Climate change

Tackling climate change is priority for BT and a core element of our CR strategy. We have identified climate change as a key CR risk as legislation is likely to result in increased energy costs and we need to keep looking at how we secure our future energy supplies. In addition, more frequent extreme weather could potentially damage our infrastructure.

Although the UN Climate Change Summit in Copenhagen in December 2009 failed to deliver international agreement on binding CO2 reduction targets, we remain committed to our aggressive carbon reduction targets.

Our vision is to help tackle climate change through the innovative use of communications products and services. BT’s ‘carbon-busting’ plan involves:

- Reducing our own footprint
- Influencing our customers and suppliers to encourage them to reduce their footprints
- Engaging with our employees to help reduce their personal footprints

We are committed to meeting these goals by becoming more efficient and using more renewable energy. Engaging our employees to reduce energy use is a key element of our strategy.

BT’s IT products and services (for example our conferencing and collaboration services) help our customers operate more sustainably and reduce CO2. We are actively collaborating with others to develop global standards to increase the energy efficiency of ICT equipment.

**Key performance indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Measure</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 equivalent emissions</td>
<td>A measure of BT’s climate change impact</td>
<td>43% intensity reduction</td>
<td>By December 2020, BT group will reduce its CO2e emission intensity by 80% against 1997 levels</td>
</tr>
<tr>
<td>Waste to landfill and recycling</td>
<td>A measure of BT’s use of resources</td>
<td>17% reduction in waste to landfill (UK only) from 2008</td>
<td>BT group will reduce the tonnage of waste sent to landfill by 8% from 2009</td>
</tr>
</tbody>
</table>

Note 3: New target in 2008

**Quantitative data**
Energy consumption

Energy consumed per £m turnover

Water use
Water consumed per £m Turnover

Emissions of NOx

Emissions of S02
### BT’s CO2e model 2010

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>1997 (Base)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stationary Combustion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil Combustion - Electricity</td>
<td>4.24</td>
<td>2.29</td>
<td>2.32</td>
<td>12.08</td>
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<tr>
<td>Generation</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Gas Combustion</td>
<td>77.68</td>
<td>80.04</td>
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</tr>
<tr>
<td>Oil Combustion - Heating</td>
<td>12.57</td>
<td>11.97</td>
<td>10.91</td>
<td>67.04</td>
</tr>
<tr>
<td>Refrigeration Gases (HFCs and SFS only)</td>
<td>2.73</td>
<td>5.57</td>
<td>5.49</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Commercial Fleet Diesel</strong></td>
<td>124.12</td>
<td>114.95</td>
<td>100.70</td>
<td>157.23</td>
</tr>
<tr>
<td><strong>Commercial Fleet Petrol</strong></td>
<td>0.68</td>
<td>0.95</td>
<td>0.01</td>
<td>18.48</td>
</tr>
<tr>
<td><strong>Company Car Diesel</strong></td>
<td>28.70</td>
<td>50.47</td>
<td>20.95</td>
<td>24.02</td>
</tr>
<tr>
<td><strong>Company Car Petrol</strong></td>
<td>5.64</td>
<td>4.11</td>
<td>2.62</td>
<td>16.30</td>
</tr>
<tr>
<td><strong>Total Scope 1 emissions</strong></td>
<td>256.35</td>
<td>249.45</td>
<td>211.74</td>
<td>413.08</td>
</tr>
<tr>
<td><strong>Purchased Electricity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grid average intensity (gross)</td>
<td>1406.55</td>
<td>1448.38</td>
<td>1419.06</td>
<td>1155.83</td>
</tr>
<tr>
<td><strong>Loss purchases of</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewable supply</td>
<td>516.39</td>
<td>591.23</td>
<td>571.72</td>
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<tr>
<td>CHP low carbon supply</td>
<td>337.46</td>
<td>318.25</td>
<td>306.74</td>
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<tr>
<td><strong>Scope 2 emissions (net)</strong></td>
<td>852.71</td>
<td>537.58</td>
<td>537.99</td>
<td>1155.83</td>
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<tr>
<td><strong>Combined scope 1 &amp; 2 emissions (net)</strong></td>
<td>809.06</td>
<td>787.25</td>
<td>749.33</td>
<td>1599.42</td>
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<tr>
<td><strong>Other indirect emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worker emissions (See notes)</td>
<td>5.83</td>
<td>5.55</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td>Cars on BT Business (Diesel)</td>
<td>12.01</td>
<td>11.24</td>
<td>8.95</td>
<td>0.86</td>
</tr>
<tr>
<td>Cars/Motorcycles on BT Business (petrol)</td>
<td>0.02</td>
<td>0.67</td>
<td>0.02</td>
<td>4.88</td>
</tr>
<tr>
<td>Refrigeration Gases (CFCs and HCFCs only)</td>
<td>4.52</td>
<td>6.95</td>
<td>5.68</td>
<td>13.07</td>
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<tr>
<td>Rail travel</td>
<td>7.09</td>
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<td>11.45</td>
</tr>
<tr>
<td>Air Travel (Domestic)</td>
<td>0.27</td>
<td>8.13</td>
<td>6.57</td>
<td>NA</td>
</tr>
<tr>
<td>Air Travel (short haul)</td>
<td>4.73</td>
<td>3.57</td>
<td>2.40</td>
<td>7.86</td>
</tr>
<tr>
<td>Air Travel (long haul)</td>
<td>20.61</td>
<td>19.27</td>
<td>10.39</td>
<td>8.10</td>
</tr>
<tr>
<td>New Cars (All Fuels)</td>
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<td>10.59</td>
<td>8.03</td>
<td>11.49</td>
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<tr>
<td><strong>Total Scope 3 emissions</strong></td>
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<td>73.00</td>
<td>51.28</td>
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<tr>
<td><strong>Total CO2e emissions (net)</strong></td>
<td>866.40</td>
<td>860.25</td>
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<tr>
<td><strong>Percentage change from base (net)</strong></td>
<td>-45%</td>
<td>-47%</td>
<td>-51%</td>
<td></td>
</tr>
</tbody>
</table>
Operations and climate change

We are committed to tackling the climate impacts of our operations by becoming more energy efficient and using more renewable energy.

We have set stretching targets to reduce our climate change impacts:

- By December 2020, we will reduce our CO₂e emissions intensity by 80%, from 1997 levels. This target relates emissions to financial performance. So far we have achieved reductions of 54%.
- By 2016, our target is to reduce our UK carbon emissions by 80%, from 1997 levels. This target ensures we continue to achieve absolute reductions in the UK, where the majority of our carbon emissions occur. So far we have achieved reductions of 59%.

To achieve our targets we look critically at every aspect of our energy use and focus on the areas where we can make the most difference. We are looking for ways to shrink consumption from our network and data centres, which consume the bulk of our total energy, and to make our office buildings and transport more energy efficient.

We are making progress with our project to build a wind farm that will generate a quarter of our UK electricity consumption by 2016.

Our research has shown that the carbon footprint of home workers is generally lower than that of office workers. Out our 97,798 people, over 9,600 employees are permanent home workers and a further 64,000 employees are equipped for home working.

Encouraging our employees to reduce energy use is one of the most effective ways to cut emissions whilst reducing operational costs and we are giving top priority to projects that bring
emissions reductions by changing behaviour.

Governance

Our work on climate change is overseen by our Board Committee on Responsible and Sustainable Business. The Chief Executive of BT Retail, Gavin Patterson, is our executive CR sponsor. Our Sustainability Leadership Team sets our climate change strategy and oversees our progress towards meeting our targets. The team includes senior representatives from our major lines of business and Group functions including BT Design, BT Operate, Group CR and Group Procurement. Mike Galvin, Managing Director of Research at BT, chairs the monthly Sustainability Leadership Team meetings.

Our approach to carbon reporting

This report based on our reporting year of 1 April 2009 to 31 March 2010 in line with the Group’s financial reporting period.

We have reported our carbon emissions since 1992 and this year have followed the Climate Disclosure Standards Board (CDSB) framework which builds on the World Resource Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol (GHGP). We also report our emissions for the Carbon Disclosure Project, EU Emissions Trading Scheme and will be reporting under the UK Government’s CRC Energy Efficiency Scheme (formerly known as the Carbon Reduction Commitment).

For full transparency, our carbon accounts this year show our gross footprint based on the ‘grid average’ carbon content of purchased electricity and our net footprint which takes account of the carbon savings associated with the purchase of low carbon electricity.

At the core of our approach are the following principles:

- To report consistently internationally
- To provide as true a picture of our emissions as possible
- To handle all emissions (or lack of them) in a similar way
- To use our reporting to drive behaviour that helps to deliver a low carbon economy.

You can download our 2010 CO₂e accounts here.

Greenhouse gases

All greenhouse gas (GHG) emissions figures are in thousands of tonnes of carbon dioxide equivalents (CO₂e) and include all six greenhouse gases covered by the Kyoto Protocol – carbon dioxide (CO₂), methane (CH₄), Nitrous oxide (N₂O), Perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulphur hexafluoride (SF₆) emissions, plus other greenhouse gases not covered under the Kyoto protocol.

Organisational boundary

Both the CDSB and GHGP allow a company to define the organisational boundaries for carbon reporting according to definitions of ‘equity share’, ‘financial control’ or ‘operational control’. The CDSB and UK Government guidance both recommend use of the ‘financial control’ approach.

Taking the financial control approach would omit most of our buildings which would not be a proper reflection of our business. Therefore, to give the most representative footprint for BT we take a hybrid approach. In essence we report on the emissions associated with energy that we buy or generate worldwide. Where the energy is provided by landlords as part of a full service contract we have not included these emissions. We take a consistent approach where we are the landlord. We have not reported for countries with less than 250 MWh per annum electricity use, nor where we do not have a controlling interest in any Joint Ventures or partnerships.

Operational boundary

Direct emissions under scope 1 which we include in our reporting are:
• Fuel used in back up generators
• Fuel used in the commercial (liveried) fleet
• Fuel used in company cars when driven on BT business
• Loss of refrigeration gases covered under the Kyoto protocol
• Fuel used to heat BT premises

Indirect emissions under **scope 2** which we include in our reporting are:

• All purchased electricity
• Electricity purchased at grid average carbon intensity
• Electricity purchased at low carbon intensity
• Renewable electricity purchased at zero carbon intensity

Note: This includes electricity used by suppliers on BT premises (for example catering) but excludes tenant electricity where separate metering is in place (for example where we bill Communication Providers for Local Loop Unbundling).

Other indirect emissions under **scope 3** which we include are:

• Employee business travel (rail, air and car hire)
• Non-Kyoto refrigerant gases (e.g. CFCs)
• A proxy for home workers carbon footprint

**Scope 3** emissions that we currently do not report on are:

• Extraction and production of purchased materials and fuels
• Transport-related activities
• Transportation of purchased materials or goods
• Transportation of purchased fuels
• Employees commuting to and from work
• Transportation of sold products
• Transportation of waste
• Electricity-related activities not included in scope 2
• Extraction, production, and transportation of fuels consumed in the generation of electricity (either purchased or own generated)
• Purchase of electricity that is sold to an end user (appropriate to utility companies)
• Generation of electricity that is consumed in a T&D system (reported by end-user)
• Leased assets
• Franchises
• Outsourced activities
• Waste disposal
• Disposal of waste generated in operations
• Disposal of waste generated in the production of purchased materials and fuels
• Disposal of sold products at the end of their life

**Geographic scope**

CO₂e emissions that fall within the organisational and operational boundaries have been reported for all worldwide operations.

**Conversion factors**

For our UK reporting we use conversion factors published by Department for Environment Food and Rural Affairs annually. As electricity fuel mix and associated carbon intensity differs from one country to another we use the Greenhouse Gas Protocol or International Energy Agency (IEA) conversion factors unless specific national or contract factors exist.

For our homeworker emissions in the UK we have derived the impact using the non-taxable allowance (tax-free payments that BT homeworkers claim from the company) permitted by UK tax authorities and applied that to average home gas/ electricity mix.

**Renewable/ low carbon electricity**

This year the UK Government published new voluntary company reporting guidelines. These differ from previous guidance. They now recommend that carbon emissions from electricity purchased with zero or low carbon emissions should only be reported at the ‘grid average’ intensity. This removes any incentive for large energy consumers such as BT to purchase renewable electricity. We feel this is retrograde step, especially given the hugely challenging targets the UK has for increasing the amount of renewable electricity over the next decade. The Government has agreed to review this by December 2010.
Depending on the outcome of that review we may need to revise our approach to energy purchasing, carbon reporting and our CO₂ targets.

Key performance indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Measure</th>
<th>Target</th>
</tr>
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</table>

Note 3: New target in 2008

Quantitative data

**BT’s CO₂e model 2010**

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>2008</th>
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<th>2010</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>Oil Combustion - Electricity Generation</td>
<td>4.24</td>
<td>2.25</td>
<td>2.32</td>
<td>12.08</td>
</tr>
<tr>
<td>Gas Combustion</td>
<td>77.98</td>
<td>80.04</td>
<td>68.73</td>
<td>107.95</td>
</tr>
<tr>
<td>Oil Combustion - Heating</td>
<td>12.57</td>
<td>11.97</td>
<td>10.81</td>
<td>67.04</td>
</tr>
<tr>
<td>Refrigeration Gases (HFCs and SF6 only)</td>
<td>2.73</td>
<td>5.57</td>
<td>5.49</td>
<td>0.50</td>
</tr>
<tr>
<td>Commercial Fleet Diesel</td>
<td>124.12</td>
<td>114.95</td>
<td>100.70</td>
<td>167.23</td>
</tr>
<tr>
<td>Commercial Fleet Petrol</td>
<td>0.86</td>
<td>0.65</td>
<td>0.01</td>
<td>18.48</td>
</tr>
<tr>
<td>Company Car Diesel</td>
<td>28.70</td>
<td>30.47</td>
<td>20.05</td>
<td>24.02</td>
</tr>
<tr>
<td>Company Car Petrol</td>
<td>5.64</td>
<td>4.11</td>
<td>2.63</td>
<td>16.30</td>
</tr>
<tr>
<td><strong>Total Scope 1 emissions</strong></td>
<td>256.35</td>
<td>249.45</td>
<td>211.74</td>
<td>413.60</td>
</tr>
<tr>
<td><strong>Purchased Electricity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grid average intensity (gross)</td>
<td>1406.55</td>
<td>1448.38</td>
<td>1419.06</td>
<td>1155.63</td>
</tr>
<tr>
<td><strong>Loss purchases of:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewable supply</td>
<td>516.39</td>
<td>591.23</td>
<td>571.73</td>
<td></td>
</tr>
<tr>
<td>CHP low carbon supply</td>
<td>337.46</td>
<td>319.35</td>
<td>308.74</td>
<td></td>
</tr>
<tr>
<td><strong>Scope 2 emissions (net)</strong></td>
<td>552.71</td>
<td>537.80</td>
<td>537.59</td>
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<td><strong>Combined Scope 1 &amp; 2 emissions (net)</strong></td>
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<td>787.25</td>
<td>749.33</td>
<td>1569.42</td>
</tr>
<tr>
<td><strong>Other indirect emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeworker emissions (See notes)</td>
<td>5.55</td>
<td>5.55</td>
<td>4.39</td>
<td></td>
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<tr>
<td>Cars on BT Business (Diesel)</td>
<td>12.91</td>
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<td>8.93</td>
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<tr>
<td>Cars/Motorcycles on BT Business (petrol)</td>
<td>0.02</td>
<td>0.67</td>
<td>0.02</td>
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<tr>
<td>Refrigeration Gases (CFCs and HCFCs only)</td>
<td>4.52</td>
<td>6.95</td>
<td>5.85</td>
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<tr>
<td>Rail travel</td>
<td>7.09</td>
<td>7.24</td>
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<td>11.45</td>
</tr>
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<td>Air Travel (Domestic)</td>
<td>9.27</td>
<td>8.13</td>
<td>8.57</td>
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<td>Air Travel (short haul)</td>
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<tr>
<td>Air Travel (long haul)</td>
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<td>19.27</td>
<td>10.39</td>
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</tr>
<tr>
<td>Hire Cars (All Fuels)</td>
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<td>10.59</td>
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<tr>
<td><strong>Total Scope 3 emissions</strong></td>
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<td><strong>Total CO₂ emissions (net)</strong></td>
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<tr>
<td>Percentage change from base (net)</td>
<td>-46%</td>
<td>-47%</td>
<td>-51%</td>
<td></td>
</tr>
</tbody>
</table>

BT worldwide CO₂e emissions
Travel and transport

In the UK we run a fleet of 26,796 commercial vehicles and 7,088 company cars, managed under contract by our subsidiary, BT Fleet Limited.

We aim to reduce the climate impact of our fleet by purchasing efficient vehicles, managing our fleet efficiently and by encouraging our drivers to adopt fuel-efficient driving techniques.

We also review vehicle replacement cycles, which ensure the fleet benefits from latest technologies and emission standards, while providing greater reliability and lower maintenance frequency and costs.

The distance travelled by our commercial fleet during the 2010 financial year reduced by 67.7 million kilometres compared with the year before returning a fuel reduction of 10%, over 4 million litres.

Our company car policy supports the key objectives of the UK Government’s emissions-based company car taxation initiative: These are:

- Increased cash allowance to employees who opt out of company car ownership
- Improve tax efficiencies for employees who opt for lower-emission cars
- Provide advice to company car drivers, encouraging users to choose lower-emission cars.

We analyse the trend in CO₂ emissions of the company cars purchased by BT since the 2000 financial year, where the model has been chosen by the employee. This year average emissions were 150 grams of CO₂ per kilometer (CO₂/km) compared to 209 grams of CO₂/km in the 2000 financial year - a 28% reduction. This was partially due to an increased proportion of employees choosing diesel cars (76% compared to 20% in the 2000 financial year) which are
more efficient.

**Key initiatives**

Initiatives in the 2010 financial year to reduce the environmental impacts of our fleet included:

- Training almost 500 high mileage BT drivers in SAFED (Safe and Fuel Efficient Driving).
- Distributing tyre pressure gauges across the engineering commercial fleet and raising driver awareness to the importance of daily vehicle checks. These measures optimise fuel efficiency and help to keep drivers safe.
- Made fuel saving tips and information available online for all drivers.
- Conducted the first phase of a longer-term trial of a diesel-electric hybrid commercial vehicle to assess the financial and operational suitability of the vehicle type.
- Conducted a data-logging exercise with a vehicle manufacturer on a small number of BT commercial vans collecting data on distance travelled, vehicle speed, stop/start rates. The data will help us to evaluate the benefits of low-carbon vehicle technology and will be used by the manufacturer in future product development.
- Assessed the results of a report commissioned to investigate the optimum blend of biodiesel using B30 as a benchmark.
- Assessed the results of a report identifying best practice in logistics and electric vehicles.

Read our case study on how Openreach is reducing environmental impacts of its fleet whilst improving customer satisfaction.

**Employee travel**

We encourage our employees to use low carbon travel and to use BT’s conferencing facilities wherever possible to avoid travel altogether. All business flights are booked via our travel management company and all air travel is pre-authorised.

BT has become the first company to cut 20% of its business flights as part of WWF’s One in Five Challenge, a programme that helps companies to reduce their reliance on flying, in favour of lower carbon alternatives.

This was partly achieved by increasing the use of our voice, video and web conferencing services, avoiding the need to fly or travel over land to meetings. As well as reducing travel costs and CO₂ emissions this has also increased productivity and improved work-life-balance for employees.

Our conferencing services and flexible working policies have revolutionised the way employees work. Home and remote working is standard business practice for many BT employees which is helping to reduce the environmental impacts of employee commuting.

BT is piloting tools to raise awareness of the cost and carbon implications associated with business travel which will enable employees to make more informed choices about their modes of travel.

**BT targets**

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Description</th>
<th>Update</th>
<th>Target Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2009</td>
<td>March 2010</td>
<td>By March 2010, BT will roll out driver training and tools (e.g. tyre pressure gauges) similarly to at least two other business units following Openreach pilot.</td>
<td>Driver training and tools have been provided to the additional business units where applicable. Our final outturn of 462 drivers trained.</td>
<td>Completed</td>
</tr>
</tbody>
</table>

**Quantitative data**
Number of Vehicles in BT’s Commercial Fleet

Fuel used by BT’s Commercial Fleet

Number of Vehicles in the Company Car Fleet
Cutting emissions and improving customer satisfaction

Openreach (part of the BT Group) installs and maintains the wiring, fibres and connections from homes and businesses in Britain to the networks used by their communications providers. Openreach operates commercial and car fleets of 25,000 vehicles, comprising over 70% of BT’s total fleet.

By looking holistically at all aspects of our operations, we have implemented a 360° innovation plan to reduce CO$_2$ emissions from our fleets whilst delivering on our core business priorities of
service improvement and cost reduction.

Since 2006, Openreach has reduced the overall fault rate in our network by around 30%, which has meant fewer engineering visits, better customer satisfaction, lower costs and lower CO₂ emissions.

For every 150 engineering visits we avoid by improving the reliability of the network and fixing faults during the first visit, we save 1 tonne of CO₂. This approach avoided over 2,000 tonnes of CO₂ in the 2009 financial year.

**Energy efficiency**

Improving the energy efficiency of our buildings and networks is part of business as usual at BT. We do this by reducing energy waste, encouraging employees to adopt energy efficient behaviour and investing in new technology and improving existing equipment.

Against a back drop of increasing energy consumption from the delivery of new and faster services we have set ourselves the tough target of reducing our worldwide energy consumption by 3% compared to 2010.

Reducing energy use is a key part of our carbon reduction strategy and helps us to reduce costs. It also helps us to meet our obligations under the UK government’s Carbon Reduction Commitment Energy Efficiency Scheme that starts in 2010.

**Energy savings programme**

In 2010 we implemented projects which save more than 100 GWh energy and 41,800 tonnes of CO₂ a year through our energy savings programme.

The programme focuses on finding ways to reduce energy use at no cost, for example by switching off legacy network equipment, server virtualisation, reducing office space, conducting building energy audits and raising employee awareness about energy efficiency.

The programme has three key projects:

- Networks - a project to turn off unused equipment, reducing energy use by 31 GWh a year and 16,000 tonnes of CO₂
- Data centres efficiency – an initiative to decommission servers virtualise equipment and reduce the amount of cooling, which is saving 15 GWh a year and 8,000 tonnes of CO₂
- Estates – a project to reduce office space and adjust temperature set points for heating and cooling of office buildings, cutting energy use by 56 GWh a year and 17,000 tonnes of CO₂

**Energy efficient behaviour**

We encourage employees to do their best to save energy by asking them to making small changes to the way they work. We emphasise the importance of the following energy saving measures:

- Turning off lights and equipment when not in use
- Using lifts less by taking the stairs
- Keeping windows closed
- Purchasing efficient equipment and using it on the lowest power setting possible
• Printing less.

**Energy efficiency capital investment programme**

We achieve energy savings through our multi-million pound programme to install new technologies and retrofit existing equipment with energy saving technology.

In 2010 we have implemented the following projects through the programme which will save more than 27 GWh of energy and 13,000 tonnes of CO₂ per year:

**Building energy management systems**

We are installing energy management systems in 1,500 of our operational buildings to make cooling systems more efficient.

The management systems will enable us to centrally monitor environmental conditions at the sites and automatically control boilers and lighting, identify inefficient operating practices and read electricity meters.

**Central air cooling plant rationalisation**

We are replacing the central chiller systems at some of our larger sites with modular cooling systems that will reduce overall energy consumption.

Advances in telecommunications technology has meant that less space and less cooling are needed to get the same amount of power from network equipment. This means that the central systems which were installed to cool large areas at some sites are no longer needed and can be replaced with smaller modular systems.

**Boiler optimisation**

In 2010, we trialled intelligent boiler optimisation at three sites. This showed that the technology can significantly reduce energy consumption and CO₂ emissions from heating systems. We will now install the technology at 23 sites.

**Variable Speed Drives**

Our energy audit programme at the top 100 energy consuming BT offices and mixed use buildings (operational buildings where a large number of people work), identified that significant energy savings could be achieved by installing Variable Speed Drive (VSD) technology to existing fan and pump motors.

Phase one of the energy audits visited the top 50 energy consuming sites and identified opportunities to install VSDs at seven sites.

Phase two of the audits visited the next 50 highest energy consuming sites and identified a further 14 suitable sites.

In phase three we will look across the remainder of the BT estate to identify remaining opportunities to use VSD technology.

**Combined cooling, heat and power**

We have installed a new combined cooling, heat and power system (CCHP) at our Adastral Park site in Suffolk. This uses gas during peak load hours to efficiently produce electricity and heat for the site in winter and electricity and cooling in summer.

**Carbon Trust Standard Certificate**

We achieved certification to the Carbon Trust Standard (UK) which is awarded to organisations that have “genuinely reduced their carbon footprint and are committed to making further reductions year on year”. The standard requires an organisation to meet three overall requirements:

- Effective measurement of carbon emissions
- Good carbon management including proof of investment in efficient equipment, maintenance programmes and staff training
- Proof that emissions have reduced over the last two years either in total or on a relative
basis.

In combination with our advanced energy metering programme, the certification makes us well positioned to respond to the Carbon Reduction Commitment scheme. The certification is recognised as an ‘early action metric’ in the scheme.

**BT targets**

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Description</th>
<th>Update</th>
<th>Target Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2010</td>
<td>March 2011</td>
<td>By March 2011, BT will reduce its global energy consumption by 3% compared to 2010.</td>
<td></td>
<td>New</td>
</tr>
</tbody>
</table>

**Quantitative data**

Energy consumption

Energy consumed per £m turnover

**Renewable and low carbon energy**

Nearly all of the electricity we use in the UK comes from renewable sources. The renewal of our green energy contract until 2014 means we continue to meet approximately 40% of our electricity needs in the UK from renewable sources, and almost 60% from combined heat and power generation. We have low-carbon energy contracts in Germany and Italy, Belgium and Luxembourg.

In the 2010 financial year (2010), our use of renewable and low carbon energy in the UK cut our carbon dioxide emissions by approximately 808,000 tonnes.

**Wind for Change**
Supplies of renewable energy in most countries, including the UK, are limited. In 2007 we announced plans to develop our own wind-farms in the UK to produce 250 MW of renewable energy by 2016 (equivalent to around 25% of our current UK electricity needs. We have identified 33 prospective sites for a range of generating capacities and expect to start producing energy by 2012.

The first planning approval for our nationwide wind farm programme was granted in the north east of England at Red Gap Farm in February 2010. Permission was granted for five wind turbines, subject to a technical issue with a local airport being resolved.

Go to our [Wind for Change](#) website for more information.

**On site renewable technologies**

In 2010, we began generating renewable energy at our Colombo House site in London using a 15kW photo voltaic solar array. We are monitoring the site closely and will use the data to assess the potential to install onsite renewables at other BT buildings.

15kW photo-voltaic solar array at Colombo House London

Our US headquarters in El Segundo, California has installed photovoltaic panels (solar panels), some of which can follow the sun to maximise their output. The panels are designed to produce around 1,000 MWh of energy each year.

Read our case study for more information.

**BT targets**

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<th>Target Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2010</td>
<td>March 2011</td>
<td>March 2011, BT will make a brief available to all of our customer facing BT people about 100% of new and ongoing applications in the Wind for Change Project.</td>
<td>New</td>
<td></td>
</tr>
</tbody>
</table>

**Quantitative data**

![Energy consumption](image)

Energy consumption
El Segundo – harvesting the Californian sun

In 2009 we slashed environmental impacts at our North American corporate headquarters at El Segundo in California, installing solar panels that will avoid 300 tonnes of carbon each year.

The system generates 1,000 MWh annually, enough to meet 15% of the site’s energy needs, including demand from El Segundo’s 440 BT employees and the site’s network operations and data centre which hosts services for customers and internal applications. As well as reducing environmental impacts, the system insulates BT from unexpected price increases of grid electricity.

The system covers almost all of the available outside space at the site, including the roof areas and the south facing car park where the panels are mounted on an elevated structure (also providing much needed shade for parked cars). A state-of-the-art tracking system enables the solar panels to follow the sun and maximise energy production during peak hours when rates are highest.

The system was installed using an innovative commercial model. Solar company, Solar Power Partners (SPP) arranged installation, owns and operates the system and sells the electricity generated by the panels to BT under a power purchase agreement. Rebates and tax incentives from the State of California helped to make the scheme commercially viable.

The project was not without its challenges. Kevin Moss, Head of Corporate Social Responsibility, BT Americas, recalls: “The original design of the installation used a steel structure, but just as we were about to begin construction the price of steel spiked unexpectedly. The additional cost would have made the scheme uneconomic, prompting a redesign using concrete piers to support the solar panels.” This move has actually also resulted in a physical design that is more in keeping with the look and feel of the building.

As well as reducing environmental impacts, the initiative helped to enhance BT’s reputation as a responsible company. Speaking when the project was announced HRH Prince Andrew, the UK Special Representative for International Trade and Investment, said: “I commend BT for its leadership in producing significant renewable energy solutions in the UK. With this solar project, BT extends its environmental consciousness to its operations in the US.”
Supporting the low carbon economy

The Climate Change Act of 2008 requires the UK to reduce emissions by at least 80% by 2050, with an interim reduction of 34% by 2020. A transformation in our economy will be necessary to achieve this. In the near future, other major economies are expected to set mid and long-term targets to cut emissions.
The ICT industry will play a key part in the transition to a low carbon economy. It will enable other sectors to become more efficient, and raise awareness of energy use and wastage by increasing access to transparent information and data. The SMART 2020 industry report has identified opportunities for ICT equipment to reduce global emissions by 15% by 2020.

Using the process we have developed to understand sustainability related opportunities, in the 2010 financial year (2010) we assessed the short, medium and long-term commercial opportunities for BT and have produced a low carbon economy opportunity map which illustrates those opportunities. Commercial confidentiality limits the amount of information we are able to share, however, example products and solutions include cloud computing, Field Force Automation and conferencing.

BT already offers products and services that help customers to reduce their carbon footprint, and we believe that new regulations and increasing customer demand will expand markets for these products.

Our analysis shows that the roll-out of superfast broadband could play a key part in the transformation to a low carbon UK in the longer term, by enabling new ways of working and living. The potential role of BT in smart communities has been a particular area of interest for us this year.

Climate change presents risks as well as opportunities for BT. These include increased costs from carbon legislation and the direct impacts of severe weather on our business. Read more about how we monitor CR risks and opportunities.

Read about our work with suppliers to encourage them to reduce emissions and to create innovative products for BT that have a reduced lifecycle carbon footprint.

**Assessing our contribution**

We are developing a key performance indicator (KPI) that measures the CO₂ emissions reductions our products and services bring for customers.

In the 2010 financial year (2010) we worked with customers, including commercial law company Beachcroft LLP and Powys County Council, to develop and trial a seven-step methodology using two of our conferencing and workstyle products.

This highlighted the complexity of measuring emissions reductions from our products and services, as customers experienced different benefits depending on where they are based and the scale of their business.

In the 2011 financial year we will work with more customers to assess and define the CO₂ emissions reductions experienced by different types of businesses.

We are also assessing the lifecycle carbon footprints of the products and services we will supply to the London Olympic and Paralympic Games using a methodology developed in 2010.

**BT targets**

<table>
<thead>
<tr>
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<th>End Date</th>
<th>Description</th>
<th>Update</th>
<th>Target Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2009</td>
<td>March 2010</td>
<td>By March 2010, BT will develop a clear plan on our top opportunities for the low carbon economy.</td>
<td>BT have developed a plan and identified mapped opportunities which we will take forward.</td>
<td>Completed</td>
</tr>
<tr>
<td>April 2009</td>
<td>March 2010</td>
<td>By March 2010, BT will publish our KPI for the Sustainable Economic Growth programme.</td>
<td>We have been working with customers to develop this measure. We have trialled our methodology, however are not yet able to set a KPI.</td>
<td>Delayed</td>
</tr>
<tr>
<td>April 2010</td>
<td>March 2011</td>
<td>By March 2011, BT will increase the number of customers to at least 8 for each solution and publish the CO2 emissions saved and a customer case study.</td>
<td></td>
<td>New</td>
</tr>
</tbody>
</table>
Products and services

The BT “Build a Sustainable Organisation” (BASO) portfolio is our wide range of products and services that help customers adjust their behaviour to reduce their environmental impact, increase their operational efficiency and reduce capital and operational costs.

The BASO portfolio includes:

- Conferencing services which enable employees to meet without travelling, cutting costs and emissions.
- Our Field Force automation solution (providing real time information and dynamic work scheduling to people “on the road”) which can reduce vehicle journeys and related CO₂ emissions by up to 20%.
- Services to make customer IT more efficient, for example our virtual data centre service delivers virtualised and on-demand computing services for customers, which can lower costs by up to 40%, reduce the amount of space required and the power consumed, cutting CO₂ emissions.
- Services to implement flexible working in ways that improve customer service and reduce the amount of office space needed. Our research suggests that, based on our own experience, customers can avoid up to 1.2 tonnes of CO₂ emissions for every employee who works from home, rather than the office.

Using our BASO portfolio our Sustainability Practice advises businesses and government organisations on how BT can help them to reduce their carbon emissions and other environmental impacts. The Practice currently operates in the UK, Germany, France, Benelux, Spain, Italy and the US.

Ethernet Backhaul Direct

At the start of the 2010 financial year, Openreach completed the national rollout of the network infrastructure to support its Ethernet Backhaul Direct (EBD) service. EBD offers permanently connected point-to-point high speed data circuits which enable communications providers to offer their UK customers secure connections with guaranteed speed. The service also results in fewer engineering visits leading to lower CO₂ emissions from the vehicle fleet.

Vision Box

This year we launched a new version of the Vision box which uses 12% less energy. We are also updating the software on the previous version to make the box more energy efficient. In a customer survey, 71% of respondents told us that it is important that we design the Vision box with energy efficiency in mind.

More information, case studies and White Papers on the low carbon products and services we offer can be found here.

Technology in action: a customer perspective

Flexible working is paying dividends for Beachcroft LLP, a commercial law firm, through higher productivity and lower costs. Beachcroft has reduced its office space in one location by 25 per cent. It is aiming for a total reduction of 50 per cent, with similar reductions expected in other locations. The reduction in travel from increased home working is also helping to improve work life balance for employees.

As an early adopter, Christy Farrer, Strategic Project Manager at Beachcroft, is in no doubt about the benefits. “I now work from home three days a week,” she says, “I’m not only saving money on commuting, but also I can work during the time I used to spend travelling. So everyone wins.”

Suppliers and climate change

BT does not manufacture anything itself, but we do source equipment and services from a network of suppliers. This makes it vital to engage with our supply chain to encourage them to
reduce emissions and to create innovative products that consume less energy and have a reduced lifecycle carbon footprint.

The BT Procurement Principles on Climate Change state:
1. We will harness the capability, diversity and innovation of our supply base to add value to our business and encourage suppliers to offer solutions which have a reduced environmental impact.
2. That the energy consumption and environmental impact of a product or service (from manufacture, through usage, to disposal) is a mandatory criterion in all tender adjudication.
3. That the energy consumption and environmental impact of any replacement product or service (from manufacture, through usage, to disposal) is less than its predecessor.

We have set targets to embed these principles in buyers’ procurement activities:

- By March 2010, 70% of competitive contracts placed will have used energy consumption and/or environmental impact considerations in the process to award business.
- By March 2010, 55% of BT ‘product or service replacement contracts’ awarded will be able to demonstrate an improvement in energy efficiency and/or reduced environmental impact.

To measure progress against these targets we have developed a process to assess suppliers’ climate change efforts during tenders and replacement contracts and tools which buyers can use to measure the environmental impact and energy consumption of products, including a detailed climate change questionnaire.

Performance

In 2010, 75% of contracts placed as a result of competitive tenders used energy consumption and/or environmental impact considerations in the process to award business, meeting our target of 70%.

100% of BT ‘product or service replacement contracts’ awarded demonstrated an improvement in energy efficiency and/or reduced environmental impact, meeting our target of 55%.

To support progress towards these targets we held a series of on site and web meeting training sessions for BT buyers based in China, India, the UK and across Europe.

Supplier action on climate change

In 2010 we assessed levels of engagement on climate change through our own supplier survey and a project conducted with the Carbon Trust:

BT supplier survey

229 suppliers responded to our survey assessing levels of engagement on climate change. Of these suppliers:

- 60% said they had a policy on climate change, compared with 54% in 2009 and 35% in 2008.
- 50% monitor their CO₂ emissions, compared with 43% in 2009 and 25% in 2008.
- 52% have climate change targets in place, compared with 45% in 2009 and 27% in 2008.

In 2010 we added three new questions related to water management and use. 22% of suppliers who responded measured their total water usage, 16% have targets or a water management plan.

Working with the Carbon Trust

We worked with the Carbon Trust, a not-for-profit company with the mission to accelerate the move to a low carbon economy, to research different approaches to carbon reduction measures in our supply chain.

The Carbon Trust spoke to 22 BT suppliers about their climate change and energy reduction programmes as well as what they are doing to engage their own suppliers on environmental issues. A number of lessons were drawn from the work. It is planned that the learnings from this project will be used to develop training materials for an appropriate sub-set of BT’s suppliers. The purpose of the training will be to help suppliers to measure and reduce their own carbon footprints and also to engage with their own suppliers to help cascade awareness down the supply chain.
This has given us a good understanding of the steps suppliers can take to reduce their emissions, particularly useful for companies with less experience in this area.

**Key performance indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Measure</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier relationships</td>
<td>A measure of the overall success of BT’s relationship with its suppliers, based on our annual supplier survey</td>
<td>85%</td>
<td>To achieve a rating of 80% or more based on the question “How would you describe the quality of your company’s relationship with BT?”</td>
</tr>
</tbody>
</table>

**BT targets**

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Description</th>
<th>Update</th>
<th>Target Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2009</td>
<td>March 2010</td>
<td>By March 2010, 55% of BT ‘product or service replacement contracts’ awarded will be able to demonstrate an improvement in energy efficiency and/or reduced environmental impact (dependant on product or service type).</td>
<td>11 contracts were placed all of which demonstrate an improvement in energy efficiency and/or reduced environmental impact.</td>
<td>Completed</td>
</tr>
<tr>
<td>April 2010</td>
<td>March 2011</td>
<td>By March 2011, 80% of competitive contracts with energy/environment as part of adjudication criteria.</td>
<td></td>
<td>New</td>
</tr>
<tr>
<td>April 2010</td>
<td>March 2011</td>
<td>By March 2011, 80% of replacement products with improved energy efficiency and/or reduced environmental impact.</td>
<td></td>
<td>New</td>
</tr>
</tbody>
</table>

**Employees and climate change**

Changing behaviour is key to tackling climate change. As a major employer we are well placed to influence the behaviour of almost 100,000 people directly and reach many more through our employees’ families and communities.

We have committed to work in partnership with our employees to achieve major cuts in their emissions both at work and at home. Our target is for 20% of our employees to be actively engaged in reducing their carbon footprint at work and at home by 2012, measured by the number of people who have signed up to at least one of our employee climate change programmes.

By March 2010, over 7,000 people were actively engaged in our climate change initiatives after 3,000 people signed up during the year.

We are constantly looking for ways to inspire our employees to take action and make a difference. Below is a selection our major initiatives.

**Energy saving campaign**

Our energy saving campaign encourages employees to support the BT’s efforts to conserve energy across the business.

The campaign raises awareness about energy saving and emphasises that everyone can make a difference. For example in 2010, we launched a poster campaign in our key telephone exchanges to encourage engineers to suggest opportunities to save energy via our energy hotline.

During Energy Saving week in October 2009 BT employees submitted more than 200 new energy saving ideas for assessment by the Energy & Carbon Unit.

**Carbon Clubs**

Carbon Clubs are a way for employees to come together with colleagues to develop ideas and take action to reduce their environmental impacts.

By the end of March 2010, there were 138 clubs with over 460 members. The majority are based in the UK, but employees have also formed clubs in Belgium, Germany, India, Italy, Korea, the Republic of Ireland, Spain, the Netherlands and the USA.
In the 2010 financial year we expanded the concept outside BT, helping the City of Edinburgh Council to pilot its own Carbon Clubs. We shared our experience and expertise and created a bespoke version of our Carbon Club website for the council. The six-month project was launched in January 2010 and will involve over 2,000 council employees.

Creating communities

Employee engagement is about listening to our people and tailoring our campaigns to meet their needs. In 2010 employees told us that they wanted a quick and easy way of contributing and keeping up to date with climate change initiatives that could fit into their busy work schedules. Acting on this feedback, we launched the Carbon Community which now has more than 2,000 members. A new web forum also enables employees to network, share ideas and discuss topics of interest.

Cycle Fit

Launched in 2010, Cycle Fit encourages BT people to take up cycling, helping to improve their health and reduce their carbon footprint.

Through the scheme, employees can enter competitions to win cycling starter packs, apply for safety training and can join a new web forum where they can network and share experience with other cyclists.

Launched with the support of Chris Hoy, Olympic cycling champion and BT Ambassador for London 2012, the Cycle Buddy online matching tool helps build the confidence of novice cyclists by pairing them with experienced riders in their local area. 126 mentors have already signed up to help their colleagues stay safe and find the best local cycles routes.

Read our Carbon Clubs case studies for more information.

Key performance indicators

<table>
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<tr>
<th>Indicator</th>
<th>Description</th>
<th>Measure</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 equivalent emissions</td>
<td>A measure of BT’s climate change impact</td>
<td>43% intensity reduction</td>
<td>By December 2020, BT group will reduce its CO2e emission intensity by 80% against 1997 levels</td>
</tr>
<tr>
<td>Waste to landfill and recycling</td>
<td>A measure of BT’s use of resources</td>
<td>17% reduction in waste to landfill (UK only) from 2008</td>
<td>BT group will reduce the tonnage of waste sent to landfill by 8% from 2009</td>
</tr>
</tbody>
</table>

Note 3: New target in 2008

BT targets

<table>
<thead>
<tr>
<th>Start Date</th>
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<th>Description</th>
<th>Update</th>
<th>Target Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2007</td>
<td>December 2012</td>
<td>20% of BT’s employees will be actively engaged in reducing carbon footprint at work and at home.</td>
<td>We are well on track to achieve this target with a significant number of BT people now actively engaged.</td>
<td>On Target</td>
</tr>
</tbody>
</table>

Carbon clubs

Aldershot Carbon Buster’s Club Bike Day

On the 17th June 2009, the Aldershot Carbon Club held a Bike Day to recruit club members and help promote cycling as part of a sustainable, healthy lifestyle.

With support from a local cycle shop, a ‘Bike Doctor’ provided free bike safety checks. Employees were able to speak to experienced cyclists, get help and advice on how to get started and find out about the clubs free 24 hour bike loan scheme.

The club funded the event themselves, using part of the prize money from being awarded ‘Club
of the Year’ in 2008.

**Grass Routes movement**

Every week day, Jenni Carberry, a portfolio analysis and planning manager in BT Operate, waved to next door neighbour Chris Sarginson as they climbed into their cars to drive the same seven mile journey to work at the BT Adastral Park IT centre.

Arriving at work one morning Jenni opened an email about Grass Routes, the Adastral Park travel plan with promotes more sustainable forms of business and commuter travel. After reading about the many benefits of car sharing, she contacted Chris through the programme to suggest they share their commute. It turned out that Chris was already sharing with another colleague - Mark Thomas - so now the three of them travel together and take it in turns to drive.

As well as a reducing wear and tear on their cars and lowering fuel costs, Jenni said there are some unexpected perks of car sharing. “It helps me maintain a good work-life balance - I have to leave work at a certain time as other people are relying on me. Of course it also helps me get up in the mornings.”

Jenni, Mark and Chris are three of the 400 Adastral Park employees who started car sharing since the launch of Grass Routes. Across BT, around 1,880 people share their commute with colleagues.

**Industry collaboration and advocacy**

The design and manufacture of ICT equipment is governed by a range of international standards. Developing new and improving existing global standards, for example to incorporate energy efficiency measures, will help reduce the climate impact of ICT equipment worldwide. We are actively working with trade associations, companies and standards organisations to improve global ICT standards and identify new ways that ICT can support efforts to tackle climate change.

We believe that common international standards are urgently required for measuring the carbon footprint of specific services provided by businesses if real progress is to be made in getting organisations to reduce their CO2 emissions. Developing the right standards will help ICT to become a key part of the transition to a low-carbon economy.

**Advocacy**

As a signatory to the Copenhagen Communiqué, BT advocates for a strong and effective international climate framework to be put in place to enable the business community to take positive action to reduce their carbon emissions and help governments to meet their climate change targets. The Communiqué was published ahead of the United Nations Climate Change Summit in Copenhagen in December 2009 and includes signatures from over 950 businesses, including some of the world’s largest companies.

Gavin Patterson, CEO of BT Retail, represents BT on the climate change board of the Confederation of British Industry (CBI). The board is comprised of 17 leaders from the business community, who have made a commitment to tackling climate change. They represent key sectors of the UK economy, whose companies globally employ nearly 2 million people and generate annual revenues of approximately £1,000bn.

In January 2010, we become an official partner of the European Commission’s Sustainable Energy Europe campaign. The campaign aims to act as a platform for the continued development, promotion and market uptake of sustainable energy technologies. It contributes to achieving the European Union’s 2020 energy policy targets within the fields of renewable energy sources, energy efficiency, clean transport and alternative fuels.

**Collaborating on energy efficiency and standards**

In the 2010 financial year, we advocated for improved standards through:

**International Telecommunication Union (ITU)**
BT chaired the ITU’s Focus Group on ICT and Climate Change. The group was established in 2008 to find ways to reduce the direct impacts of the ICT companies and supply chains and to examine how ICT equipment can help reduce emissions across the economy. In 2010, BT contributed with its research on CO₂ trade-offs between home-based and office-based working. We also chaired a special study group through which the global telecoms industry agreed to a worldwide one-size-fits-all solar-powered mobile phone charger. This means that when you buy a new phone you will no longer have to throw away the charger that came with the previous phone. This will significantly cut waste and CO₂ emissions.

**Greenhouse Gas Protocol Initiative**

We are contributing to the joint World Resources Institute and World Business Council on Sustainable Development initiative to develop a new standard for accounting and reporting product lifecycle greenhouse gas emissions. BT is one of the companies road testing the new framework for measuring the greenhouse gas emissions of products.

**Global e-Sustainability Initiative (GeSI)**

BT is a founding member of GeSI, an industry initiative, which together with the Climate Group, produced the SMART 2020 ([www.smart2020.org](http://www.smart2020.org)) report which found that ICT equipment could potentially save 15% of global CO₂ emissions by 2020.

**ICT4EE Forum**

BT is collaborating with others in the ICT sector in the ICT for Energy Efficiency (ICT4EE) Forum. The forum was set up in response to the European Commission’s recommendation for the ICT sector to identify, by 2011, energy efficiency targets that aim to exceed the EU 2020 targets by 2015. GeSI, DIGITALEUROPE, TechAmerica Europe and the Japan Business Council in Europe are working together to provide common methodologies to measure the sector’s energy use and carbon footprint, to set targets and benchmark progress. The Forum will also engage with the buildings and construction, transport and logistics and energy supply sectors to identify ways that ICT solutions can help to make these sectors more energy efficient.

**Broadband Forum (UK)**

We chair the Broadband Forum’s Green Oversight Committee and lead efforts to encourage the implementation of standards and guidelines for low power Digital Subscriber Line (DSL - broadband). We have promoted the need for standards development organisations to work together to create global energy efficiency testing standards for network equipment and customer premises equipment.

**Key performance indicators**

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<td>43% intensity reduction</td>
<td>By December 2020, BT group will reduce its CO₂e emission intensity by 80% against 1997 levels</td>
</tr>
</tbody>
</table>

Note 3: New target in 2008

**Quantitative data**
## BT’s CO₂e model 2010

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>2008 CO₂e (thousands)</th>
<th>2009 CO₂e (thousands)</th>
<th>2010 CO₂e (thousands)</th>
<th>1997 (Base) CO₂e (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stationary Combustion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil Combustion - Electricity Generation</td>
<td>4.24</td>
<td>2.29</td>
<td>2.20</td>
<td>12.08</td>
</tr>
<tr>
<td>Gas Combustion</td>
<td>77.69</td>
<td>80.04</td>
<td>68.72</td>
<td>107.95</td>
</tr>
<tr>
<td>Oil Combustion - Heating</td>
<td>12.57</td>
<td>11.97</td>
<td>10.91</td>
<td>67.04</td>
</tr>
<tr>
<td>Refrigeration Gases (HFCs and SF6 only)</td>
<td>2.73</td>
<td>5.57</td>
<td>5.49</td>
<td>0.50</td>
</tr>
<tr>
<td>Commercial Fleet Diesel</td>
<td>124.12</td>
<td>114.95</td>
<td>100.70</td>
<td>167.23</td>
</tr>
<tr>
<td>Commercial Fleet Petrol</td>
<td>0.68</td>
<td>0.05</td>
<td>0.01</td>
<td>18.48</td>
</tr>
<tr>
<td>Company Car Diesel</td>
<td>28.70</td>
<td>30.47</td>
<td>20.06</td>
<td>24.02</td>
</tr>
<tr>
<td>Company Car Petrol</td>
<td>5.64</td>
<td>4.11</td>
<td>2.63</td>
<td>16.30</td>
</tr>
<tr>
<td><strong>Total Scope 1 emissions</strong></td>
<td>256.35</td>
<td>249.45</td>
<td>211.74</td>
<td>413.60</td>
</tr>
<tr>
<td><strong>Purchased Electricity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grid average intensity (gross)</td>
<td>1406.55</td>
<td>1448.38</td>
<td>1419.06</td>
<td>1155.83</td>
</tr>
<tr>
<td><strong>Less purchases of:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewable supply</td>
<td>516.39</td>
<td>501.23</td>
<td>571.73</td>
<td></td>
</tr>
<tr>
<td>CHP low carbon supply</td>
<td>337.48</td>
<td>319.35</td>
<td>309.74</td>
<td></td>
</tr>
<tr>
<td><strong>Scope 2 emissions (net)</strong></td>
<td>552.71</td>
<td>537.86</td>
<td>537.59</td>
<td>1155.83</td>
</tr>
<tr>
<td><strong>Combined Scope 1 &amp; 2 emissions (net)</strong></td>
<td>809.06</td>
<td>787.25</td>
<td>749.33</td>
<td>1559.42</td>
</tr>
<tr>
<td><strong>Other indirect emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeworker emissions (See notes)</td>
<td>5.86</td>
<td>5.55</td>
<td>4.30</td>
<td></td>
</tr>
<tr>
<td>Cars on BT Business (Diesel)</td>
<td>12.91</td>
<td>11.24</td>
<td>8.95</td>
<td>0.86</td>
</tr>
<tr>
<td>Cars/Motorcycles on BT Business (petrol)</td>
<td>0.82</td>
<td>0.67</td>
<td>0.02</td>
<td>4.98</td>
</tr>
<tr>
<td>Refrigeration Gases (CFCs and HCFCs only)</td>
<td>4.52</td>
<td>6.95</td>
<td>5.85</td>
<td>13.07</td>
</tr>
<tr>
<td>Rail travel</td>
<td>7.09</td>
<td>7.24</td>
<td>5.03</td>
<td>11.45</td>
</tr>
<tr>
<td>Air Travel (Domestic)</td>
<td>0.27</td>
<td>8.13</td>
<td>6.57</td>
<td>N/A</td>
</tr>
<tr>
<td>Air Travel (short haul)</td>
<td>4.73</td>
<td>3.37</td>
<td>2.10</td>
<td>7.86</td>
</tr>
<tr>
<td>Air Travel (long haul)</td>
<td>20.61</td>
<td>19.27</td>
<td>10.39</td>
<td>8.10</td>
</tr>
<tr>
<td>Hot Cars (All fuels)</td>
<td>14.35</td>
<td>10.59</td>
<td>8.55</td>
<td>11.49</td>
</tr>
<tr>
<td><strong>Total Scope 3 emissions</strong></td>
<td>79.34</td>
<td>73.00</td>
<td>51.28</td>
<td>57.73</td>
</tr>
<tr>
<td><strong>Total CO₂ emissions (net)</strong></td>
<td>886.40</td>
<td>860.25</td>
<td>800.61</td>
<td>1627.15</td>
</tr>
<tr>
<td><strong>Percentage change from base (net)</strong></td>
<td>-45%</td>
<td>-47%</td>
<td>-51%</td>
<td></td>
</tr>
</tbody>
</table>

BT worldwide CO₂e emissions

![CO₂ equivalent emissions chart](image-url)
CO2 emissions (tonnes) per £m turnover
Thanks for reading what we have to say – now we want to listen to you. E-mail us at yourviews@bt.com and tell us what you think of this review and sustainability at BT.