



Climate change: ITU must continue to act

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In the wake of the United Nations Summit on Climate Change, held in Copenhagen, Denmark in December 2009 (see article on pages 20–21), many will be asking whether the event was worth the cost — both in money and in carbon.

Hopes for a binding agreement had been dashed long before delegates arrived at the summit. Nonetheless, many expected countries to promise increased cuts in CO₂ emissions. In the end, they did not — while the *Copenhagen Accord* capped global warming at 2°C, pledges fell well short of what this implies.

But nothing that came out of Copenhagen suggests that efforts to tackle climate change should be scaled back. The climate is changing — fast. Countries accept the need to act. Regulations and fiscal interventions will follow. As they do, markets for low carbon products will open up.

ICT can help

In the information and communication technologies (ICT) industry, we are fortunate that our products and services can do so much to help businesses and individuals reduce their greenhouse-gas emissions.

"SMART 2020"¹, a report I helped create, said new applications of ICT could reduce global CO₂ emissions by 7.8 gigatonnes a year by 2020. That represents 15 per cent of what might be produced if things continue as they are.

Huge opportunities await us in such areas as smart grids, smart cities, smart buildings, smart transport and the replacement of older "gas guzzler" ways of doing things with new energy- and carbon-efficient alternatives.

Dematerialisation is one example: the replacement of paper invoices with electronic ones, of music CDs by downloads, and so on. Another is the use of videoconferencing instead of travel. There is no doubt that business habits are changing and carbon emissions are being reduced as a result. Independent researchers estimate that the use of videoconferencing in BT alone prevented the emission of more than 50 000 tonnes of CO₂ in 2008.²

But set against such opportunities are two key threats.

First, there is the impact on our businesses of changing weather patterns, rising sea levels and so on. The equipment and cables on which our industry

¹ "SMART 2020: Enabling the low carbon economy in the information age", The Climate Group, 2008.

² "Conferencing at BT 2008", The University of Bradford and SustainIT, 2009.

depends are spread all over the world. We protect them as well as we can, but severe storms, extreme temperatures, droughts and floods inevitably take their toll. The cost of damage quickly mounts up, and scientists say such incidents will become increasingly common as our planet heats up.

Second, our industry is responsible for the emission of a great deal of CO₂. Worldwide, it is estimated that the manufacture and use of computers, phones and other such devices already generates about two per cent of global CO₂ emissions — roughly as much as the entire economy of the United Kingdom, for example.

Overall, though, ICT can do more to alleviate climate change than worsen it.

Efforts at BT

At BT we thought the evidence for climate change was compelling, well before the Copenhagen summit. We had decided not just to act, but to set one of the most aggressive corporate emissions-reduction

targets in the world. By 2020, we hope to have cut the carbon intensity of our global business by 80 per cent compared to its level in 1990.

Our strategy is clear: we invest in changes to reduce CO₂ emissions not just because we think it is the right thing to do, but also because there is a sound business case for doing so. If we use more energy than we need to, profits we could make quite literally go up in smoke.

Since setting our first carbon reduction target in 1992, we have received an excellent return on our investments. The use of new technologies and new ways of working to reduce our carbon footprint has benefited us by around GBP 400 million over the last five years alone.

As we do more to reduce our emissions, we expect the financial benefits to grow. The global energy saving campaign we launched in 2008 will, we hope, reduce our costs by GBP 15 million by 2011 and prevent the emission of 75 000 tonnes of CO₂.

An engineer from BT Wholesale installs 21CN equipment to create a next-generation network that uses less power



Looking ahead, though, the challenges will get tougher and tougher — the law of diminishing returns applies as much to reducing CO₂ emissions as elsewhere.

The changes we have made so far — changes that have reduced the carbon intensity of our global business by 43 per cent compared to our 1997 baseline — were relatively easy to introduce. Decisions made and implemented centrally had a big impact. In 2004, for example, we decided to get the majority of the electricity we use in the United Kingdom from low carbon sources, such as wind farms and combined heat-and-power schemes. Forty-one per cent of the electricity we use in the UK now comes from renewable sources. Also significant was the decision we made the same year to replace our existing networks with a next-generation network, 21CN. As ITU points out, next-generation networks use much less power than their predecessors. They reduce CO₂ emissions as a result.

To go further, our energy consumption must be cut significantly. Everyone in our business will have to help, including those sceptical about climate change. With more than 100 000 employees spread across the world, this will be no mean achievement. And as time goes by, we know it will be harder and harder to identify cost-effective ways to cut energy use, reduce emissions and implement the changes required.

The ICT industry should work hard to reduce energy use and CO₂ emissions — in all sectors

Follow ITU's lead

Tough though such challenges are, we are determined to succeed. But our destiny is not entirely in our own hands. Many of the products we buy operate according to international standards, for example. If their power consumption is to be cut, ITU and other standards bodies must act. Energy efficiency must be paramount, just as it was when, in October 2009, ITU specified a standard for the new universal charging solution for mobile phones and other devices.

So, while some may use Copenhagen to argue for delay, my view is clear: the amount of CO₂ the world produces must quickly be reduced. When it comes to tackling climate change, ITU must continue not just to act, but to encourage others to follow its lead. ■



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