

Call For Papers: *GreenMetrics 2009* Workshop
June 15, 2009
Seattle, WA

In conjunction with SIGMETRICS/Performance 2009
Sponsored by ACM SIGMETRICS

Global climate change is a topic of increasing importance in modern society. The primary objective of this workshop is to explore how improvements to or new uses of Information and Communication Technology (ICT) can contribute towards efforts to minimize climate change. In particular, this workshop will provide a forum for discussions on how to reduce the environmental impact of ICT. According to a recent report from the Climate Group, the ICT sector is responsible for 2% of the worldwide carbon footprint. This is roughly equivalent to the carbon footprint of the airline industry. Furthermore, an increase of 50% is predicted for the ICT sector's carbon footprint by 2020. As regulatory and social pressures increase, organizations will need to take steps to reduce their environmental impact. ICT is expected to be a key sector in the effort to combat climate change, reducing overall carbon emissions by 15% by 2020 (smart2020.org). The workshop will provide an opportunity to explore opportunities for ICT applications or services to reduce the environmental impact of existing non-ICT processes.

This workshop is intended to bring together researchers from the (traditional) SIGMETRICS community with researchers and practitioners in relevant areas, to exchange technical ideas and experiences on how to lessen the environmental impact of ICT, or how to utilize ICT to lessen the environmental impact of other sectors. Improvements are to be quantified in terms of *sustainability metrics* such as reduction of carbon emissions. Improvements in sustainability should ideally also demonstrate that acceptable Service Level Agreements (SLAs) can be maintained. This workshop will serve as a forum for the SIGMETRICS community to apply general measurement, analysis and modeling techniques to this important area.

Topics of interest include but are not limited to:

- Measurement and evaluation of the sustainability of existing ICT systems
- Definition and demonstration of useful sustainability metrics
- Methods that systematically improve the efficiency of existing ICT systems
- Tools that facilitate the design of more sustainable ICT systems
- Development of models that pertain to the sustainability of ICT systems
- Case studies of efforts to improve the sustainability of production ICT systems
- Use of ICT systems to improve the sustainability of existing non-ICT processes

Preference will be given to work on large-scale systems, e.g., entire data centers or enterprise-scale applications.

Important Dates

May 4, 2009: Paper Submission (hard deadline)

May 18, 2009: Author Notification

May 25, 2009: Final Versions Due

Submission Guidelines

Papers must not exceed five double-column pages in the standard ACM format (<http://www.acm.org/sigs/publications/proceedings-templates>). Submissions must be submitted electronically in printable PDF form, via the EDAS system (<http://www.edas.info/>). The EDAS system requires you to register the title and abstract of your paper before you can upload the manuscript of the paper. The deadline for the final version of submissions is May 4, 2009, 23:59 EST.

Organizing Committee:

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