Acting on Climate Change: the role of ITU

About ITU

The International Telecommunication Union (ITU) is the UN specialized agency responsible for tel-ecommunications/information and communication technologies (ICTs). Its membership, comprising 193 Member States, over 700 ITU sector members and 20 academic institutions, have called for ITU to take the lead in engaging the global community (including the UN system and the ICT industry, as well as academia and NGOs) to address climate change through the use of ICTs. ITU is based in Geneva, Switzerland, with 12 field offices around the world.

> "ITU is moving forward the agenda to promote the use of ICTs as an effective tool to combat climate change and achieve environmental sustainability."

Dr Hamadoun Touré
ITU Secretary-General

Moving the agenda forward

Building a sustainable future with ICTs

Information and communication technologies (ICTs), such as satellites, mobile phones or the Internet, play a key role in addressing major challenges related to climate change and sustainable development. ICTs are fundamental to monitoring the climate and helping countries to mitigate and adapt to the effects of climate change. By raising awareness of the role of ICTs, ITU is assisting society with the transition towards a green economy by promoting innovative solutions that can ensure a sustainable future.

Greening the ICT sector

While ICTs enable a low carbon future, these technologies also contribute to around 2-2.5 per cent of global greenhouse gas (GHG) emissions. ITU is engaging the public and private sectors through the development of new global ICT standards, methodologies for measurement, and policies and strategies that minimize the environmental footprint of the ICT sector.

"Delivering as one" with the UN

Within the UN system, ITU has the unique competence in the ICT sector. This makes our work relevant to nearly all aspects of developing an integrated UN approach to the relation between ICTs and climate change. ITU is actively contributing to the work under the UNFCCC and the preparatory process for the UNCSD 2012 (Rio+20). By providing inputs from the ICT sector, ITU is joining UN efforts to "deliver as one." ITU is also among the lead UN agencies striving to achieve climate neutrality in its operations.

...and 3 ways

1 Standardization Activities

ITU's work in the area of standardization is largely directed towards energy efficiency of ICT and Broadcasting equipment. Energy efficient equipment and effective use of ICTs in executing day to day activities for development and sustainability greatly reduce GHG emissions. The ITU global standard for a universal energy-efficient mobile phone charger will save up to 82,000 tonnes of redundant chargers a year and at least 13.6 million tonnes of CO_2 annually. This is one of the many standards developed by ITU to reduce e-waste.

2 Development Activities

ITU's development work is focused on mainly using ICTs to support Member States in their development initiatives. ITU assists its Member States in the use of ICTs to adapt to climate change; and provides direct assistance to Member States to achieve better preparedness in dealing with climate change issues through our activities in the area of Emergency Telecommunications.

3 Improving and Saving Lives – Telecommunications

A prominent example of this area of activities is the use of ICTs to implement early warning systems for natural disasters and the use of communications for disaster relief operations. Japan, Haiti and Pakistan are three countries among many interventions where ITU has taken an active role to assist countries when they needed help the most. ITU has also assisted some Member States to enhance their preparedness and to better adapt to climate changes.

3 Action areas:

Climate change monitoring

ITU, as the steward of the international spectrum, allocates the necessary radio frequencies and orbit resources as well as approves international standards for the interference-free operation of applications and radio communications systems (terrestrial and space) used for climate monitoring, weather forecasting, remote sensing, and disaster prediction and detection.

Adaptation and capacity building

As a core function of its work with developing countries, ITU assists its Member States in the use of ICTs to adapt to climate change. Two prominent examples of this area of activities are the use of ICTs to implement early warning systems for natural disasters and the use of communications for disaster relief operations.

Climate Change mitigation

As the preeminent global body for ICT standardization, ITU is playing an important role in limiting and ultimately reducing greenhouse gas (GHG) emissions. By developing technical standards to limit and reduce the power requirements of ICT equipment and services and to reduce e-waste. ITU is actively promoting environmental sustainability.

> "ICTs will play an increasingly important role in adapting to the effects of climate change – from providing vital life-saving warnings ahead of natural disasters and catastrophes, to providing vital communications links once they have occurred ... by working together we can build a low carbon future and greener society for all of us"

Brahima Sanou
Director ITU Telecommunication Development Bureau