The Coalition for ENERGY SAVINGS

Inflating the costs of energy efficiency

A review of the Commission's cost-effectiveness analysis of an energy efficiency target for 2030

The European Commission's communication on energy efficiency from 23 July 2014 (COM(2014) 520) proposes a 30% energy efficiency target for 2030. This is based on an Impact Assessment that ignores research and censors important data, thus artificially inflating the costs of energy efficiency targets. This means that the Commission's reasoning and justification for its proposal is flawed and misleads EU decision-making.

Ignoring research

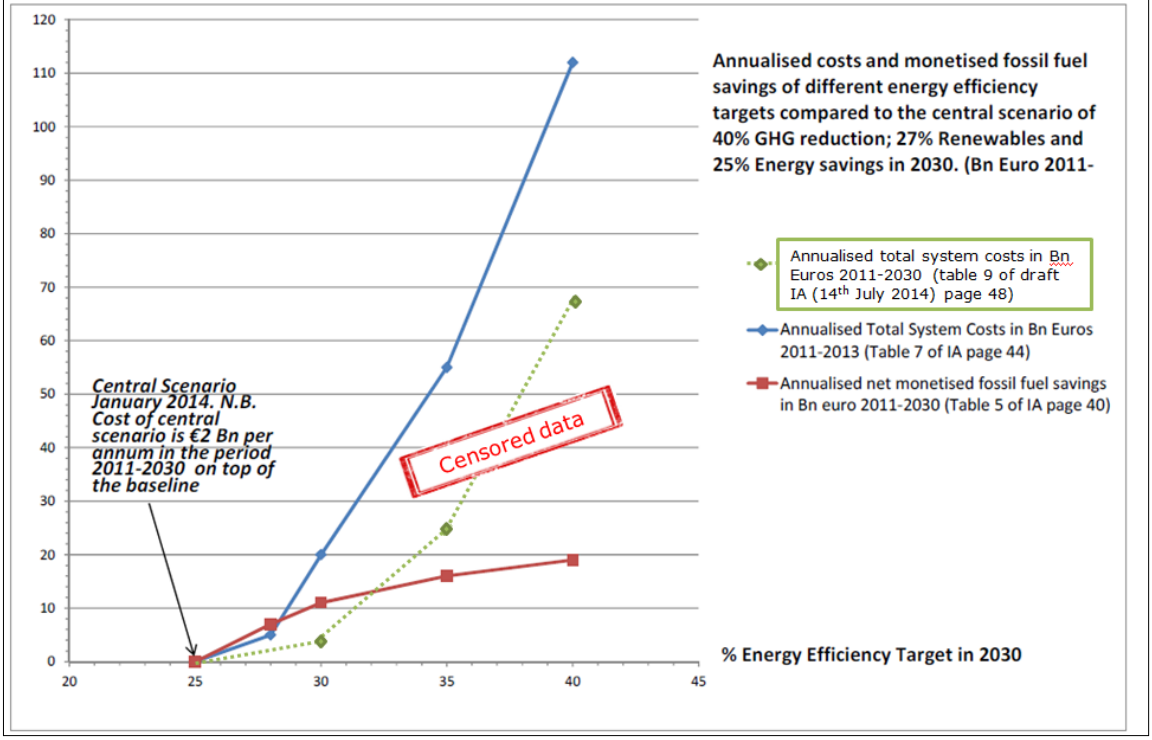
For its communication the Commission ordered research on the potential for energy savings using a bottom up approach (Fraunhofer, TU Vienna, PwC 2014). The study finds that the cost-effective energy savings potential is around 40% for 2030. However, the Commission has not yet published this research and ignores the findings in its Impact Assessment.

Censoring of modelling

Modelling, which better reflects the current understanding of energy efficiency policies, shows a lower energy system costs and thus a higher cost-effective potential. But it was censored from the Impact Assessment. This also means that the costs presented in the Communication and Impact Assessment are artificially inflated. The picture below shows this censured data compared to the published data (COM(2014) 520 page 12 figure 2).

Figure 2. Additional annual average energy system costs and fossil fuel savings compared to the central scenario of 40% greenhouse gas target, 27% renewable energy target and 25% energy savings target.

Amended by Coalition for Energy Savings to reflect lower cost calculations censored from final IA



This shows that the cost-effective potential is much higher and the additional costs are inflated by up to €45bn per year.

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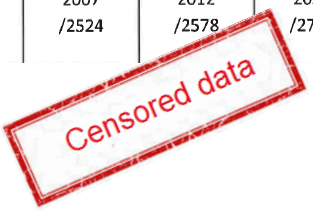
Rationale for lower costs

The previous draft Impact Assessment (from 14 July 2014) included an approach for the cost calculations using lower discount rates, to better reflect the current understanding of energy efficiency policies.

Table 9. System and Capital costs under alternative cost reporting

Indicator *(figures are presented in a 2030/2050 format)*	Ref	Ref plus	Decarbonisation Scenarios					
			GHG40	EE25	EE28	EE30	EE35	EE40
Total System Costs in bn €'10 *(average annual 2011-30 and 2031-2050)*	2011 /2424	2009 /2423	2008 /2589	2008 /2535	2007 /2524	2012 /2578	2033 /2708	2075 /2958



Source: Page 48 of draft impact assessment (14 July 2014).

This reduction in discount rates was suggested in the IA for the 2030 framework communication, published in January 2014, which did not apply reduced discount rates to direct energy efficiency investment but concluded that *"[w]ith energy efficiency policies increasingly changing energy markets by addressing market failures and imperfections, it appears appropriate to revisit this issue in future analyses"*. The issue was also raised by many stakeholders during the public consultation.

However in the final IA the modelling of lower discount rates was not included, resulting in only one model of costs which are considerably higher.

Table 7. Energy system costs and its components[57, 58]

Indicator *(figures are presented in a 2030/2050 format)*	Ref	GHG40	Decarbonisation Scenarios					
			EE27	EE28	EE29	EE30	EE35	EE40
Total System Costs in bn €'10 *(average annual 2011-30 and 2031-2050)*	2067 / 2520	2069 / 2727	2069 / 2649	2074 / 2686	2082 / 2747	2089 / 2806	2124 / 3001	2181 / 3355

Source: Page 46 of final impact assessment.

Missing system benefits

The evidence of the benefits that energy efficiency can bring to the energy system is missing. For electricity, these include deferring the need for increased electricity capacity, deferring distribution system upgrades and reducing line losses; these are in addition to avoided fuel costs - the only consideration of the Commission.

Published on 03/09/2014

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