

PepsiCo UK and Ireland – Environmental Sustainability Update 2008/9

Areas for assurance	Indicator title (measure)	Definition	UOM	2008 Value	Geographical Scope	How collected	Basis of calculation	GRI Indicator
1	Total direct energy use by PepsiCo*	Our direct energy use arises as a consequence of the activities of PepsiCo production in and for the UK market, from sources that are owned or directly controlled by PepsiCo. In this report these are our on-site gas and oil burners.	MWh	478,117	PIUK sites, Rotterdam, Zeebrugge	Each site inputs values for gas (kWh) and gas oil (litres), from meters / supplier bills into site spreadsheet. 12 times p.a.	Gas oil (l) converted to kWh using DEFRA conversion factor. All sites' gas (kWh); and litres of gas oil (kWh) then aggregated in central spreadsheet.	EN3
2	Total indirect energy use by PepsiCo*	Our indirect energy use arises as a consequence of the activities of PepsiCo production in and for the UK market, but occurs from sources controlled by other companies. In this report indirect energy use covers the electricity procured from the national electricity grids of the UK, the Netherlands and Belgium.	MWh	147,469	PIUK sites, Rotterdam, Zeebrugge	Each site inputs values for electricity (kWh), from meters / supplier bills into site spreadsheet. 12 times p.a.	All sites' electricity (kWh) then aggregated in central spreadsheet.	EN4
3	Total PepsiCo UK carbon footprint*	Our total carbon footprint includes the CO ₂ e arising from our direct and indirect energy use, the fuel used by our distribution fleet and employee car travel and for 2008, employee air travel.	Tonnes CO ₂ e	210,562	PIUK sites, Rotterdam, Zeebrugge	Outputs from the indirect & direct energy use measures, in addition to: - Distribution fleet - aggregation of fuel (litres) purchased. - Car travel is an aggregation fuel purchased on company fuel cards, and mileage claimed by employees using their own cars for business use. Air Travel – aggregation of air net mileage compiled by HRG for PepsiCo.	Data on greenhouse gas (GHG) emissions from energy use are reported as carbon dioxide equivalents (CO ₂ e) and calculated in line with The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (World Resources Institute & World Business Council for Sustainable Development, 2004). GHG emissions from electricity consumption use UK conversion factors provided by DEFRA. (Updated April 2008). DEFRA conversion factors used for converting car litres / mileage into CO ₂ e. The conversion factors for cross border production sites is a National Grid average from Pepsi	EN16, EN17

							Europe guidance on GHGs. During 2008, 45% of Rotterdam electricity was supplied from renewable sources, Zeebrugge was 100% from renewable sources.	
4	Energy use per kg of production (Walkers crisps and snacks)*	Total (indirect and direct) energy use used to make 1kg of Walkers product	kWh per kg	2.54	PIUK Walkers potato crisp and snacks manufacturing sites	Indirect / direct energy data collected as above. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system.	Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and energy use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values.	EN5, EN6
	Energy intensity for production (Walkers crisps)	Total (indirect and direct) energy use used to make 1 kg of Walkers potato crisps	kWh per kg	2.91	PIUK Walkers potato crisp manufacturing sites	Indirect / direct energy data collected as above. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system.	Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and energy use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values.	EN5, EN6
5	Total waste recycled*	Total amount of solid waste recycled	Tonnes	38,185	PIUK sites, (including DCs) Rotterdam, Zeebrugge.	All streams weighed as they are despatched from site. Weights recorded, cross-checked with invoices raised for receiving company, and entered in spreadsheet. The aggregation is then reported 12 times pa.	All site data are aggregated in central spreadsheet.	EN22
6	Total waste to landfill*	Total amount of solid waste sent to landfill	Tonnes	3,669	PIUK sites, (including DCs) Rotterdam, Zeebrugge.	Weight assumption for each load leaving site made by visible inspection. Recorded in spreadsheet, aggregated 12 times p.a..	All site data are aggregated in central spreadsheet.	EN22
7	Total water use*	Total amount of water used	M ³	1,692,282	PIUK sites, Rotterdam, Zeebrugge.	Site water meter readings taken at least weekly, recorded and aggregated in spreadsheets.	All site data are aggregated in central spreadsheet.	
8	Water intensity for	Water used to create 1 kg of	Litres		PIUK	Site water meter	Production volumes converted	

	production (Walkers crisps and snacks)*	Walkers product	per kg	6.61	Walkers potato crisp and snacks manufacturing sites	readings taken weekly, recorded and aggregated in spreadsheets. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system.	automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and water use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values.	
9	Water intensity for production (Walkers crisps)	Water used to create 1 kg of Walkers potato crisps	Litres per kg	7.61	PIUK Walkers potato crisp manufacturing sites	Site water meter readings taken weekly, recorded and aggregated in spreadsheets. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system.	Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and water use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values.	
10	Energy use per kg of total production (PIUK)*	Total (indirect and direct) energy use used to make 1 kg of PIUK product	kWh per kg	1.20	PIUK Walkers, Quaker and Tropicana manufacturing sites	Indirect / direct energy data collected as above. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system.	Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and energy use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values.	EN5, EN6
11	Water intensity for production (PIUK)*	Water used to create 1 kg of PIUK product	Litres per kg	3.31	PIUK Walkers, Quaker and Tropicana manufacturing sites	Site water meter readings taken weekly, recorded and aggregated in spreadsheets. Production volumes collected by Central Finance team via automatic, end of line (bar code readers), production recording system.	Production volumes converted automatically from cases to kg in financial system, and verified by Central Finance team. Volumes and water use then aggregated in Central Sustainability spreadsheet and value calculated automatically to achieve stated values.	

* Indicates performance data reviewed by Deloitte LLP as part of their environmental sustainability assurance work.



Independent assurance statement by Deloitte LLP ('Deloitte') to PepsiCo International Limited on selected information included in the PepsiCo UK and Ireland ('PIUK') Environmental Sustainability Update 2008/9.

What we looked at: scope of assurance work

PepsiCo International Limited have engaged us to perform limited assurance procedures on selected environmental sustainability performance data for the year ended 31 December 2008. The assured data appear in the 'Environmental Sustainability Update 2008/9' (the 'Report') at <http://www.pepsico.co.uk/purpose/environment/reports-and-updates/20089-environment-update> and are indicated by the * symbol.

What we did: assurance process and standards

Engagement assurance standards

We conducted our work in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000) issued by the International Auditing and Assurance Standards Board (IAASB) for carrying out assurance engagements on non-financial information.

This is a limited assurance⁺ engagement, which is designed to give a similar level of assurance to that obtained in a review of interim financial information.

Assurance procedures

The ISAE 3000 standard requires that we review the systems, processes and controls that deliver the selected performance data.

Our work consisted primarily of making inquiries of company personnel and carrying out analytical procedures and sample tests as follows:

- understanding, analysing and testing on a sample basis the collation, validation and reporting of the selected performance data by PIUK in accordance with their definitions and basis for calculation which can be found at <http://www.pepsico.co.uk/purpose/environment/reports-and-updates/20089-environment-update>; and
- reading and analysing the content of the Report against the findings of our work, industry sustainability practices and other relevant information and, as necessary, making recommendations for improvement.

The limited assurance⁺ procedures engagement excludes procedures such as testing of source data and operating effectiveness of controls and is substantially less in scope than a reasonable assurance⁺ engagement. Accordingly we do not provide reasonable assurance on those matters specified in this statement.

What we found: our conclusions

Based on the work we performed, we are not aware of anything that causes us to believe that the environmental sustainability performance data indicated by the * symbol is materially misstated.

Responsibilities of Directors and independent assurance provider

PIUK's responsibilities

- The directors are responsible for the preparation of the Environmental Sustainability data update and for the information and statements contained within it. They are responsible for determining PIUK's objectives in respect of Environmental Sustainability performance and for establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived.

Deloitte's responsibilities and independence

- Our responsibility is to independently express a conclusion on the selected performance data indicated by the *symbol as defined within the scope of work above.
- We complied with Deloitte's independence policies, which address and, in certain areas, exceed the requirements of the International Federation of Accountants Code of Ethics for Professional Accountants. We have confirmed to PIUK that we have maintained our independence and objectivity throughout the year, and in particular that there were no events or prohibited services provided which could impair our independence and objectivity in the provision of this engagement.
- This statement is made solely to PepsiCo International Limited in accordance with our letter of engagement for the purpose of the directors' governance and stewardship. Our work has been undertaken so that we might state to PIUK those matters we are required to state to them in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than PepsiCo International Limited for our work, for this statement, or for the conclusions we have formed.

Deloitte LLP
London
14 December 2009

Footnote [†]: The levels of assurance engagement are defined in ISAE 3000. A reasonable level of assurance is similar to the audit of financial statements; a limited level of assurance is similar to the review of a six-monthly interim financial report.