

# EU's energy efficiency policy

## Ambitious target or hidden fuel?

### Growing energy dependency, the significant impact of energy costs on the EU's trade deficit and insufficient national measures on energy efficiency are the most common arguments in favor of the new EU Directive on Energy Efficiency (2012/27/EU).

In contrast to the previous directive from 2006, the new directive has introduced as one of its targets a binding national 1.5% annual end-use energy saving. June of 2014 is now a looming deadline by which the Member States are required to specify how they will achieve this target, and whom they want to assign as an obligated party to accomplish the energy savings.

#### Energy savings target

In 2007, the EU agreed upon its energy target called "20-20-20 by 2020". The policy has the aim of increasing the share of renewable sources to 20%, decreasing greenhouse emissions by 20%, and increasing energy efficiency by 20%. Moreover, the energy savings target is one of the headline targets of the Europe 2020 Strategy. The goal of the European Commission was to place energy efficiency at the core of their EU energy strategy, which would enable all Member States to decouple energy use from economic growth.

In 2010, despite the directive in force, the EU was a long way off its agreed target for energy savings by 2020. Due to this, the European Commission proposed to amend the existing directive on energy efficiency (2006/32/EC). As a result, the new directive on energy efficiency (2012/27/EU) was adopted in 2012.

Through the application of new rules, obligations and targets, the EU wants to encourage the utilization of its unused energy savings potential. In compari-

son to the old directive, the new directive on energy efficiency sets a binding 1.5% annual end-use energy savings target for Member States, and also provides them with alternatives for achieving it. Indeed, Member States may assign the savings target to energy companies (retail energy sales companies and/or energy distributors), or they may opt to take other policy measures to achieve energy savings amongst their final customers. Furthermore, there will be a target for public bodies, requiring them to renovate 3% of the total floor area owned and occupied by the government, which is almost double the current EU renovation rate. The new directive also places more emphasis on the importance of energy services, as well as supporting efficient co-generation.

#### The hidden fuel

Energy savings are often marked as the "hidden fuel" of the energy mix besides fossil, nuclear and renewable sources. Therefore, as is also the case of any other fuel, its incorporation into the energy system has direct impacts on the overall energy infrastructure. Energy savings can theoretically be achieved anywhere along the value chain of which the stages are energy transformation, energy transport and energy consumption.

The best performer in the utilization of "hidden fuel" is Denmark. However, it was not always the case, and it has taken some time for Denmark to reach the top. Its success story started 30 years ago, when a wide variety of initia-

tives, mostly government-driven, helped Denmark to overcome the key challenge which other countries are facing today – how to reduce energy consumption dramatically, and maintain a solid economic growth rate at the same time. The result of these and other policies is that Denmark's energy consumption has remained stable for more than 30 years, while the country's gross domestic product has doubled. However, the downsides of these measures are higher taxes and costs for both businesses and consumers.

In comparison to other economies, the EU's performance in energy intensity (a measure of the energy efficiency of a nation's economy – total energy consumption per unit of GDP) is the second best (169 toe/M€ GDP), whereas the lowest rate is in Japan (129 toe/M€ GDP). The average of the world's economy is more than twice that figure (392 toe/M€ GDP). However, within the EU Member States, it is possible to identify a very broad range of performance rates. The CEE region has achieved the biggest improvement within the EU since 1990, but this has mainly been due to economic transformation and the shut-down of energy intensive industries.

In conclusion, there are two different approaches that can be taken towards the compulsory energy savings target. The first one advocates a strong regulatory approach to energy efficiency measures in order to increase energy security, maintain sustainability of supply and stabilize

energy costs for consumers. Higher energy efficiency brings other benefits: increased market competitiveness and enhanced customer welfare. The second approach, contrary to the first, proclaims that any artificial intervention only serves to create an additional cost for consumers. Nevertheless, both groups agree that energy efficiency is going to become an important indicator for the future development of the energy market, with the potential to create economic growth, while inefficiency could trigger higher energy costs.

#### Less energy shall lead to economic growth

Energy economists often use the metaphor "energy is the blood of economy". Today we could hardly imagine a functioning modern economy without a sufficient energy supply. The financial crises of recent years, and the related economic slow-down, have sharpened the importance of an affordable energy supply in the globalized world. Besides the potential to mitigate the impact of raising energy costs, energy savings can also create positive externalities for economies, such as reducing the environmental impact.

According to estimates, the EU-wide energy efficiency measures may require an annual investment of around 24 billion euros, whereas the expenditure for fuel may decrease by 38 billion euros annually. Moreover, the savings potential in energy generation and distribution investments could reach six billion euros. It is also estimated that energy savings shall create an additional 400,000 jobs by 2020.



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