

ICT solutions for sustainable lifestyles

Workshop Outline

13 February 2013, 14:00-18:00

ETH – Swiss Federal Institute of Technology, Rämistrasse 101, Zürich, Switzerland

1. Background

Being woken up every morning by your digital alarm, checking e-mails from colleagues on your way to work, monitoring your energy consumption through smart meters, communicating and networking with your family and friends, and using your GPS or smartphone to find a proper restaurant for tonight. Information and communication technology (ICT) is all around us. This is why it matters how we use it. ICT can play a significant role in enabling us to live more sustainably and move to a more intelligent use of our time, energy and resources.

Some examples of *green ICT solutions* include the use of smart technologies in key sectors of the economy such as smart grids, smart buildings or intelligent transport systems, which can dramatically reduce energy consumption globally, as well as cut down greenhouse gas (GHG) emissions. It is estimated that by 2020 the use of these ICT-enabled applications has the potential of achieving a reduction of 9.1 Gt of GHG emissions, amounting to \$1.9 trillion in gross energy and fuel savings¹. This represents 16.5% of global emissions.

The challenge today is to move from theory to practice, and put in place the right measures and policy frameworks to fully scale up green ICT solutions. Findings from both the <u>World Resources Forum 2011</u>, held in Davos, as the <u>World Resources Forum 2012</u>, held in Beijing, indicate that, apart from progress on technical level (product and service design), sustainable resource management requires more attention to the use phase (consumer side). Raising awareness and providing information need to go hand in hand with providing adequate products, infrastructure and facilities.

2. Context

The joint WRF, ITU, GeSI and HP workshop *ICT solutions for sustainable lifestyles* is a pre-event of the international conference *ICT for Sustainability (ICT4S)* conference organized by University Zürich, ETH and Empa. This conference is about using the power of ICT for making our world more sustainable. The ICT4S conference will have speakers from 27 countries and 5 continents. Some 200-400 participants are expected to attend. For more detailed information about the conference visit http://www.ict4s.org/ or contact Prof. Lorenz M. Hilty at ict4s@ifi.uzh.ch

The WRF, ITU, GeSI and HP workshop is open to the participants of the ICT4S conference as well as to the public, free of charge. Prior registration is required, please visit the following link: <u>bitly.com/XCmf0n</u>.

3. Topics

- How can ICT help facilitate more sustainable lifestyles and consumption patterns in areas such as education, housing, transport, health, food and shopping?

¹ GeSI SMARTer2020: The Role of ICT in Driving a Sustainable Future, <u>http://gesi.org/SMARTer2020</u>.

- What kind of ICT solutions are already available, and what trends do we see in research and development?
- What can be done to mainstream and widely deploy existing ICT solutions, and encourage the development of new ones?
- What roles do different stakeholders have in encouraging cross-sector and public-private collaboration to achieve the necessary scale?

4. Draft agenda

The workshop will be moderated by Bas de Leeuw, Managing Director of WRF.

14:00-15:30: Session 1- Keynote speeches

Keynote speakers will introduce the topic of how ICT can enable sustainable lifestyles from different points of view, highlighting the role that standards, regulations and public policies play to move from proof of concept to mainstream implementation.

- > Opening by **Bas de Leeuw**, Managing Director, WRF
- > Keynote by Flavio Cucchietti, Vice Chairman of ITU-T Study Group 5, ITU
- Keynote by Alice Valvodova, Executive Director, GeSI
- > Keynote by Heinz Gutscher Ph.D., Professor Emeritus of Social Psychology, University of Zürich
- Keynote by John A. "Skip" Laitner, Principal, Economic and Human Dimensions Research Associates, and Senior Fellow, American Council for an Energy-Efficient Economy (ACEEE)

15:30-16:00: Coffee break

16:00-16:30: Session 2- ICT solutions industry panel

Presentations of innovative ICT solutions for sustainable lifestyles by representatives of the ICT sector and other stakeholders.

- > e-Education: Sibylle Rock, Worldwide Stakeholder Engagement Manager Environment & Education, HP
- > e-Health: Heinz-Gerd Peters, Senior Expert Group Corporate Responsibility, Deutsche Telekom
- Smart metering: Fabian Etter, Head of Corporate Responsibility, Swisscom
- > Cloud computing: Dan Williams, Environmental Sustainability Research Manager, Microsoft
- > Intelligent transport: Ulrike Vott, Sustainability Manager Middle East and Africa, Nokia

16:30-17:30: Session 3- Interactive visioning

Interactive group discussions on how ICT can enable sustainable lifestyles in the present and the future, the way forward for mainstreaming ICT solutions.

17:30: Closing remarks and next steps

The key conclusions of the day and the next steps including setting the agenda for WRF Davos, 6-9 October 2013.

18:00: Networking reception

The organisers will prepare a short report with the outcomes of the workshop and make it available to all workshop participants shortly after the conference.

5. Logistics

The workshop will take place at ETH – Swiss Federal Institute of Technology, located at Rämistrasse 101 in Zürich, Switzerland.

Please register at <u>bitly.com/XCmf0n</u> by Friday 8 February 2013. Information about accommodation can be found at <u>bit.ly/WttgJS</u>.

6. Organizers

The workshop is jointly organized by WRF, ITU, GeSI and HP.

About WRF

The World Resources Forum (WRF) is the global science-based platform for sharing knowledge about the economic, political, social and environmental implications of global resource use. WRF promotes innovation for resource productivity by building bridges among researchers, policymakers, business, SMEs, NGOs and the public. Flagship activity is the annual WRF Conference. For further information, visit www.worldresourcesforum.org/world-resources-forum-association.

About ITU

ITU, the International Telecommunication Union, is the UN specialized agency responsible for ICTs. Its membership, comprising 193 governments, some 700 private companies and about 50 universities, has called for ITU to take the lead in engaging the global community in addressing climate change through the use of ICTs. ITU is headquartered in Geneva, Switzerland, with 12 field offices around the world. Further information about ITU's climate change activities, including the reports referenced in this article, is available at www.itu.int/climate.

About GeSI

The Global e-Sustainability Initiative (GeSI) is a strategic partnership of the Information and Communication Technology (ICT) sector and organisations committed to creating and promoting technologies and practices that foster economic, environmental and social sustainability. Formed in 2001, GeSI's vision is a sustainable world through responsible, ICT-enabled transformation. GeSI fosters global and open cooperation, informs the public of its members' voluntary actions to improve their sustainability performance, and promotes technologies that foster sustainable development. GeSI has 29 members representing leading companies and associations from the ICT sector. GeSI also partners with two UN organizations - the United Nations Environment Program (UNEP) and the International Telecommunications Union (ITU) - as well as a range of international stakeholders committed to ICT sustainability objectives. These partnerships help shape GeSI's global vision regarding the evolution of the ICT sector, and how it can best meet the challenges of sustainable development. For more information, see <u>www.gesi.org</u>.

About HP

HP creates new possibilities for technology to have a meaningful impact on people, businesses, governments and society. The world's largest technology company, HP brings together a portfolio that spans <u>printing</u>, <u>personal computing</u>, <u>software</u>, <u>services</u> and <u>IT infrastructure</u> to solve customer problems. More information about HP (NYSE: HPQ) is available at <u>http://www.hp.com</u>.

7. Contact information

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