

Energy efficiency EU directive and its impacts on Utilities business models

Energy Efficiency is a key stake for European Utilities today

The 'climate and energy package' enacted by the European Union (EU) in June 2009 set a series of demanding climate and energy targets to be met by 2020, known as the "20-20-20" (reduction in EU greenhouse gas emissions of at least 20%, 20% of renewable energy in EU final energy consumption, 20% reduction in primary energy use to be achieved by improving Energy Efficiency).

Whilst the 2 first objectives are articulated as binding legislation, the Energy Efficiency (EE) one is not. Given uncertainties for the EU in reaching this objective, the European Commission has been thinking about ways for helping Europe achieve this important objective.

On June 22 2011, the European Commission unveiled a project of directive to ensure the target of 20% primary energy savings by 2020 is met. The Power Utility industry is the main sector targeted by this directive.

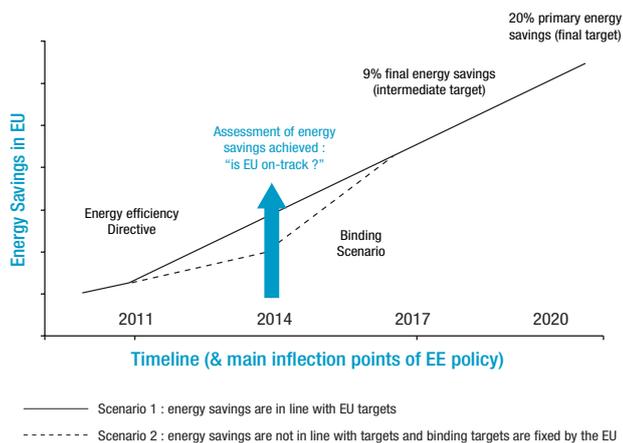
What are potential impacts of this new directive for the industry? How can this new legislation be used by the Utilities as an opportunity, rather than an additional regulatory constraint?



The European Union Energy Efficiency Directive :

The proposed directive established a common framework for promoting energy efficiency in the Union to ensure the target of 20% primary energy savings by 2020 is met.

Following an assessment of national achievements planned in 2014, the European Commission might decide to reinforce the framework by adding binding targets.



The two main economic sectors targeted in this new directive are the **Public sector and the Power Utilities industry**, with an ambitious objective of annual energy savings equivalent to 1.5% of energy sales in the previous year

White certificate scheme at EU level is not recommended because of high administrative costs. However, **Member States must implement national obligation schemes with savings targets and penalties.**

What does it mean for European Utilities ?

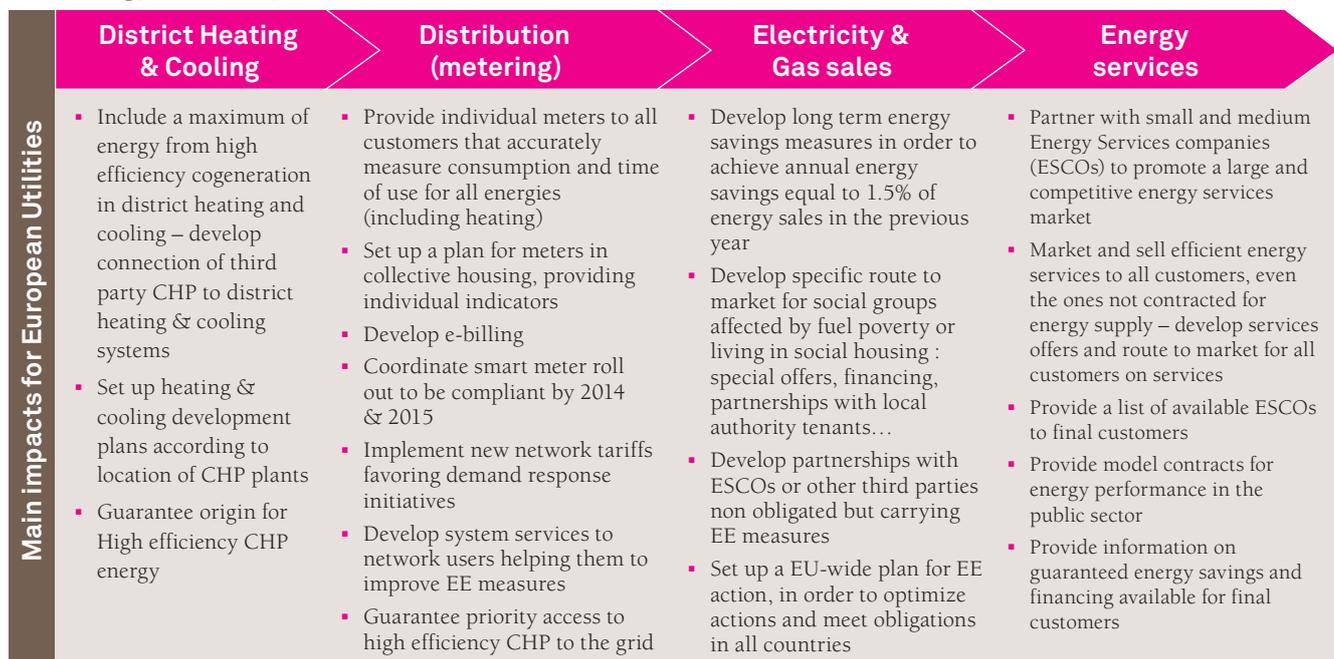
The challenge for Utilities is to make EE obligations an opportunity for business development rather than another regulatory constraint – even if energy savings means a loss of revenue from energy supply in the short term:

- **Strong investment to avoid penalties by implementing EE measures**
- **Significant internal evolution** to face the new paradigm shift (new skills, dedicated organization, ...)
- **Deep business model transformation** to address EE obligations: Market strategy (positioning, offers, route to market, ...), Customer relationship and Operational excellence (IT, process...)

The Energy Efficiency Directive is based on 5 main complementary core topics to achieve target of 20% energy savings by 2020

- Energy savings obligation scheme : National EE obligations schemes have to be implemented by each Member State
- Smart metering & Billing : Savings obtained through cost-effective technologies like smart metering are key. Minimum requirements for billing are required
- Combined Heat and Power (CHP) district heating & cooling : High efficiency cogeneration and district heating & cooling have significant potential for saving primary energy
- CHP Transmission & Distribution : High efficiency cogeneration electricity should be granted priority and non discriminatory access to the grid
- Energy services: Development of both supply and demand for energy services should be further incentivized

The Energy Efficiency Directive impacts the whole downstream value chain for Utilities



Learnings from European forerunner countries in Energy Efficiency : development of different models around energy savings obligations

Five countries have set strong energy savings obligation schemes for a few years (France, the United Kingdom, Italy, Belgium and Denmark). Several key learnings can be drawn from analysing each of them in details.

In spite of countries specificities, most of EE regulations in Europe rely on standard measures to be implemented by utility players (distributors or suppliers)

However, main measures implemented (heating, equipment, insulation...) vary strongly depending on countries legislation and market structure

In order to avoid penalties that can be very high (e.g., more than €2.5 Billion for EDF), all European utilities in countries with EE regulation changed their business model - to a different extent:

- Positioning on EE services is key
- Developing services means having a dedicated services division or partners

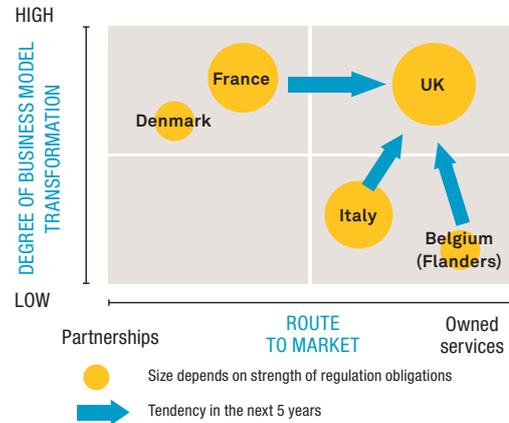
Degree of professionalization in selling and marketing EE services varies between countries.

- UK Utilities have become energy services providers, thanks to existing assets like owned installation services for boilers and heating pumps
- Danish and French Utilities - with different models - developed partnerships to achieve their EE obligation and sell services
- Italian and Belgian Utilities developed services but did not push them strongly on the market

ESCOs did not develop significantly across EU as such, but several Utilities have entered into Energy Services instead.

Energy Efficiency roadmap of selected EU countries

Business models transformation and route to market for European countries studied



High maturity in business model transformation means well developed owned services to address directly end customers (network of installers, e.g.), coupled with targeted partnerships (with manufacturers, e.g.)

When national regulation has structural constraints, Utilities develop partnerships to propose quickly new energy services to end customers and collect certificates

Moderate regulation implies limited transformation of business models and development of incremental offers (mainly through owned services) to get quick wins

Development of owned services coupled with strategic partnerships is key to deeply transform Utilities business model, and ensure business development on EE services

Regarding EU directive and existing EE regulation, white certificate schemes are expected to grow on each national market and four levers will enable Member States to design their own obligation scheme

Obligation scheme: degree of constraint	Obligated bodies in Utilities: Suppliers vs. distributors	Obligated sectors of energy savings: degree of B to B implication	Complementary regulations: Tax credits
---	---	---	--

Utilities need to work on 4 themes to make EE regulation an opportunity for business development

Business case	Lobbying	Marketing & Sales	Operations
<ul style="list-style-type: none"> ▪ Quantify impacts of EE regulation ▪ Assess equipment and construction sectors in core markets to determine best route to market in terms of partnership ▪ Build up a dedicated business plan 	<ul style="list-style-type: none"> ▪ Lobby on complementary regulation to incent relevant actions and decrease cost pressure ▪ Lobby on the four levers to design an obligation model that would fit Utilities strategy and capabilities 	<ul style="list-style-type: none"> ▪ Strengthen customer knowledge ▪ Develop relevant offers and services to address the market and meet obligations ▪ Determine sales channel and communication strategy for EE services ▪ Develop owned services or partnerships 	<ul style="list-style-type: none"> ▪ Develop a dedicated team driving investments and monitoring results of EE actions ▪ Set up new capabilities and support cultural change caused by marketing and selling of new services ▪ Work on operational excellence (processes and tools)



About Capgemini and Capgemini Consulting

With more than 115,000 people in 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2010 global revenues of EUR 8.7 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

For more information:
www.capgemini.com

Capgemini Consulting is the Global Strategy and Transformation Consulting brand of the Capgemini Group, specializing in advising and supporting organizations in transforming their business, from the development of innovative strategy through to execution, with a consistent focus on sustainable results. Capgemini Consulting proposes to leading companies and governments a fresh approach which uses innovative methods, technology and the talents of over 3,600 consultants worldwide.

For more information:
<http://www.capgemini-consulting.com/>

Rightshore® is a trademark belonging to Capgemini

Contacts :

Arnaud Bouchard

Vice President - Practice Marketing, Sales & Service
arnaud.bouchard@capgemini.com

Alain Chardon

Principal, Industry, Services and Utilities
alain.chardon@capgemini.com

Sebastien Joubert

Managing Consultant, Marketing, Sales & Service
sebastien.joubert@capgemini.com

Philippe Coquet

Utilities Strategy Lab lead, Energy & Utilities
Global Sector Network
philippe.coquet@capgemini.com

Naima Makri

Consultant, Marketing, Sales & Service
naima.makri@capgemini.com