

ITU-T Methodologies to assess ICT footprint in cities

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Agenda

- Introduction
- Question on methodologies
- Recommendation L.1440 ICT in Cities
- Conclusions

Cities worldwide are more and more assessing their GHG emissions, reporting them and setting targets

For instance CDP Cities, national laws compliance...



49 000 000 tCO₂
2011

-30% in 2030
versus 2005



62 000 000 tCO₂
2010



24 600 000 tCO₂
2009

-25% in 2020
versus 2004



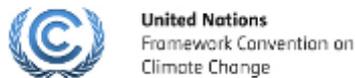
9 500 000 tCO₂
2010



25 000 000 tCO₂
2010

ITU, The UN agency responsible for ICT 193 Member States and more than 700 Sector Members

Co-operations include on methodologies :



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3 recommendations published

- L.1400 Overview and general principles
<http://www.itu.int/rec/T-REC-L.1400>
- L.1410 Environmental impact of ICT goods, networks and services
<http://www.itu.int/rec/T-REC-L.1410>
 - Part I : ICT Lifecycle assessment: framework and guidance
 - Part II : Comparative analysis between ICT and baseline scenario : framework and guidance
- L.1420 Environmental impact of ICT in organisations
<http://www.itu.int/rec/T-REC-L.1420>
 - The assessment of the environmental impact of an ICT organization
 - The assessment of the life cycle environmental impact of ICT Goods, Networks and Services used by an non-ICT organization

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3 recommendations under preparation

- L.1430 Environmental impact of ICT projects (consented in February 2013)
 - This Recommendation will specify principles, requirements and methods in order to quantify, monitor and report GHG emission reductions, energy consumption savings, energy efficiency improvements resulting from ICT projects
- L.1440 Environmental impact of ICT in cities (consent expected in 2013)
- L.1450 Environmental impact of ICT in countries (consent expected in 2014)

L.ICT in cities (to become L.1440), under preparation

- This Recommendation will present general principles on how to evaluate the environmental impact of Information communication technologies (ICT) in cities, or other urban areas with a focus on energy consumption and greenhouse gas (GHG) emissions
 - It is built with a large number of representatives from the ICT sector and governments and in relationship with UNEP and UN-HABITAT.
- It is expected that L.1440 will cover the following aspects :
 - aggregation of impacts at cities level of ICT goods, networks and services
 - aggregation of impacts at cities level of ICT in organizations
 - Impacts of ICT projects in cities, for instance in the construction sector, the energy sector, the transport sector
- **L.1440** will in particular cover how to assess the impacts of the use of ICT in cities **to reduce energy consumption and GHG emissions** of other sectors

Examples of ICT projects in cities

- This Recommendation could for example be used to assess the impact of the following type of projects related to cities :
 - Optimization of public lighting, optimization of water usage at city level
 - Optimization of waste management
 - Smart metering
 - Smart buildings
 - Smart grid
 - Smart mobility
 - Creation of new connected work places
 - Remote public services with videoconferencing
 - Use of Software for urban planning
 - Connected hospital
 - Hospital at home

Conclusions

- Cities worldwide are more and more assessing their energy consumption and GHG emissions
 - At municipal level and city-wide
 - More and more cities report GHG emissions and set reduction targets
- ITU-T Study Group 5 Question on methodologies develops a set of methodologies to assess the environmental impact of ICT
- ITU-T Recommendations L.1400, L.1410 and L.1420 are available for free
 - They cover general principles and the assessment of ICT Goods, Networks and Services and the assessment of ICT in organizations
 - **L.1430** was consented in February 2013
- ITU-T Recommendation L.ICT in cities is under development
 - Your inputs are welcome !

Thank you !



<http://www.itu.int/ITU-T/climatechange/>

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