

Environmental Performance Data Independent Verification Report



BUREAU
VERITAS

To: Toshiba Corporation

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Bureau Veritas Japan Co., Ltd.
System Certification Services Headquarter



Objective of Verification

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has evaluated environmental performance data for inclusion in the environmental accounting and environmental efficiency data for the Toshiba Group's Environmental Report 2011, (the Report), covering the Fiscal Year 2010. The Report is issued under the responsibility of the Toshiba Corporation (Toshiba). Bureau Veritas' responsibility is to provide independent verification on environmental performance data based on objective evidence.

Scope of Work

Bureau Veritas has visited the following sites to evaluate environmental performance data for the Report.

Toshiba Principal Office:	Headquarters
Toshiba Hamakawasaki Operations:	Manufacturing of transformer, switchgear, and arrestor
Toshiba Yokohama Complex:	Manufacturing of metallic material parts
Toshiba Consumer Electronics Holdings Corporation:	Headquarters of consumer electronics business
Toshiba Fuchu Complex:	Manufacturing of social infrastructure equipment
Toshiba Home Appliances Corporation Fuji Complex:	Design development of small air conditioner
Toshiba Information Equipment (Hangzhou) Co., Ltd.:	Manufacturing of notebook computer
Toshiba Semiconductor (Thailand) Co., Ltd.:	Manufacturing of transistor, IC, and photo coupler

Verification Methodology

Bureau Veritas has conducted the following evaluation based on agreement with Toshiba, at;

Headquarters

- The reliability and adequacy of data collection and aggregation systems and related processes
- The effectiveness of internal verification processes
- The accuracy of the data collected

Sites

- The appropriateness of boundaries for data collection
- The reliability of data measurement, collection and aggregation methods
- The effectiveness of internal verification process
- The accuracy of final aggregated data of visited sites

This verification was conducted using Bureau Veritas' standard procedures and guidelines for external verification of non-financial reporting, based on current best practice. Bureau Veritas refers to the International Standard on Assurance Engagements (ISAE) 3000 (2003) in providing a limited assurance for the scope of work stated herein.

Verification Findings

Key findings:

1. No significant errors were detected in the environmental performance data within the Report.
2. Other non-significant errors in the reported data were detected during the verification process and have been duly corrected.
3. Toshiba's systems for the monitoring, collection and aggregation of environmental performance data are considered to be reliable and appropriately implemented at each of the visited sites.
4. Therefore, nothing comes to our attention to suggest that there are any data or statements that are mis-stated and are not free from significant error or bias.

This independent verification statement applies only to environmental data within the Report and should not be relied upon to detect all errors, omissions or misstatements that may exist within the Report.

Bureau Veritas has implemented a code of ethics across its business which is intended to ensure that all our staff maintain high standards in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest. Bureau Veritas activities for Toshiba Corporation are for Environmental Report verification only and we believe our verification assignment did not raise any conflicts of interest.

Methods for Calculating Environmental Performance Indicators

Reporting period	April 1, 2010 – March 31, 2011
Scope of data collection	Toshiba Corporation and consolidated subsidiaries
	Domestic companies : 200
	Overseas companies : 298

Environmental performance indicator		Calculation method
Mitigation of Climate Change	CO ₂ emissions from fuel	Used CO ₂ emissions factors provided in the Guideline for Calculation of Greenhouse Gas Emissions(version 2.4) published by the Japanese Ministry of the Environment. http://www.env.go.jp/earth/ghg-santeikohyo/manual/index.html
	CO ₂ emissions factor for purchased electricity	< Japan > CO ₂ emissions per basic unit for power sources at the receiving end(kg-CO ₂ /kWh), listed in the Environmental Action Plan of the Electric Industry issued by the Federation of Electric Power Companies of Japan. FY1990:0.417, FY2000:0.376, FY2006:0.410, FY2007:0.453, FY2008:0.372, FY2009:0.351, FY2010:0.350
		< Global > CO ₂ emissions factor proposed by the GHG Protocol(*) (*)Internationally accepted accounting and reporting standards for companies and other entities to report their greenhouse gas emissions, operated under the umbrella of the World Business Council for Sustainable Development (WBCSD) and the World Resource Institute (WRI)
	CO ₂ emissions per unit production	< Japan > CO ₂ emissions / (nominal production / corporate goods price index(*)) (*)Corporate price index adjusted based on the average corporate goods price index (electrical and electronic equipment) published by the Bank of Japan for the period from April 2010 to March 2011(The base year is 1990)
		< Global > CO ₂ emissions / nominal production
	Emissions amount of greenhouse gases other than CO ₂	Global warming potentials are based on the Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)
	CO ₂ emissions associated with product logistics	Fuel method, Fuel cost method and Revised ton-kilometer method, as defined in the law concerning the Rational Use of Energy
CO ₂ emissions per unit production associated with product logistics	CO ₂ emissions / (nominal production / corporate goods price index(*)) (*)Corporate price index adjusted based on the average corporate goods price index (electrical and electronic equipment) published by the Bank of Japan for the period from April 2010 to March 2011(The base year is 1990)	
Efficient use of Resources	Total amount of waste generated	Total amount of industrial waste, general waste, valuable items and reduction by in-house intermediate process
	Amount of final waste disposal	Total amount of landfilled waste from sites directly and landfilled waste from intermediate process
	Amount of resources recycled	Total amount of reused, recycled, or heat recovered materials discharged from sites
	Amount of water received	Total amount of water withdrawal for business process (Municipal water, industrial water, groundwater and rainwater)
Management of Chemicals	Affected chemical substances	Specified Type 1 and Type 1 chemical substances specified in the Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management (PRTR Law)), VOC, Other chemical substances
	Emissions form chemical substances	Emission amount includes emissions to the atmosphere and hydrosphere
	Quantity of chemical substances used	Total amount of substances used in quantities 1 kg or more monthly at each site
Management of substances that have impacts on the atmosphere and hydrosphere	SO _x emissions	Total weight of nitrogen oxide emitted from smoke-generating facilities regulated by the Air Pollution Control Law, which is calculated for NO ₂
	NO _x emissions	Total weight of sulfur oxide emitted from smoke-generating facilities regulated by the Air Pollution Control Law, which is calculated for SO ₂
	Total nitrogen pollution load	Nitrogen concentration × drainage into public body of water
	COD pollution load	COD concentration × drainage into public body of water

Product Recycling	Recycling rate	Recycling rate is defined in the Law for Recycling of Specified Kinds of Home Appliance (Weight of materials and components that can be either sold or provided free of charge / Weight of products collected for recycling)
	Amount collected in Japan	Amount of equipment collected in accordance with the Law for Recycling of Specified Kinds of Home Appliance, Act on the promotion of Effective Utilization of Resources and through voluntary measures
	Amount collected in Europe	The sum of weight of collected products per collection system in Europe × Toshiba share (in collection system) of product weight put on the market × 0.65(recycling rate of the product of the categories 3 and 4 specified by WEEE Directive)
	Amount collected in USA	Weight collected according to state Law and voluntary measures
	Amount collected in Asia•Oceania	Collected through voluntary measures
Product eco-efficiency	Product factor	Weighted average of product factor. Sales of product and service used.
	Value of a product	Weighted sum of product performances (normalized score). QFD matrix used which consists of customer requirements and product performance metrics
	Environmental impact of a product	LCA results derived from LCA support tool combined with LCIA index (LIME)