



Unlocking the value of Energy Efficiency for Europe

- How the electricity sector can team-up to drive economic growth and tackle climate concerns while improving security of energy supply -

Harry Verhaar

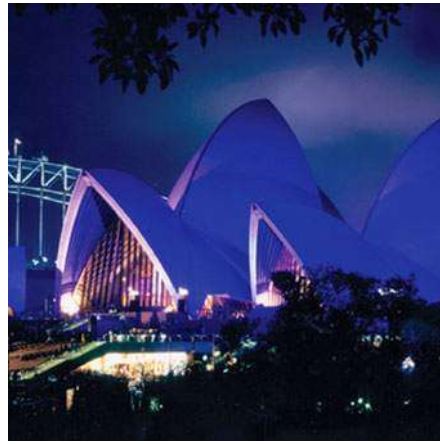
Head of Public & Government Affairs, Philips Lighting
Development Group, Brussels, 5 May 2015

Global Trends & Challenges

The need for a paradigm change



Population growth & demographics



Urbanization & the need for Cities to establish identity



The rise of the middle class



Resource challenges

We live and operate in a fast changing world, where a number of **global trends** pose new **challenges** to government, business and society, resulting in the need (and opportunities) for new **solutions** and **business models** that address economic growth with accompanying improvements in quality of life.

Energy Efficiency in the Lighting Sector

The role of energy efficient lighting

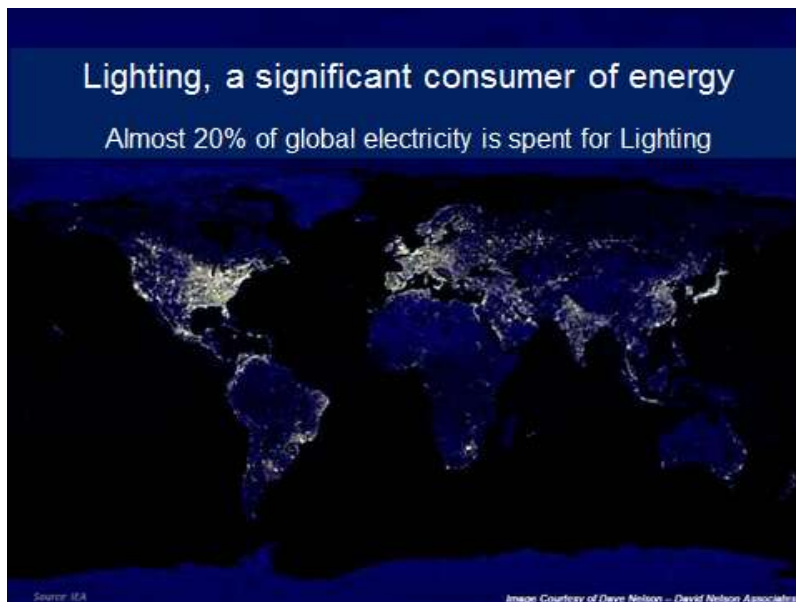
Four drivers for action

- Rising energy prices
- Climate change
- Security of Supply
- Economic Growth

Our value proposition



Energy Efficient
Lighting Solutions



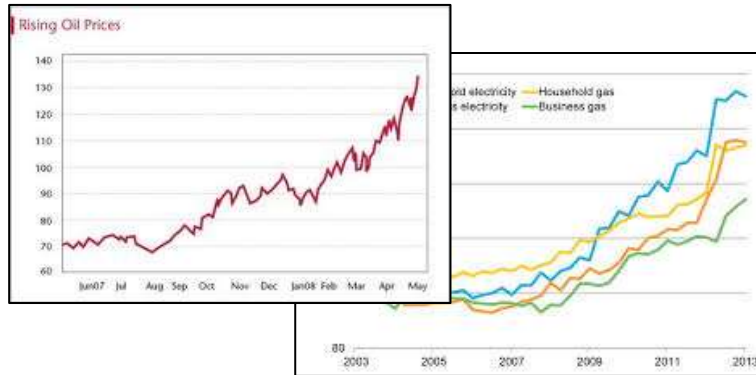
Potential savings 40%

	Global	Europe
Electricity cost/yr (Bil €)	128	28
CO ₂ emissions/yr (Mio tons)	670	98
Car emissions@10km/yr(Mio)	260	38
Power plants (at 2TWh/yr)	642	141

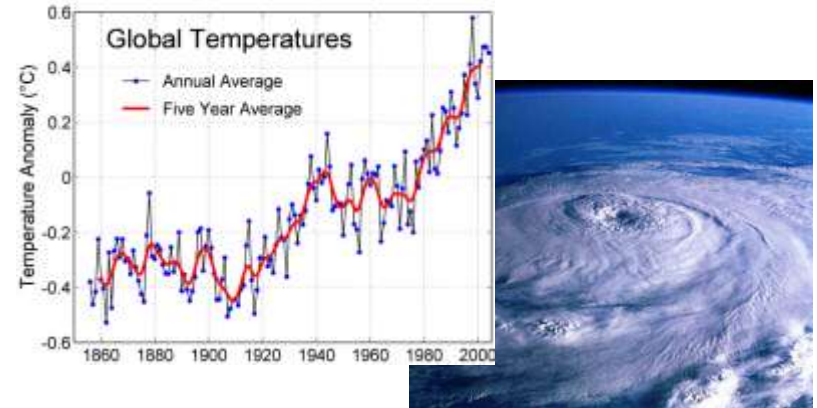
Unlocking the value of Energy Efficiency

Catching 4 birds with one stone

Rising energy prices



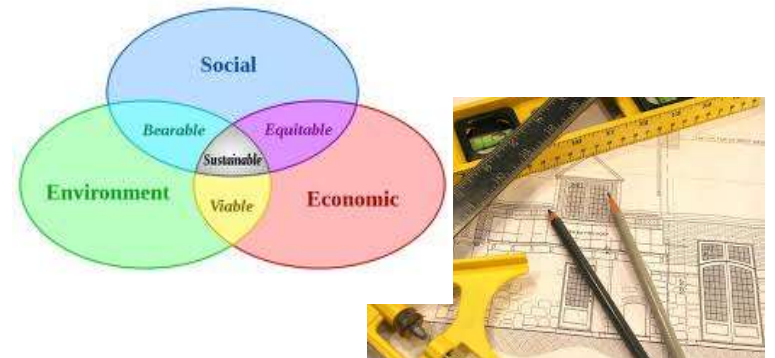
Climate Change



Security of energy supply



Economic growth



The LED Lighting Revolution

Lighting is evolving beyond offering products



- Analog / Lamps
- Stand-alone / 'Dumb'
- Products / Replacement sales / Invoicing



- Digital / LEDs
- Connected / 'Smart'
- Services / Leasing / Larger-scale projects



EUROPEAN ALLIANCE TO
SAVE ENERGY

#EfficiencyFirst

This is the principle to ensure that energy efficiency investments:

- Are systematically and fairly assessed when energy policy is developed
- Are given priority when they are more cost-effective than equivalent investments in energy supply
- Can compete on equal terms with investments in energy supply

FIRST FOR SECURITY



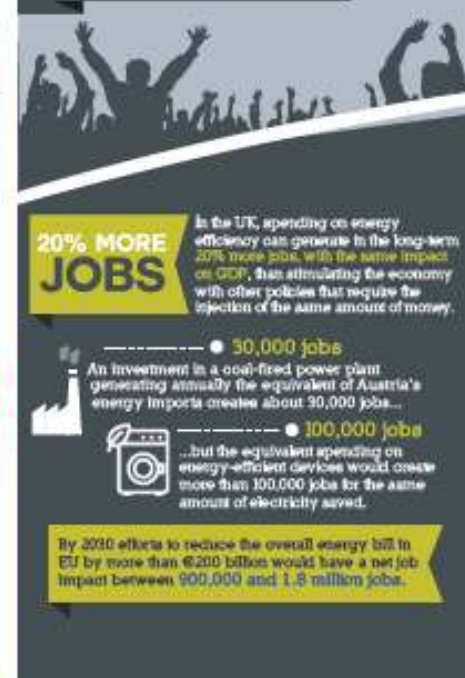
FIRST FOR IMPACT



FIRST FOR GROWTH



FIRST FOR PEOPLE



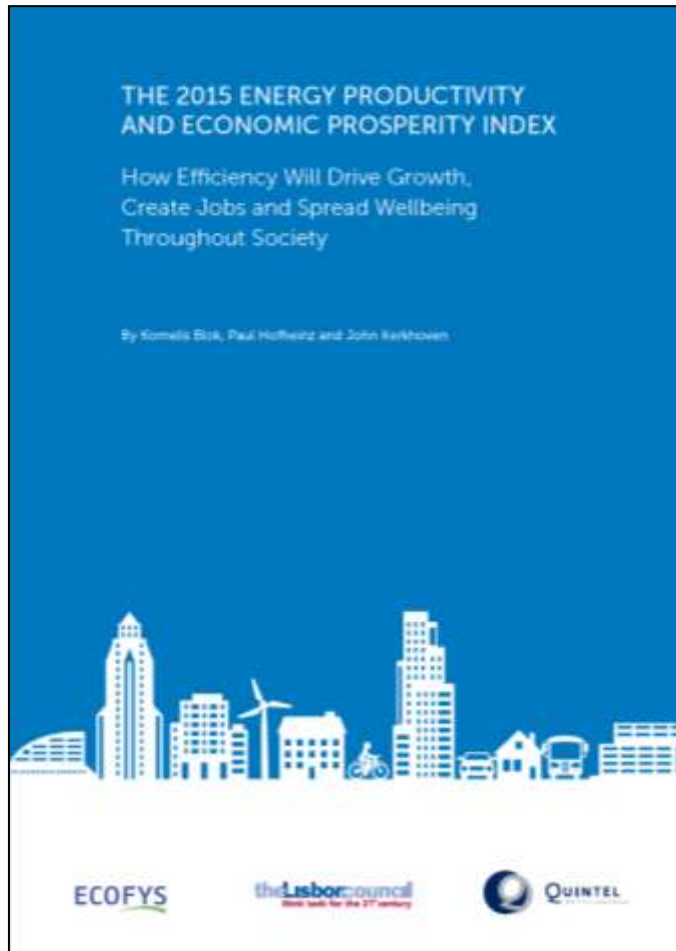
- 1 Establish an **Advisory Group** in 2015 to define how to remove structural barriers to a single market for energy efficiency products, systems and services.
- 2 Investigate the barriers to a level-playing field between supply and demand in the European energy sector.
- 3 Realise demand side markets within the **Third Internal Energy Market Package**.
- 4 Require Member States **2030 National Energy Action Plans** to apply a 'savings test' to the allocation of infrastructure funds and maximise the role of energy efficiency in delivering 2030 goals at least cost.
- 5 Set up a dedicated **Energy Efficiency Team** within the European Fund for Strategic Investments (EFSI) Advisory Hub.
- 6 Implement #EfficiencyFirst when accessing **European funds** - e.g. no access to Connecting Europe Facility Funds without delivery plans for energy efficiency first in place.
- 7 Make approval of **State Aid** for energy infrastructure and supply-side technologies conditional on a guarantee of fair treatment of the demand-side, and on the provision of clear evidence that no alternative demand side solution can address the failure at lower cost.
- 8 Incorporate #EfficiencyFirst objectives into the **annual State of the Energy Union** without forgetting the basics: 8.1. Review demand projections used for planning infrastructure investments to ensure they are aligned with energy savings objectives; 8.2. Review cost benefit assessment methodology to ensure that costs and benefits of energy savings are fairly accounted for 8.3. Ensure strong implementation, enforcement and evaluation of existing energy efficiency legislation.

EUROPE'S
ROADMAP
TO DELIVERING
#EFFICIENCYFIRST



Energy Productivity

Turning Energy Efficiency into Economic Growth



EU Impact

Scenario: doubling the rate of EP:

1. Reduction of energy expenditure by 35%
2. Improved security of energy supply
3. Job creation 1.2 million by 2030 (renovation; innovation)

The Future of Electricity

WEF Study, launched 1/2015 Davos



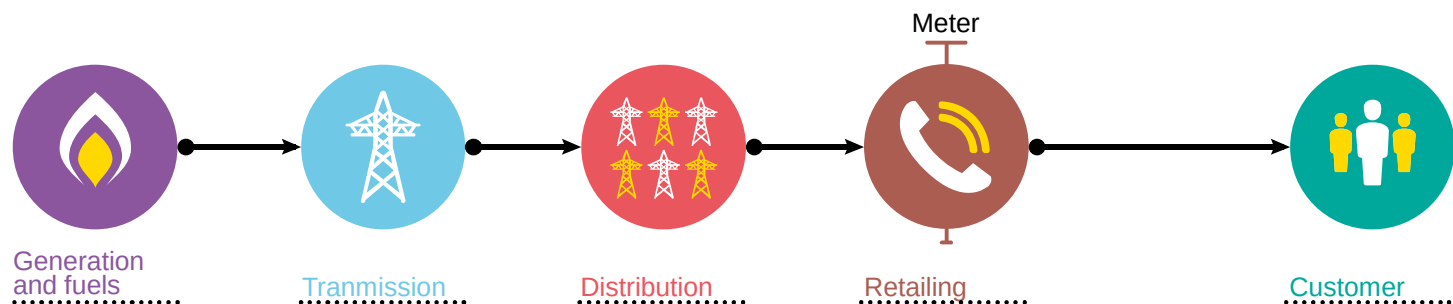
What characteristics of a balanced energy policy framework and transition pathway will ensure investability?

What design of the market is required?

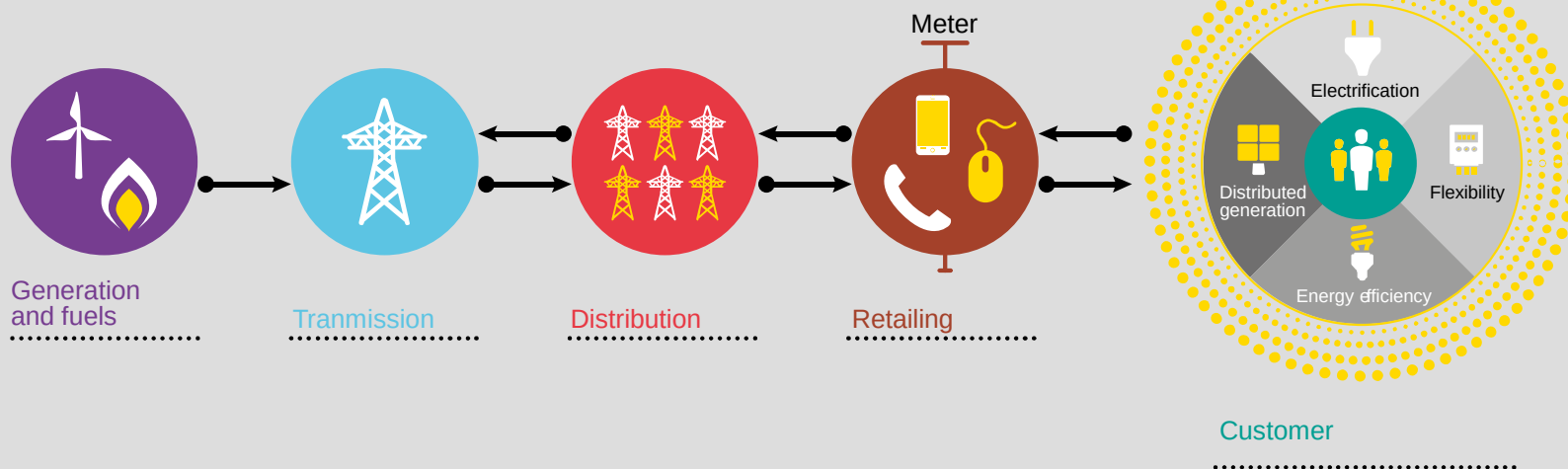
What business and investor models could support the transition?

The electricity value chain is evolving with new business and investment opportunities emerging beyond the meter

Current Model



Future Model



The Future of Electricity

WEF Study, launched 1/2015 Davos



- Integrated Policy, Market Design and Business Model transition
- Balanced approach to 'Supply' and 'Demand'
- Moving from 'Electricity' to 'Electricity Services'
- Leveraging Utility Customer Base (SME; Large corporations; Cities; Consumers)
- Energy Efficiency as a new Customer
 - EE investments / Utility as Big-Esco
 - Combi-projects for Cities, States & Regions
 - EE in Buildings combined with Electric Heating?
 - LED Streetlighting combined with Electric Transport?
 - ...

Global EE Accelerator Platform (SE4All)

Doubling the rate of EE in a unique (Sub)National x Business PPP

Launched @UN Climate Summit NYC

- EE Accelerators
 - Buildings
 - Lighting
 - Appliances
 - District Heating
 - Transport
 - Industry

Partnership for global progress

- UN (UNF; UNEP; SE4All; UNFCCC)
- Sub-national governments (in progress)
 - TCG; R20; C40; ICLEI; UCLG; GCI



Achim Steiner (UNEP), Sarah Watson (FIA), Harry Verhaar (Philips), Ban Ki Moon (UN), Kandeh Yumkella (SE4All), Clay Nesler (JCI), Amanda Eichel (C40), Reid Detchon (UNF)



SUSTAINABLE ENERGY FOR ALL

ABOUT US | OUR HUBS | FLAGSHIP PROGRAMMES | EVENTS & MEETINGS | TRACKING PROGRESS | NEWS & MEDIA

FLAGSHIP PROGRAMMES

GLOBAL ENERGY EFFICIENCY ACCELERATOR PLATFORM

- UN Secretary-General Video Message
- Appliances and Equipment
- Building Efficiency
- District Energy
- Lighting
- Transport and Motor Vehicle Fuel Efficiency
- Industrial Energy Efficiency
- SE4All Energy Efficiency Committee Report
- Contact

COUNTRY LEVEL ACTIONS

HIGH IMPACT OPPORTUNITIES

Global Energy Efficiency Accelerator Platform

Sustainable Energy for All, an initiative led by the UN Secretary-General and the President of the World Bank, has as one of its three objectives for 2030 a doubling of the global rate of improvement in energy efficiency.

The Global Energy Efficiency Accelerator Platform was established to help reach this objective. It will do so by driving action and commitments by national and sub-national leaders at the country, city, state, region, or sector level.

A key deliverable will be Integrated Policy and Investment Roadmaps prepared with committed public and private partners. These Roadmaps will guide project implementation supported by a global network of experts, institutions and businesses.

[Download the Global Energy Efficiency Accelerator Platform Flyer and read more](#)



