Carbon Disclosure Project

CDP 2012 CDP Water Disclosure 2012 Information Request
Nestle

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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.

Enter the period that will be disclosed.
Sat 01 Jan 2011 - Sat 31 Dec 2011

0.3

Reporting Boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported.

Companies, entities or groups over which financial control is exercised

0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

0.4a

List of Exclusions

Please describe any exclusion(s) in the following table.

Exclusion	Please explain why you have made the exclusion
Head Offices	Nestlé doesn't consolidate at global level the water consumption in its Head Offices. We have already started the process of implementation of a new consolidation system that will include Head Offices.
R&D	Nestlé doesn't consolidate at global level the water consumption in its R&D centres. We have already started the process of implementation of a new system that will include R&D centres.
Distribution Centres	Nestlé doesn't consolidate at global level the water consumption in its Distribution Centres. We have already started the process of implementation of a new system that will include Distribution Centres.
Acquisitions	Some recent acquisitions.

Further Information

Please find attached:
Nestlé Annual Report 2011
Nestlé Corporate Business Principles
Nestlé Policy on Environmental Sustainability
Nestlé Creating Shared Value Report 2011

Attachments

https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/Introduction/Nestlé Creating Shared Value Report 2011.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/Introduction/Nestle_Corporate_Business_Principles__UK_English.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/Introduction/2011-Annual-Report-.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/Introduction/Nestlé Policy on Environmental Sustainability.pdf

Module: Water Management

Management & Governance

1.1

Does your company have a water policy, strategy or management plan?

Yes

1.1a

Please describe your policy, strategy or plan, including the highest level of responsibility for it within your company and its geographical reach.

Country or geographical reach	Description of policy, strategy or plan	Position of responsible person
Global	The Nestlé Water Policy includes the following: 1. Water is essential for nutrition. Nestlé Waters, the water business of Nestlé, provides a wide range of safe, wholesome and convenient bottled waters of high quality to meet the increasing and varied needs of consumers throughout the world. Preservation and the responsible management of water resources are of primary importance in this endeavour. 2. Nestlé directs its worldwide research and development network towards: • the innovation and renovation of its products and processes, including manufacturing methods that minimise water consumption and waste water generation; • scientific research that is centred on the physiological and quality aspects of water. 3. Agricultural raw materials are dependent on water. Although, in general, Nestlé is not involved in the production of raw materials, it supports and encourages sustainable, environmentally-sound farming methods, including best possible practices for water use and conservation, and gene technology. As a raw material for food processing, water must satisfy both local legal requirements and internal quality criteria. 4. Nestlé strives to achieve optimal performance in its manufacturing activities, including water management: • without compromise to the safety and quality of its products, freshwater use is reduced as much as possible and, wherever feasible, water is re-used and recycled; and • used water is treated and returned to the environment according to local legislation; where none exist, internal Nestlé standards are applied. 5. The Nestlé Environmental Management System (NEMS) ensures the continuous improvement of Nestlé's environmental performance, including management of water resources: objectives are established, progress is monitored, results are checked and corrective and preventive actions are implemented. 6. As part of its broader commitment towards the good of the community, Nestlé: • in co-operation with health authorities, promotes to consumers the importance of using safe water for food and drink preparation; and • provides education, supports initiatives and fosters awareness of the importance of water resource conservation among employees, governments, local communities, schools, industry, consumers and other stakeholders.	Board/executive board

Country or geographical reach	Description of policy, strategy or plan	Position of responsible person
Other: Nestlé Waters	Nestlé Waters' overall efforts are guided by the global Nestlé Water Policy. Nestlé Waters' aim is to be the recognised healthy hydration company; the company works towards this by striving to maximise value for both shareholders and society by: ▪ Providing healthy and safe products to cover consumers' daily hydration needs ▪ Managing water resources in a responsible manner ▪ Continuously optimising our environmental performances with a focus on packaging optimisation and recycling ▪ Promoting hydration science and awareness from medical communities to the general public ▪ Developing water care behaviours, with a focus on child education ▪ Contributing to the environmental, social and economic development of the communities where we operate.	Board/executive board

1.1b

Does the water policy, strategy or plan specify water-related targets or goals?

Yes

1.1c

Please describe these water-related targets or goals and the progress your company has made against them.

Country or geographical reach	Category of target or goal type	Description of target or goal	Progress against target or goal
Global	Direct operations	*Be the most efficient water user among food manufacturers and lead in water resource management. *Continuously improve water efficiency across our operations, further reduce water withdrawals and discharges, and return clean water to the environment. *Reduce water consumption and water discharges on a comparable basis by a further 10% by 2015.	*274 water-saving projects run in our factories, Water Resources Review programmes conducted at 100 Nestlé sites and CHF 28 million invested in water-saving and cleaning programmes during the year. *28% reduction in water withdrawals since 2001, while our food and beverage production volume increased by 73%.
Global	Supply chain and	*Help ensure that water is managed effectively throughout	*Engaging in water preservation activities with local

Country or geographical reach	Category of target or goal type	Description of target or goal	Progress against target or goal
	watershed management	the agricultural value chain. *Protect the livelihoods of 25 million people involved in Nestlé's entire value chain.	stakeholders. *Sharing sustainable water use best practice and guidelines with other food companies. *Promoting sustainable development in 45 countries through the Nestlé Sustainable Agriculture Initiative (SAIN). *Ongoing implementation of Responsible Sourcing Guidelines for 12 of our key commodities and extension of our Water Guidelines for Suppliers of Agricultural Raw Materials. *A new SAIN pilot project in India suggests that water use could be reduced by around 30–40%.
Global	Collective action	*Demonstrate leadership in voluntary multi-stakeholder initiatives, which recognise water issues as shared risks and responsibilities and promote water stewardship. *Pursue collective action in watersheds relevant to our operations to balance water use.	*Acting in all workstreams of the CEO Water Mandate and one of the first companies to contribute to the Water Carbon Disclosure Project (CDP). *Advocating for common standards through ISO 14046, the Alliance for Water Stewardship (AWS) and the Water Footprint Network. *Engaging in local water preservation and stewardship initiatives in countries including Colombia, India and France. *Appointment to AWS International Standard Development Committee: first draft standard by Q1 2012. *Harmonisation of CEO Water Mandate and Water CDP reporting requirements. *"Ecological corridors" in the Nestlé Waters Switzerland ECO-Broye project.
Global	Public policy	*Participate in the public policy debate on balancing water withdrawals with natural renewals. *Contribute to action-oriented dialogue that will increase the efficiency of water use at a watershed level, to deliver a balanced regulatory framework.	*Water cost curves tested in India, Pakistan, South Africa, Jordan, Mexico and Mongolia, with the Water Resources Group. *Participation at high level in public-private sector dialogue in several fora including World Economic Forum, World Water Week and Chatham House.
Global	Community engagement	*Contribute to the universal goal of translating the human right to water and sanitation into reality. *Support this worldwide, in areas close to our operations, by fostering access to clean drinking water and sanitary installations, as well as water, health and hygiene education.	*Access to water and sanitation for over 100 000 people, through our work with the International Federation of Red Cross and Red Crescent Societies since 2007. *40 water and sanitation partnership projects worldwide in 2011, and 126 factories provided clean drinking water to communities in 2010. *Water Education for Teachers programmes established in a dozen countries.
Global	Transparency	*We include a description of actions and investments undertaken, making reference to relevant performance indicators including water indicators found in the Global Reporting Initiative Guidelines.	* Nestlé achieved a significant step towards greater transparency, by receiving the Global Reporting Initiative A+ application level for our 2011 Creating Shared Value Report.

1.1d

You may explain here why your company does not have a water policy, strategy or plan and if you intend to put one in place.

1.2

Do you wish to report any actions outside your water policy, strategy or management plan that your company has taken to manage water resources or engage stakeholders in water-related issues?

Country or geographical reach	Category of action	Description of action and outcome
Nigeria	Direct operations	Optimising water reuse and efficiency in Nigeria: The Agbara manufacturing complex is one of two Nestlé factories in Nigeria, producing a wide range of brands and products including Maggi Cubes, Milo and Cerelac. The close proximity of our food manufacturing plant and the Nestlé Waters plant at Agbara has enabled us to install a connection so that all surplus water from the Nestlé Waters deep well is used by Nestlé Nigeria plants, leading to a reduction in the water ratio (m3/tonne of finished product) and an annual water saving of 100 000 m3/year.
South Africa	Direct operations	In 2010, the Western Cape region experienced its worst drought in 132 years, and in response Nestlé introduced a multi-pronged approach which included engineering interventions and awareness campaigns. The programme, which will run until 2015, is part of our work with organisations including the South African Government, the Water Resources Group and several multi-national companies to help close the water gap by 2030, ensuring the availability of water in the future. The water saving project at the Nestlé factory, which is supplied by the municipality, reduced its water consumption by approximately 50% in 2010 compared to 2009 values. Significant savings of municipal water were due to the recovery and use of condensate from the milk evaporation process. This recovered water was used for the boiler, refrigeration plant and cooling tower, to wash the Company's fleet of milk tankers, and washing the floor in the boiler. Nestlé used a multi-pronged approach to realise and sustain the water savings. This included awareness campaigns, measuring and monitoring water usage, sharing results and engineering interventions. Specific actions included: sharing information through notice boards and emails to reinforce the water saving message to staff, while water saving suggestions by staff were implemented and rewarded; using a water measurement system to monitor water usage in the various sections of the plant; and implementing water saving measures such as shortening automated wash times, modifying hosepipe nozzles to reduce water flow, reducing shower head water flow and reducing the pressure in ablution blocks.
Philippines	Direct operations	Recovering and reusing rainwater in the Philippines: Our Lipa factory has constructed a system that collects rainwater from catchment areas, such as the Coffee-Mate warehouse roof, and supplies it to the cooling tower for

Country or geographical reach	Category of action	Description of action and outcome
		use as make-up water. This is expected to enable the factory to reduce its overall water withdrawals by around 10 000 m3
Italy	Direct operations	Using water twice in Italy: At the Nestlé Waters San Pellegrino plant, we have developed a "cascade" system enabling water to be used not once but twice, for rinsing and washing of the bottles, which saves water while still meeting all requirements in hygiene and product quality.
Ghana	Direct operations	Returning clean water to the environment in Ghana: A CHF 1.97 million investment at our factory in Tema, Ghana, provided a new wastewater treatment plant to improve on the local municipal facilities. The plant began operations in 2010 and treats the wastewater from the factory as well as the adjacent Nestlé Distribution Centre, in full compliance with local environmental legislation and our own standards
Congo, Democratic Republic of the	Direct operations	Although legislation in the Democratic Republic of Congo requires nothing more than a septic tank, our newest water treatment plant – at the Maggi factory in Kinshasa – became operational in October 2011.
Colombia	Supply chain and watershed management	Investing in supply chain water management in Colombia: In the new central coffee mill in Jardín, Antioquia, the water infrastructure is designed to reduce water consumption by half and treat 100% of the waste water. The first AAA coffee from the mill was produced in 2011, and included in the first AAA Limited edition grand cru, Dhjana, launched in September.The new community processing centre in Jardín, Colombia, co-funded by Nespresso, enables coffee farmers to mill and dry coffee more efficiently.
India	Supply chain and watershed management	In India, a new pilot project led by SAI and run by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), uses a simple water impact calculator to determine the amount of water required under differing landform and irrigation conditions. Tests on rice, potatoes, tomatoes and fruit at five locations in Gujarat, Rajasthan and Andhra Pradesh revealed that water use could be reduced to around 30–40% by using the calculator, without affecting yields. ICRISAT will conduct further tests on maize and cotton during the monsoon period, and is also looking into the feasibility of farmers providing data via mobile phones.
Vietnam	Supply chain and watershed management	Growing coffee, a major ingredient in many Nestlé products, uses a significant amount of water, and sometimes takes place in countries where water is already scarce. To better understand and quantify potential risks to key production inputs – such as water – and to coffee itself, we launched a study in 2011 in partnership with the International Water Management Institute, the Swiss Agency for Development and Cooperation and EDE Consulting. The initiative includes: a global assessment of the "consumptive water use" (water consumed in the production process without being returned) of coffee production at farm level; and a two-year, site-specific study at Dak Lak in Vietnam. In response to the rapid growth of Robusta coffee production in Vietnam, which has led to deforestation and land degradation, the study will promote the value of water among smallholders and recommend practical ways to optimise water use.
Venezuela	Supply chain and watershed management	Three farms in El Piñal, Venezuela, have planted trees to control soil erosion, provide shade for livestock and reduce water loss to evaporation and run-off. Some activities of the project include the development of pilots farms of dairy production, silvopastoral systems and implementation of conservations techniques such as buffer strips, hedges, erosion control and conservations areas.

Country or geographical reach	Category of action	Description of action and outcome
United States of America	Supply chain and watershed management	90% of the wastewater processed at Gerber's baby food factory in Fremont, United States, is returned to the local aquifer by irrigating local crops
India	Supply chain and watershed management	Our chicory supplier in Gujarat, India, built a rainwater collection pond to mitigate the decline of the local water table.
China	Supply chain and watershed management	In China, water use at our coffee demonstration farm in Yunnan Province was reduced by 80% in 2010 through the introduction of new post-harvest equipment.
Mexico	Supply chain and watershed management	A partnership with the Swiss College of Agriculture is using the updated Response-Inducing Sustainability Evaluation (RISE) 2.0 tool to improve the sustainability of water use in Mexico's dairy industry at 13 farms in the Torreon municipality.
Greece	Supply chain and watershed management	Local community partnerships in Greece: In Greece, a Nestlé Waters project is supporting local communities in reducing potential threats to the quantity and quality of regional water resources. The initiative, which began in 2007, has involved hydrogeological investigation, assessing the vulnerability of the local groundwater and the identification of potential drilling sites in less water-scarce areas. Our engagement with local stakeholders in the planning process has helped secure a win–win approach for the local authorities, the farmers and their communities, and Nestlé.
India	Supply chain and watershed management	Partnerships and awareness-raising in India: A 2010 joint study by Nestlé and the International Water Management Institute into the water intensity of milk, wheat and rice production in the Punjab determined that groundwater levels are falling rapidly due to agricultural over-use. Nestlé India therefore designed a programme to raise awareness among Punjab dairy farmers, and another for school students, to highlight the effects of over-exploitation of groundwater and the remedial action possible. In 2011, we also joined a Department of Agriculture project to learn about Systems of Rice Intensification (SRI): innovative paddy cultivation techniques promoted by NGOs in southern India that increase yields using fewer seeds, pesticides and fertilizers, and less water. The study compared SRI and non-SRI yields for the summer harvest and if results are positive, we will extend the techniques to our milk suppliers.
Cote d Ivoire	Community engagement	Since 2007, we have worked with the International Federation of Red Cross and Red Crescent Societies (IFRC) and the Red Cross Society of Côte d'Ivoire to provide water and sanitation facilities and hygiene training in Côte d'Ivoire. More than 60 000 adults and children are starting to feel the benefit, and the programme will be further extended in the next three years, covering 55 schools, 65 water points and sanitation facilities and at least 53 000 beneficiaries in the cocoa-growing areas of Côte d'Ivoire.
India	Community engagement	In India, our Water Awareness programme has been rolled out, promoting responsible water use among children in schools near our factories and installing 156 drinking fountains. These now provide 66 000 students with clean drinking water.

Country or geographical reach	Category of action	Description of action and outcome
Global	Community engagement	Project WET and World Water Day: Project WET (Water Education for Teachers) is an international NGO that uses educational tools to raise awareness of water issues among school children around the world. Nestlé Waters has been its main sponsor since 1992, helping Project WET to establish programmes in a dozen countries including Vietnam, China, the United Arab Emirates, Lebanon and, most recently, Egypt. Every March, Nestlé Waters marks World Water Day in partnership with Project WET. Children and teachers participate in Together for Water festivals, to increase awareness of the importance of freshwater for nature, healthy hydration, good hygiene and disease prevention. In 2011, more than 10 000 children and 400 Nestlé Waters employees participated in events across 25 countries. In 2012, more than 15 000 children and 500 Nestlé Waters employees participated in events across 29 countries.
India	Community engagement	Provision of clean drinking water and education programme in India, Bangladesh and Sri Lanka: We have constructed clean drinking water facilities for the communities surrounding our factories in India, Bangladesh and Sri Lanka. Investing in the drilling of deep bore wells and new water tanks, for example, has given school children regular access to clean drinking water. In addition, our Water Awareness programme teaches students about the importance of clean water, the need for water conservation and the link between clean water, hygiene, health and wellness. Nestlé has launched 184 clean drinking water projects in the South Asia region, benefiting over 100 000 pupils in village schools, and in an effort to encourage more girls to attend village schools we have constructed 51 sanitation facilities reaching more than 25 000 girls in rural areas. Furthermore, our Water Awareness programme has been rolled out, promoting responsible water use among children in schools near our factories and installing 156 drinking fountains. These now provide 66 000 students with clean drinking water
Malaysia	Community engagement	WWF Project for the conservation of the Setiu Wetlands in Malaysia: As well as being rich in natural resources, the Setiu Wetlands on the East Coast of Malaysia are vital for the fishing sector and provide flood control for the region. To help preserve the area, Nestlé Malaysia has been working with the World Wildlife Fund (WWF) to increase environmental awareness among local communities and create sustainable income opportunities for local people, particularly women who play a major role in the area's sustainable development. Participants are offered training on basic entrepreneurial skills and eco-tourism, and Nestlé Malaysia and WWF also provide workshops on how they can sustain a local snack business, covering topics such as packaging, hygiene, marketing, environmental awareness and communication skills. To sustain the project, the participants are also taught how to pass the training on to other women. The initiative has generated increased income for the local community and is helping protect the environment for future generations.
New Zealand	Community engagement	Nestlé Community Environment programme in New Zealand: The Nestlé Community Environment programme was launched in 2003 and is now active in 19 Nestlé production sites across the Oceania region. The programme, which involves Nestlé sites, community organisations, schools and local government, aims to make a positive environmental impact in the communities in which Nestlé operates, enhance and maintain Nestlé's reputation as a careful steward of the environment, and foster positive relationships with local residents and organisations. So far, the programme has resulted in: 44 re-vegetation, regeneration or conservation projects leading to more than one million trees being planted; 13 water conservation projects including the installation of eight water tanks in schools;

Country or geographical reach	Category of action	Description of action and outcome
		six waste reduction and education projects within schools and communities; and seven habitat protection and education projects that support the conservation of endangered species.
Global	Public policy	Nestlé is: Engaging in public sector dialogue with national governments and inter-governmental fora. Chairing the 2030 Water Resources Group and leading the World Economic Forum water effort. Today, we remain active and concerned, exemplified by the engagement of Nestlé Chairman Peter Brabeck-Letmathe with the World Economic Forum (WEF) over many years, including its Annual Meeting in Davos, Switzerland, in January 2011 (World Economic Forum website). Since 2008, we have also played a leading role in the 2030 Water Resources Group (WEF-WRG; Charting our Water Future), formed with the International Finance Corporation of the World Bank Group, McKinsey & Company and a consortium of business partners. Under the leadership of Mr Brabeck-Letmathe, the WEF-WRG seeks new insights into water scarcity, explores the opportunities and costs of possible solutions, and fosters results-based stakeholder dialogue. Beyond the debate, we also want to be part of the solution with our own efforts within the context of a cost-effective, comprehensive strategy.
Colombia	Collective action	Improving water management - Colombia Through the SuizAgua project, we work with the Swiss Development Agency and a consortium of Swiss companies in Colombia to assess water use impact along the product life cycle. The project seeks to improve water management in dairy operations and the supply chain in Florencia and Bugalagrande, by estimating water use in traditional and silvopasture systems, helping farmers with water stewardship and improving the environmental performance of our products.
Switzerland	Collective action	Nestlé Waters partnership approach in Switzerland: Since acquiring the Henniez brand in 2007, Nestlé Waters' ECO-Broye programme has fostered local partnerships to help preserve natural resources and maintain farmer income in this region of Switzerland. The initiatives, which will be extended by the stakeholders themselves, involve farmers establishing "ecological corridors" across 1500 hectares of farmland to preserve and stimulate local biodiversity; organic filtration in a tributary of the River Broye to improve surface water quality; and a biogas digester to turn organic farm waste into clean energy, to be controlled by Nestlé Waters.
Global	Collective action	We play an active role in Stockholm World Water Week in order to exchange ideas and innovations among experts, practitioners and decision-makers. This is an annual event hosted by the Stockholm International Water Institute and at the 2011 event, themed Water in an Urbanising World, the Stockholm Industry Water Award was presented to Nestlé. As well as participating in World Water Weeks, we collaborate with the Institute's experts on specific topics including the water impact of food waste.
Global	Collective action	We are a member of the Water Footprint Network, founded in 2008, and participate in a working group, providing response options from the private sector aligned with the work we conducted in the 2030 Water Resources Group. We have also shared our water management experiences in Vietnam, India, the UK and Colombia.
France	Collective action	Nestlé France, Nestlé Waters and Nestlé Nespresso are participating in a national experiment on environmental communication to consumers in France. The initiative, launched in July 2011 by the French Ministry of Ecology, Sustainable Development, Transport and Housing, communicates environmental performance (greenhouse gas emissions, water, biodiversity) of products from Vittel, Nescafé and Nespresso. The year-long project will explore

Country or geographical reach	Category of action	Description of action and outcome
		what is required to introduce environmental labelling on products in France. A similar test on consumer goods assessment has been started by the European Commission, in which we participate with Nespresso, Nescafé, Vittel, KitKat and Purina Gourmet. We are also co-chairing the Steering Committee of the European Food Sustainable Consumption and Production Roundtable, together with the European Commission, to develop a harmonised methodology to assess the environmental performance of food products.
Global	Collective action	As a participant in the recently formed Alliance for Water Stewardship, we are working with others towards establishing a voluntary certification programme over the next two years, allowing water managers and users to demonstrate compliance with, or support for, a new International Water Stewardship Standard. This voluntary standard will help companies to measure, manage and engage with others, improve water stewardship practices beyond their own activities, and will complement regulatory efforts to reduce water-related impacts.
Global	Transparency	We believe that transparent disclosure is vital to aid financial and policy decision-making and therefore actively participate in the Carbon Disclosure Project Water Disclosure Project.
Global	Transparency	We report our water actions in the different element of the UN Global compact CEO Water Mandate. Our 2011 CSV report focused on water and achieved a GRI A+.
Spain	Direct operations	In our Sevares and Reus factories we implemented water saving projects resulting in resulted 4000m3 savings per year with an investment of EU 500k. In Valladolid, we have installation RO plant which has resulted in a reduction of water consumption and an improvement of water quality used in the process. In La Penilla factory we have created a work team which aims at reducing the water used in refrigeration, which have resulted in 30% water reduction in half a year.
France	Collective action	In an effort to preserve the quality of the water resources, Nestlé Waters works with local farmers and other communities in the Vosges region of eastern France, where the Vittel and Contrex sources are located. The programme, known as Agrivair, came into being in 1992 and helps farmers alleviate the impact of their agricultural activities on water quality and quantity through targeted grants, research and technical assistance. The programme is now implemented on over 92% of the Vittel and 70% of the Contrex land areas.
Brazil	Collective action	As part of the acquisition of the mineral water brand São Lourenço in 1992, Nestlé assumed responsibility for the related water park and spa, and has made a series of improvements. The Park's spa building was totally refurbished, and the native forest reconstituted. These projects have been initiated following consultation and dialogue with the local community.

Further Information

Our W.A.T.E.R. Commitments in water use and stewardship, first announced in 2006, are key to driving water performance through our operations, supply chain and with communities. Our commitments are being developed under continuous review, and we continue to gather feedback on them from our stakeholders. In 2011,

they underwent an extensive internal review and at the same time we consulted externally with leading experts. The result is the five commitments outlined below, which will be further refined as we continue to gather feedback, including inviting comment from water experts attending our stakeholder convenings.
1. Work to achieve water efficiency across our operations:
Leading in water resource management and excelling in the direct reduction of the direct water use in all our facilities
2. Advocate for effective water policies and stewardship:
Promoting public policies that place value on water at every level
3. Treat effectively the water we discharge:
Setting strict targets for returning clean water to the environment
4. Engage with suppliers, especially those in agriculture:
Helping to improve their water management with focus on impacts at watershed level
5. Raise awareness of water access and conservation:
Engaging employees, communities and consumers in the water imperative

We are developing a set of key performance indicators that will underpin our qualitative W.A.T.E.R. commitments and enable systematic measurement of performance. This is work in progress and requires wide consultation across the business and with experts to define comprehensive, robust measures that we can use to track performance over the next five years and beyond.

Please see attached:
Nestlé Creating Shared Value Report 2011
Nestlé Creating Shared Value Report Summary Report 2011
Nestlé Waters Creating Shared Value Report 2010
Nestlé Policy on Environmental Sustainability
Nestlé Supplier Code

Attachments

https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/Nestle-CSV-Summary-Report-2011.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/Nestlé Policy on Environmental Sustainability.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/Nestlé_Waters_CSV_report_2011.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/Nestlé Creating Shared Value Report 2011.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/1.WaterManagementandGovernance/The Nestlé Supplier Code.pdf

Module: Water Risks Ops

Water indicators operations

2.1

Are any of your operations located in water-stressed regions?

Yes

2.1a

Please specify the method(s) you use to characterize water-stressed regions (you may choose more than one method).

Method used to define water stress	Please add any comments here:
Other: Nestlé Combined Water Stress Index	The Nestlé Combined Water-Stress Index takes an average of two leading water-stress indicators (estimated annual renewable water supply per person for 2025; water withdrawals to availability ratio). We use the World Resources Institute (WRI) water scarcity definition to estimate a water stress factor for each of our operations based on the annual renewable water supply per person estimated for 2025 (Revenga et al. (2000) World Resources Institute, Washington D.C., USA: Pilot Analysis of Global Ecosystems: Freshwater Systems). A score from 1 to 5 is given to each factory depending on the water stress factor assigned at each location. Water experts define areas where per capita water supply drops below 1,700 m3/year as experiencing "water stress". A factory located in areas where the projected water availability per capita is less that <500m3/year is given a score equals 5. Similarly, factories located in areas where the water availability per capita projected by 2025 is between 500-1000m3/year, 1000-1700 m3/year, 1700-4000m3/year, or greater than 4000m3/year are given an score of 4, 3, 2 and 1 respectively. In addition, we use the water withdrawals to water availability index developed by Pfister et al. (2009) (Institute of Environmental Engineering – ETH Zurich, Switzerland): Assessing the Environmental Impacts of Freshwater Consumption in LCA. Depending on the ratio between water withdrawals to water availability of each factory's location, a score is assigned for each factory. Locations with ratio less than 0.1, between 0.1-0.2, 0.2-0.4,0.4-0.9 and greater than 0.9 are given a score of 1, 2, 3, 4 and 5 respectively. The Nestlé Combined Water-Stress Index is the average between the scores aforementioned. Factories with an average equal or greater than 3 are considered in water stressed areas. This indicator allows to select factories that are characterised in water stressed areas or/and areas with high water withdrawals to water availability index. For mapping our operations in water-stressed regions we use the WBCSD Global Water Tool and Google Earth (with Pfister et al. water stress maps).

2.1b

Please list the water-stressed regions where you have operations and the proportion of your total operations in that area.

Country or geographical reach	Region within country	Proportion of operations located in this region (%)	Further comments
Australia	Sydney, Melbourne	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.1%.
China	Shangai, Beijing	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 2.2%.
France	Scattered locations across the country	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 2.8%.
Israel	Scattered locations across the country	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 2%.
Mexico	Jalisco, Querétaro, Puebla, México	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 2.4%.
South Africa	Gauteng, Free State, Western Cape	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.7%.
United Kingdom	England	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.1%.
United States of America	South East, Mid West and West Coast, New York and Washington DC Area	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 6.5%.
India	Karnataka, Kerala, Punjab, Haryana	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.1%.
Saudi Arabia	Jeddah, Riyadh, Dammam	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.5%.
Spain	Extremadura, Cataluña	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.5%.
Thailand	Bangkok	1 – 10	The proportion of operation located in water-stressed in this country out of the total number of Nestlé factories worldwide equals 1.3%.

2.1a

Please specify the method(s) you use to characterize water-stressed regions.

Method used to define water stress	Please add any comments here:

2.1c

You may explain here why you are not able to identify which of your operations are located in regions subject to water stress and whether you have plans to investigate this in the future.

2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

Yes

2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

2.2

Are there other indicators (besides water stress) which you wish to report which help you to identify which of your operations are located in regions subject to water-related risk?

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or geographical reach	Region within country	Risk Indicator	Proportion of operations located in this region (%)	Further comments
China	Country scale indicator	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water.
India	Country scale indicator	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water.
Israel	Country scale indicator	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water.
South Africa	Country scale indicator	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water.

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or geographical reach	Region within country	Risk Indicator	Proportion of operations located in this region (%)	Further comments

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or geographical reach	Region within country	Risk Indicator	Proportion of operations located in this region (%)	Further comments

2.2b

You may explain here why you do not wish to report or why you do not use other indicators to identify which of your operations are located in regions subject to water-related risk.

2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to water-related risk.

2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to water-related risk.

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

40%

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and /or 2.2.

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here
Number of facilities	We have calculated the proportion of factories located in the regions at risk out of the total number of factories we have worldwide (461).

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2

Basis used to determine proportions	Please add any comments here

Water indicators supply chain

2.5

Do any of your key inputs or raw materials (excluding water) come from regions subject to water-related risk?

Yes

2.5a

Please state or estimate the proportion of your key inputs or raw materials that come from regions subject to water-related risk.

Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
Coffee	11 – 20	Volume or weight of material purchased	The coffee supply chain is extremely complex, with 80% of all farmers being smallholders. Around 25 million smallholders depend directly on coffee farming for their livelihoods, and a further 100 million people are involved in the industry as a whole. Nestlé is the world's largest purchaser of coffee. In 2011, we purchased 89 392 tonnes of green coffee through our Farmer Connect programmes in Vietnam, Thailand, China, Indonesia, the Philippines, Côte d'Ivoire and Mexico, maintaining our industry-leading position in terms of direct purchases of green coffee. The production of coffee is predominantly rainfed and its green and blue consumptive water use of coffee is 15'365 m3/ton (mainly from rain). We do not manage the GPS location of all our suppliers. So we have estimated the proportion of coffee coming from regions at risk by selected a list of countries that we considered at risk due to water scarcity (Mexico, Pakistan, USA, China, India, Spain, and South Africa). We have calculated the volume of coffee procured from these countries out of the total coffee bought. Please note that this is an approximation as we know that not all regions within those countries are under risk.
Cocoa	1 – 10	Volume or weight of material purchased	Cocoa is grown in rainfed areas and the average consumptive water use is according to WFN on average 19'749 m3/ton which are mainly coming from rain. Out of the list of countries that we considered at risk due to water scarcity (Mexico, Pakistan, USA, China, India, Spain, and South Africa), we procured less than 1% of cocoa from Mexico. The rest of the cocoa is bought from other countries.

Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
Milk	31 – 40	Volume or weight of material purchased	In terms of value of products sold, Nestlé is the world's largest milk company. We sourced over 13.41 million tonnes of fresh milk equivalent from more than 30 countries in 2010. Our approach involves the widespread use of our milk district model, which dates back to the 1870s. We procure milk from countries such as Mexico, China, India and Pakistan which we considered as water risk. The global average consumptive water use of milk production is estimated on 979 m3/ton, which 91% are obtained from rain water.
Sugar	11 – 20	Volume or weight of material purchased	We use sugar cane and sugar beet in our products. we source sugar from different countries including Brazil, USA, France, UK, Argentina and Germany. Sugar has a very low consumptive water use compared with meat, nuts and chicken. Sugar represents important blue water consumption (irrigation) when compared to our key agricultural raw materials. We estimated that about 18% of sugar (beet and raw) comes from countries considered at risk. In 2011, Nestlé started working with Proforest, an independent, not-for-profit organisation specialising in natural resources sustainability to help develop and implement Nestlé Responsible Sourcing Guidelines (RSGs) for sugar. The RSGs define the social and environmental performance requirements, including on water management, for sugar production and guidance on implementation. In 2012, we began to map our global sugar supply chains and start assessing priority suppliers against the RSGs. Nestlé supports suppliers who are not yet able to meet the RSGs, but have committed to become compliant.
Soy	61 – 70	Volume or weight of material purchased	We procure soybean, soybean meal and soybean oil. The main country were soy is produced from is USA. In 2011, we partnered with Conservation International, a global environmental non-profit organisation, to develop and implement RSGs for soya. These will implement Nestlé's commitment on no-deforestation and forest stewardship in the field of soya sourcing.

2.5b

You may explain here why you are not able to identify if any of your key inputs or raw materials come from regions subject to water-related risk and whether you have plans to explore this issue in the future.

Further Information

We source our agricultural raw materials through traditional trade and direct procurement operations (which we term “Farmers Connect”).
Nestlé is not directly involved in the production of raw materials; therefore we do not manage the specific GPS locations of all farmers who supply us. However, we have broadly estimated the proportions of raw material volume coming from water stressed areas. To do so, we have identified different countries affected to some extent by water stress such as China, India, United States of America, Pakistan, Mexico, South Africa and Spain – which represent 47% of the world’s population.
To estimate the proportion of agricultural raw materials sourced from that region we have assumed that all agricultural raw materials sourced from those countries (Mexico, Pakistan, USA, China, India, Spain, and South Africa) are under risk. Nevertheless, we recognised the limitations of this methodology and we are working with our suppliers to estimate risks more accurately.
The criteria of selection of those countries was based on literature review, water stressed Maps and 2010 Environmental Performance Index conducted by the University of Yale and Columbia.
The inputs selected (Coffee, Cocoa, Milk, Sugar and Soy) are some of our key agricultural raw materials.
For many of our commodities we source via conventional trade and we do not currently have access to country/region of origin, thus we work on average global consumptive water use and impacts.

Please visit http://www.nestle.com/csv/ruraldevelopment/Pages/Ruraldevelopment.aspx to read more about Nestlé Rural Development.

Water risk assessment operations

3.1

Is your company exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

3.1a

Please describe (i) the current and/or future risks to your operations, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks, and (iv) your current or proposed strategies for managing them.

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
South Africa	16. Other:	Municipal water treatment facilities not operated	Current	Install additional water treatment (e.g. reverse

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
	Inadequate infrastructure	adequately; and failing infrastructure in some regions. This lead to declining water quality and increased costs for additional treatment of water.		osmosis).
South Africa	03. Physical: Increased water stress or scarcity	Climatic variation leading to reduced rain; and increasing demand for water by other users (e.g. human consumption). This can potentially lead to restrictions on water use; however industries have been exempted for now.During a drought period in 2009, one of our factories (Mossel Bay) was obliged to drastically reduce its water consumption. Luckily production was not affected but this pushed the factory to optimise their water usage. A similar drought period could occur in the future.	Current	Improved water efficiency at factories. Engagement with suppliers (e.g. milk farmers) to optimise water use. Engagement with local authorities. In addition, the factory located in Mossel Bay had decided to become a 'best in class' factory in terms of water usage by implementing several innovative Water 'Reduce, Reuse and Recycle' projects so that it is protected from future incidents of drought.
Spain	03. Physical: Increased water stress or scarcity	Declining groundwater levels and lower quality of superficial water. The potential business impact include a possible disruption of operations or potential need of investment for a new equipment in order to guarantee the quantity and the quality of water.	Current	We continue to monitor the risk in the sensible areas; improve the water efficiency and implement the necessary resources for the new equipments. The projects implemented in 2011 in our Sevares and Reus factories have resulted in water savings (4000m3 per year) with an investment of EU 500k. In Valladolid, we have installation RO plant which has resulted in a reduction of water consumption and an improvement of water quality used in the process. We will implement in 2013 an Environmental Setting Programme starting in one of our factories to continue identifying opportunities of water saving and applying efficient technologies, and best practices to optimise energy and water consumption.
China	09. Regulatory: Regulation of discharge quality/volumes leading to higher compliance costs	Regulatory changes can result in increase of the operational costs Investment in water technologies have been implemented to reduce water use and recycle water. On-line monitoring devices have been installed at the effluent discharge point.	Current	Recycle cow water using RO. Different investment projects to storage the high quality discharge water for the lower requirement's usage. Reduce water usage by adjustment and close monitoring.
China	06. Regulatory: Higher water prices	Water price increases every year. Potential business impact is related to operating cost increase. Water prices increase varies from	Current	We are implementing new technologies to further recycle. Recycle and reduce the water usage

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
		different region and source of supply. It increases from 0%-20%.		
China	08. Regulatory: Mandatory water efficiency, conservation, recycling or process standards	Potential business impact includes operating cost increase.	1 – 5	We are implementing new technologies to further recycle water in our operations. In 2011, Nestlé recycled 7.8 million m3 of water as we seek to reduce water use and discharge.
China	11. Regulatory: Statutory water withdrawal limits/changes to water allocation	Potential business impact includes operating cost increase.	1 – 5	Enhance water efficiency. As part of our Nestlé Environmental Management System we continue to implement projects to reduce our use of water, non-renewable energy and other natural resources, to reduce our greenhouse gas emissions, to eliminate waste and to improve the environmental performance of our products, including their packaging.
Pakistan	03. Physical: Increased water stress or scarcity	Weak governmental plans to build Dams for water reserves causing excessive Water withdrawal for irrigation purposes by Agricultural sector through tubewells and pumps around area of Factory Operations. This may affect water level leading to an increase in business operational costs. Drop of water level and natural recharge could impact commodity prices.	6 – 10	Reduction in water wastage, Improve awareness on water usage in factories, Reusing of clean water, Maximizing reuse of water in utilities services. We work to raise awareness to farmer to adopt latest technique of irrigation and minimize use of irrigation from ground water.
Mexico	13. Other: Litigation	Changes in regulation can result in litigation in some factories. Extra fees will need to be paid to get water allowances that will allow increasing the production volume in the factories. This represents a risk as this could limit possible expansion of production. The potential business impact is an increase in operational cost estimated in MXP 4million representing the value of Guarentee quotas.	Current	We have already bought Guarantee Quotas authorized to keep higher volumes than currently used in Gerber, Queretaro, Ocotlan and Coatepec factories.
Mexico	01. Physical: Declining water quality	México has a growing overexploitation of aquifers, pollution of surface waters and groundwater, poor quality of drinking water and high flood vulnerability of different populations the country. (Source:	Current	In Chiapas and Tlaxcala, we are assessing options to source water from a well to avoid the use of surface water. In2011, in Lagos de Moreno, we installed a reverse Osmosis treatment plan for our

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
		Agenda del Agua 2030_CONAGUA, 2011) In Chiapas and Tlaxcala, quality of surface water is declining. This results in higher production cost as there is a need to buy clean water to avoid any disruption in the production processes. This cost can be up to three times the normal cost of water. In Lagos de Moreno, the water of the aquifer has high concentration of fluoride. The quality od water does not comply with drinking water regulations and therefore we need to invest in cleaning water treatments to treat the water we use in our processes.		Ice-Cream Factory. Another RO to Lagos Milk factory will be installed in 2012.
Mexico	07. Regulatory: Increased difficulty in obtaining operations permit	The amount of water available in the zone does not allow additional volumes in the water concession (Toluca). Do not have the possibility of growing or problems to maintain the production rate.	Current	We are implementing project to save water. Specifically a project with10% reduction in consumption of water is being implemented.
Mexico	09. Regulatory: Regulation of discharge quality/volumes leading to higher compliance costs	High waste water treatment costs and future stronger regulations can lead into higher compliance cost. In Ocotlán, the capacity of the WWTP is exceeded and we have plans to increase the capacity of the WWTP.	1 – 5	We are upgrading the WWTP in order to increase production during 2012.
Congo, Democratic Republic of the	12. Regulatory: Other	Legislation in the Democratic Republic of Congo requires nothing more than a septic tank, which does not meet Nestlé Environmental Requirements. An investment at our factory provided a new wastewater treatment plant to improve on the local municipal facilities.	Current	We use municipal wastewater treatment facilities wherever possible, but where these are not efficient enough, we invest in our own facilities, returning treated water to the environment according to local legislation and internal standards, whichever is more stringent. We built a new water treatment plant – at the Maggi factory in Kinshasa – which became operational in October 2011.
Ghana	16. Other: Inadequate infrastructure	Due to inadequate infrastructure of the municipal water supply network, one of our factories (Tema) is affected by frequent cuts in water supply. This has affected production on a number of occasions causing the factory to shutdown partially or fully production. The lack of water is due to inadequate infrastructure and not a physical lack of water in	Current	A USD 2.2 million investment at our factory in Tema, Ghana, provided a new wastewater treatment plant to improve on the local municipal facilities. The factory with the assistance of the corporate Engineering of Nestlé put in place an ambitious action plan to reduce water usage and also recycle water to certain non food contact

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
		the region.		processes (e.g. cooling, floor washing etc)
India	03. Physical: Increased water stress or scarcity	A case study in the Moga District of Punjab (India) between Nestlé and the International Water Management Institute (IWMI) is raising strong concern about the sustainability of the region's fresh milk supply due to water stress. Water scarcity could affect the milk production in Moga.	1 – 5	An energy and water target setting is planned for 2012 and the factory is already in the process of implementing ambitious water recycling projects in order to reduce the factory dependence on groundwater.
Spain	12. Regulatory: Other	Due to low flow of surface water in certain period of the year, the government put some restrictions to withdraw water below certain water flows. This can have can affect the production in our factory in La Penilla.	1 – 5	In La Penilla factory we have created a work team which aims at reducing the water used in refrigeration, which have resulted in 30% water reduction in half a year.
Australia	03. Physical: Increased water stress or scarcity	Potential future risks to water supply; Potential future risks to sourcing raw agricultural ingredients.Increased water stress or scarc has resulted in increases up to 45% of water prices.	Current	Focus on water reduction/conservation actions for manufacturing facilities, participation in Aust SAI Platform which has a Water & Climate Change Working Group Some site specific actions for water reduction include: 1) Wahgunyah – capture rainwater from warehouse roof (saves 250kL/year) 2) Mulgrave – reduction in sanitise flushes in Cleaning circuit (saves 1,000kL/yr) 3) Campbelfield – Reduce blowdown rate on cooling tower (approx 1,875kl/yr) 4) Campbelfield – Change from batch to inline processing of products (1,000kl/yr) 5) Wahgunyah – Install auto on/off valve on pumpseal water supply (1,750kl/yr) 6) Tongala – Removal of redundant cleaning pipework (2,000kL/yr)
Australia	06. Regulatory: Higher water prices	Increased water supply costs to factories Our top 6 water using sites have shown an average increase of approximately 25% (range from 15-45%) in water supply costs from 2009-2010. This was at end of a long drought. The price increases from 2010-2011 have been far less (ie 0-20%).	Current	Some site specific actions for water reduction include: 1)capture rainwater from warehouse roof (saves 250kL/year) 2)reduction in sanitise flushes in Cleaning circuit (saves 1,000kL/yr) 3)Reduce blowdown rate on cooling tower (approx 1,875kl/yr) 4)Change from batch to inline processing of products (1,000kl/yr) 5) Install auto on/off valve on pumpseal water supply (1,750kl/yr) 6) Removal of redundant cleaning pipework (2,000kL/yr)
Australia	10. Regulatory: Regulatory	Uncertainty regarding government water policy - influences production of food & feed crops, water	1 – 5	Monitoring government policy development.

Country or geographical reach	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
	uncertainty	availablity & pricing affects food industry economic, environment & social sustainability A key water policy document which is currently under development is the Murray-Darling Basin Plan. This has the potential to significantly impact agriculture due to the allocations of water entitlements. A second draft was recently released & sent to state ministers for consideration.		

3.1b

Please explain why you do not consider your company to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

3.1c

Please explain why you do not know if your company is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

3.2

What methodology and what geographical scale (e.g. country, region, watershed, business unit, facility) do you use to analyze water-related risk across your operations?

Risk methodology	Country or geographical scale
To analyse water-related risk across our operations we use different methodologies at different geographical scales. (1) At a country and region level we analyse water-related risk across our operations by screening the operations that are in risk areas taking into account metrics such as water withdrawals to availability and the renewable water supply per person in that specific area. In addition, Nestlé has in place an Enterprise Risk Management 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. Water related issues are an integrated part of the risk and opportunity assessment for business. (2) At a watershed level we have in place the Water Resources Review which is undertaken at operations considered under risk (at Nestlé Waters, this is undertaken at all sites). The programme looks into details in specific locations. The programme focuses on five areas: water quantity; water quality; regulatory compliance; site protection; and relationships with other stakeholders. Hydrogeological monitoring and possibly aquifer modelling are also used to assess the availability of surface and underground water. The impact of our operations linked to water transportation (pipelines and storage tanks), water treatment and wastewater processes are also analysed. Sites can also be prioritised by their position in our Water Stress Analysis, which in turn is based on external indicators of water poverty, watershed stress and internal local indicators. (3) At a facility level: Since 1996 we have in place the Nestlé Environmental Management System (NEMS) which help us to achieve continuous performance improvement and contribute towards sustainable development at factory level. NEMS also provides information regarding the environmental performance of our operations, including management of water resources. This system allows us to monitor progress, check and implement corrective and preventive actions.	Other: From country to facility

Water risk assessment supply chain

3.3

Do you require your key suppliers to report on their water use, risks and management?

Yes

3.4

Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

3.4a

Please describe (i) the current and/or future risks to your supply chain, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks and, (iv) your current or proposed strategies for managing them.

Country or geographical reach	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
India	03. Physical: Increased water stress or scarcity	Disruption of supply of raw agricultural materials. In parts of India (for example Gujarat), the water table is dropping up to 6 meters per year. This is partly due to the existence of over 20 million motorised water pumps in operation in India today, compared with 100,000 in 1955. Local water resources are overexploited and the water table is falling by at least one metre a year, which could affect raw agricultural materials supply in the long term.	1 – 5	A 2010 joint study by Nestlé and the International Water Management Institute into the water intensity of milk, wheat and rice production in the Punjab determined that groundwater levels are falling rapidly due to agricultural over-use. Nestlé India therefore designed a programme to raise awareness among Punjab dairy farmers, and another for school students, to highlight the effects of over-exploitation of groundwater and the remedial action possible. In 2011, we also joined a Department of Agriculture project to learn about Systems of Rice Intensification (SRI): innovative paddy cultivation techniques promoted by NGOs in southern India that increase yields using fewer seeds, pesticides and fertilizers, and less water. The study compared SRI and non-SRI yields for the summer harvest and if results are positive, we will extend the techniques to our milk suppliers.
China	01. Physical: Declining water quality	There is a lack of wastewater treatment capacity in rural locations and pollution prevention regulations for manure and silage storage and disposal is poorly enforced; in part due to poor practices in watershed management such as these, 21% of available surface water resource nationally is now unfit for use even in agriculture according to McKinsey “Charting our Future”. Because most manure storage systems require sizable investments with no immediate financial	1 – 5	Nestlé has responded by financing the distribution of a low-cost solution: biogas digesters that help farmers store their manure in secure, covered containers and collect the manure’s methane gas as energy for home cooking, lighting, and heating. Biogas production provides farmers with an economic incentive to manage their manure supplies more effectively, reducing water contamination in the process.

Country or geographical reach	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
		returns, local farmers have little incentive to improve their management of manure. Results from RISE (Response-Inducing Sustainability Evaluation) conducted in China suggest that the risk of water pollution is particularly caused by inappropriate manure storage, free access of cattle to water bodies and the absence of an appropriate waste water treatment. The waste water is predominantly discharged directly on the ground and even though there are legislations that prohibit cattle to enter water bodies, they are not enforced. The lack of wastewater treatment available in some villages and an increased risk for water pollution through manure and silage leachate can negatively impact agricultural materials supply.		
South Africa	03. Physical: Increased water stress or scarcity	Disruption of supply of raw agricultural materials i.e. milk.	Current	In 2010 the Western Cape region experienced its worst drought in 132 years, and in response Nestlé introduced a multi-pronged approach which included engineering interventions and awareness campaigns. The programme, which will run until 2015, is part of our work with organisations including the South African Government, the Water Resources Group (WRG) and several multi-national companies to help close the water gap by 2030, ensuring the availability of water in the future. In 2011, we launched phase two of the programme, a SAIN project to optimise water use further up the value chain engaging with 17 dairy farmers, five of whom work within the dam's catchment area, to increase milk production. Local experts, including Nestlé Agricultural Services, are providing training and financial assistance to help with soil moisture monitoring, soil fertility management, irrigation scheduling and the use of drought-resistant crops. Phase three, which will run from 2012 to 2015, will involve engineering

Country or geographical reach	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
				work to convert the factory into a zero water intake facility.
Pakistan	11. Regulatory: Statutory water withdrawal limits/changes to water allocation	Lowering of Water level may give rise to regulator changes to limit water withdrawal from ground resources. This may affect the volumes of production and may lead to newer water technologies to be implemented with potential increasing operational costs.	6 – 10	Water conservation technologies to be used, reuse and recycle methodologies to be used. Exploring best available techniques for recycle and reuse.
Mexico	03. Physical: Increased water stress or scarcity	During the past several decades, the demands placed on Mexico's water resources increased dramatically largely due to rapid population growth. In addition, the excess of allocations contributed to the overexploitation of water resources. Water withdrawal by agriculture is estimated at 60.6km3, or 78% of the total water withdrawal.	1 – 5	Working with farmers who supply coffee to the Company, Nestlé provides training and support for new technology to decrease water use in the coffee production process. As a result, water usage in coffee production was reduced from 40 litres to 3-5 litres of water per kilogram of coffee produced. Today, this technology is used by Nestlé Coffee suppliers across Mexico, achieving annual savings of about 296 000 m3 of water a year. The initiative is being promoted by the Mexican government, reaching many partners in the Mexican coffee milling industry, who have also adopted this technology. *We are working with the Swiss College of Agriculture in Mexico to improve the water sustainability of dairy production.
Other: In several water-stressed countries or regions (Cocoa production countries)	03. Physical: Increased water stress or scarcity	Cocoa is highly susceptible to drought and the pattern of cropping cocoa is related to rainfall distribution. Cocoa seedling mortality is encouraged by prolonged dry season (drought), short dry season affects pod filling which will affect the bean size.	6 – 10	Cocoa Propagation Project: Nestlé develops new technology to mitigate water stress problems in many countries or regions. Nestlé has developed a competency in somatic embryogenesis, a relatively new technique that does not change the plant material but enables deep soil penetrating roots with greater drought tolerance. Currently, Nestlé's technology is applied, or in the process of being established, in several water-stressed countries or regions in Latin America and SE Asia.
Colombia	01. Physical: Declining water quality	As the vast majority of Nespresso AAA farmers are smallholders, especially in Colombia, they often lack the resources to invest in appropriate water treatment facilities. The outcome of our Tool	Current	The installation of the micro-central mill in Jardín Antioquia is one such solution. Inaugurated in December 2010 as a joint undertaking between Nespresso, USAID, ACDI/VOCA, Cafexport and

Country or geographical reach	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
		for the Assessment of Sustainable Quality (TASQ™) indicates that many of these smallholder farms do not have the appropriate equipment for either domestic wastewater treatment or coffee-processing water treatment. The cost of providing such facilities on a farm-by-farm basis for the tens of thousands of farms we buy from is prohibitive, so we have been working with local partners to find more efficient and creative solutions that can protect water, improve crop quality and drive profitability for coffee farmers.		the local cooperatives, this new mill will provide coffee-milling services initially for 110 coffee farmer families in the region, avoiding the need to replicate equipment in each farm and improving coffee quality. The mill will save an average of 27 000 litres of water per farm and increase farmer profitability by 30%.
Ethiopia	03. Physical: Increased water stress or scarcity	Improved water efficiency and reduced drought sensitivity could be achieved by an optimised combination of plant material, propagation and farming techniques.	Current	Screening for plant characteristics related to water-efficiency has only recently started in a few organizations, in particular in Brazil and Ethiopia. Coffee plant collections of different characteristics are fragmented throughout many organisations and it is unclear, which organisation has the most promising varieties. Nestlé has one of the largest collections of coffee varieties in the world and is thus considered an important piece of the global coffee plant puzzle. Although Nestlé has not previously screened for water-related characteristics, the following main activities are planned: Reinforce and build relationships with major coffee R&D organisations in Brazil and Ethiopia Start Nestlé's own screening program for the following water-related characteristics (in addition to quality and yield) in coffee plants: - lower overall water demand - fewer and shorter irrigation cycles - less drought sensitivity and fast recovery after droughts

3.4b

Please explain why you do not consider your supply chain to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

3.4c

Please explain why you do not know if your supply chain is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

Water Impacts

4.1

Has your business experienced any detrimental impacts related to water in the past five years?

Yes

4.1a

Please describe these detrimental impacts including (i) their financial impacts and (ii) whether they have resulted in any changes to company practices.

-Due to inadequate infrastructure of the municipal water supply network, ourTema factory is affected by frequent cuts in water supply. This has affected production on a number of occasions causing the factory to shutdown partially or fully production. The lack of water is due to inadequate infrastructure which has resulted in acute water shortage in the industrial hub of Ghana, Tema, has compelled industries within the harbour city and its environs to temporarily shut down their various plants for productions. The business impact of this water shortages resulted in production volume loss estimated on GHC 6 mio in 2011.
This has resulted in changes in water practices. The factory with the assistance of the corporate Engineering of Nestlé put in place an ambitious action plan to reduce water usage and also recycle water to certain non food contact processes (e.g. cooling, floor washing etc)

- The flooding in Thailand in 2011 cause detrimental impact to the business. Our two of six factories in Thailand were affected to shut down and infrastructure damages. There was insufficient supply of Nestlé products tour customer during October 2011 to early of 2012.
During this situation, many employees could not come to workplace and some had to move to safer area.
The detrimental impacts included sales volume, time spent, labour cost, waste disposal cost, during the flooding and also in recovery period.

After the water level was declined, we learnt from experiences and good practices, which will minimise an impact if it would happen again.
Protective action are in place for example, water protection system such as Aqua fence. AquaFence is a effective transportable flood protection barrier that can be rapidly deployed, prior to or even during heavy rain and severe weather when there is a recognised danger of flooding. After the rain, sea or river water has receded the flood barrier can be easily dismantled and stored ready for the next flood event.The government has put protective plans in place around industrial estates.

-A detrimental impact that Nestlé faced was the massive floods in Pakistan where devastating floods washed away 4'500 villages, 1'600 human causalities, 20 million people displaced, 300'000 cattle dead, 20% agricultural land with crops flooded and major transportation issues during 4 weeks
Among the longer term impacts we indentified high food inflation, GDP dropped from expected 4.5% to 2.8% in 2010 and people below the poverty line increased from 33% to almost 40% of the population.
Beyond the usual business procedures we set up a Crises Committee and Help desk set-up, Vigilance committee in the Milk collection operation. Nestlé Pakistan undertook a series of initiatives during 8 months, to make up for lack of external governance mechanisms such as distributing food to more than 80'000 people (first 2 weeks) and 240'000 litres of drinking water were transported in our milk tankers to flood relief camps. In addition, Nestlé contributed to free vaccinations to over 300,000 animals, repairs of damaged CSV projects, i.e. schools and water filtration plants and Joint Nestlé / SDC project in 17 villages of 10'000 people: food, seed and fertilizers, 370 water pumps and wells rebuild actions.
The negative impact on Nestlé was limited, with a 7% reduction of fresh milk sourcing for four weeks.
Nevertheless, Nestlé Pakistan achieved all business targets thanks to the outstanding attitude and work ethic of the staff. We have enhanced our contingency plans.

- In recent years, the bottled water industry has received some criticism, often based on biased, one-sided information, from certain actors – particularly activist organisations. This criticism has been most visible in North America and Western Europe and has often taken the form of anti-bottled water campaigns, traditional and online media articles, and documentary films. The bottled water industry has actively mobilised to balance the criticisms with factual information on natural mineral, spring and treated waters, the health benefits of plain water, the industry's commitment to good water management, and its efforts to improve the environmental performance of its products (e.g. packaging and transport optimisation).

4.1b

Please explain why you do not know whether your business has experienced any detrimental impacts related to water in the past five years and if you have any plans to explore this in the future?

Water Opportunities

5.1

Do water-related issues present opportunities (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

5.1a

Please describe (i) the current and/or future opportunities, (ii) the ways in which these opportunities affect or could affect your operations (iii) the estimated timescale and (iv) your current or proposed strategies for exploiting them.

Country or geographical reach	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Global	Other: Improve water management	Improve competitive position though operational performance, efficiency and by innovating new solutions.	1 – 5	Our Water Resources Review (WRR) programme is in place, focusing on five areas: water quantity, water quality; regulatory compliance; site protection; and relationships with other stakeholders. Specific to regulatory compliance, the WRR programme it against the water-related responsibilities of our local operations (i.e. water rights, abstraction licences, water effluents discharges) and estimates potential evolution of water regulatory framework impacting the sites. In 2011, we introduced the concept of notional cost to analyze water projects based on estimated water prices. We assign a specific notional cost (CHF/m3) based on the water base cost (CHF/m3) and the water stress index of the factory. We use this to evaluate reusing and recycling projects especially in water stressed locations where we estimate a higher water cost. The Nestlé Environmental Performance tracking tool continuously monitor the cost of all purchased water and off-site treated water for all plants.
Global	Other: Reduce waste	Saving in environmental and financial terms. By saving waste we save water.	1 – 5	*We work to prevent food waste by having high quality standards in packaging as it reduces waste by protecting food products during transportation and storage, in the retail environment and at home. Packaging is also essential for food safety and freshness, and provides consumers with nutritional information and portion guidance at the point of

Country or geographical reach	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
				purchase. *To reduce waste between farmers and our factories, we work with farmers and provide storage and chilling facilities, better transport networks, technical assistance by Nestlé specialists (agronomists and veterinarians), and field technicians. *We work to reduce waste by providing consumers with the adequate portion sizes fitting their needs.
Global	Other: Improve the environmental performance of our products.	Delight our consumers while at the same time improve the impact on the environment including their water consumption.	1 – 5	Nestlé actively participates in different multi-stakeholder LCA-related initiatives. *In Nestlé, we have in place different tools that allows us to conduct screening environmental life cycle assessment of products including water use: • PIQET (Packaging Impact Quick Evaluation Tool) is a packaging eco-design tool that evaluates the main environmental impact categories of an existing or under development packaging within Nestlé. • GEF (Global Environmental Footprint) evaluates the main environmental impact categories of a factory, a specific department, or an existing or under development product within Nestlé Waters. Based on its results and business needs a Full LCA may then be performed. **Nestlé co-chairs, together with the European Commission, the steering committee of the European Round Table on Food Sustainable Consumption and Production, which aims in particular at developing a harmonised methodology for the assessment of environmental performance of food products. *Nestlé is a member of the Water Footprint Network and supports and actively participates in the development of the new ISO 14046 Standard on Water Footprinting Requirements and guidelines.
Global	Other: Driving resource conservation and saving precious water	Operation of zero-intake milk factories in water stressed regions.	1 – 5	We are applying best technologies to make milk factories a zero-intake factories. We are making engineering interventions in our factories e.g South Africa, Mexico.

Country or geographical reach	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Global	Other: Enhancing consumer understanding of their water consumption by using our products	Consumers need water to prepare and use our products. By providing consumer with tips on how to reduce water use and scientific based and externally reviewed environmental data, they are able to improve their environmental performance and continue enjoying Nestlé products.	6 – 10	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 improve their environmental impact when preparing and using our products, including minimising energy and water use. The interactive Nescafé Life Cycle Assessment communication tool in France, for example, invites consumers to click on the different stages of the Nescafé life cycle to learn about the level and nature of impacts at each product phase. Users can also look at GHG emissions, water use or biodiversity impacts across the full product life cycle.
China	Cost savings	Through continuous driving water saving, we gain competitive advantage in terms of lower manufacturing cost.	Current	Different investment projects to storage the high quality discharge water for the lower requirement's usage. Reduce water usage by adjustment and close monitoring.
South Africa	Other: Reputation	Reputational opportunities. Nestlé South Africa is playing a leading role in industrial water efficiency and supply chain water savings through its work with local farmers in the Mossel Bay region. As a result, Nestlé is a founding member of the Strategic Water Partners Network (SWPN) which is a collection of industrial water users and national government.	1 – 5	Participation in SWPN; Continue working with Supply Chain (farmers)
Vietnam	Other: Reuse Water	he implementation of a very sophisticated treatment process using UltraFiltration, Reverse Osmosis and advanced oxidation to comply with Nestlé Environmental Requirements have allow us to reuse water in the process.	1 – 5	Although the wastewater from our soluble coffee factory (under construction) would be discharged to the local municipal sewage, the discharge limit for colour (Pt Co 20 @pH7) and the high amount of colour in coffee effluents has forced us to implement a very sophisticated treatment process using UltraFiltration, Reverse Osmosis and advanced oxidation. The water is in fact so good after this treatment that it will be reused again within the factory utilities.
Mexico	Other: Reputation	In many countries, Nestlé was the first company to	Current	Ocotlan is one of 2 Nestlé factories which

Country or geographical reach	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
		set up a wastewater treatment facility and while these investments have added to production costs in the short term, they have led to stricter regulations for all companies over time, thus giving Nestlé the prime-mover advantage.		demineralise Whey. The WW from this process is highly loaded in salts and in particular phosphates (<300ppm). The treatment process is being upgraded to meet stringent discharge limits for phosphates (<5ppm). The factory engineers are also studying a new process to recover the phosphates at source which can be recovered and used as fertilizer.
Mexico	Cost savings	In water stressed areas, the application of best technologies allows us to continue delighting consumers with our products with no intake of water. In addition, these interventions will result in water savings of more than 200,000m³ per year.	Current	By implementing engineering interventions to make the factory a zero-water intake factory we are saving water cost in 25%. We are recovery and use of condensate from the milk evaporation process. This recovered water is used in other uses such as as the make-up water for the boiler, refrigeration plant and cooling tower.
Global	Other: Reduction of water use in use phase of our products	Providing consumers with products that reduce their water use, allow them to continue enjoying Nestlé products while at the same time reduce their direct water footprint.	Current	By choosing the ideal temperature for consumer baby's bottle, the BabyNes system does not need to overheat the water as a kettle or stove. This means energy savings are maximised through the preparation of each bottle and no water is needed to cool down the bottle which also saves water.
Global	Other: Healthy hydration	Recently obesity and the measures that can be taken to address them have been in the spotlight, often accompanied by reports and guidance by health authorities encouraging populations to drink more water (USDA, WHO). In such a context, consumers are increasingly looking for good quality products that support their efforts towards a balanced, healthy diet and lifestyle. The overwhelming majority of the products produced by Nestlé Waters are plain water (which does not add calories to the diet). This makes them the reference healthy hydration option on the packaged beverage market, supported by the Nestlé quality guarantee.	1 – 5	-The company works on leveraging hydration and exploring its contribution to human health by participating in and funding clinical research, and contributing to the release of scientific evidence within the medical community. Our experts also participate in congresses and conferences around the world. -We promote healthy hydration through both our brand and corporate communication.

5.1b

Please explain why you do not consider water-related issues to present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure or supply chain.

5.1c

Please explain why you do not know whether water-related issues present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure.

Further Information

For more information please go to the following links:
http://www.thecocoaplan.com/
http://www.nescafe.co.uk/sustainability_en_co_uk.axcms
http://www.nespresso.com/ecolaboration/
www.4c-coffeeassociation.org
http://www.nestle.com/csv/water/Pages/Water.aspx

Water trade-offs

6.1

Has your company identified any linkages or trade-offs between water and carbon emissions in its operations or supply chain?

Yes

6.1a

Please describe the linkages or trade-offs and the related management policy or action.

Linkage or trade-off	Policy or action
Linkage: Food production requires water and energy; water extraction and distribution requires energy; and energy production requires water. We use water to cool power equipment, and water supply and treatment, pumping water requires energy. On the other hand, risk to electricity from diminishing water is a global problem. The use of fossil energy has an impact on climate change—which disrupts the water cycle and threatens both water and energy resources.	In 2009, Nestlé launched the Energy Target Setting (ETS). Teams of internal and external experts are sent to factories to identified energy and water and greenhouse gas emissions reduction opportunities. Our ETS Initiative completed 16 projects in 2011, during which we identified more than 379 projects for a total investment of about CHF 86 million. These projects have resulted in an annual energy saving of about 8 million GJ and a reduction of approximately 191 000 tonnes of CO2 equivalent. Furthermore, we saved 2.6 million m3 of water and CHF 41 million. *We strive to improve the environmental performance of our factories. *We are working within the Water Resources Group on an innovative initiative under the guidance of the Global Agenda Council on Water Security. This initiative engage governments who wish to work progressively on a water sector reform strategy; and then provide a supporting public-private approach.
Trade-off: use of close-loop cooling systems vs once-through cooling systems	Cooling systems that use a water's cooling capacity a single time are called once-through cooling systems. These systems use large volumes of water. Close-loop cooling systems use less water but require more energy. In general, we replace once-through cooling systems with close-loop cooling systems to save water. In 2011, we use 15.2 million m3 in once through cooling, 7.5% down from 2010.
Trade-off: Biofuels vs water availability. Increased use of biofuels puts increasing pressure on water resources in at least two ways: water use for the irrigation of crops used as feedstocks for biodiesel production; and water use in the production of biofuels in refineries, mostly for boiling and cooling. Nestlé is a strong supporter of sustainable and efficient water and energy use. Nestlé believes that any decision on the use of water and energy sources must be based on a systematic cost benefit and life cycle analysis, taking into consideration the social and environmental impact, including the effects on food prices. - The current production of biofuel relies on the extensive use of food and feed crops such as maize and wheat. The large scale expansion of these agricultural raw materials for biofuel production will aggravate the problem of water scarcity, as every litre of biofuel made from irrigated maize or soybeans requires between 500 and 5,000 litres of water. This causes an unsustainable boost in the use of freshwater by agriculture, which already uses 70% of available sources. Furthermore, depending on crop type and geography, greenhouse gas savings compared to fossil fuel can be very small. Therefore Nestlé is opposed to the introduction of widespread production incentives and subsidies for current forms of biofuel(no food for fuel). Biofuels targets require a certain proportion of national energy	It is our belief that biofuels should only be accepted when they: do not threaten food security; are able to demonstrably reduce greenhouse gas emissions; do not pose significant land use issues, or significant water allocation and stewardship issues; and when they do not risk conservation conflicts. Therefore, Nestlé continues to advocate against the use of crops for fuel rather than food, as the growing use of biofuels is a significant factor in the destruction of rainforests. Therefore our strong policy claim: no food for fuel.

Linkage or trade-off	Policy or action
needs to be met from renewable fuels, most of them biofuels (ie, ethyl alcohol made from crops, usually maize or sugar).	
A site level, Nestlé has identified linkages and trade-offs between usage of water and energy. These are taken into account through its Change Management process, which includes investments projects and innovation/renovation of products and processes. For each new product or process developed, R&D teams have to assess related environmental impacts, which include water withdrawal and energy consumption and these are part of an internal process.	Nestlé also strives to improve factory(ies) environmental performance through internal tools and procedures and in some situations with the support from external consultants and suppliers. Linkages between water and energy are taken into consideration. For instance, in many Nestlé factories the reduction of steam consumption allows to minimise water withdrawal as well as energy consumption. Trade-offs between water, energy and carbon are also taken into consideration, such as treating waste water which will allow the recycling of water but at the cost of additional energy usage. The impact of these factors on the environment may vary depending on local conditions (such as water scarcity in a region) and need to be evaluated based on all of the inputs, not just the impact a project or initiative has on one of the factors.
Trade-off: There are initiatives on product labelling and standards, mainly in Europe, where greenhouse gas emissions are the sole indicator used. For food products, considering GHG emissions only can be misleading and Nestlé therefore considers important not only GHG emissions but also other environmental indicators such as water consumption and biodiversity.	Nestlé has been conducting Life Cycle Assessments to assess the environmental impacts of its major product categories, from farm to consumer in order to increase the environmental performance of its products throughout their life cycle. Nestlé aims to use natural resources efficiently at all stages of the life cycle is, to favour the use of sustainably-managed renewable resources and to target zero waste. To optimise the environmental performance of its products, Nestlé not only considers the environmental impacts of its manufacturing operations but also those associated with the other steps in the value chain. Nestlé therefore applies a life cycle approach, systematically assessing its product categories from farm to fork and beyond. We advocate a multi-disciplinary approach not just looking at GHG emissions but also at water and natural resources, human health, and ecosystem quality.
Linkage: By recovering heat at the end of manufacturing processes, we reduce water used in our factories for cooling purposes. The heat is not used to evaporate water in the cooling tower but to replace fuel to heat other processes.	In our factories most of the heat is evacuated trough cooling tower systems by evaporating water in the ambient air. Anytime we are recovering the heat of a process to heat another one it saves the primary energy previously used to run the second process and the water consumed in the cooling tower to cool the 1st process. Applying this principle in the scope of our Energy Target Setting initiative we have identified more than 90 heat recovery or water/energy beneficial projects resulting in more than 6 mio. GJ saving, 1.4 mio. m3 of water and 110’000 tons of CO2 per year.

Further Information

For information on our actions on energy efficiency, please visit:
http://www.nestle.com/csv/Environment/climatechange/Improvingenergyefficiency/Pages/Improvingenergyefficiency.aspx

Module: Water Account

Water Withdrawals

7.1

Are you able to provide data, whether measured or estimated, on water withdrawals within your operations?

Yes

7.1a

Please report the water withdrawals within your operations for the reporting year.

Country or geographical reach	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
Global	Surface	20518	76-100	100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/Nestle/ourperformance/AssuranceStatement/Pages/AssuranceStatement.aspx.
Global	Groundwater	75018	76-100	100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/Nestle/ourperformance/AssuranceStatement/Pages/AssuranceStatement.aspx.
Global	Rainwater	49	76-100	100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at

Country or geographical reach	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
				http://www.nestle.com/csv/Nestle/ourperformance/AssuranceStatement/Pages/AssuranceStatement.aspx.
Global	Municipal water	47866	76-100	100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/Nestle/ourperformance/AssuranceStatement/Pages/AssuranceStatement.aspx.

7.1b

Please explain why you are not able to provide data for water withdrawals.

7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

Yes

7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

7.2a

Please report the water recycling/reuse within your operations for the reporting year.

Country or geographical reach	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
Global	7767	76-100	This quantity corresponds to the total water flow that is captured for further use such as irrigation on-site and off-site. It does not include water volumes which are reused or recycled within the operations.

7.2a

Please report the water recycling/reuse within your operations for the reporting year.

Country or geographical reach	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments

7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

Water withdrawal is the sum of water used by the plant from all sources, including purchases from suppliers as well as surface, ground or rain water sources. This includes water that may be treated through industrial services (such as softening and demineralising), non-contact cooling water, water used for cleaning and water used as a raw material (e.g. for bottled waters) but does not include water contained in raw materials (e.g. from milk).

7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

7.4

Are any water sources significantly affected by your company's withdrawal of water?

No

7.4a

Please list any water sources significantly affected by your company's withdrawal of water.

Country or geographical reach	Water source	Impact	Company action and outcomes

7.4b

You may explain here why your company's withrawal of water does not significantly affect any water sources.

As part of The Nestlé Policy on Environmental Sustainability we work to reduce the amount of water withdrawn per kilo of product; assure that our activities respect local water resources and we take care that water we discharge into the environment is clean.

When we withdraw water from small watershed, we constantly and carefully monitor water resources ensuring that our withdrawals do not affect water sources. In most of the cases we abstract water from big watersheds where there is no significant impact.

Nestlé Waters has developed a monitoring system of physical parameters (for example: withdrawals, level, flow, conductivity, temperature, and rainfall) for all catchments. Frequent interpretation of data is critical in order to immediately detect any abnormality and anticipate long-term trends. It allows us to implement immediate action including temporarily reducing or stopping bottled water production. The ability to react quickly is essential if we are to avoid deviations that may lead to a major intervention on the catchment, a temporary decrease of water supply or even the permanent loss of a resource for our bottling activities.

Although our sources of water for bottling are typically separate from those drawn on by local communities or municipalities, we support community-wide water resource management initiatives wherever possible. Environmental monitoring extends beyond the immediate locality of our water sources to include the whole water recharge area. In partnership with local communities, we work to ensure that only as much water is taken from an aquifer as its replenishment capacity allows.

The Water Resource Review is an internal audit process to evaluate the long term sustainability of each of our sources. The review includes an internal risk assessment tool that anticipates as soon as possible corrective actions that may be needed to avoid any potential water supply issues. The Water Resource Review allows us to rank our different sites in order to identify our most sensitive sites and adjust our local protection policy, or initiate new prevention plans in collaboration with the local community. These measures may include land acquisitions, extension of protection perimeters or transformation of farming practices.

Maintaining the highest standards means implementing protection measures against accidental or voluntary actions. At Nestlé Waters we have a complete set of technical specifications covering how drillings, pumping or storage operations shall be manoeuvred to comply with strict hygiene conditions. The technical specifications include disinfection processes for all the equipment that are directly in contact with water to avoid any contamination. Technical requirements also set standards for materials, such as the mandatory use of stainless steel or high density polyethylene for pipes, and 304L or 316L stainless steel for wellheads or equipment within the well. Technical protection also deals with the overall design of the catchment system to minimise impacts to retention zones and identify the time needed during maintenance in order to lower risk of microbiological contamination.
Our stringent specifications have been recognised by French standardisation authorities (Afnor) who asked Nestlé Waters to review technical guidelines for mineral water operational systems, which have since been published.

We adhere to measures that are adapted to the specific hydrogeological context of each source. These measures aim to prevent external disturbance within the immediate area surrounding the catchment, and to ensure that no contamination occurs during transport to the bottling plant. This includes locks and motion sensors covering all potential access points. Motion sensor activity is directly connected to our security guards and production offices. If there is a security breach, we are able to initiate measures to stop pumps or divert flows as necessary. At some of our sources, the bottling production area is very near to the source, whereas in others a greater distance from source to the bottling area allows more reaction time and different security measures.

7.4c

Please explain why you do not know if any water sources are significantly affected by your company's withdrawal of water.

Further Information

Please find attached:

Nestlé Policy on Environmental Sustainability
Nestlé CSV Summary Report 2011
Nestlé Waters CSV Report 2011

Attachments

https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/7.WithdrawalsandRecycling/Nestle-CSV-Summary-Report-2011.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/7.WithdrawalsandRecycling/The Nestlé Policy on Environmental Sustainability.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/7.WithdrawalsandRecycling/Nestlé_Waters_CSV_report_2011.pdf

Water Discharges

8.1

Are you able to identify discharges of water from your operations by destination, by treatment method and by quality using standard effluent parameters?

Yes

8.1a

Please explain why you are not able to identify discharges from your operations by destination, treatment method and quality and whether you have any plans to put in place systems that would enable you to do so.

8.2

Did your company pay any penalties or fines for significant breaches of discharge agreements or regulations in the reporting period?

No

8.2a

Please describe the location and impact of the discharge that was the subject of the significant breach(es), the associated fines and any actions taken to minimise the risk of future non-compliance.

Country or geographical reach	Impact	Fines and penalties	Company action and outcomes

8.3

Are any water bodies and related habitats significantly affected by discharges of water or runoff from your operations?

No

8.3a

Please list any water bodies and associated habitats which are significantly affected by discharge of water or runoff from your operations.

Country or geographical reach	Water body	Impact	Company action and outcomes

8.3b

You may explain here why your company's discharge of water does not significantly affect any water bodies or associated habitats.

The Nestlé Corporate Business Principles and The Nestlé Policy on Environmental Sustainability commit the Company to respect and comply with existing laws and regulations concerning the environment in local markets, and to apply Nestlé internal standards suitable to local conditions in those regions where specific environmental legislation is non-existent or insufficient.

The Nestlé Environmental Requirements define mandatory requirements across all Nestlé operations. Whilst their primary application is in those jurisdictions where environmental legislation is non-existent or under-developed, they must be met where applicable by all such Nestlé operations regardless of location.

New sites are intensively investigated and monitored for both quality and quantity, including potential pollution sources and hydrogeology.

Guidelines for Sustainable Water Resources Management are distributed to all technical directors, factory heads and Water Resources Community in Nestlé Waters factories. This document is supported by the Water Resources Review program, an internal audit system that is conducted on a regular basis.

The long-term supply of water with high quality and sufficient quantity is essential for our factories. To raise awareness at a local operational level, identify key issues and risks, and devise action plans for more sustainable water use, especially in water-stressed or water-scarce areas, our Water Resources Review programme focuses on five areas: water quantity; water quality; regulatory compliance; site protection; and relationships with other stakeholders. Hydrogeological monitoring and possibly aquifer modelling are also used to assess the availability of surface and underground water. The impact of our operations linked to water transportation (pipelines and storage tanks), water treatment and wastewater processes are also analysed.
On the local level, a continuous water resource managing system is in place with daily monitoring (quantity and quality) done by Water Resources Champions or Factory Environmental Officers at each Nestlé factory.

We monitor and improve water efficiency through our water resources management specialists and in our factories with our environmental specialists in line with the Nestlé Environmental Management System.

We use municipal wastewater treatment facilities wherever possible, but where these are not efficient enough, we invest in our own facilities, returning treated water to the environment according to local legislation and internal standards, whichever is more stringent. We have 301 on-site treatment plants, and in 2011 invested CHF 6 million in new and improved facilities.
We discharged 93.9 million m3 of water in 2011, with an average of 68.6 mg Chemical Oxygen Demand per litre.

8.3c

Please explain why you do not know if any water bodies and associated habitats are significantly affected by discharge of water or runoff from your operations.

Water Intensity

9.1

Please provide any available financial intensity values for your company's water use across its operations.

Country or geographical region	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega-liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Global	Profit	Withdrawals	CHF	87000	In 2011, operating profit amounted to 12471 million CHF and we withdrew 143453 megalitre.

9.2

Please provide any available water intensity values for your company's products across its operations.

Country or geographical region	Product	Product unit	Water unit	Water intensity (Water unit/product unit)	Water use type	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Global	All production	tonne	Other: cubic metre	3.17	Withdrawals	We aim to be the most efficient water user among food manufacturers. We withdrew 3.17 m3 per tonne of product; this is a

Country or geographical region	Product	Product unit	Water unit	Water intensity (Water unit/product unit)	Water use type	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
						4% reduction in withdrawal per tonne of product from 2010.
France	Nescafé	Other: 1 cup of coffee of 100ml	Other: dl equivalents	0.1	Other: Water Consumption	To estimate the impact of water use, we recognise that in some parts of the world freshwater is a scarce resource. Therefore we apply a regional scarcity coefficient (between 0 and 1) to the actual volumes of water used. This intensity represents the amount of water needed to produce a cup of coffee that may be in competition with other usages.This approach is aligned with ISO CD 14046 draft standard on Water Footprint. The water footprint is defined by the ISO CD 14046 as parameter(s) that quantify(ies) the potential environmental impact related to water and it is based on a life cycle assessment.

Further Information

The interactive Nescafé Life Cycle Assessment communication tool in France invites consumers to click on the different stages of the Nescafé life cycle to learn about the water consumption, its level and nature of impacts at each product phase. Users can also look at GHG emissions, or biodiversity impacts across the full product life cycle.

The tool is available at: http://nescafe.outil-acv.com/

Attachments

https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/9.WaterIntensity/Nestle_Corporate_Business_Principles__Spanish.pdf
https://www.cdproject.net/Sites/2012/42/12942/CDP Water Disclosure 2012/Shared Documents/Attachments/CDPWaterDisclosure2012/9.WaterIntensity/Nestlé Policy on Environmental Sustainability.pdf