

NETWORK STANDBY TOWARDS A POLICY FRAMEWORK

WORKSHOP 7-8 MARCH, TORONTO

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International
Energy Agency



Joint workshop



SUPEREFFICIENT.ORG



***How can we decrease standby power consumption of network-connected products?**

***What are the issues that need to be considered?**

***What are the policies, supporting measures, technical standards and initiatives to achieve this?**

International Energy Agency

- **E**nergy security
- **E**conomic development
- **E**nvironmental awareness
- **E**ngagement worldwide

Working together to ensure reliable, affordable and clean energy

Energy Efficiency

- **P**olicy recommendations
- **P**olicy guidance
- **E**merging issues

- *Statistics
- *Analysis
- *Models
- *Foresight
- *Guidance

ICT and energy implications

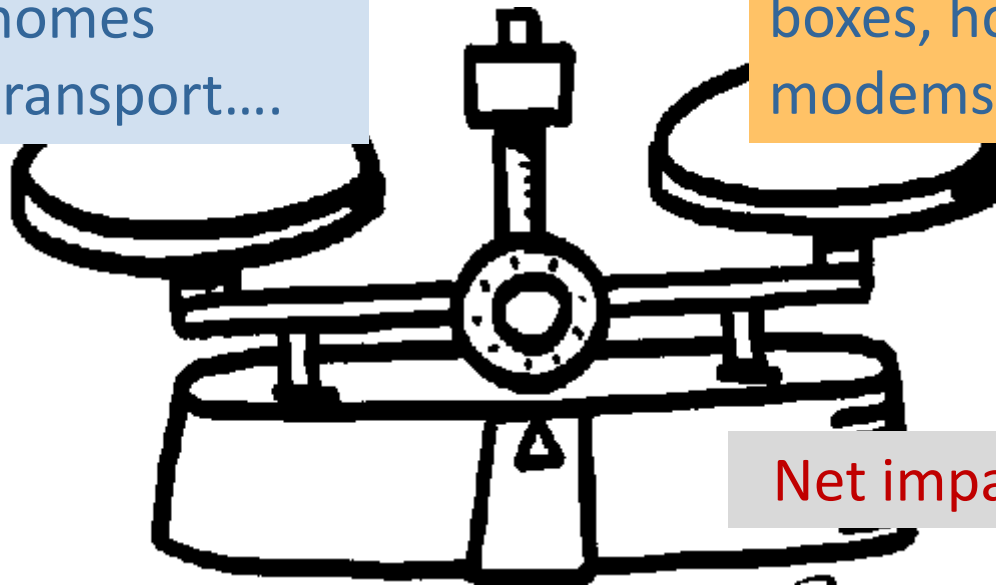
- ICT products, applications and services that **enable energy efficiency** in other sectors
 - **ICT own energy consumption**
- **What is happening to 1-W standby?**

New services

Smart grids
Smart homes
Smart transport....

New load

Deployment of computers, TVs, set top boxes, home gateways, modems, servers....



Net impact?

ICT is growing rapidly

- **2 billion people online**
- **490 million smart meters by 2015**
- **12 million home automation systems by 2016**
- **4 network-connected products per US home**
- **16 network-connected products/home by 2016**
- **100 billion connected products by 2030**

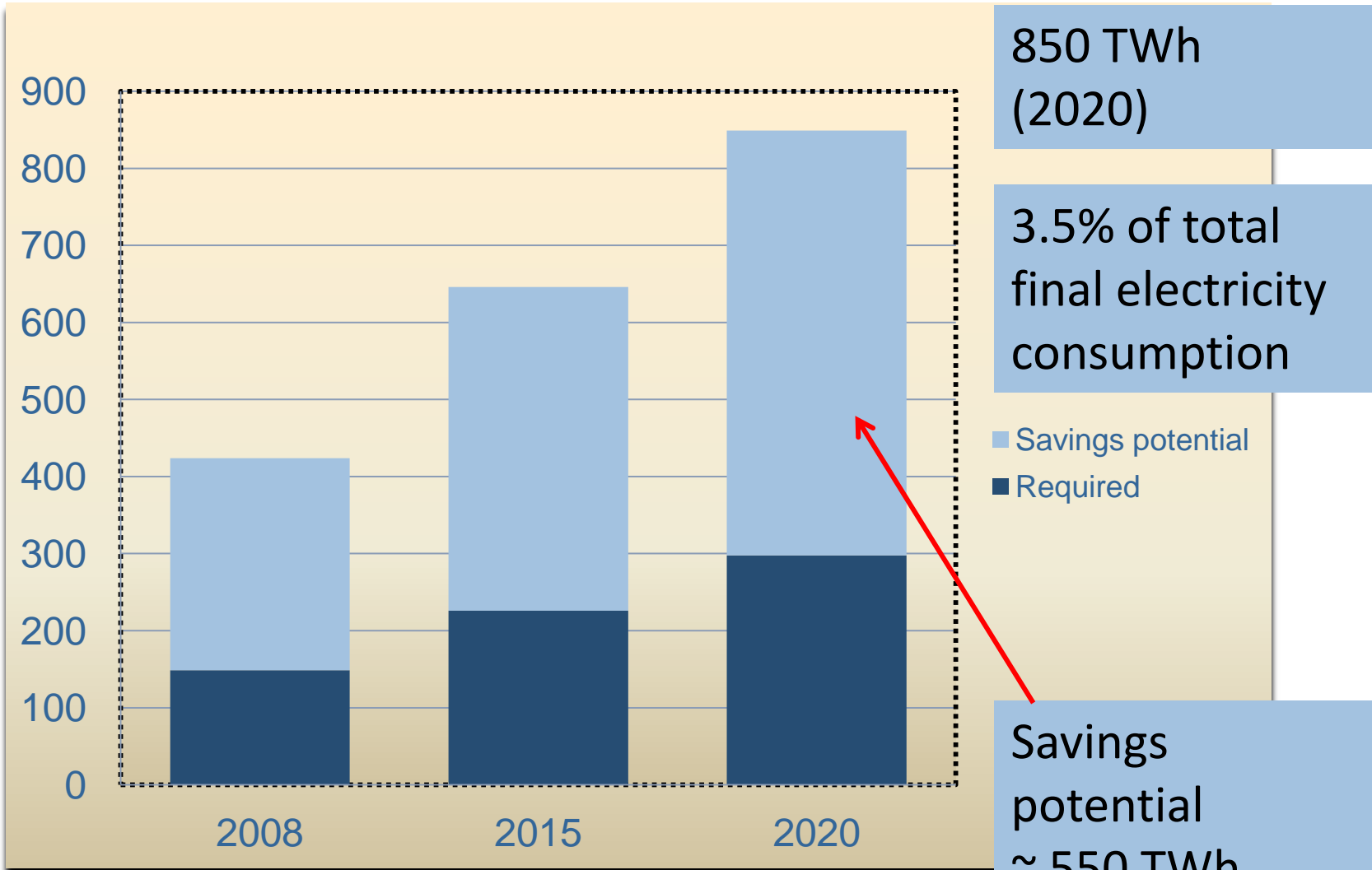
ICT electricity demand is growing rapidly

- **5%** of global electricity consumption
- **10%** of EU electricity consumption
- **3-fold** projected increase in global ICT-related electricity consumption by 2030

A lot is wasted

- **90%** of network electricity is consumed when nothing is transmitted
- **3.5%** of global electricity consumed by networked products in standby 2020

Global network standby power estimated savings potentials (TWh)*



Source: Bio Intelligence Service, 2011 *residential/commercial edge-devices

IEA Project on network standby

Objectives:

- **Raise awareness about network standby**
- **Provide policy guidance**
- **Stimulate data collection efforts and international cooperation**

Approach:

- **Strategic partnerships**
- **Stakeholder engagement**
- **Workshop in Stockholm 2012**
- **Policy framework**
- **Publication 3Q 2013**

Policy framework

- **Definitions**
- **Technical standards**
- **Data collection methodology**
- **Energy efficiency metrics (power vs. energy)**
- **Test methodology**
- **Policy options – policy package**
- **Systems perspective**
- **Overview of existing policies and standards**

Next step:

- **Policy guidance in accessible format and with clear messages**

Workshop topics

DAY 1

- **Policies**
- **Perspectives from industry**
- **Technical standards**

DAY 2

- **Supporting measures/standardised approaches**

Definitions, functions, test methodology

- **Lessons learned and initiatives**

Usage patterns, TVs and set-top boxes, technologies, solutions, new issues, smart meters

- **Beyond network standby**

Workshop outcomes

- **Overview of policies and what supporting measures are needed**
- **Understanding of current technical standardisation and identification of future standardisation needs**
- **Better understanding of definitions and functions**
- **Role of different stakeholders**
- **How can industry drive efficiency**
- **Roadmap – what needs to be done, when, by whom**
- **Issues for future attention**