



Symantec comments for the public consultation on Information and Communication Technologies enabling Energy Efficiency.

Submitted online <http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=ICT4EE>

by 21 July 2008

Background

On May 13th 2008, the Commission launched its Communication on “*Addressing the challenge of energy efficiency through Information and Communication Technologies*” which was followed by the launch of a consultation period. It is the first EU policy initiative that recognizes that ICT have a role to play in increasing energy efficiency of the economy, and that Europe needs to ensure that ICT-enabled solutions are available and fully deployed. Symantec congratulates the Commission on such a move and would like to take this opportunity to comment on the Communication.

We also welcome the creation of a collaborative partnership through the Ad-Hoc Advisory Group. Symantec has already submitted input to the Ad-hoc Advisory Group as a member of AeA Europe who has a seat there. We believe this structures dialogue is the right way forward and appreciate the opportunity to provide contributions though this fora. However, we also wish to take the opportunity of this consultation to highlight the positive role software has to play in enabling energy efficiency.

Symantec is the fourth largest software company worldwide providing security, system management and storage solutions both to businesses and consumers. As such we would like to stress in this paper the important role software has to play in ICT energy efficiency, supporting the EU in achieving its goals of reducing its carbon emissions by 20% by 2020.

Software has a powerful role to play as an enabler for energy efficiency in the ICT sector and across other sectors by mitigating energy consumption of hardware by rationalising energy requirements throughout their entire IT infrastructure from desktop, to servers and data centers.

Reducing CO2 footprint of ICTs

- *European Commission: Proposes that the ICT industry voluntarily commits to becoming Carbon Neutral and exchanges best practices to improve structural change in the industry*

ICT companies differ in their approaches on this issue. Some ICT companies have taken carbon neutrality commitments, while other member companies pursue different strategies to mitigate climate change. Each ICT company should determine itself how it best contributes to mitigating climate change. Symantec strategies is built around carbon reduction by managing and reducing its energy consumption and helping its customers rationalize the power demands of their own IT infrastructure through a software driven strategy for storage, data and desktop efficiency.



As a company of over 17 000 employees spread across the globe in aprox. 220 sites, Symantec has committed to reduce its carbon output by 15% by 2012 and provide public records of its progress towards this target.

- We have deployed a “Reduce, Reuse, Recycle” operation across the company for employees in our offices, research parks, and manufacturing facilities. Our main European facility in Dublin, Ireland recycles fully 80% of the waste generated on site.
- We use our software solutions to dramatically improve storage and server utilization efficiency (and therefore reduce power consumption) in our data centers.
- The company has steadily increased the online sale and distribution of its software. Over 72% are distributed electronically. To further reduce the environmental impact of our sales, we have reduced the size of our consumer packaging by 97%.
- Symantec is actively reducing its carbon footprint by curtailing business travel, using web conferencing whenever possible, supporting the use of mass transit by employees, and purchasing carbon credits to at least partially offset the indirect creation of greenhouse gases by our corporate activities.
- Symantec manufacturing production site are ISO 14001 compliant. The International Standard ISO 14001 is used by thousands of organizations worldwide as a model for implementing an environmental management system that promotes environmental protection, resource conservation, and improved efficiencies.

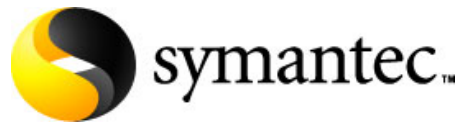
Symantec also helps its customers reduce their carbon footprint through software solutions and services: We help our customers make their IT infrastructure more energy efficient by rationalizing its energy usage through their IT infrastructure. Symantec software improves hardware utilization by decreasing storage consumption through data deduplication, maintaining high availability through advances clustering, managing inactive workstations through power management utilities, and maximizing energy efficiencies through intelligent data center design.

Symantec would welcome, and contribute to sharing of best practices in this area. We are member of the Green Grid (<http://www.thegreengrid.org>) a global consortium of public and private entities dedicated to advancing energy efficiency in Data Centers and business computer eco-systems which is already active in the US and Asia.

We would encourage the Commission to take stock of existing initiatives of sharing best practices and efforts to develop metrics, standards and measurement methods and processes in other regions of the world, such as in the US and Asia. This will help avoid creating regional silos and unnecessary duplication of efforts and, instead, focus on advancing energy efficiency globally going forward.

- *European Commission: Recognizes that ICTs, their components, sub-systems and end-systems consume significant amount of energy and need to improve. EC proposes to foster R&D and other EU funding for energy efficient ICTs, components, applications, services, and footprint tracking.*

Symantec agrees that ICT sector consume significant amount of energy at present.



Data Centers are an example of high energy consumers and wasters. Designed when energy costs were relatively low, data centers traditionally deployed inefficient physical data center infrastructure components such as power distribution grids, wasting large amounts of energy before it arrives in the system racks. Surveys¹ show that the Power Usage Effectiveness (PUE) ratio² of many data centers is 3.0 whilst an energy efficient designed data center could reduce the PUE to 1.6.

European legislation on Data Retention (2006/24/EC) and Data Protection (95/46/EC) and other business compliance requirement (SOX) demand business to store an ever increasing amount of data. In addition to these regulatory requirements for data processing and storage are round the clock performance business requirements in a global economy. As a result, Data Centers power needs are soaring despite improved hardware efficiency.

There is an increasing server and storage footprint and massive increase in power density per rack: A single rack can consume more than 30KW whilst less than a decade ago it would have been between 2KW and 3KW. In 2005, research showed data centers accounted for 1.7% of the total power consumed in the US. There, power consumption will continue to grow at 14% per annum - consuming an ever larger share of the global energy market⁽³⁾.

These challenges are a chronic, inescapable fact for organisations. Whilst the main priority remains business continuity, soaring energy costs for running the ICT infrastructure should encourage the development of energy efficiently managed IT environment yet take up is slow due to aversion to change and risk incurred by such changes. As a result, energy expenses in data centers are to double in the next 5 years⁽⁴⁾;

Whilst software has a role in reducing data centers and ICT carbon footprint in general, complementing efforts and innovation in hardware solution, government input is needed. Policy instruments should be explored as well to adopt best practice existing today. E.g. stimulate the Code of Conduct of data centres, and developing more ambitious green procurement criteria for complex ICT solutions (e.g. data centres, eGovernment services).

ICT as enabler in power grids:

- *EC: Support awareness raising on distributed generation, support multidisciplinary R&D, and use EU funding for large scale projects*

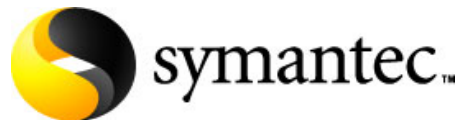
Symantec agrees with the Commission to support awareness raising on distributed generation, support multidisciplinary R&D and use EU funding for large scale projects. However we believe the Commission should first identify the state of the art, and do a

¹ Green Grid, www.thegreengrid.org

² Ratio between the total power a Data Center facility draws and the power the facility IT equipment draws.

³ Jonathan G. Koomey, *Lawrence Berkeley National Laboratory in Berkeley, California*. Survey data on US and worldwide Data Center power consumption. <http://enterprise.amd.com/Downloads/svrprwusecompletefinal.pdf>

⁴ EPA US Environment Protection Agency, www.epa.gov



benchmarking exercise across the EU and identify barriers to their uptake, and then develop policy solutions which could remove the barriers.

We would also urge the Commission to investigate into similar actions and initiatives which have been successful in other regions worldwide.

ICT as enabler in energy-smarter homes and buildings

- *European Commission: Support multidisciplinary R&D in areas such as energy visualization, and energy management systems. Support large scale demonstration projects using EU funding. Raise awareness on emetering.*

We agree, but like above, we need to investigate best practice, benchmark, identify barriers, and develop policy to remove the barriers. One potential barrier is that the actor needing to invest in smart metering does not receive the financial benefits, and therefore the uptake of the solution may need to be legislated for due to market failure.

Increasing visibility and understanding of ICTs for energy efficiency

- *European Commission: launch consultation and partnership process to investigate how ICTs can support other policy areas addressing energy challenges, and launch information gathering and analysis exercise on the impact of ICT on energy efficiency.*

Symantec agrees with the Commission intention to launch a consultation and partnership process to investigate how ICT can support other policy areas addressing energy challenges and are willing to participate in the process.

We appreciate this opportunity to submit these comments to the Commission's public consultation on "Information and Communication Technologies enabling Energy Efficiency and continue to offer our expertise and commitment to help achieve these important goals. For further information, please contact Sarah Greenwood, Government Relations Manager, - tel. +32 (0)2 534 63 50, sarah_greenwood@symantec.com

About Symantec

Symantec is a global leader in providing security, storage, and systems management solutions to help business and consumers secure and manage their information. Headquartered in Cupertino, California, Symantec has operations in more than 40 countries. Further information on www.symantec.com.