

## IOGP contribution to the debate on the Energy Efficiency Directive

### 1. The oil and gas industry supports and continuously works on the improvement of energy efficiency

- IOGP supports the EU's efforts to encourage energy efficiency across Europe, particularly in end-use. Efficient use of energy is crucial in meeting the world's growing energy demand. Therefore, there is a need to optimise the use of resources, while reducing greenhouse gas (GHG) emissions. Energy efficiency is also important to improve the international competitiveness of EU industry.
- The oil and gas industry is committed to improving energy efficiency in its own operations but is also working closely with end-users to support them to maximise efficiency in end-product use. These efforts include the offshore service industry, such as drilling contractors for example, who are continually improving the energy efficiency of their drilling units. Reduced costs along the whole supply chain are an additional benefit, making at the end energy more affordable to European citizens and the industrial consumers.

### 2. An indicative energy efficiency target for 2030 should be kept

- IOGP agrees that energy efficiency will be an important part of developing a sustainable and competitive EU energy mix. However, a single GHG reduction target for 2030 is for IOGP the most cost-efficient way to achieve a lower-carbon society, while avoiding overlapping targets.
- In October 2014, the European Council decided to make the reduction of GHG emissions the backbone of the EU climate policy. The proposal to make energy efficiency target now binding undermines this decision.
- According to the Commission's Impact Assessment, the energy efficiency target of 30% has a 'paradoxical' impact on the EU's power generation mix. As the table below indicates, the share of coal (which emits twice more CO<sub>2</sub> than gas) across the EU increases, while the shares of all other energy sources including natural gas and renewables drop.<sup>1</sup> In this scenario, the ETS price is projected to fall from 42 to 27 €/CO<sub>2</sub>tonne, which clearly demonstrates the impact of overlapping policies (ETS vs. EED).<sup>2</sup>

Gross Inland consumption	Solid Fuels	Oil	Nat Gas	Nuclear	Renewables
% change from EU 27%	+4	-2	-10	-1	-3

- The overall goal of the Energy Efficiency Directive should be to help improving energy efficiency per unit of production or output. A target, as formulated right now, as a global cap on energy consumption can have adverse socio-economic consequences for Europe. Setting a planned cap on energy consumption is likely to have an impact on the economic growth. A nominal energy savings target incentivises stopping activities more than improving activities. An economic crisis will lead to a good energy savings performance, but it does not reflect any progress on efficiency in the sense of improvement. With this in mind, and given the complexity that detailed target setting brings, we would encourage an approach of an indicative energy efficiency target so as to not lose sight of the ultimate goal of GHG reduction.

<sup>1</sup> Based on Table 6, Energy Efficiency Impact Assessment.

<sup>2</sup> Based on Table 10, Energy Efficiency Impact Assessment.

- Offering affordable energy prices to consumers is key to the successful delivery of the Energy Union project.<sup>3</sup> In this context, the Commission needs to bear in mind that around 11% of European citizens were unable to keep their home adequately warm in 2012.<sup>4</sup> In its Impact Assessment, the Commission notes that significant investments in energy efficiency to implement European and national policies will increase the initial capital costs for energy consumers as well as will require specific policy instruments. However, there is no information on when consumers will enjoy lower energy prices.<sup>5</sup>

### 3. As gas helps in improving energy efficiency, primary energy factor (PEF) for electricity should be at least 2.2

- The use of natural gas will be essential to unlock the full potential of energy savings. Gas can cost-effectively enable GHG reduction in the heating sector, for example, through the replacement of old boilers with modern natural gas condensation boilers which require a far lower level of energy consumption while providing the same duty. This is illustrated by a study carried out by the German research institute EWI.<sup>6</sup> Deploying gas heat pumps also helps to reduce energy consumption and GHG emissions.
- As demonstrated by the European Environment Agency (EEA), the improvement in energy efficiency in the EU between 2005 and 2010 is explained by the increased use of natural gas (natural gas power plants have relatively higher efficiencies – 60%<sup>7</sup>) and the decreased use of coal, lignite and nuclear (coal, lignite and nuclear power plants have relatively lower efficiencies). Conversely, after 2010, the average efficiency of electricity and heat production diminished due to the increased use of coal, lignite and biomass, and the decreased use of natural gas. About half of the drop in energy efficiency between 2010 and 2012 can be attributed to the changes in fuel mix. In addition, the increased use of coal and lignite may have led to a greater use of existing low efficiency coal plants.<sup>8</sup> **Given the strategic value of hydrocarbons for energy security of EU Member States a balanced and sustainable increase of gas utilisation, including a switch from coal to gas, needs to be endorsed as an important instrument to increase energy efficiency and reduce CO<sub>2</sub> emissions.**
- While the PEF is necessary to compare the use of electricity with energies such as natural gas, in a fair manner, **it should however be based on the existing fuel mix and not on a potential forward looking scenario of 2030, as the future energy mix of Europe is very uncertain and impacted by many different factors.**
- We also believe the **PEF should reflect reality and should not make the use of electricity artificially more attractive than the use of other energy.** The PEF should thus not be used as a tool to achieve policy objectives, but remain a derived calculation to reflect the conversion of final energy to primary energy. Therefore, the PEF for electricity should be at least 2.2 if the points above are considered. A PEF taking account of the marginal use of electricity would give a much higher number, i.e. if more electricity is needed in winter months due to a cold spell, baseload coal-fired electricity would sharply increase the real PEF in many countries.
- The PEF in the EED should not be used for energy labelling and eco-design. Energy for heating is mainly used in the winter and does not represent an average over the year. Furthermore, the reduction of the PEF for electricity should not result in highly inefficient electric appliances, which are currently forbidden under the Ecodesign rules, appearing to be more efficient and becoming available for sale again.

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<sup>3</sup> Report 'Energy prices and costs in Europe', European Commission, COM(2016) 769 final. Figure 3 in this report shows that the energy component of average EU household retail electricity prices equals around 75€/MWh, and for industry – slightly over 50€/MWh (Figure 6). Figure 10 shows that the energy component of average EU household retail gas prices accounts for around 35€/MWh, and for industry – slightly over 25€/MWh (Figure 12)..

<sup>4</sup> Source: [https://ec.europa.eu/energy/sites/ener/files/documents/INSIGHT\\_E\\_Energy%20Poverty%20-%20Main%20Report\\_FINAL.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/INSIGHT_E_Energy%20Poverty%20-%20Main%20Report_FINAL.pdf)

<sup>5</sup> Energy Efficiency Impact Assessment, page 66.

<sup>6</sup> Energiewirtschaftliches Institut an der Universität zu Köln (EWI): „Potentiale von Erdgas als CO<sub>2</sub>-Vermeidungsoption“, June 2014.

<sup>7</sup> European Environment Agency, EN19 Efficiency of conventional thermal electricity and heat production, [here](#).

<sup>8</sup> European Environment Agency, Efficiency of conventional thermal electricity and heat production, [here](#).

#### **4. Energy efficiency is a means to reach GHG emission reductions, but EU policy makers should avoid creating overlapping regulations**

- Transport should be clearly exempted from Energy Efficiency Obligation Schemes (EEOS). Vehicle efficiency standards, labelling, taxation of road fuels, incentives to favour fuel efficient cars and measures to improve infrastructure are all used extensively and are more effective means of tackling this complex area. There are many examples of successful EEOS around the world including in many EU Member States tackling traditional energy utilities. These have common success factors: schemes addressing utility energy suppliers via distributors, retailers or service companies which have a strong relationship (contractual) with their customers and use this to offer services, incentives or projects to improve efficiency.
- On the part of the fuels suppliers there is no possibility of influencing consumer habits of consumption due to the strong fragmentation of this heterogeneous market and the absence of contractual relationships with the customers.