Sustainable Computing Workshop 2026

SCW @Computing Frontiers Towards Sustainable Systems

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May 19-21, 2026 Catania, Italy

CALL FOR PAPERS

The **ACM International Conference on Computing Frontiers (CF'26)** is a premier international forum in emerging technologies in the broad field of computing. **SCW 2026** is a workshop within CF'26 that addresses sustainability aspects of computing systems. Emphasis is on current and future challenges of sustainable computing in both academia and industry.

SUBMITTING A PAPER

We invite prospective authors to submit original papers in areas including, but not limited to:

Impact assessment or life cycle analysis (LCA) of computing systems and technologies

• Novel methods and tools for LCA and impact assessment or measurement
• Evaluation of the environmental or social, direct or indirect impacts of ICT systems and technologies
• Carbon footprint of systems and technologies
• Attributional or consequential LCAs of computing systems or technologies
• Critical reviews of impact assessment or LCA methods
• Global and/or prospective environmental impact assessment of computing infrastructures and associated industries
• Absolute environmental impact assessment of computing services and sectors compared to planetary boundaries

Novel methods and tools for systems ecodesign

• Repair/reuse/recycle strategies for computing systems, and integration in a circular economy
• Reusability of devices through hardware and software updates
• Long-term maintenance of hardware and software for increased longevity
• Design methodologies to increase the lifetime or lower the impacts of systems
• ASIC design flows for sustainable devices and applications
• Reconfigurability for systems lifetime extension
• FPGA design flows for sustainable computing devices
• Hardware and software designs and methodologies for better traceability, interoperability and modularity
• Critical reviews of computing ecodesign methods

Computing systems for sustainability

• Novel exploitations of computing systems for improving the sustainability of applications

Submissions may cover one or several of the three sustainability pillars : environmental, economic and social. Submissions drawing a link between open source contributions and sustainability or between digital sovereignty and sustainability are particularly welcomed.

Sustainable computing technologies and architectures

• New systems exploited for sustainable computing : chiplets, architectures, AI hardware, cloud, quantum etc.
• New software programming technologies for green computing and low energy processing
• New substrates for low environmental impacts
• Sustainable computing architectures, operating systems and applications
• Provably low environmental or social impact systems and frugal systems
• Reduced energy consumption application-specific designs, and methods to adjust resource requirements to the actual needs of the application
• Low energy video communication architectures
• Sustainable neural network architectures
• Novel power electronics for frugal computing systems
• Testing and verification of system updates, and update or maintenance mechanisms

Submission Procedure

4-page short paper or 8-page long paper.
Accepted papers will be published in the ACM digital library.
Paper submission deadline : **February 27, 2026** **(extended)**
Notification of acceptance : **March 20, 2026**
Camera ready deadline : **April 6, 2026**

All accepted papers require one registration and one physical attendance at the conference.

COMMITTEE

Organization Committee
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https://www.eecone.com/eecone/workshop/scw26.html