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# **ITU-T Activities on ICTs: Environment and Climate Change**

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# ITU-T created Study Group “Environment & Climate Change”

- ITU-T Study Group 5 (April 2009)
  - New Working Party “ICT and Climate Change”
  - Continuing and expanding the work of ITU-T Focus Group on ICT and CC
  - Next meeting will be held from 27 April – 5 May 2011
- All ITU-T study groups to examine impact of recommendations on climate change



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# ITU-T SG5 established seven work areas

- Coordination and Planning of ICT&CC related standardization (Question 17 of ITU-T SG 5)
- Methodology of environmental impact assessment of ICT (Q18/5)
- Power feeding systems (Q19/5)
- Data collection for Energy Efficiency for ICTs over the lifecycle (Q20/5)
- Environmental protection and recycling of ICT equipments/facilities (Q21/5)
- Setting up a low cost sustainable telecommunication infrastructure for rural communications in developing countries (Q22/5)
- Using ICTs to enable countries to adapt to climate change (Q23/5)



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## ITU-T Methodology

- Common methodology for measuring ICT carbon footprint
- Without, it will be impossible to provide meaningful comparisons
- Helps to establish the business case to go green





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## **Building a Green Economy Using ICT standards**

- Identifying priority sectors where ICTs can reduce emissions (e.g. smart buildings, intelligent transport systems, smart grids)
- The promotion of NGNs (reducing power consumption by up to 40%)
- Lifecycle analysis including disposal/recycling of ICTs
- All new standards are now checked for energy efficiency



# Standard for a universal charger for mobile phones

- “Universal power adapter and charger solution for mobile terminals and other ICT devices” (ITU-T Recommendation L.1000)
  - specifies general requirements
  - covers charger for mobile phones
- Future version will cover other ICT devices



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# ITU's universal charger standard

**Instead of this ...**



**... have this:**



**Recommendation L.1000**  
**Approved March 2010**

# ITU-T established Joint Coordination Activity (JCA)

- Objectives:
  - to co-ordinate across ITU-T study groups and with ITU-R and ITU-D
  - to seek co-operation from external bodies including non-ITU member organizations
- **Next e-meeting will be held online 25 March 2011**
  - introduction to the topic of the two new Questions: Q 22/5 "Setting up a low cost sustainable telecommunication infrastructure for rural communications in developing countries" and Q23/5 "Using ICTs to enable countries to adapt to climate change". The aim of this presentation is to encourage contributions to the 27 April-05 May 2011 meeting of SG5 on 'Environment and Climate Change'.
- **Next Physical Meeting: 6 May 2011**





# Raising Awareness on ICTs and Climate Change

- TSB is maintaining a **calendar of events and a repository and knowledge base** on the relationships between ICTs, environment and climate change
- Symposiums
  - [Fifth Symposium on ICTs, the Environment and Climate Change](#) (Cairo, Nov. 2010)
  - **Sixth Symposium to be held in Accra, Ghana in June 2011**
- Events
  - ITU-GeSI Meeting on "[Green Information and Communication Technologies \(ICTs\) for a Sustainable Future](#)" held on 24 September 2010, New York, USA.
  - In the framework of the Internet Governance Forum (IGF), TSB on behalf of ITU is leading the [Dynamic Coalition on Internet and Climate Change \(DCICC\)](#), which held its third physical meeting on 16 September at IGF-5 in Vilnius, Lithuania.



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# ITU Green Standards Week

- **Green Standards Week to be held in Rome, Italy:**
  - **5 September 2011.:** Workshop on [Methodologies for Environmental Impact Assessment of ICT](#) will examine work underway to measure the impact of ICTs on climate change and how to standardize the way to calculate the reduction of GHG that ICTs have.
  - **6-8 September 2011:** Workshop on [Moving to a Green Economy through ICT Standards](#) will explore how ICTs can help to address climate change and build a green economy, shedding light on standards, policies and best practices.
  - **8-9 September 2011:** Workshop on [Using Submarine Communications Networks to Monitor the Climate](#), will aim to encourage the development of new technologies and standards and will explore business opportunities for telecommunication companies to become active players in monitoring climate change.



# Partnerships with UN Agencies & ICT Industry

## ■ Collaboration with UN Agencies

- ITU (TSB) with **UNEP Basel Convention, United Nations University (UNU)** and in collaboration with SteP Initiative and the Center for Environment and Development for the Arab Region (CEDARE) will carry out a joint survey on e-waste (May 2011)
- ITU (TSB) is collaborating with **UNFCCC** to develop the ITU-T SG5 Methodologies in line with UNFCCC guidelines
- ITU (TSB) will develop Technical Specifications for Sustainability Standard for the ICT Sector together with **UNIDO, UNEP, UNU** and more than 20 partners



## ■ Collaboration with ICT Industry

- Global e-Sustainability Initiative (GeSI)
- ICT for Energy Efficiency Forum



**GeSI**  
GLOBAL e-SUSTAINABILITY  
INITIATIVE



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# New Reports

- [ICTs as a Key Technology to Help Countries Adapt to the Effects of Climate Change](#) World Resource Institute (February 2011)
- [ITU-GeSI Report on Using ICTs to Tackle Climate Change](#) (December 2010)
- [Using Submarine Communications Networks to Monitor the Climate](#) (November 2010)
- [ICT as an Enabler for Smart Water Management](#) (October 2010)



# Links

- ITU-T and climate change  
<http://www.itu.int/ITU-T/climatechange>
- ITU-T Study Group 5  
<http://www.itu.int/ITU-T/studygroups/com05>
- ITU Symposia & Events on ICTs and Climate Change  
<http://www.itu.int/ITU-T/worksem/climatechange>
- Contact us: [greenstandard@itu.int](mailto:greenstandard@itu.int)

**Thank you...**

