

Project: **REViSITE**

Roadmap Enabling Vision and Strategy for ICT-enabled Energy Efficiency ([www.revisite.eu](http://www.revisite.eu))



**Title:**

**D2.2** ICT4EE – Knowledge and Current Practices

Deliverable D2.2 ([download](#))

**Work Plan:**

The REViSITE project aims to produce a common cross-sectoral ICT4EE roadmap that identifies and harmonises common topics highlighting synergies for positively impacting energy efficiency. This deliverable D2.2 undertakes a state of the art review and critical analysis of recent and current RTD and industry efforts of ICT in energy efficiency.

Authors:



**Daniel Kuhn (Fraunhofer IPK)**  
[Daniel.Kuhn@ipk.fraunhofer.de](mailto:Daniel.Kuhn@ipk.fraunhofer.de)

**Executive summary:**

In 2008, Commission President José Manuel Barroso stated “...the real gains will come from ICT as an enabler to improve energy efficiency across the economy. ICT matters for energy reduction, especially in transport and the energy intensive sectors. ICT’s ability to organise and innovate is a key factor. In a 2010 key communication from the Commission - ‘A European strategy for smart, sustainable and inclusive growth’ - the importance of ICT in transport and energy intensive sectors was reiterated, with the communication also stating that at a national level, ‘Member States will need: To incentivise energy saving instruments that could raise efficiency in energy-intensive sectors, such as based on the use of ICTs’. The central role of ICT in enabling energy and sustainability goals is evident.




**Keith Ellis (Intel Labs)**  
[Keith.a.ellis@intel.com](mailto:Keith.a.ellis@intel.com)

D2.2 is a main deliverable of WP2 - Impact assessment of ICT for Energy efficiency. It is a "state of the knowledge and practice" type report detailing that which is homogenous, heterogeneous and synergetic across the four target sectors in terms of ICT enabled Energy Efficiency. The four sectors covered are Smart Grids, Smart Building, Smart manufacturing and Smart Lighting.

Deliverable D2.2 begins with a recap of deliverable D2.1 ‘ICT4EE Data Taxonomy: A common methodology to assess the impact of ICT developments’. The methodology and SMARTT taxonomy were used throughout D2.2 as an integrative classification system and as an aid to cross sector ICT4EE impact assessment.

Each partner/sector then details a distinct and individual review of their sector, describing its defining ‘smart’ characteristics, individual energy profile, sectorial framework and usage of ICTs. The ICT’s are categorised

- Matti Hannus (VTT)**
- Bruno Fies (CSTB)**
- Nilay Oza (VTT)**
- Hans Pille (KEMA)**
- Henryk Stöckert (FHG)**
- Eino Tetri (Aalto)**
- Tarek Hassan (LOU)**
- Steven Firth (LOU)**

<p>using the SMARTT taxonomy to assist in cross-comparison. The initial review is concluded by identifying relevant current state-of-the-art and sector specific RTDs of European and national research projects.</p> <p>Having completed the individual sector specific reviews the document then focuses on identifying gaps, commonalities and synergies leveraging cross-sectorial heuristics. Each sector describes the most significant links, as they see them, to the other sectors. There is then a focus on the most promising ICT/RTDs as each sector aims to identify points of reference for other sectors, while at the same time, investigating potential adoptions that can benefit their own sector in terms of ICT4EE.</p> <p>The document concludes with a synthesis explaining the common themes, potential synergies and most significant ICTs and fields of research across the sectors. It is envisaged this initial synthesis together with the overall output of this deliverable will feed directly into deliverable D2.3 ICT4EE impact assessment model and WP3 RTD roadmap development in the area of ICT4EE.</p>	
<p><b>Keywords:</b> Energy Efficiency, State of the Art, ICT, ICT4EE, ICT, Knowledge, RTD, Smart Grids, Smart Buildings, Smart Manufacturing, Smart Lighting.</p>	<p><b>Date:</b> 14/02/2011</p>
<p>Dissemination level:  <b>PU – Public</b>  <b>Copyright</b>  </p> <p>You are free: to Share - to copy, distribute and transmit the work; to <b>Remix</b> - to adapt the work.</p> <p><b>Attribution</b> - You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).</p>	<p>Project cofinanced by</p> 