

# Telecommunications sector report

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

This sector report summarizes responses to the 2011 Carbon Disclosure Project Information Request from Telecommunications 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). Individual company responses to CDP can be viewed on [www.cdproject.net](http://www.cdproject.net).

### Global 500, S&P 500 and FTSE 350 response rate:

Telecommunications overall: 70% (28 of 40)

### Key industry groups within the sector:

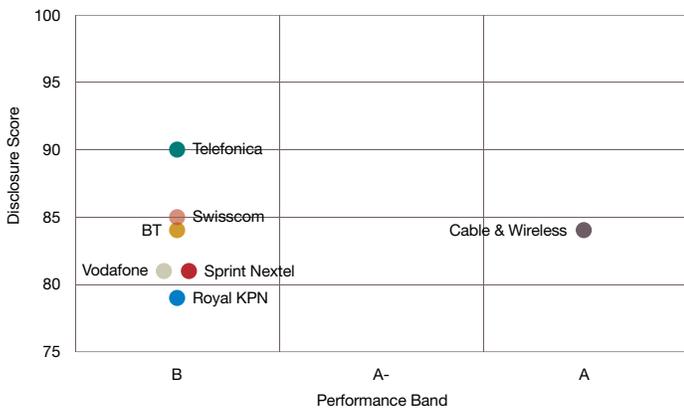
Diversified Telecommunication Services (21 of 29);

Wireless Telecommunication Services (7 of 11).

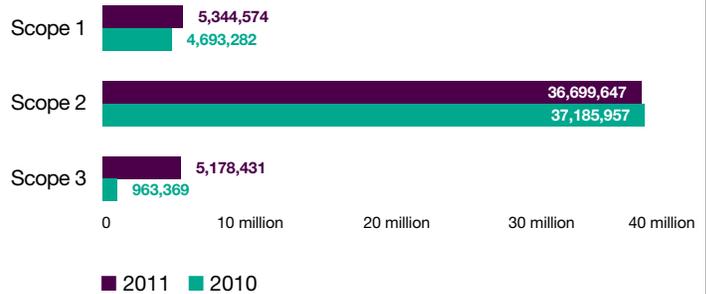
### Largest non-respondents include:

China Mobile, America Movil, China Unicom, SoftBank, Bharti Airtel, Mobile TeleSystems OJSC, Telekom Indonesia, Frontier Communications, China Telecom.

### Top disclosure scores Vs. top performance bands



### Emissions disclosure (t CO<sub>2</sub>-e)



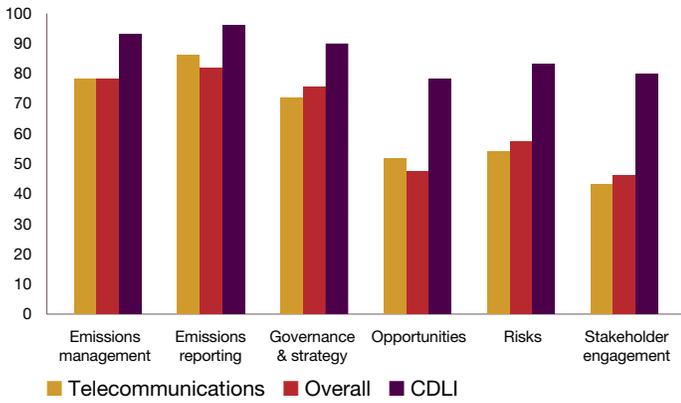
### Opportunities reported

- Increased use of telecommunications technology presents a number of opportunities to reduce emissions e.g. reduced travel, improved logistics, dematerialization
- Social disruptions resulting from extreme weather events may prevent populations from travelling and may result in greater use of telecommunication services. Such conditions would also generate opportunities to provide emergency response telecom solutions
- Cost savings for customers through development of new products such as multiservice platforms (MSPs) and video conferencing, particularly when substituting for business travel and paper communications. Equally, increasing travel costs will increase the demand for alternative ways of communication and thus the demand for such products

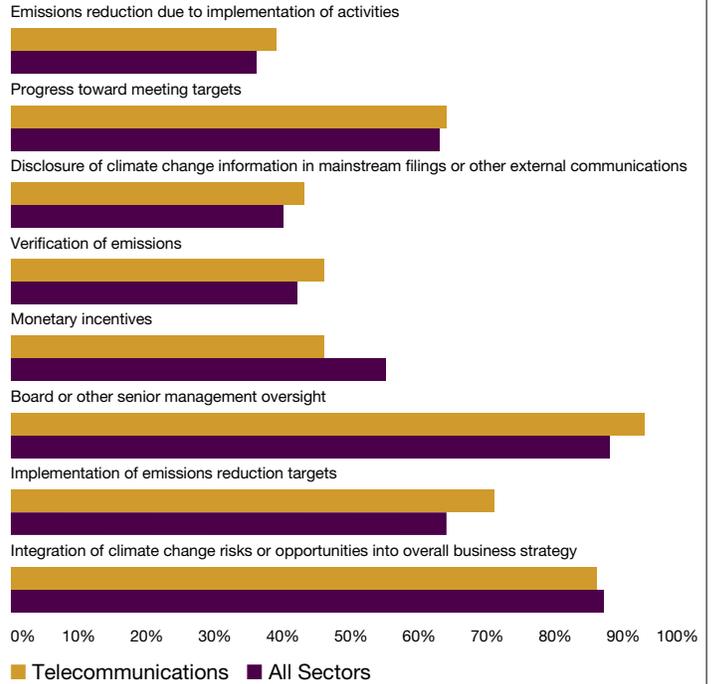
### Risks reported

- Threat of extreme temperatures and changes in precipitation patterns could result in damaged equipment
- Lack of clarity surrounding climate change regulations. Emissions from the Telecommunications sector are indirect and not covered by international agreements (i.e. EU ETS or Kyoto Protocol). However, improving energy consumption is being targeted via various legislative initiatives
- Risk of rising energy prices and fluctuations in price due to supply constraints and future regulation

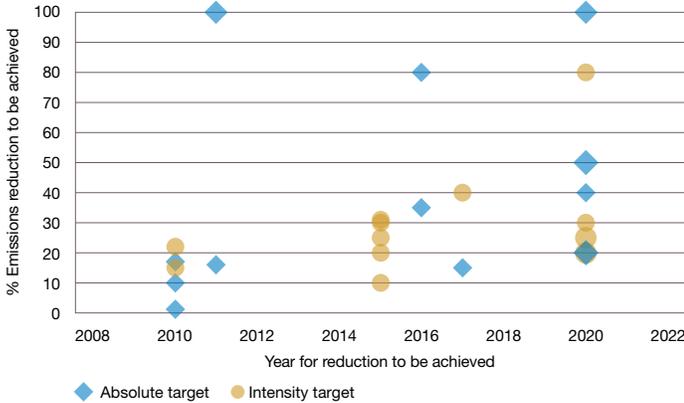
### Carbon disclosure breakdown for sector Vs. Global 500, S&P 500 and FTSE 350 overall and CDLI



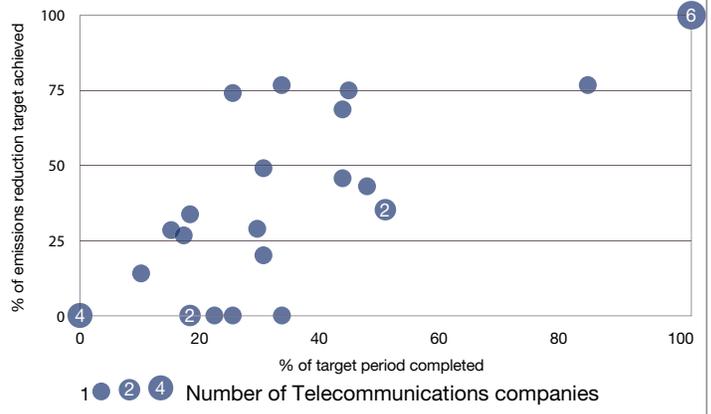
### Performance: percentage of respondents that implement best practices



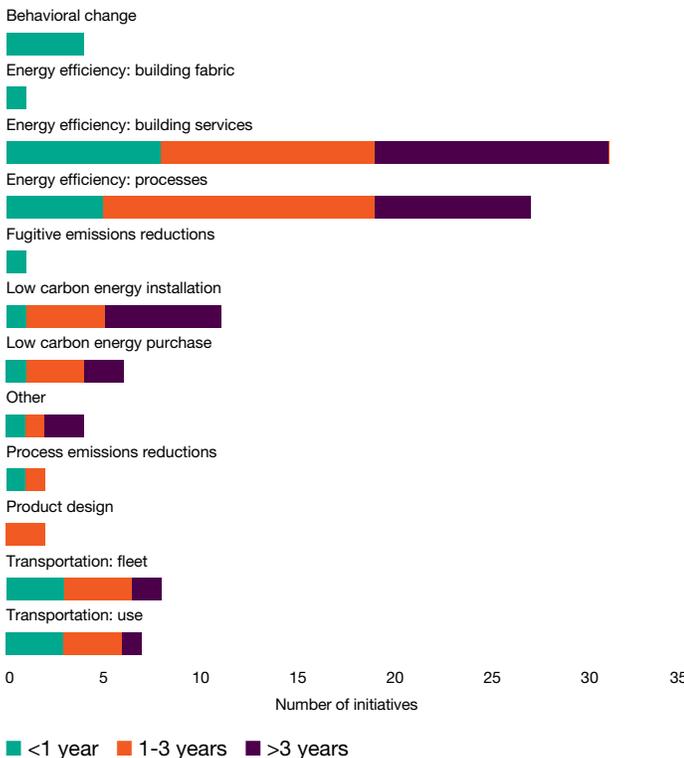
### Emissions reduction targets



### Emissions reduction target progress



### Payback period breakdown of reported active emissions reduction initiatives by activity type



“We think a significant portion of these reductions will be achieved through the use of our products and services. For instance, we are estimating that our teleconference services conducted by our customers in 2010 prevented the emission of approximately 1.8 megatonnes of CO<sub>2</sub>-e.”

**BCE**

“We see the ICT sector as enabling society to adopt technologies that have the potential to decrease overall GHG emissions.”

**Research in Motion**

Company	Low carbon solutions
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American Tower	“Service offering one generator set with the capacity to service all carriers at a site. In the past, each carrier at a wireless tower site would leased space for and located in our compound a backup power generator for purpose of servicing their equipment only. With the introduction of this service, it allows a reduction in the aggregate Scope 1 emissions.”
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AT&T	“Decreasing energy-intensive travel through telecommuting, teleconferencing and other services. Providing centralized data management, internet, communications and software service for customers. Dematerializing public and commercial activities through electronic billing. Online provision of governmental services and online delivery of goods and services, such as education, libraries, research, medicine, videos and music. [...] Improving energy efficiency in commercial and residential buildings through more sophisticated monitoring and dispatching systems for more accurate control and delivery of energy.”
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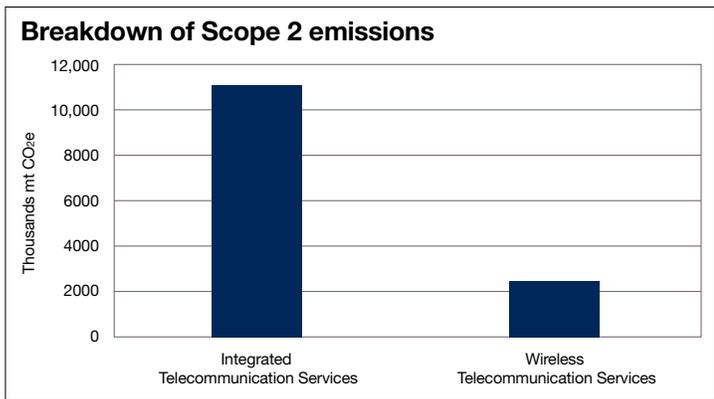
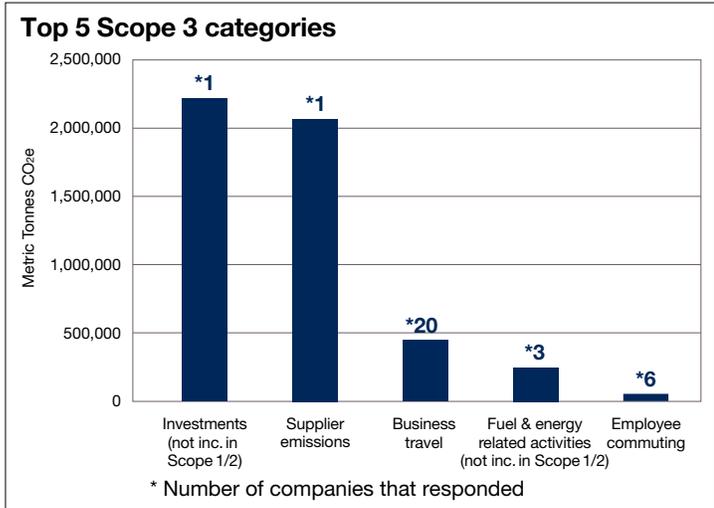
France Telecom	“Orange has developed innovative remote monitoring services based on M2M (Machine to Machine) connectivity, making it possible to carry out various types of operation remotely: remote meter reading (gas, water, etc.), remote stock management, supply chain automation, remote management and maintenance of manufacturing equipment, remote management of public infrastructure (lighting).”
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Sprint Nextel	“Our Network Vision project will replace our existing networks with a single new multi-modal highly efficient network. We will eliminate our existing cell sites and structures and replace them with far fewer, more powerful, yet significantly smaller and more adaptable sites.”
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Verizon Communications	“Consumers are seeking the ability to understand and manage the amount of energy they use in their homes. We are rolling out a new home energy control service that enables consumers to remotely monitor and control energy using devices from a computer, tablet or smartphone. The service was developed in response to heightened consumer interest in climate-change and their desire to take steps to minimize their environmental impact.”
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Vodafone	“1) Smart Metering Wireless M2M smart meters deployed across the energy distribution network monitor energy losses and the network’s load capacity. This helps utility companies to locate areas where energy is being lost, and minimise energy shortages and power outages. Smart meters also support the sale of excess energy from small-scale renewable energy generators (such as rooftop solar panels or wind turbines) to the grid. Utility companies can keep track of the amount of electricity fed into the grid from individual locations remotely via M2M mobile connections.
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	2) Smart Logistics Remote tracking systems: Wireless, GPRS-enabled vehicle tracking devices feed data about each vehicle’s position and the latest traffic information into a centralised fleet management system. This then generates routes that cover the shortest distance and alerts drivers about optimum driving speeds.”
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## Contrasting views

Issue	Outlook 1	Outlook 2
Physical risk	<p>“At this time, it is our position that physical risks may be more significant than regulatory risks, however, based on our current planning processes, site hardening activities, low use of water, and ability to support a distributed work force, these risks are not considered material by SEC reporting standards.”</p> <p><b>Sprint Nextel</b></p>	<p>“We consider our company to be exposed to physical risks in all 170 countries we operate in as a result of climate change. Extreme temperature conditions such as snow and ice and heat waves can lead to rising operational costs (e.g. equipment cooling) and risk to our reputation due to network disruption, damaged equipment, customer complaints, and employee injuries and absences.”</p> <p><b>BT Group</b></p>

“BT advocates for a strong and effective international climate framework to be put in place to enable the business community to accelerate positive action to reduce their carbon emissions in a predictable framework. There is significant progress still to be made before this framework may be established. BT is supporting a statement from EU businesses calling for a 30% GHG reduction target for 2020.”

### **BT Group**

“Vodafone encourages policy makers to deliver an appropriate price for carbon; for example by exploring appropriate opportunities to extend emissions trading schemes and progressively decrease free carbon allowances. This is the key factor in encouraging the uptake of opportunities to reduce emissions from information and communications technology (ICT); and would provide greater transparency and certainty to enable rational investment decisions.”

### **Vodafone**

“AT&T provides several products and services from fleet management to smart grid to cloud computing and virtualization that can enable others to reduce their travel and energy use. Increased use of these products and services would lead to increased revenue for AT&T. We set two goals in 2010 to guide our efforts in promoting these products and services. They were to 1) launch customer tools to quantify carbon emissions avoided from use of specific offerings that reduce travel and 2) establish external advisory board to promote ICT as a sustainability enabler; and develop measurements for the environmental impact of ICT products and services.”

### **AT&T**

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