

ICTFOOTPRINT.EU'S SELF-ASSESSMENT TOOL FOR ENERGY & ENVIRONMENTAL EFFICIENCY IN THE ICT SECTOR

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Abstract

ICT is probably one of our most powerful and flexible tools for addressing today's great challenges: global warming and exhaustion of resources. However, ICT itself is a considerable source of carbon emissions in the environment, due to e-waste, electricity to power electronic devices, and in particular because of the huge amount of energy needed to keep data centres and the underlying infrastructure up and running. With progressive digitisation of society and business moving to the cloud the ICT environmental footprint is growing dramatically. Researchers and Industry have defined new standards and best practices for ICT sustainability and energy efficiency. Be that as it may, changes must be adopted on a large scale for achieving substantial impact. An estimate of 10 million SMEs in Europe is ICT-intensive. In the quest of raising awareness on ICT's environmental sustainability, and democratising the access to standard footprint calculation methodologies, ICTFOOTPRINT.eu has developed an easy-to-use online Self-Assessment Tool for ICT Services (branded SAT-S) to help SMEs measure the carbon footprint of ICT services, providing them with basic knowledge to raise awareness on environmental footprint methodologies, start addressing the problem and make informed decisions leading to a greener ICT. SAT-S is deliberately simple, and performs simplified evaluation based on life-cycle assessment (LCA) principles and limited to two indicators: GHG emissions and primary energy consumption, following the main methodological principles and rules, as provided by existing standards and methodological guidelines specific to the ICT sector (ITU-T, GHG, etc.). This paper reports on the choices made for the development of the SAT-S tool from the methodological, algorithmic and usability perspectives. Moreover, the paper provides an updated analysis of the ICT methodologies selected in the context of analysing energy efficiency in ICT organisations, ICT products, ICT Goods and ICT Services.



Figure 1

ICTFOOTPRINT.eu Self-Assessment Tool logo

Keywords: carbon footprint in ICT; self-assessment methodologies for SMEs; ICT sustainability; energy efficiency; standards; LCA.

Topic: 09. Energy Management | **Identification number:** 09.143