Climate Change and continue to be a strategic partner of this programme encouraging government and civil society to understand and address critical issues such as climate change. José Lopez is a member of the advisory board of the University of Cambridge Programme for Sustainability Leadership. The method is to engage with key international policy making fora, in particular through the Rio +20 process.

ii) Nature of engagement

Through seminars, working groups, providing case studies, experiences and other initiatives. Voluntary.

iii) Actions advocated

As part of the Prince of Wales' Corporate Leaders Group on Climate Change we encourage governments to undertake a variety of actions, recognising their responsibility for climate change and respective capabilities to respond, including: international collaboration, effective market mechanisms, financing the transition for low carbon and climate resilient development, incentivising innovation of new technology and skills and processes, encouraging energy and resource efficiency to reduce GHG emissions, and integrating adaptation and risk reduction.

We share information about our adaptation activities which helps stakeholders improve their understanding and assessment of impacts, vulnerability and adaptation to climate change.

iv) Impact of those actions

Positive: The UN initiative was launched in Durham 17th COP and case studies has been added in the database.

More than 400 signatories have endorsed the 2°C Challenge Communiqué to call on governments to take action to ensure a successful transition to green growth and a climate resilient economy.

Topic: Assessment of the environmental performance of products and organisations including GHG emissions and their communication to consumers

i) Engagement method

We are co-chairing, together with the European Commission (EC), the European Food Sustainable Consumption and Production (SCP) Roundtable and we also actively participate in the UNEP FAO Agrifood Task Force to advocate in this topic. We chair the Food Drink Europe Environmental Sustainability Committee. We are participating in a national initiative, led by the French Ministry of Ecology and Sustainable Development, to communicate with French consumers about GHG emissions, particularly in relation to products such as Vittel, Nescafé and Nespresso.

We engage with the EC consultation on SCP. In China, authorities plan to establish a national standard on product environmental performance (e.g. GHG) in which we participate.

ii) Nature of engagement

Directly as a company. Voluntary approach by providing feedback on public consultations on proposed policies and legislation. Nestlé is actively involved in consultation processes and provide our comments and recommendations on SCP (i.e Europe, China, Thailand).

iii) Actions advocated

To favour the development of an 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, water & energy use and biodiversity. 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.

iv) Impact of those actions

Positive: French government is considering a legislation based on a comprehensive set of indicators and the European Food SCP Roundtable launched a communication environmental performance tool.

Topic: Further actions on reduction on GHG emissions, combat deforestation and use of natural refrigerants

i) Engagement method

We are an active member of the Consumer Goods Forum (CGF) Sustainability Steering Committee and trade association.

ii) Nature of engagement

We work with governments on the broader global effort to tackle deforestation, and use its influence to support funding mechanisms and other practical schemes that will assist countries and local communities to conserve their natural assets. Voluntary

iii) Actions advocated

We share the CGF commitment to global zero-net deforestation by 2020.

Nestlé fully endorses CFG pledge 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".

iv) Impact Positive: We have phase out 90% of refrigerants with high global warming.

Further Information

For more information on Environmental Sustainability, please visit:

<http://www.nestle.com/csv/Environment/Pages/Environmentalsustainability.aspx>

For more information on Principal risks and uncertainties. See section Group Risk Management (pg40-41) of 2011 Annual Report attached.

For more information on materiality issues, please visit:
<http://www.nestle.com/csv/Nestle/materialissues/Pages/materialIssues.aspx>

Attachments

<https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/2.Strategy/2011-Annual-Report-.pdf>

Page: 3. Targets and Initiatives

3.1

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

Absolute and intensity targets

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+2	100%	1%	2010	7125398	2011	In addition to our long-standing focus on water and energy efficiency, we have defined for the first time specific objectives to reduce absolute greenhouse gas emissions and waste, at the same time as demand for our products continues to rise.

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+2	100%	5%	metric tonnes CO2e per metric tonne of product	2010	162.9	2015	Nestlé established a specific target on GHGs: Continue decoupling of energy generation and CO2 emissions, i.e. greenhouse gas emissions on 5% a comparable basis by 2015. The GHG emissions in 2010 were 7125398 tonne CO2e.

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	Comments
Int 1	Decrease	1			Nestlé energy efficiency efforts also translate into GHG emissions reductions, though historically, Nestlé has reduced GHG emission more than energy due to a number of its factories switching to cleaner fossil fuels such as natural gas, and also renewable sources of energy. Nestlé plans to further decouple energy consumption and GHG emissions in the future.

3.1d

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

ID	% complete (time)	% complete (emissions)	Comment
Abs 1	100	100	We have defined for the first time specific objectives to reduce absolute greenhouse gas emissions and waste, at the same time as demand for our products continues to rise. In 2011, our production increase in 3.4% and our GHG scope 1 and 2 decreased achieving our absolute target.
Int 1	33	99	Per tonne of product, we reduced our Scope 1 and 2 GHG emissions from 162 tonne of CO2e in 2010 to 155.7 tonne of CO2e in 2011.

3.1e

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

3.2

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

Yes

3.2a

Please provide details (see guidance)

[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 a machine consumes a significant amount of electricity, especially when used below its full capacity. So our coffee machine design has an efficient stand-by function, which can save approximately 15%–25% of total energy consumption. Through saving energy, the GHG emission is reduced.

ii. An estimate of the amount of emissions

The estimate of the amount of emissions avoided is 30kgs and 36kg CO2e per year per machine of Nesspreso and Nescafé Dolce Gusto machines respectively. This considers that the Nesspreso 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 2010 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 CO₂e per year. This means, with this stand-by function, the avoided GHG emission for this coffee machine is 30kg CO₂e every year.

Taking a 2010 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 CO₂e per year. This means, with this stand-by function, the avoided GHG emission for this coffee machine is 36kg CO₂ every year.

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

The calculation methodology was developed in-house and the CO₂e 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 gCO₂/kWh for indirect GHG emission by electricity consumption.
- Global Warming Potential take 1 for CO₂ according to IPCC report.
- Annual GHG emission caused by this electricity consumption: 51.1 kWh x 587 gCO₂/kWh = 30 kgCO₂ 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 gCO₂/kWh for indirect GHG emission by electricity consumption.
- Global Warming Potential take 1 for CO₂ according to IPCC report.
- Annual GHG emission caused by this electricity consumption: 60.95 kWh x 587 gCO₂/kWh = 36 kgCO₂ per year.

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

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. By enjoying a cup of coffee NESCAFÉ instead of cup of drip filter coffee, 16.2 gCO₂e are saved through the entire value chain. NESCAFÉ uses less energy and emits less GHG emissions than drip filter coffee.

In 2011, our packaging source optimisation programme helped to save 39 000 tonnes by light weighting, design change, format and size optimisation.

ii)An estimate of the amount of emissions

Per year with a 2010 baseline, an estimate of 2313254 tonne of CO₂e were avoided in 2011 by drinking Nescafe instead of drip filter coffee.

Per year with a 2010 baseline, an estimate of 76000 tonnes CO₂e were avoided in 2011 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 Co₂; 25 for CH₄ and 298 for N₂O.

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 unbleached15.5[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 CO₂e/ton of packaging.

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.

3.3

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

Yes

3.3a

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

Stage of development	Number of projects	Total estimated annual CO2e savings (only for rows marked *)
Under investigation	379	191000
To be implemented*	78	96000
Implementation commenced*	1	3000
Implemented*	66	68000
Not to be implemented	35	64000

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	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
Energy efficiency: processes	We are very actively improving our energy efficiency by implementing internal tools on voluntary basis. Amongst them a methodology called Energy Target Setting that is aiming at issuing a roadmap of energy improvement projects covering building, industrial services and processes. In 2011, the projects implemented achieved a estimated saving of 54000 tonne of CO2e in scope 1& 2. (Life time: 10 years)	54000	9000000	30000000	>3 years
Low carbon energy installation	We are investing in renewable energy systems on voluntary basis such as the use of sustainable biomass source to fuel our boilers. In 2011, these projects resulted in a saving estimated of 3000t CO2eq. (scope 1, lifetime 20 years)	3000	700000	3000000	>3 years
Fugitive emissions reductions	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. All the new plants are using exclusively natural refrigerants. (Scope 1, Life time: 20 years)			7500000	>3 years
Energy efficiency: building fabric	We voluntary 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. One of our buildings was awarded LEED Platinum. (Scope 1,2&3, Lifetime 50+ years)				>3 years
Transportation: fleet	Nature of the activity: Alternative engines In the UK we worked with Eddie Stobart Ltd (ESL; a logistics and warehousing company) to successfully integrate liquefied methane powered trucks into our transport operation. Volvo, who designed and built the first heavy truck to run on liquefied methane, asked ESL to field test five trucks in the UK. In 2010, Nestlé UK and ESL established a partnership to trial three trucks dedicated to Nestlé, which entered service in mid-December 2010. Achievements: 225 000 km travelled, 25 800 tonnes lifted. 40 275 litres diesel saved, equating to 25 400 kgs of CO2 equivalent. As a result of the initiative, Nestlé UK and Eddie Stobart won the 2011 Efficient Consumer Response (ECR) Award for Sustainable Distribution at the IGD Food Industry Awards. In Germany, Mercedes-Benz is currently testing 50 hybrid trucks, which have the potential to reduce fuel consumption and carbon dioxide emissions by 10 to 15 per cent in short-radius distribution work. One of the trucks is being used by Nestlé Schöller for the delivery of freezer cabinets. Scope 2 Voluntary Expected life time: these are trials only so far. If successful, investments will be done in coming years.	25			
Transportation: fleet	Nature of the activity: Transport shifts in Europe In our European operations, shifting from road to rail and short-sea shipping has delivered a reduction of approximately 2400 tonnes of CO2 equivalent in 2011. An additional 2500 tonnes of CO2 equivalent were also saved as a result of optimising vehicle loads and sourcing. Scope 2	4900	200000		<1 year

Activity type	Description of activity	Estimated annual CO2e savings	Annual monetary savings (unit currency)	Investment required (unit currency)	Payback period
	Voluntary Expected life time: ongoing improvement.				
Fugitive emissions reductions	Moving to Natural refrigerants in commercial applications. HFCs contribute to climate change. We actively support the development and use of safe and efficient natural refrigerants solutions for commercial applications and are progressively phasing out HFCs appliances. We are testing 2 300 HC freezers in Australia, Spain, Malaysia, Chile and the United States. Our new HC freezers are equipped with high-efficiency fans, improving the energy efficiency by 80%. We estimate that the reduction in GHG emissions from these freezers will be around 10 000 tonnes of CO2 equivalent (CO2e) over their expected 10-year lifetime. Scope 2 Voluntary	1000			
Energy efficiency: building fabric	Nestlé Waters North America Headquarters earns LEED Gold. This is NWNA's 10th LEED-certified building. To date, Nestlé Waters has the most LEED-certified facilities of any U.S. food and beverage manufacturer. All the LEED-certified facilities have helped reduce energy use by 1.5 million kWh, GHG emissions by 952 ton, and water use by 9 million gallons. (Voluntary, Scope 1,2&3, Lifetime 50+ years)	952			
Behavioral change	Our energy management programme is composed by four levels of interventions: cultural, operational, maintenance and engineering investment. Behavioural change is included in our integrated approach of behaviour observation programmes and several campaigns managed by our operations globally. Behavioural change is achieved combining specific environmental objectives and awareness campaigns aligned with local and global environmental issues. The combination of all these points are measured in our total performance, we are not able yet to provide a figure only related with cultural behavioural change. Scope 1. Voluntary.				
Behavioral change	Promotion of environmental sustainability awareness among employees. We encourage the use of teleconference systems instead of business travel when possible. We provide training materials and raising awareness material to employees Scope 3. Voluntary.				<1 year
Behavioral change	Promote preferential use of renewable energy and energy conservation among farmers through 4C. We support 4C through its value chain, for example, by procuring 4C coffee and supporting growers and others working within the scheme. This is a multi-stakeholder association of which Nestlé is a founding member and which we strongly support. 4C is a unique organisation with members across trade and industry, producers, civil society and companies active in the coffee supply chain. Scope 3. Voluntary.			60000000	>3 years

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.
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).
Internal incentives/recognition programs	Monetary reward and incentives are linked to attainment of energy savings, thus of GHG reduction targets.
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.

3.3d

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

Further Information

For more information, please download the following documents:
 Nestlé Environmental Performance Indicators 2011
 Definitions and comments on Environmental Performance Indicators 2011

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/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/3.TargetsandInitiatives/Definitions and comments on Environmental Performance Indicators 2011.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/3.TargetsandInitiatives/Definitions%20and%20comments%20on%20Environmental%20Performance%20Indicators%202011.pdf)
[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/3.TargetsandInitiatives/Nestlé Environmental Performance Indicators 2011.xlsx](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/3.TargetsandInitiatives/Nestlé%20Environmental%20Performance%20Indicators%202011.xlsx)

Page: 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 other places than in your CDP response? If so, please attach the publication(s)

Publication	Page/Section Reference	Identify the attachment
In voluntary communications (complete)	pp 1	Climate change available website
In voluntary communications (complete)	Section 2011 Performance Summary Section & pp 36-37	Nestle-CSV-Summary-Report-2011
In voluntary communications (complete)	pp 15,196,197	2011 CSV Report
In annual reports (complete)	pp25	2011-Annual-Report

Further Information

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Re 1	Cap and trade schemes	The worldwide largest cap and trade mechanism to reduce GHG emissions is the European Emission Trading Scheme (EU ETS) , currently in Phase II. During Phase III starting in 2013, drastic GHG emissions reductions will be asked to emitters. Nestlé will most probably be required to purchase certificates for its factories emissions. With the reduction of granted allowances, and the newcomers in the Phase III, the cost of allowances is expected to rise. Increased operational cost in factories participating in the scheme are expected. Nestlé has 21 factories participating in EU ETS, with an expected net positive emissions balance end of Phase II. Some other countries have implemented Cap and Trade mechanism, like Japan, or Tax schemes like Australia, and some are considering of it or on the point to launch it, like USA. This will lead to an increase of the whole production costs for Nestlé.	Increased operational cost	1-5 years	Direct	Virtually certain	Low-medium
Re 2	Product labeling regulations and standards	Uncertainty surrounding future product labelling regulations requirements which might result in increased compliance cost. The introduction of mandatory requirements for producers to provide access to detailed and in-depth environmental information for interested stakeholders (e.g. by mentioning a dedicated webpage on the packaging or in advertising) may lead in an increased of operational cost including LCA studies critically reviewed. For example, the European Commission has launched a public consultation to assess policy options such as to create a mandatory scheme for product environmental declaration. In addition, governments such as France, are also assessing the introduction of an obligation for producers to provide environmental data and information on specific aspects of the product. Greece, Thailand, China are considering to promote voluntary schemes and related tools emphasizing credible, substantiated environmental information.	Increased operational cost	6-10 years	Direct	Very likely	High
Re 3	Other regulatory drivers	Policy incentives designed to reduce GHG emissions, can promote biofuels. Producing biofuels can consume between 20-100% of the total quantity of water now used worldwide for agriculture. This is clearly an unsustainable trade-off. Another example is shale gas extraction, which promises access to new reserves of fossil fuels, but is highly water-intensive and may pose	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
		a risk to water quality.					

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 analyzed the financial implications for its factories in EU ETS Phase II and Phase III. Assuming a CO2 price of 25€/tonne, the financial implication of the EU-ETS is estimated to be EUR25-30 mio. biggest impact for Nestlé might come from 5 coffee factories.

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

We have 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 France, a project of heavy fuel boiler to wood boiler replacement in three factories has been put in place in 2011. 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 CO2e a year and helps minimise the impact of energy cost increase. The same is underway in the factories in St Pol and Rosières.

-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 CO2e include the installation of high pressure ammonia heat pump for heating of office building (500 t CO2e/year); low temperature heat supply(6900t CO2e/year).

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

-These actions will reduce the magnitude of impact of the risk in €16 Mio over 1-5 years timeframe.

(iii) the costs associated with these actions

At Europe level in 2011, the cost of these emission reduction activities accounted for CHF 7.5 mio which include the reduction in 9.5K tonnes of CO2e

In addition, the total cost of the wood boiler replacement in Challerange, France is €17 Mio, reduced by €6 Mio due to the Government subsidies. Total costs of investments in France amounts to €16 Mio. With this fossil to renewable energy switch, CO2e of these 3 factories will be reduced by 25%, from 103k tons to 77k tons, representing a reduction of 26k tons per year. The full benefit will be available starting 2013.

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 20000 CHF on average, and we communicate environmental information of 10000 products, we estimate that the potential financial implications of the risk amounts to around 200 million CHF in the 5-10 years timeframe.

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

- We have been conducting LCA to identify the environmental impacts of our major product categories, including their packaging.
- In 2011, we launched the development of Eco-D, a multi-criteria eco-design tool that covers both packaging and ingredients in all product categories, partnering with recognised LCA scientists and experts.
- We have implemented RISE (Response-Inducing Sustainability Evaluation) to assess the sustainability of agricultural production in 14 countries.
- Since 2011 in France, we are 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 2011 we participated on a similar test on consumer goods launched by the European Commission.
- In China, we contribute to the development of a national standard on product environmental footprint.
- Globally, we have completed over 1700 Eco Design analyses. 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.
- We advocate for international standards for assessment, databases and voluntary communication. -We actively participate in the development of 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.
- These actions will reduce the magnitude of the impact of the risk in CHF 25 Mio over 5-10 years timeframe.

(iii) the costs associated with these actions

The cost of the co-development of ECO-D was CHF400k in 2010, CHF500k in 2011 and the cost of implementation of RISE is CHF 550 to date. In addition to this, there will be about CHF100k for the World Food Database Project. In 2011, the costs of the licences of tools to assess the environmental performance of packaging used were CHF 81k and the cost of participation of experimentation mentioned above is estimated in 125 days equivalent to CHF162k.

Re3

(i) the potential financial implications

The financial impact is estimated to be US \$50 - \$75 million a year. 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 \$1.50 a bushel due to the ethanol program, all things being equal.

(ii) To manage this risk:

- We favour the research of third generation biofuels.
- In our factories, we are continuing to pursue energy efficiency, as well as increasing the amount of energy derived from renewable sources. We completed 16 projects in 2011, which resulted in a reduction of approximately 191 000 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 Mio over 1-5 years timeframe.

(ii) the costs associated with these actions are estimated on CHF 30m in 2011.

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. These 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 effect 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 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, based on re-using the water recovered from the milk evaporation process.	Increased operational cost	6-10 years	Indirect (Supply chain)	Very likely	Medium-high
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 felt through water and the food industry is more exposed to climate change than most, because 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	Inability to do business	>10 years	Direct	Likely	Medium-high

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>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 produce to Nestlé and support their local communities. The use of drip irrigation and automated watering technology has maximised crop yields and, at the same 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>					

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 on 96 million CHF. 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 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.

ii) the methods you are using to manage this risk

By securing the long term supply of limited supply of raw materials triggered by climate change, we will be able to continue delighting consumers with our products globally. The measures we are have taken and are taking to manage the risk:

- Nestlé investigates possible impacts on its activities of such changes on a case by case basis when conducting risk assessment. 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, providing training and technical assistance.

- Our methods include purchasing our main raw materials directly from more than 680 000 small-scale suppliers in 2011. Our network of 1140 sourcing staff and agronomists and 10 625 support staff offered support, training and technical assistance to the farmers who supply us.
- In 2009 we launched the Nestlé Cocoa Plan and in 2010, we launched the NESCAFÉ Plan to ensure we continue to receive a supply of high quality raw material. This Programme also 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 farm's resilience to climate change.
- As part of the Nestlé Cocoa Plan, we are putting our plant science expertise to work and in 2011 distributed 824 000 higher-yielding, disease resistant-plantlets.
- In Central America region we have elaborated a list of substitution materials (for sales purposes) if the stock cover is affected. In Colombia, we have reinforce simulation exercises; and defined contingency plans for sourcing, alternative distribution routes.
- In Australia, we have established alternative sourcing plan for coffee sourcing.
- 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 will allow 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.
- We have conducted a project in In Dak Lak in Vietnam – the world's largest Robusta coffee producer. This project has trained farmers on the optimal timing and techniques to irrigate their trees. The project has decreased the water needed per coffee tree per year from 3.09 cubic metres to 1.56 cubic metres, a saving of 1'530 litres per tree per year, without affecting yields. This could save up to one billion cubic metres of water every year, especially important in case of droughts.
- In order to ensure long term supply, Nestlé is aiming to help 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 are estimated in CHF 600 million until 2020 which include The Nestlé Cocoa Plan and The Nescafé Plan investment in key rural development initiatives and the investment in 2011 of USD 24.9 million of direct financial assistance. The Nestlé Cocoa Plan cost is CHF10.6 m in 2011
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 150m 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 2011, 274 water-saving projects were run in our factories, 11 Water Resources Review programme were conducted at Nestlé sites.
- In 2011, 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 10 projects associated with water in 2011 in our supply chain.
- In China and Mossel Bay in South Africa we have included interventions and awareness campaigns to reduce water use. In Mexico, we are working on having more efficient process to reduce water consumption, such as Lagos de Moreno dairy plant, located in an area of water scarcity, where water will be recovered from the milk of the cow and used in service areas.

Towards the end of 2010, the Western Cape region experienced its worst drought in 132 years. In the Mossel Bay area the level of the local dam dropped to 20% at the height of the drought in November 2010. Use of condensate from the milk evaporation process has allowed halve the water use.

-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 2011, the cost associated with these actions is estimated on CHF 37m. This includes CHF 28m for water-saving and cleaning programmes, CHF 2.25m in community projects.

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	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. The fewer milk is loss, the fewer GHG scope 3. 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 the 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 to the order of 2 million tonne CO2 per year.	Other: Reduced supply of agricultural raw materials.	1-5 years	Indirect (Supply chain)	More likely than not	Low-medium
Oth 2	Changing consumer behaviour	Consumers' environmental awareness is growing. They would like to know if the food they eat are produced in a environmentally responsible way. They request food manufacturers to disclose environmental performance of their products and make informed choice when they decide to buy.	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
		<p>According to Consumer Insight study by Data Monitor, 47% of consumers are highly attentive to packaging information about how a product is manufactured. For example, Indian consumers are increasingly aware of sustainability practices in the food sector. A recent National Geographic survey suggests that consumers in emerging markets are increasingly inclined to buy environmentally improved goods. A 2011 European Commission survey suggests that 72% of European respondents were willing to buy green products. Climate change induced behaviour can move consumers to reduce demand for our products if consumers perceived that our products do not match their expectation. Therefore, it is important to communicate environmental information based on scientifically verified by third parties. 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.</p>					

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

The financial implication of the food waste in the supply chain, especially for milk, are estimated in 20 CHF million a year. The estimation 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 the 5 years timeframe.

(iii) the costs associated with these actions

In India, we have invested CHF 11 million in storage tanks, chillers centres, and veterinary aid.

In Mexico we invested CHF 7 million in biodigestors to recover energy from waste.

Oth2

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

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)

A reduction of demand for our products due to a consumers perceptions that the environmental performance of our products is not as good as competitors can result in reduced demand of products. The financial implication of consumer change behaviour can result in loss in reputation due to climate change. This is estimated in CHF 6m 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 environmental performance 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 a packaging eco-design tool 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 2011, we launched the development of Eco-D, a multi-criteria eco-design tool that covers both packaging and ingredients in all product categories, partnering with recognised LCA scientists and experts. Eco-D 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 14 countries (Mexico, Nicaragua, Panamá, Dominican Rep, Ecuador, Venezuela, Chile, China, Brazil, Spain, Switzerland, Pakistan, Morocco, Poland)

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 2011, in France, we developed 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 incentive consumer to recycle their petfood 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 will have an automatic poweroff 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 a light-weight water bottles. The new packaging will be launched in 2012 after a £35m 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 5m as these actions will reinforce Nestlé reputation on climate change mitigation.

(iii) the costs associated with these actions

The costs are estimated in CHF 300k a year including the license of eco-design tools, and LCA communication tools.

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

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

Page: 2012-Investor-Risks&Opps-ClimateChangeOpp

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 energy efficiency in our factories which reduced GHG emission. By end of 2011, Nestlé had 21 factories in the European Union in 8 countries: Spain, Portugal, Germany, Hungary, Italy, UK and France participating in the European Trading Scheme. Nestlé is expected to end up Phase II (end 2012) in a surplus position, which means Nestlé's sites will generate less emission than allowances received. It represents an opportunity and an incentive for even continuing reducing the CO2e in each site. This rewards also our continuous improvements and investments processes in place.	Reduced operational costs	1-5 years	Direct	Virtually certain	Low-medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>Nestlé will probably 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 probably have to buy EU ETS credits from 2017 (forecast) generates an additional incentive to reduce the total CO2e 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).</p>					
Re 2	Product labeling regulations and standards	<p>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). 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 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 than equivalent home made products. Demand could increase for Nestlé products due to the labelling regulations and standards. Nestlé has already conducted LCA for different categories and incorporated eco-design at the earliest stage in the</p>	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
		development of our 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; (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 for buy credits. In 2011, we emitted 105k tonnes of CO₂e per year 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. It is estimated that potential financial implications are would be EUR 25-30 mio.by 2020. This is estimated with a price of 25 euro per tonnes of CO₂. By 2020 we estimate we will need to buy 1million credits we will imply a cost of EUR 26,8m. By keeping our allowances below the level of our emission, we can sell our excess allowances at a price determined by supply and demand at that time.

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

We have been taking measures to reduce our emissions (such as 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 CO₂e 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, 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 network. Renewable energy has fully replaced external energy supply. The positive balance lead to a EUR 100'000 benefit yearly. Added to this, a reduction of 690t of CO₂e is realised yearly, providing a CO₂ 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 CO₂ are avoided, with a reduction of transportation costs of EUR 13'000.

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 carbon 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.

These measures have resulted in energy savings which have enhanced the opportunity. In Italy, the Ruspino factory has achieved a saving of €140k due to the rationalization of the production of compressed air in 2011. The San Giorgio in Bosco factory has been realized a saving of €490k 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.

(iii) the costs associated with these actions

The cost associated with this measures are estimated in CHF 15m. This includes capital cost of measures implemented in 2011. 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 EUETS will approach CHF300K.

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 have taken 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 400m 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. By providing more environmental information could increase demand for its product.

- In 2011, we launched the development of Eco-D, a eco-design tool that covers both packaging and ingredients in all product categories., Eco-D 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, eg through eco-design tool such as Packaging Impact Quick Evaluation Tool.
 - Nestlé France and Nestlé Waters are currently participating in a national initiative, led by the French Ministry of Ecology and Sustainable Development, to communicate with French consumers about GHG emissions, water and biodiversity, particularly in relation to products such as Vittel, Nescafé and Nespresso. For example, the GHG emissions of a cup of NESCAFÉ are estimated in 28.4gr CO₂e along the entire life cycle. A similar test on consumer goods has been launched by the European Commission, in which Nestlé participates with Nespresso, Nescafé, Vittel, KitKat and Purina Gourmet.
 - 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.

(iii) the costs associated with these actions

The annual cost of these actions is estimated in CHF 2 million (This includes: development of Eco-D:1000kCHF, LCAs and communication programme:CHF 500k)

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	Change in	Changes in extreme temperatures may favour the growth of	Other: Ensure supply	>10 years	Indirect	More likely	Medium-

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
1	temperature extremes	some agricultural raw materials such as coffee, cocoa, tomatoes, maize and vegetables. 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. For example, some areas in Northern countries may become suitable for production of raw materials that we supply. This can result in a secure supply of raw materials and also in decrease in operational cost including transportation. In addition, predictions from the Hadley climate change model suggest maximum summer temperatures in East Anglia (UK) will rise by 3°C by 2050. If climate changes in line with predictions there will be positive impacts on beet growing. Warmer springs will allow sowing to be brought further forward, canopies will develop faster, capturing more light to build more yield. With warmer weather the trend of increasing yields could well continue. The impact of future climate change on sugar beet yields is assessed over western Europe using future, climate scenario data from a General Circulation Model and the Broom's Barn simulation model of rain-fed crop growth and yield. Climate change is expected to bring yield increases of around 1 t/ha of sugar in northern Europe, for the period 2021-2050.	of key agricultural raw materials		(Supply chain)	than not	high
Ph 2	Change in temperature extremes	According to IPCC, some extreme weather events have changed in frequency and it is very likely that hot days and hot nights have become more frequent, It is likely that heat waves have become more frequent over most land areas. 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	Increased demand for existing products/services	1-5 years	Indirect (Client)	More likely than not	Medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		USA, hot weather during summer helped boost demand for ice cream parlours and impulse ice cream sales. Summer was the fourth hottest summer on record according to the National Oceanic and Atmospheric Association. In turn, consumers decided to buy ice cream to cool down, benefiting sales of most ice cream 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 water and ice creams products.					

6.1d

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

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 financial implication of 500m CHF. 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. 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 cultural 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.
- 1140 sourcing staff and agronomists and 10 625 support staff offer support, training and technical assistance to the farmers who supply us, and maintain ongoing dialogue with them, as well as with government agencies and NGO partners. Through our activities we enabled more than 45 000 farmers to access services.

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 600million CHF which include the cost of those methods from 2010 to 2020. On top of that USD 24.9 million of direct financial assistance provided in 2011.

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 a financial implication of 350m CHF per year. 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 the 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 in 35 CHF 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
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ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
Oth 1	Reputation	Climate change is increasingly important to consumers. Consumers are more likely to consider in particular GHG emissions in their purchasing decisions, and businesses are increasingly marketing themselves and their products based on their sustainability credentials. Based in part on a media and competitive scan, we identified that climate change mitigation remains a central concern for stakeholder. Nestlé is taking leadership approach in climate change mitigation. This can result in an increase in reputation and increased demand for our products.	Increased demand for existing products/services	Current	Direct	Virtually certain	Low
Oth 2	Changing consumer behaviour	Among the agricultural raw materials that Nestlé use to manufacture finished food products, some are forest-risk commodities such as palm oil. Some palm oil producers plant oil palm by deforestation, a major contributor to climate change. It is estimated that rainforest destruction contributes to around 20% of GHG emissions. As awareness of public is more and more increasing, eliminating deforestation along the whole supply chain of a company will realise reputational benefits by demonstrating what Nestlé is committed and doing. We are making a serious attempt to raise the bar in the corporate actions against deforestation. The NESCAFÉ plan and the Nestlé Cocoa plan has been communicated in products labels which increase the communication of Nestlé actions on climate change.	Increased demand for existing products/services	Current	Indirect (Client)	More likely than not	Low

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 , Oth 2

i) the potential financial implications of the opportunity We have estimated that this opportunity can result on a financial implication of CHF 3m. This has been estimated by considering the likelihood and the impact of increasing reputation for our commitment on environmental sustainability and specifically on combating deforestation.

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

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

In our operations we continue to identified and implemented projects to improve our environmental impact by reducing water use, 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 CO₂ 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 2011. An additional 2500 tonnes of CO₂e were also saved as a result of optimising vehicle loads and sourcing.
 - In 2011, 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 in 247'000 tonne of CO₂e in 2011.
 - The Nestlé packaging optimisation programme resulted in 2011 in avoidance of 76000 tonnes CO₂e.
 - In 2011, Nestlé contributed to the United Nations Framework Convention on Climate Change Adaptation Private Sector Initiative by providing a business case study to help raise awareness about the engagement of the private sector in this field.
 - 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™. We were also a runner up in the Ethical Corporation Responsible Business Award.
 - In 2011, 54% 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 RSGs. We systematically identify and exclude and companies owning or managing plantations linked to deforestation.
 - 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 65000 in 2011.
- (iii) the costs associated with these actions The cost associated with these action amounts to CHF 143 million in environmental improvements including GHG emission reduction in 2011.

6.1g

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

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

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

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1

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

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Fri 01 Jan 2010 - Fri 31 Dec 2010	3981400	3143998

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
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: CFC-11	Other: IPCC First Assessment Report
Other: CFC-12	Other: PCC First Assessment Report
Other: HC-R600A	IPCC Second Assessment Report (SAR - 100 year)
Other: HCFC-141b	Other: IPCC First Assessment Report
Other: HCFC-22	IPCC Second Assessment Report (SAR - 100 year)
Other: HCFC-401A	IPCC Second Assessment Report (SAR - 100 year)
Other: HCFC-408A	IPCC Second Assessment Report (SAR - 100 year)
Other: HFC-125	Other: IPCC First Assessment Report
Other: HFC-134a	Other: Intergovernmental Panel on Climate Change supplementary
Other: HFC-404A	IPCC Third Assessment Report (TAR - 100 year)
Other: HFC-407A	IPCC Third Assessment Report (TAR - 100 year)
Other: HFC-410A	IPCC Third Assessment Report (TAR - 100 year)
Other: HFC-417A	IPCC Second Assessment Report (SAR - 100 year)
Other: HFC-507	IPCC Third Assessment Report (TAR - 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
Anthracite	98.10	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Brown coal	101.10	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Coking coal	94.60	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Natural gas	56.10	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Liquefied petroleum gas (LPG)	63.10	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Other: LFO (Light fuel oil)	74.10	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Diesel/Gas oil	74.10	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Other: Coal	94.60	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Other: HFO (heavy fuel oil) /Bunker oil	77.40	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Wood or wood waste	112.00	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Other: Other primary solid biomass fuels	100.00	Other: kgCO ₂ e/GJ	2006 IPCC Guidelines for National Greenhouse Gas Inventories

Further Information

Nestlé has developed an internal tool, Nestlé Environment & Safety Performance Tracking Tool (NEST), through which factories enter monthly their environmental information; in particular energy and refrigerants consumption data and which calculates corresponding GHG emissions. NEST is an Intranet reporting tool for all Nestlé plants and has been used since the end 2004 for the reporting of safety and environment performance indicators. NEST 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 The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard.

8.1

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

Financial control

8.2a

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

3806467

8.2b

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

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment

8.2c

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

Gross global Scope 1 emissions (metric tonnes CO2e) – Part 1 Total	Comment

8.2d

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e - Part 2

Boundary	Gross global Scope 1 emissions (metric tonnes CO2e)	Comment
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8.3a

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

3233547

8.3b

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 breakdown

Boundary	Gross global Scope 2 emissions (metric tonnes CO2e)	Comment
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8.3c

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e - Part 1 Total

Gross global Scope 2 emissions (metric tonnes CO2e) - Total Part 1	Comment
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8.3d

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

Boundary	Gross global Scope 2 emissions (metric tonnes CO2e) - Other operationally controlled entities, activities or facilities	Comment
----------	---	---------

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?

8.4a

Please complete the table

Reporting Entity	Source	Scope	Explain why the source is excluded
------------------	--------	-------	------------------------------------

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 has not implemented a system to track the emissions in the Head Offices yet. We have already started the process of implementation of a new system that will include Head Offices.
R&D	Scope 1 and 2	Nestlé has not implemented a system to track the emissions in R&D centres yet. We have already started the process of implementation of a new system that will include R&D Centres.
Distribution Centres	Scope 1 and 2	Nestlé has not implemented a system to track the emissions in the Distribution Centres yet. We have already started the process of implementation of a new system that will include Distribution Centres.
Factories	Scope 1 and 2	Some recent acquisitions.

8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and Scope 2 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 from markets 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 from markets 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

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

Level of verification or assurance	Relevant verification standard	Relevant statement attached
Limited assurance	ISO14064-3	Please see: CDP verification statement_Nestle SA.pdf attached.

8.7

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

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

Level of verification or assurance	Relevant verification standard	Relevant statement attached
Limited assurance	ISO14064-3	Please see: CDP verification statement_Nestle SA.pdf attached.

8.8

Are carbon dioxide emissions from the combustion of biologically sequestered carbon (i.e. carbon dioxide emissions from burning biomass/biofuels) relevant to your company?

Yes

8.8a

Please provide the emissions in metric tonnes CO₂e

647000

Attachments

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/8.EmissionsData\(1Jan2011-31Dec2011\)/CDP verification statement_Nestle SA.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/8.EmissionsData(1Jan2011-31Dec2011)/CDP%20verification%20statement_Nestle%20SA.pdf)

9.1

Do you have Scope 1 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

9.1a

Please complete the table below

Country	Scope 1 metric tonnes CO2e
United States of America	690455
Mexico	220258
France	208280
Brazil	222505
United Kingdom	167519
China	180995
Spain	152943
Philippines	138230
Germany	103099
Japan	98612
Italy	81867
Russia	51044
Switzerland	49003
Australia	36056
Canada	21739
Rest of world	1383862

9.2

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

By business division

By facility

9.2a

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

Business Division	Scope 1 metric tonnes CO2e
Cereal Partners Worldwide	75583
Dairy Partners America	145793
Nespresso	4527
Nestlé Nutrition	240645
Nestlé Waters	134151
Purina PetCare	415921
Nestlé Professional	18747
Other Nestlé Food	2771100

9.2b

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

Facility	Scope 1 metric tonnes CO2e
CN PL Shuangcheng	104457
ES PL Girona	102231
IN PL Moga	79275
ZA PL Estcourt	73005
PH PL Cagayan de Oro Factory	71129
MX PL Toluca - Cafes y Culin	70304
US PL Freehold	65769
ID PL Kejayan	65487
PK PL Kabirwala Factory	63585
PK PL Sheikhpura Factory	58525

Facility	Scope 1 metric tonnes CO2e
US PL Fremont	58204
US PL Fort Smith	51695
US PL Bloomfield Nppc-gp	51401
JP PL Himeji	50402
FR PL Dieppe	46584
US PL Anderson	43752
PH PL Cabuyao Factory	42369
MX PL Lagos de Moreno-Lacteos	41495
MX PL Coatepec	40582
IN PL Nanjangud	39909
Rest of the factories	2586307

9.2c

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

GHG type	Scope 1 metric tonnes CO2e

9.2d

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

Activity	Scope 1 metric tonnes CO2e

10.1

Do you have Scope 2 emissions sources in more than one country or region (if covered by emissions regulation at a regional level)?

Yes

10.1a

Please complete the table below

Country	Scope 2 metric tonnes CO2e
United States of America	1277767
Mexico	169023
France	37055
Brazil	52478
United Kingdom	126792
China	132452
Spain	48530
Philippines	10672
Germany	138913
Japan	18459
Italy	71745
Russia	37945
Switzerland	3669
Australia	148900
Canada	18335
Rest of world	940812

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 metric tonnes CO2e
Cereal Partners Worldwide	97823
Dairy Partners Americas	33831
Nespresso	716
Nestlé Nutrition	128540
Nestlé Waters	594842
Purina PetCare	419580
Nestlé Professional	30534
Other Nestlé Food	1927681

10.2b

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

Facility	Scope 2 metric tonnes CO2e
US PL Anderson	67935
US PL Little Chute	46515
ZA PL East London	46056
US PL NW Hollis Factory	45331
US PL Gaffney	44712
US PL Bakersfield, CA	43753
US PL Springville	42164
US PL Laurel, MD	41948
IN PL Moga	37337
US PL Freehold	36936

Facility	Scope 2 metric tonnes CO2e
US PL NW Hawkins Factory	34000
CN PL Shuangcheng	33626
US PL Davenport Nppc	32898
US PL Mt Sterling	32889
US PL NW Cabazon Factory	32265
US PL Solon	31670
US PL NW Allentown 2 Factory	30548
AU PL Campbellfield	29030
US PL NW Mecosta Factory	28725
IN PL Nanjangud	28305
Rest of the factories	2466904

10.2c

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

Activity	Scope 2 metric tonnes CO2e

Page: 11. Emissions Scope 2 Contractual

11.1

Do you consider that the grid average factors used to report Scope 2 emissions in Question 8.3 reflect the contractual arrangements you have with electricity suppliers?

Yes

11.1a

You may report a total contractual Scope 2 figure in response to this question. Please provide your total global contractual Scope 2 GHG emissions figure in metric tonnes CO₂e

11.1b

Explain the basis of the alternative figure (see guidance)

11.2

Has your organization retired any certificates, e.g. Renewable Energy Certificates, associated with zero or low carbon electricity within the reporting year or has this been done on your behalf?

Yes

11.2a

Please provide details including the number and type of certificates

Type of certificate	Number of certificates	Comments
Renewable Energy Certificates	92553	These certificates correspond to 92553 MWH in Italy.
Other: Certificat Blueélec	1021	These certificates correspond to 1021 MWH (SEIC) in Nestlé Waters factory Cristalp - Saxon in Switzerland.

Page: 12. Energy

12.1

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

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

12.2

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

Energy type	MWh
Fuel	17848561
Electricity	6745596
Heat	36314
Steam	396342
Cooling	0

12.3

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

Fuels	MWh
Anthracite	100090
Brown coal	146469
Other: Cocoa	15525
Other: Coffee	881026
Other: Gas/Diesel Oil	586069
Other: Hard Coal	843620
Other: HFO Bunke	2845369
Other: LoFO	279408
Liquefied petroleum gas (LPG)	24929
Natural gas	11064763
Propane	54591
Wood or wood waste	690802
Other: Landfill gas	42526

Fuels	MWh
Butane	27521
Other: LoPG	245853

Page: 13. Emissions Performance

13.1

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

Decreased

13.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	4.4	Decrease	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. Our Energy Target Setting Initiative identified more than 379 projects for a total investment of about CHF 86 million. This is the result of efforts by Nestlé engineers and environmental professionals working together to reduce and recover energy. In 2011, these projects resulted in a reduction of approximately 54000 tonnes of CO2 equivalent. In France, a new wood boiler reduces about 8000 tons of CO2e a year and helps minimize the impact of energy cost increases. In Germany, measures already implemented to reduce the CO2e include the installation of high pressure ammonia heat pump for heating of office building (500 t CO2e/year); low temperature heat supply which allows to avoid 6900t CO2e/year. We generate renewable energy on site. For example, at 20 of our 32 Nescafé factories, coffee grounds from manufacturing process are used as a source of renewable energy. We have now phased out more than 90% of refrigerants with high global warming and ozone depleting potential in our industrial operations. See Question 3.3 for detailed information. Data used for the calculation 2010 data: CO2 emission (Scope 1+2): 7.125398 mio. tonnes CO2e Production volume: 43.737 mio. tonnes CO2 efficiency (Scope 1+2) per tonne of product was 162.91 kg CO2e /tonne of product

Reason	Emissions value (percentage)	Direction of change	Comment
			2011 data: CO2 emission (Scope 1+2): 7.040015 mio. tonnes CO2e Production volume: 45.21 mio. Tonnes CO2 efficiency (Scope 1+2) per tonne of product was 155.72 kg CO2e /tonne of product. If using the efficiency of 2011 to produce the same amount of production volume as 2010, the total emission would be 68.1 million tonnes CO2e (4.4% reduction from 6.80 thousand tonnes).
Change in output	3.4	Increase	The increase in output in 2011 resulted in an increase in absolute GHG emissions. Data used for the calculation In 2011, the production volume increased in 1.473731 mio tonnes. Deducting the calculated 2010 emissions (6.8 mio. Tonne CO2e) due to emission reduction activities from 2011 emissions (7.040015 tonne CO2e), we see the increase of emission due to change of output is 0.23 mio. tonnes CO2eq(3.4%).

13.2

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
84	metric tonnes CO2e	unit total revenue	30	Increase	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. See Question 3.3 for detailed information. Sales decreased leading to an increase of 30% of the metric tonnes CO2e per unit of revenue. The increase is mainly explained due to 2011 foreign exchanges rates and divestitures. Please note that in 2011 changes in the Income Statement have been applied. They are described in Note 1 – Accounting Policies (attached). 2010 Income statement has been restated in Annual report 2011. These changes have resulted on a lower revenue in 2011. In particular, foreign exchange rates had a negative impact of 13.4% and divestitures, net of acquisitions, a further 4.2%, mainly Alcon. Excluding the impact of the sale of Alcon, sales were down by 4.8%. 2010 data: CO2e (Scope 1+2): 7.12 mio. tonne Revenue: 109722 mio. CHF CO2e (Scope 1+2) per revenue was 64.9 tonnes/mio.CHF 2011 data: CO2e (Scope 1+2): 7.04 mio. tonne

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for Change
					Revenue: 83642 mio. CHF – CO2e (Scope 1+2) per revenue was 84.2 tonnes/mio.CHF

13.3

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
21	metric tonnes CO2e	FTE Employee	20	Decrease	The intensity figure is expressed in tonne of CO2e per employee. GHG emissions scope 1 and 2 decreased 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 decreased at 7 million tonnes of CO2e in 2011, although the production volume increased in 1.473731 mio tonnes. 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. See Question 3.3 for detailed information. Per employee, we reduced our Scope 1 and 2 GHG emissions from 25.4 tonne of CO2e in 2010 to 21.4 tonne kg of CO2e per employee in 2011.

13.4

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
155.7	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 decreased at 7 million tonnes of CO2e in 2011, although the production volume increased in 1.473731 mio tonnes. Per tonne of product, we reduced our Scope 1 and 2 GHG emissions from 162.9 tonnes of CO2e in 2010 to 155.7 tonnes of CO2e in 2011.

Further Information

For more information please refer to our CSV report 2011 attached.

Attachments

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/13.EmissionsPerformance/2011-Financial-Statements-EN.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/13.EmissionsPerformance/2011-Financial-Statements-EN.pdf)
[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/13.EmissionsPerformance/Nestlé Creating Shared Value Report 2011.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/13.EmissionsPerformance/Nestlé%20Creating%20Shared%20Value%20Report%202011.pdf)

Page: 14. Emissions Trading

14.1

Do you participate in any emission trading schemes?

Yes

14.1a

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 CO ₂ e	Details of ownership
European Union ETS	Tue 01 Jan 2008 - Sat 31 Dec 2011	2322852	0	1945006	Facilities we own and operate

14.1b

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

EU-ETS process: At the end of 2011, 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 2011, 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.

14.2

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

Yes

14.2a

Please complete the following 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	11400		Not relevant	Voluntary Offsetting

Page: 2012-Investor-Scope 3 Emissions

15.1

Please provide data on sources of Scope 3 emissions that are relevant to your organization

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
Fuel- and energy-related activities (not included in Scopes 1 or 2)	1495894	Nestlé entrusted external consultant to calculate this emission. Nestlé provided figures for the types and quantities of fuels and electricity purchased worldwide in 2011. The emissions are calculated by multiplying the activity data by upstream and T&D emission factors. Transportation emissions for relevant fuels are included. For electricity, T&D losses and heat losses, emissions are specific to each country or region. The activity data is from Nestlé's internal reporting tool. The emission factors are taken from environmental databases. The method used is IPCC 2007 GWP 100a V1.02	
Employee commuting	248177	Nestlé entrusted external consultant to calculate this emission. Nestlé provided the total number of employees in all facilities including factories, distribution centres, head offices, R&D centres, etc. 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	

Sources of Scope 3 emissions	metric tonnes CO2e	Methodology	If you cannot provide a figure for emissions, please describe them
		commuting. The methodology used is IPCC 2007 GWP 100a V1.02	
End-of-life treatment of sold products	947193	Nestlé entrusted external consultant to calculate this emission. Figures publicly available in Nestlé's annual report as divided by branch and brand were used to extrapolate the total number of products sold. One to three products (brands) per branch were selected for this calculation. Packaging contributing to approximately 90% of the packaging mass per product were 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. The data quality of reported emissions data is low due to the global generalization and the limited number of products that were modelled. More details on methodology and assumptions are available in the tab "data sources". The method used is IPCC 2007 GWP 100a V1.02	

15.2

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

Verification or assurance complete

15.2a

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

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

15.2b

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

Level of verification or assurance	Relevant verification standard	Relevant statement attached
Limited assurance	ISO14064-3	Please see: CDP verification statement_Nestle SA.pdf attached.

15.3

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

Yes

15.3a

Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
End-of-life treatment of sold products	Emissions reduction activities	6	Decrease	In 2011, our packaging source optimisation programme led to emission reduction activities by saving 39 000 tonnes. This was possible by applying light weighting, design change, format and size optimisation initiatives. Some emission reduction initiatives in 2011 included • New Nescafé Dali refill pack in the UK uses 35% less packaging compared with the previous refill pack • To reduce the amount of material used in the Skinny Cow Dreamy Clusters and Skinny Cow Heavenly Crisp take home cartons, the board caliper reduced from 18 point to 16

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				point. This resulted in an annual material savings of 84 tons . • Coffee Mate Bottles bottle weight reduction and lead to a reduction of 43 tons of HDPE / year • The reduction of biscuit packaging in Chile lead to a reduction of 2,4 tons per year in « Mini » Biscuits; reduction of 0,6 ton per year of material in « Criollita » Biscuits and a reduction of 0.35 ton per year by reducing 10 mm of material in « Vino » Biscuits • In Colombia, we reduced KLIM 11 % in flexible consumption of 26g milk powder pillow bag.
End-of-life treatment of sold products	Other: Decrease in sales and divestitures.	26	Decrease	In 2011, Scope 3 emission of End-of-life treatment of sold products decreased compared with 2010 due to a decrease in sales. This had impacted the amount of products sold and their associated scope 3 emissions.

Attachments

[https://www.cdproject.net/Sites/2012/42/12942/Investor CDP 2012/Shared Documents/Attachments/InvestorCDP2012/15.Scope3Emissions/CDP verification statement_Nestle SA.pdf](https://www.cdproject.net/Sites/2012/42/12942/Investor%20CDP%202012/Shared%20Documents/Attachments/InvestorCDP2012/15.Scope3Emissions/CDP%20verification%20statement_Nestle%20SA.pdf)

Module: Sign Off

Page: Sign Off

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

CDP 2012 Investor CDP 2012 Information Request