

Information Technology sector report

Covering Global 500, S&P 500 and FTSE 350 respondents

Introduction

In the 10 years since the launch of the Carbon Disclosure Project (CDP), the quality and quantity of reporting on climate change have increased dramatically. This year, CDP—backed by 534 institutional investors representing more than US\$64 trillion of funds under management—sent questionnaires to more than 4,700 of the world’s largest corporations, requesting information on greenhouse gas (GHG) emissions, the significant risks and opportunities related to climate change, and the actions companies are taking to manage these risks and opportunities. The results are published in more than 20 geographies around the world and are freely available at www.cdproject.net. Individual company responses to CDP can also be viewed on the same Web site.

This sector report, prepared by PricewaterhouseCoopers LLP (PwC),¹ summarizes responses to the 2010 Carbon Disclosure Project Information Request from Information Technology² companies in the FTSE Global Equity Index Series (Global 500), Standard & Poor’s 500 Index (S&P 500), and the FTSE 350 Index (FTSE 350).

The overall number of responses for the Information Technology sector in 2010 increased from 78 to 84—a steady 69%—compared with last year’s response rate of 70%.³ Respondents spanned a number of industry groups within the sector, with 39% (33) in Software & Services, 39% (33) in Technology Hardware & Equipment, and 21% (18) of respondents in Semiconductor & Semiconductor Equipment.

Figure A: Respondents by industry group

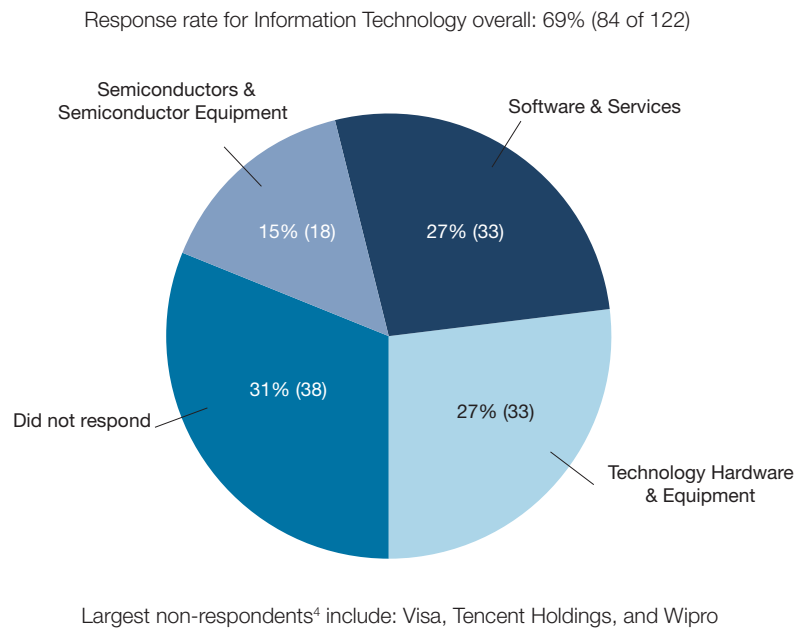
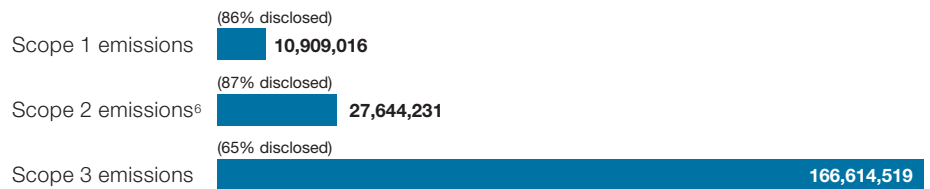


Figure B: Information Technology emissions disclosure⁵ (t CO₂-e)



- 1 Please see the Important Notice on the back cover of this report regarding its content and use.
- 2 Responses to CDP 2010 are grouped according to the Global Industry Classification Standard (GICS).
- 3 The response rate represents all responding companies for this sector. Statistics in the remainder of this report are based on the number of analyzed responses only and do not represent companies that responded after the deadline for analysis.
- 4 Based on market capitalization available from Thomson Reuters as of May 15, 2010.
- 5 Percentage of respondents that reported emissions and total disclosed emissions for the sector. Scopes 1, 2 and 3 emissions are terms used under the GHG Protocol. For a full description see: "GHG Protocol: A Corporate Accounting and Reporting Standard," available at www.ghgprotocol.org/files/ghg-protocol-revised.pdf.
- 6 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

“IBM offers data center services which assist clients in delivering more workload from their data centers for each unit of power consumed... These projects can reduce data center energy use and space requirements by 10 to 80% depending on the applications.”

IBM

All Carbon Disclosure Project reports are available at www.cdproject.net

Figure C: Information Technology carbon disclosure leaders

Company name	Carbon disclosure score	Carbon performance score
Samsung Electronics	95	A
Cisco Systems*	92	A
Nokia Group	91	A
Accenture	91	B
Logica*	87	B

*Company has been in at least one of the Global 500, the S&P 500, or the FTSE 350 CDLI's for the past three consecutive years.

The Information Technology sector discloses the lowest levels of risk from climate change, as most report they are not currently subject to significant carbon regulations. In comparison to other sectors, the amount of Scopes 1 and 2 emissions produced is low; the largest emitters are those with technology manufacturing facilities and data centers. However, the entire carbon footprint, including product use and disposal, of the Information and Communications Technology (ICT) industries⁷ is reported to generate nearly 2% of global carbon emissions.⁸

Information Technology companies report taking a number of steps not only to reduce energy consumption by their own operations but also to improve their understanding of the downstream impacts from the usage and waste disposal of their products. As a sector focused on providing innovative solutions for their customers, Information Technology finds its largest opportunities coming from their provision of products and services that can help all of the other sectors manage and mitigate their own GHG emissions. According to research, the ICT sector has the potential to reduce emissions five times greater than its own direct impact by 2020.⁹ Software companies report delivery of solutions to assist others with managing and measuring their carbon emissions, as well as process efficiency enhancements (e.g., optimization of industrial processes). Technology Hardware & Equipment companies report focusing on producing increasingly energy-efficient products.

Disclosure trends in the Information Technology sector

Fifty-seven percent of the Information Technology respondents identify significant risk from climate change, which is the lowest of all sectors. Among the most frequently reported risks (at 43%, or 33 respondents) are risks from extreme weather damaging manufacturing plants and other facilities. Companies disclose business continuity planning and diversification of operational locations to mitigate the impacts of a weather event from significantly disrupting their operations.

Forty-two percent (32) of respondents also identify significant risks from regulation. Respondents comment on the risk from increases in energy prices and the associated cost of doing business. Several companies, particularly in the Technology Hardware & Equipment industry group, note risks from potential product efficiency and labeling standards as demands increase for companies to produce more carbon information at the product level.

“Energy and water are key elements in the semiconductor manufacturing process. Energy shortages... and drought will cause manufacturing interruption. Meanwhile, costs will increase as these resources become deficient.”

Taiwan Semiconductor Manufacturing

7 The ICT sector includes those companies both in the Information Technology and Telecommunications sectors. For the purposes of these reports, the Telecommunications sector is analyzed separately.

8 Gartner, “Green IT: The New Industry Shockwave,” presentation at Symposium/ITXPO conference, April 2007.

9 Giulio Boccaletti, Markus Löffler, and Jeremy M. Oppenheim, “How IT can cut carbon emissions,” *McKinsey Quarterly*, October 2008; accessed August 23, 2010, http://www.mckinseyquarterly.com/Information_Technology/Management/How_IT_can_cut_carbon_emissions_2221.

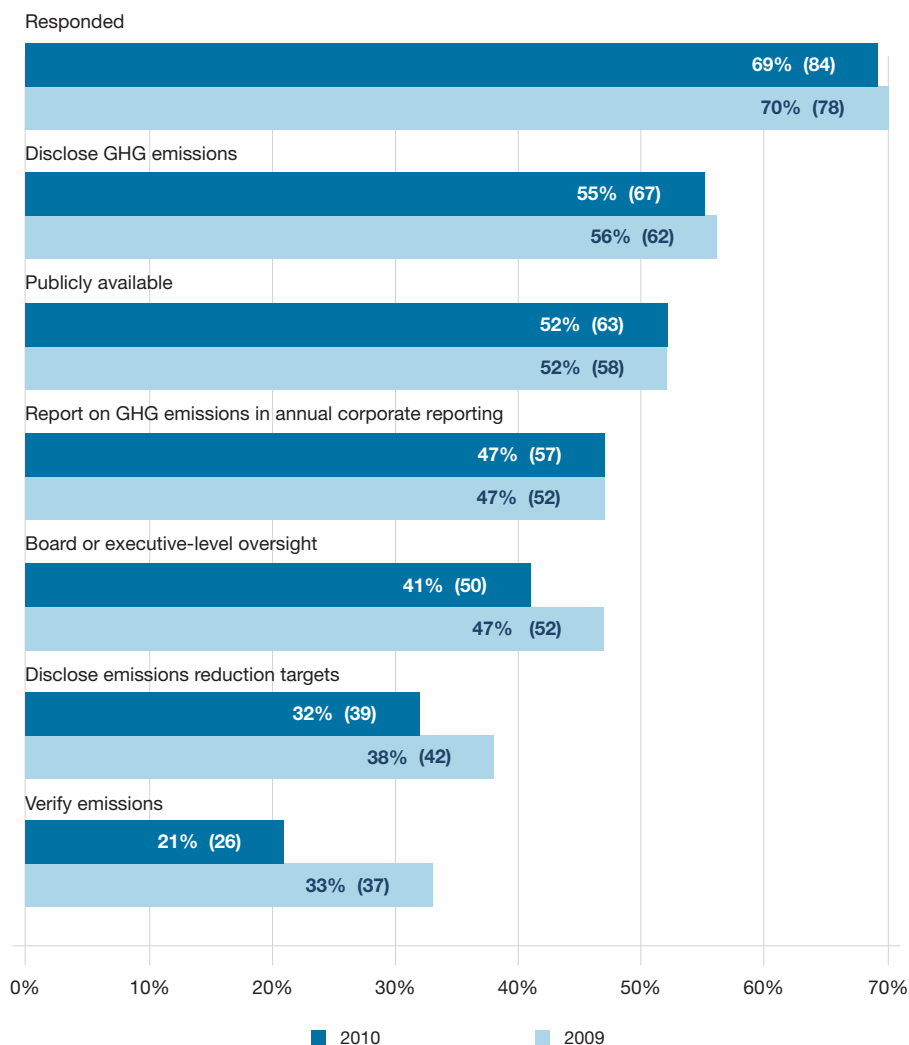
Emission disclosures continue to improve in 2010, increasing 8% from 62 to 67 respondents. The proportion of companies disclosing Scope 1 emissions rose from 80% (59) in 2009 to 86% (66) in 2010. Scope 2 disclosures also rose, from 84% (62) in 2009 to 87% (67) in 2010.

The number of companies disclosing Scope 3 emissions remains flat, at 49 respondents in both 2009 and 2010. Many respondents report on the increasing importance of understanding their Scope 3 emissions to better assess their value chain as well as to understand the carbon life-cycle of their products. Several companies indicate they are members of the Electronic Industry Citizenship Coalition (EICC),¹⁰ through which they collaborate with their peers for understanding their supply chain; others have also volunteered to be road testers of the WRI/WBCSD Scope 3 Accounting & Reporting Standard,¹¹ which is scheduled to be released in early 2011.

“There are numerous efforts underway (e.g., GeSI, iNemi, ITU, WEF, WRI/WBCSD) looking at product life cycle emissions (and Scope 3 emissions in general). These efforts have substantial political momentum and are difficult for the ICT sector to address in their current form. The immediate concern, likely to continue to increase, is requests from customers for product ‘carbon footprint.’”

Cisco Systems

Figure D: Year-over-year disclosure levels for the Information Technology sector¹²



10 The Electronic Industry Citizenship Coalition is a global coalition of information and communications technology companies that are working together to improve efficiency in the supply chain. See www.eicc.info.

11 The World Resources Institute and the World Business Council for Sustainable Development plan to release two new GHG Protocol standards—the Product Life Cycle Accounting and Reporting Standard and the Scope 3 (Corporate Value Chain) Accounting and Reporting Standard—to provide standardized methods to account for emissions associated with individual products across their life cycles and with corporations across their value chains.

12 The counts and percentages reported in this chart are based on total population for the Information Technology sector, or 122 invited companies. All other trends cited in the analysis are based on total respondents who were scored and analyzed.

“Over the last decade, we have reduced the average no-load energy consumption of our chargers (the amount of energy the charger continues to consume after the phone has already charged) by over 80 percent, and our best-in-class chargers by over 95 percent.”

Nokia Group

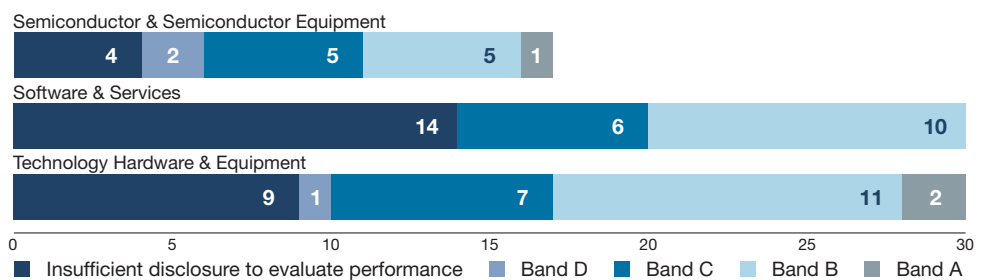
“Apple feels that measuring the company’s entire carbon footprint, including Scope 3 emissions, is essential to understanding the company’s impact. Apple is the only major company in our industry to measure and report our entire corporate greenhouse gas emissions, including emissions from our product life cycle. It is because we have measured our complete footprint that we know the majority of the company’s emissions come from our products.”

Apple Inc.

Figure E: Table of Carbon Performance Score Band A companies in the Information Technology sector

Company name	Carbon disclosure score	Index
Cisco Systems	92	Global 500, S&P 500
Nokia Group	91	Global 500
Samsung Electronics	95	Global 500

Figure F: Range of carbon performance scores by key industry groups



2010 Carbon Performance Score

In the 10 years that CDP has monitored disclosure practices, corporate activity has advanced to a stage where analysis of performance can aid investors who want to identify leading companies in carbon management. In 2009, CDP piloted a performance component in an effort to respond to investor requests for such analysis.

This year all companies with carbon disclosure scores greater than 50 receive banded carbon performance scores. Respondents have been grouped into one of four tiered categories (Band A to Band D) based on the level of activity disclosed in their responses.¹³ Carbon disclosure scores lower than 50 do not necessarily indicate poor performance; rather, they indicate insufficient information to evaluate performance. A listing of companies and their carbon performance scores is included at the end of this report.

The Information Technology sector is lagging in performance when compared with other sectors.

Specifically, 35% (27) of respondents did not achieve the minimum carbon disclosure score required to obtain a carbon performance score. Further, this sector is second to last across all sectors, with only three respondents (4%) earning an A in Performance.

There is a broad range of carbon performance scores reflecting diverse views on and approaches to climate change action within the various industries of the Information Technology sector. The Technology Hardware & Equipment industry group has the highest number of top performers, with 43% of the industry group (18) achieving Band A or B. The companies in this industry group demonstrate they are taking steps to reduce their own direct impact as well as beginning to manage the downstream impacts from usage of their products. This industry group has the highest share of its respondents report emissions verification (50%, or 15), achievement of emissions

¹³ For further information on the carbon performance score methodology, including descriptions of the performance bands, see www.cdproject.net.

Figure G: Carbon performance scorecard

Performance scorecard	All sectors	Information Technology
Strategy		
Integration of climate change risks or opportunities into overall business strategy	44%	35%
Implementation of emissions reduction targets	57%	51%
Governance		
Board or executive-level oversight	82%	65%
Monetary incentives	40%	31%
Stakeholder communications		
Verification of emissions	46%	36%
Disclosure of climate change information in mainstream filings or other external communications	50%	35%
Achievements		
Progress toward meeting targets	46%	55%
Significant emissions reduction in the past year	19%	17%

reductions (60%, or 18), and disclosure of climate change information in external communications (53%, or 16). In contrast, Software & Services companies have the lowest level of performance in comparison to the other industry groups. While Software & Services respondents report they are taking actions to help other companies manage and measure their carbon footprints, they are themselves not taking as many actions to measure and manage their own carbon footprints. Less than half disclose they had emissions reduction targets in place (43%, or 13) or indicate any achievement of emissions reduction targets (47%, or 14).

While opportunities are reported to be high, only 35% of Information Technology respondents indicate that climate change has been integrated into their overall business strategy.

Companies such as **Cisco Systems, Hewlett-Packard,** and **Akamai Technologies** report that climate change considerations constitute a key component of their operational activities and products and services. Their responses demonstrate that an integrated strategy drives value and enables companies to realize competitive advantage.

"We believe we need to take a leadership role in developing strategies to improve the energy efficiency and reduce the GHG emissions of our network operations. Our customer base includes industry leaders that increasingly tell us environmental sustainability and GHG emission reductions are of growing importance. These companies are taking an aggressive stance on energy efficiency and GHG reductions... They are looking to their suppliers, such as Akamai, to be a partner in these initiatives."

Akamai Technologies

"HP is working in three ways to impact the global energy equation - by creating and using IT to measure and manage energy consumption across industries, by increasing the energy efficiency of our products, operations and supply chain with goals and measurable progress, and by creating technologies to transform processes from energy and material intensive to more-sustainable practices."

Hewlett-Packard

"Tackling the risks and opportunities of climate change is core to Autodesk's business strategy. Our vision is to help millions of architects, designers, and engineers worldwide radically transform the built world by making sustainable design easy and accessible."

Autodesk

While Information Technology companies appear to be slower than companies in other sectors to integrate climate change initiatives into their overall business strategies, many describe implementing various programs to manage their carbon footprints. Fifty-one percent (39) of Information Technology respondents disclose emission reduction targets.

"Dell's primary role in addressing climate change is to help our customers improve their energy efficiency and reduce the impact of their operations by providing IT tools that enable efficiency while making those IT tools they use more efficient... We've steadily reduced the average energy consumption of our product portfolio while simultaneously enhancing its performance."

Dell

"...Our SAP Sustainability Champions dedicate 10% of their work time to promoting sustainability and climate protection throughout our organization. By acting as a role model, they give sustainability and climate protection local relevance and applicability... By combining a strong governance model that is backed by senior and local leadership and employee engagement, we can make our daily operations more sustainable."

SAP

Innovation and carbon opportunities

Information Technology respondents continue to have a positive outlook on climate change, with more respondents disclosing significant opportunities rather than risks. Seventy-nine percent (61) of the Information Technology sector report at least one type of significant opportunity, a decline from the 89% (66) that reported opportunities last year. The 10-point drop may be attributable to questionnaire revisions requesting disclosure of only those risks and opportunities deemed to be significant for 2010.

The Information Technology sector is focused on helping others manage their climate-related risks.

With regulatory risks directly affecting many of their customers, several

respondents report opportunities to help their customers improve the carbon efficiency of their own goods and operations. **CA Technologies** and **Logica** provide solutions to help companies manage and measure their carbon and energy usages so as to meet emerging and current regulatory standards. **Applied Materials** also reports that Applied Global Services group helps customers with *“improving the environmental and energy footprints of their factories. Some customers have already begun to inquire about solutions for their PFC [perfluorocarbon compound] emissions.”* Other companies are helping their customers manage the physical threats of climate change by providing advanced weather-monitoring capabilities and improved backup technology services.

Information Technology respondents focus on improving the energy efficiency of their products and services to provide more value for their customers.

Many respondents in the Technology Hardware & Equipment and Semiconductor & Semiconductor Equipment industry groups indicate that while product efficiency and product labeling present risks, they also present opportunities, particularly for companies that have already made efforts to understand their GHG inventories. Several respondents report that focusing on lower power consumption differentiates their products. Companies like **Cisco Systems** indicate that these efforts are key elements of their brand, making them industry leaders.

Examples of climate innovation

“...Our solutions and services can help our clients manage and reduce their energy consumption, thus enabling our company to grow market share in this space. Specifically, solutions and services that assist our clients and downstream value chain range from an assessment tool which monitors energy consumption, to device consolidation and converged communications which can help reduce our clients’ emissions, supporting our clients’ compliance with energy reduction regulations and legislation.”

Dimension Data Holdings

“Microchip’s continuing and significant research and development investments into microcontrollers that use extreme low power will allow all of us to continue to use the things that make life easier while also lowering their impact on the environment. That means less energy consumption and greenhouse gas emissions.”

Microchip Technology

“We believe that the Group’s most advanced technologies such as nuclear power generation, CO₂ separation and collection technology, photovoltaic power generation, new rechargeable batteries, and new lighting using light-emitting diodes (LED) will contribute greatly to the realization of a sustainable society by offering new value.”

Toshiba

Setting targets and taking action on climate change

Compared with 2009, there is a decrease in the disclosure of emissions reduction targets in 2010. The percentage of companies disclosing emissions reduction targets dropped from 57% (42) in 2009 to 51% (39) in 2010. Those companies with higher energy usage were more likely to have targets in place. Sixty percent of the Technology Hardware & Equipment companies report having emissions reduction targets, as well as

over half (53%, or 9 respondents) of the Semiconductor & Semiconductor Equipment industry group. Less than half (43%, or 13 respondents) of the Software & Services industry group report having emissions reduction targets in place. Some respondents, such as **Teradata**, indicate they're still in the process of both understanding their current carbon profiles and developing associated reduction targets.

Other respondents indicate plans to expand their targets in the future as they continue to understand both the

upstream and downstream carbon impacts of their products. Industry associations are seen as a useful way to facilitate knowledge sharing with peers and develop standardized approaches to measure and manage emissions.

Information Technology respondents report focusing on energy efficiency activities, converting to cleaner energy sources and implementing changes to business practices to reduce Scopes 1, 2, and 3 emissions. The following table summarizes actions taken by companies in this sector to reduce their emissions.

Figure H: Examples of targets and actions

Company name	Target	Actions
Cisco Systems (Communications Equipment)	25% absolute reduction in Scopes 1, 2, and 3 emissions relative to base year of 2007, with target year of 2012. Target was met in FY2009, however they seek to sustain that level in the face of projected revenue growth.	Implemented the following actions to reduce emissions from physical travel and employee commuting: <ul style="list-style-type: none"> • Cisco remote collaboration technologies—including TelePresence, WebEx, and MeetingPlace—to replace physical travel. • Cisco Virtual Office, to promote telecommuting. This included providing an integrated services router and an Internet Protocol phone to effectively work remotely from a home office and avoid commuting to the office each workday. <p>This achieved 187,320 t CO₂-e in avoided GHG emissions per year.</p>
eBay (Internet Software & Services)	15% absolute reduction in Scopes 1 and 2 emissions relative to base year of 2008, with target year of 2012.	Unveiled a fuel cell installation at its San Jose North Campus. <p>This removed 15% of its electricity needs for its San Jose North Campus from the grid.</p>
IBM (IT Services)	12% absolute reduction in Scopes 1 and 2 emissions from operational fuel and electricity use relative to base year of 2005, with target year of 2012 (base year emissions adjusted yearly for divestitures and acquisitions). 7% absolute reduction in Scopes 1 and 2 emissions (operational GHG emissions, PFC emissions from semiconductor operations) relative to base year of 2005, with target year of 2012 (US Environmental Protection Agency Climate Leaders commitment). 25% absolute reduction in PFC emissions from semiconductor operations relative to base year of 1995, with target year of 2010. 6% absolute reduction in Scopes 1 and 2 GHG emissions for Canadian, US, and Mexican operations relative to average annual 1998–2001 emissions. Target year of 2010 (Chicago Climate Change commitment).	Implemented data center energy efficiency practices such as air flow balancing and temperature adjustments and the virtualization and consolidation of server and storage assets; equipment upgrades for heating, ventilation, air-conditioning, and lighting systems; building system recommissioning and implementation of real-time metering; and data collection and analytic programs. <p>This resulted in a 5.4% reduction / avoidance of energy use in 2009.</p>
Yahoo! (Internet Software & Services)	15% absolute reduction in Scopes 1 and 2 emissions relative to base year of 2008, with target year of 2012.	Implemented an adaptive cooling and cold row encapsulation project at its data center in Santa Clara, California. <p>This achieved an annual reduction of 1,760 t CO₂-e.</p>

Appendix: Information Technology scores and emissions by company

Please refer to the Key at the end of the Appendix for further explanation of the abbreviations used.

Company	Index	2010 response status ¹	2009 response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions ²	Scope 1	Scope 2 grid average ³	Scope 3 ⁴	Scope 3 source type
Communications Equipment											
Cisco Systems	G, S	AQ	AQ	92	A		644,334	53,579	590,755*	6,812,830^	Tr Eq DSP EC EA AS TSP USP
Ericsson	G	AQ	AQ	72	B		201,000	26,000	175,000	19,355,200	Tr EC EA TSP
Harris	S	NR	NR								
JDS Uniphase	S	AQ	AQ	37	-		40,834	9,664	31,170	4,865	Tr
Juniper Networks	S	AQ	AQ	77	B		66,120	3,327	62,793	32,456	Tr EC
Motorola	G, S	AQ	AQ	81	C		433,373	33,217	400,156	19,945,700	Tr AS TSP USP
Nokia Group	G	AQ	AQ	91	A		299,300	18,700	280,600*	9,355,280	Tr EC AS S1 TI TSP USP
Qualcomm	G, S	AQ	AQ	50	C		92,135	53,633	38,502		
Research In Motion	G	AQ	AQ	55	D		42,306	9,505	32,801	15,731	Tr
Spirent Communications	F3	NR	NR								
Tellabs	S	AQ	AQ	48	-		32,265	2,684	29,581	9,156	Tr
Computers & Peripherals											
Apple Inc.	G, S	AQ	AQ	80	B		165,940	24,476	141,464*	9,438,370^	Tr DSP EC S1 TI USP
Dell	G, S	AQ	AQ	75	B		393,272	31,387	361,885*	76,550^	Tr
EMC	G, S	AQ	AQ	82	B		386,263	39,211	347,052	70,800	Tr
Hewlett-Packard	G, S	AQ	AQ	66	B		2,102,780	289,324	1,813,460	6,264,720	Tr DSP S1 TSP
Imagination Technologies	F3	DP	X								
Lexmark International	S	AQ	AQ	67	C		163,337	18,066	145,271	6,527^	Tr Oth
NetApp	S	AQ	AQ	42	-						
QLogic	S	AQ	AQ	43	-	NP					
SanDisk	S	DP	DP								
Sun Microsystems (see Oracle)	S	AQ(SA)	AQ								
Teradata	S	AQ	AQ	44	-		17,499	512	16,987		
Toshiba	G	AQ	AQ	72	C		3,134,000	980,000	2,154,000	58,000	TSP
Western Digital	S	AQ	X	51	C		365,341	8,017	357,324	32,911	Tr EC
Electronic Equipment, Instruments & Components											
Agilent Technologies	S	AQ(L)	AQ								
Amphenol	S	NR	NR								
BYD Company	G	NR	X								
Canon	G	AQ	AQ	66	B	NP					
Corning	G, S	AQ	AQ	46	-		1,287,588	327,459	960,129		

Some of the figures in this report have been updated since the initial response analysis and may therefore differ from data in the main report contents.

Company	Index	2010 response status ¹	2009 response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions ²	Scope 1	Scope 2 grid average ³	Scope 3 ⁴	Scope 3 source type
Domino Printing Sciences	F3	NR	DP								
Electrocomponents	F3	AQ	AQ	69	B		20,188	2,037	18,151	2,014	Tr
FLIR Systems	S	NR	X								
Halma	F3	NR	NR								
Hon Hai Precision Industry ⁵ (see Foxconn International)	G	AQ(SA)	AQ			NP					
Jabil Circuit	S	AQ	AQ	71	C		439,114	22,850	416,264	0 [^]	Oth
Kyocera Corporation	G	AQ	AQ	68	B	NP					
Laird	F3	AQ	X	41	-	NP					
Molex	S	AQ	AQ	38	-		201,166	3,077	198,089		
Premier Farnell	F3	AQ	AQ	74	B		23,788	4,593	19,195	2,467	Tr
Renishaw	F3	AQ	NR	55	C	NP					
Rotork	F3	AQ	NR	49	-		4,937	1,359	3,578		
Spectris	F3	IN	IN								
Internet Software & Services											
Akamai Technologies	S	AQ	NR	82	C		57,609	109	57,500	52,150 [^]	Tr S1
eBay	G, S	AQ	AQ	65	C		135,178	9,168	126,010	16,030 [^]	Tr
Google	G, S	AQ	AQ	44	-						
Moneysupermarket.com Group	F3	AQ	AQ	32	-		941	2	939		
Monster Worldwide	S	AQ	NR	24	-	NP					
Telecity Group	F3	NR	NR								
Tencent Holdings	G	NR	DP								
Verisign	S	AQ	NR	13	-	NP					
Yahoo Japan	G	AQ	AQ	10	-	NP					
Yahoo!	G, S	AQ	AQ	43	-					47,100	Tr EC
IT Services											
Accenture	G	AQ	AQ	91	B		205,564	15,366	190,198 [*]	349,863	Tr
Affiliated Computer Services	S	NR	NR								
Automatic Data Processing	G, S	AQ	AQ	43	-		188,204	20,026	168,178		
Cognizant Technology Solutions	S	AQ	AQ	73	C		150,909	21,555	129,354	27,738	Tr
Computacenter	F3	AQ(L)	X								
CSC	S	NR	NR								
Dimension Data Holdings	F3	AQ	AQ	80	B		80,640	13,107	67,533	26,431	Tr EC EA
Fidelity National Information Services	S	DP	AQ								
Fiserv	S	AQ	AQ	14	-						
IBM	G, S	AQ	AQ	85	B		2,837,601	456,655	2,380,950 [*]	3,935,200	Tr EC Lr USP
Infosys Technologies	G	AQ(L)	AQ(L)			NP					
Logica	F3	AQ	AQ	87	B		94,575	35,030	59,545 [*]	46,722 [^]	Tr EC
MasterCard	G, S	AQ	AQ	44	-	NP					
Paychex	S	NR	NR								
SAIC	S	IN	X								
Tata Consultancy Services	G	AQ	AQ	75	B		268,018	26,123	241,895 [*]	68,858	Tr
Total System Services	S	AQ	AQ	22	-	NP					
Visa	G, S	DP	X								
Western Union	S	NR	DP								
Wipro	G	NR	AQ(L)								
Xchanging	F3	AQ	AQ	77	C		11,856	931	10,925	1,218 [^]	Tr

Carbon Disclosure Project

Company	Index	2010 response status ¹	2009 response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions ²	Scope 1	Scope 2 grid average ³	Scope 3 ⁴	Scope 3 source type
Office Electronics											
Xerox	S	AQ	AQ	60	B		357,082	163,500	193,582	15,541 [^]	Tr Oth
Semiconductors & Semiconductor Equipment											
Advanced Micro Devices	S	AQ	AQ	66	C		200,528	36,319	164,209	363,728 [^]	Tr EC S1 TSP
Altera	S	AQ	IN	26	-	NP					
Analog Devices	S	AQ	AQ	51	C		149,978	48,447	101,531		
Applied Materials	G, S	AQ	AQ	66	B		180,740	25,740	155,000	32,000	Tr
ARM Holdings	F3	AQ	AQ	51	C		9,349	323	9,026	6,000	Tr
Broadcom	S	AQ	AQ	63	D		39,252	2,700	36,552	14,221	Tr
CSR	F3	NR	AQ								
Intel	G, S	AQ	AQ	72	B		3,189,883	770,845	2,419,040 [*]	43,595,000	Tr S1 TI USP
KLA-Tencor	S	NR	DP								
Linear Technology	S	NR	NR								
LSI	S	AQ	AQ	79	B		84,663	6,422	78,241	360,722	Tr S1 TSP
MediaTek	G	DP	X								
MEMC Electronic Materials	S	NR	NR								
Microchip Technology	S	AQ	NR	70	C		206,880	84,885	121,995 [*]		
Micron Technology	S	AQ	AQ	28	-		1,566,469	654,197	912,272		
National Semiconductor	S	AQ	AQ	63	B		291,686	130,058	161,628	2,396	Tr
Novellus Systems	S	AQ	AQ	44	-		26,562	3,534	23,028		
NVIDIA	S	AQ(L)	AQ	56	D		29,254	1,761	27,493	2,889	Tr
Samsung Electronics	G	AQ	AQ	95	A		9,114,871	3,777,513	5,337,360	40,587,000	Tr TSP USP
Taiwan Semiconductor Manufacturing	G	AQ	AQ	85	B		3,578,530	1,528,133	2,050,400	994,737 [^]	Tr EC AS TSP
Teradyne	S	AQ	AQ	53	D		26,484	2,464	24,020	2,432	Tr
Texas Instruments	G, S	AQ	AQ	59	C		1,720,956	675,230	1,045,730		
Xilinx	S	AQ	AQ	41	-	NP					
Software											
Adobe Systems	G, S	AQ	AQ	71	B		30,335	2,793	27,542	34,635	Tr Le
Autodesk	S	AQ	AQ	75	B		8,110	2,228	5,882	35,442	Tr EC EA S1 Oth
Autonomy Corporation	F3	NR	NR								
Aveva Group	F3	IN	IN								
BMC Software	S	IN	NR								
CA Technologies	S	AQ	AQ	61	C		81,282	3,631	77,651	25,868	Tr
Citrix Systems	S	NR	NR								
Compuware	S	AQ	AQ	84	C		26,974	2,727	24,247	3,159	Tr
Electronic Arts	S	NR	NR								
Fidessa Group	F3	NR	X								
Intec Telecom	F3	DP	X								
Intuit	S	AQ	AQ	43	-		40,696	6,422	34,274	47,821	Tr EC TI
McAfee	S	NR	X								
Micro Focus International	F3	AQ	NR	37	-		1,248	226	1,022		
Microsoft	G, S	AQ	AQ	78	B		1,077,034	41,649	1,035,390 [*]	289,194	Tr S1
Misys	F3	AQ	NR	12	-	NP					
Nintendo	G	AQ(L)	AQ			NP					
Novell	S	NR	NR								
Oracle	G, S	AQ	AQ	31	-	NP					

Company	Index	2010 response status ¹	2009 response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions ²	Scope 1	Scope 2 grid average ³	Scope 3 ⁴	Scope 3 source type
Red Hat	S	IN	X								
Sage Group	F3	NR	AQ								
Salesforce.com	S	IN	NR								
SAP	G	AQ	AQ	83	B		232,000	131,000	101,000*	191,000^	Tr EC TSP Oth
SDL	F3	DP	X								
Symantec	S	AQ	AQ	73	B		119,603	6,915	112,688	41,776	Tr

1 Those companies marked AQ(L) in 2010 submitted responses after the analysis cut off date of July 1, 2010. These companies' responses are not included in the analysis of this report.

2 Scopes 1 and 2 grid average reported emissions.

3 Where there is a * in this column, the company did provide detail in relation to its contractual Scope 2 emissions. Please refer to the company's response.

4 Where there is a ^ in this column the company provided an "Other" Scope 3 source type which was adjusted to be included in one of the main Scope 3 source types.

5 Please refer to Foxconn International's response at www.cdproject.net

Index:

F3	FTSE 350
G	Global 500
S	S&P 500

Key:

AQ	Answered questionnaire
SA	Company is either a subsidiary or has merged during the reporting process. See company in brackets for further information on company's status
AQ(L)	Answered questionnaire late
IN	Provided information
DP	Declined to participate
NP	Answered questionnaire but response not made publicly available
NR	No response
-	Company did not meet carbon disclosure score threshold of 50 to receive carbon performance score
X	Company did not fall into one of the CDP samples in that year
*	Company provided a figure for scope 2 contract arrangements

Scope 3 source key:

S1	Purchased goods and services - direct/tier 1 supplier emissions
AS	Purchased goods and services - emissions of all upstream suppliers - tier 1 and beyond
EA	Energy-related activities not included in Scope 2
Eq	Capital equipment
TI	Transportation and distribution of inputs (goods and services) and waste generated in own operations
Tr	Business travel
Wa	Waste generated in operations
Fr	Franchises (Scope 1 emissions of the franchisor)
Lr	Leased assets (Scope 1 emissions of the lessor)
In	Investment (Scope 1 emissions of the company receiving investment)
Fe	Franchises (Scope 1 emissions of the franchisee)
Le	Leased assets (Scope 1 emissions of the lessee)
TSP	Transportation and distribution of sold products inc. warehousing and retail
USP	Use of sold goods and services
DSP	Disposal of sold products at the end of their life
EC	Employee commuting and teleworking
Oth	Other

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