Cefic position on the Commission proposal to recast the Energy Efficiency Directive

Cefic supports Europe's ambition to become climate neutral by 2050. To achieve this objective, large volumes of competitively priced renewable and low-carbon energy, breakthrough technologies and enabling frameworks for the very large investments will be required.

Since 1991, the chemical industry has made tremendous progress in this regard: its production increased by 94.7% while energy consumption has gone down by 13.8% (2018, EU27)[1]. Such improvements have taken place for example, through process intensification and integration, introduction of energy management systems, novel energy-saving processes, and the increased penetration of Combined Heat and Power (CHP).

Efficient use of energy and permanent upgrading of existing assets as well as new investment is a must for European chemical producers as energy costs represent a significant portion of production costs in Europe compared to other competing regions. While the remaining energy efficiency potential is unlikely to fully compensate for rising energy costs, industry will continue to explore further possibilities to increase its energy efficiency, through innovative solutions and with appropriate support where necessary.

Moreover, the chemical industry is and will remain a solution provider, leading to energy efficiency further in the value chain such as in the construction industry, automotive, aerospace, homecare products and textiles. Our smart solutions for energy efficient buildings include products such as chemical-based insulation products, which significantly reduce the energy needed to heat or cool residential and service buildings.

In this regard, we welcome the European Commission's recognition of the significant un-tapped potential for energy savings in new and existing buildings. Dedicated measures in this area promise not merely to provide a cost-effective pathway to greater energy-efficiency, but also help to create a market for the energy-efficient materials and products mentioned above.

We therefore consider the revised Energy Efficiency Directive (EED), and the energy efficiency first principle, to play a pivotal role in supporting the transition to climate neutrality. In view of the decision-making process leading to the adoption of the EED recast, Cefic would like to put forward the following recommendations, focusing on these key areas:

1. **Energy Consumption and GHG Emissions Reductions**
2. **Energy Efficiency Obligation Schemes (EEOS)**
3. **Energy Audits & Energy Management Systems**

[1] Cefic, 2021: The European Chemical Industry – A Vital Part pf Europe's Future, Facts & Figures 2021

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1. Energy Consumption and GHG Emissions Reductions

Cefic welcomes the new provisions, providing flexibility to Member States for achieving their energy efficiency contributions, particularly through allowing consideration of the development "in [the] energy mix and [the] deployment of new sustainable fuels, [as well as the] decarbonisation of energy intensive industries." It is an important recognition that reaching the EU's climate neutrality objective will require an increase in climate-neutral energy consumption in certain sectors of the economy, including energy-intensive industries.[2] For example, according to the European Commission, only switching the current annual EU hydrogen production to electrolysis would require 290 TWh of electricity (about 10% of current production).[3] Other Studies suggest even higher electricity needs, in the range of 500 TWh.

Cefic also recommends considering in Art. 3 the importance of energy system integration[4] for the efficient scale up of renewable energy along-side the "energy efficiency first principle." Taking a more system-focused approach would allow for more flexibility from large industrial actors, for instance for running assets just below or above optimal efficiency conditions to accommodate scarcity or excess of renewable production. Such flexibility, also to the benefit of energy storage options, will become increasingly important as the share of renewables with variable load-factors increases in the EU energy system.

Cefic recommendation: Strengthen Member State flexibility for achieving their energy efficiency contributions to avoid disincentivising technology pathways that are essential for energy-intensive industries to reduce their GHG emissions.

2. Energy Efficiency Obligation Schemes (EEOS)

With EEOS intended to provide a substantial contribution to the overall EU energy efficiency target, their design is pivotal to the success of the recast of the EED. As a matter of principle, we welcome the emphasis on avoiding overlapping regulatory burdens between the EED and other legislation such as the ETS, ETD, or the Eco-design Directive as noted in Art. 8, 8).

However, the increased scope of the EU ETS, the possible rise in the underlying average carbon price, as well as the revision of the ETD taxation minima, would render it extremely complex to assess additionality when it comes to judging to what extent end-users' choices are influenced by current and future carbon pricing effects. This will substantially limit opportunities for additional energy consumption savings under the EEOS (article 8(1)).

Moreover, the exclusion of energy savings that can be achieved from e.g. the efficient use of natural gas, may limit the opportunity for these savings to be implemented. Such exclusion would even be environmentally and economically unjustifiable, as it would remove incentives in cost-effectively reducing

[2] New recital (9): "[…] Furthermore, the possible increase in industry's energy demand that may result from its decarbonisation, particularly for energy intensive processes, should also be taken into account."

[3] G. Kakoulaki, I. Kougias, N. Taylor, F. Dolci, J. Moya, A. Jaeger-Waldau, Green hydrogen in Europe – A regional assessment: Substituting existing production with electrolysis powered by renewables, Energy Conversion and Management, Volume 228, 15 January 2021, 113649

[4] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0299&from=EN

carbon emissions. Hence, the strict additionality criteria for savings under the EEOS will pose a significant implementation challenge for Member States, obligated parties and, by extension, end-users.

Besides, the schemes may also interfere with companies' investment decisions aimed at carbon reduction. Specifically, with regards to climate-neutrality plans, companies will want to make integral choices, set their own priorities and search for solutions that fit best in complex production processes.

To conclude, the achievability of the raised EEOS targets under consideration of strict legislative additionality, and revisions of the EU ETS and ETD, should hence carefully be considered, and Member States be provided with notable flexibility to formulate alternative instruments. The cost pass-through of a raised ambition under the EEOS, either directly or indirectly, to energy intensive industries subject to international competition must be avoided and remedial measures be taken accordingly to mitigate the growing risk of carbon leakage.

Cefic recommendation: provide urgent clarity to Member States and obligated parties on how the additionality criteria under the EEOS can be assessed, especially considering the extended scope of the EU ETS, the tightening of Eco-design requirements, and the exclusion of certain technology pathways. Energy savings should be encouraged, regardless of the technology or the energy carrier used.

The revised EED contains a new definition of **high-efficiency cogeneration**. This new definition includes a criterion on GHG emissions. It is important to avoid overlap and even counterproductive interferences between directives. Since CO_2 emissions are already regulated by other directives and efficiency of CHP's is related to its energetic performance.,

Cefic recommendation: remove the criterion on CO_2 emissions in the definition of high-efficiency cogeneration.

3. Energy Audits & Energy Management Systems

Cefic supports the implementation of energy audits and energy management systems based on energy consumption levels. The scope of these should be designed to increase their effectiveness and reduce undue administrative burdens.

The recast of the EED annex VI also introduces requirements for "identify[ing] the potential for cost-effective use or production of renewable energy" amongst the audit criteria. This requirement should consider both renewable and other low-carbon options for a holistic and cost-effective approach to GHG-abatement.

Notably, both energy efficiency measures and the use of renewable and low-carbon energy sources and energy carriers are a means for industry to reach climate neutrality. However, reaching this end goal can result in conflicting messages in the energy audit recommendations. For instance, requiring both simultaneously may work for some applications (such as installing heat pumps for efficient district heating and cooling), but send conflicting signals for others (such as a biomass-fired boiler which has a lower efficiency than a natural gas fired boiler; or implementing CCUS). Additionally, Power Purchase Agreements (PPAs) should be recognized as a tool for cost-effective use of renewable energy in this requirement.

Moreover, we do not think it is appropriate to publish the energy audit recommendations in companies' annual reports. Energy audits contain detailed and confidential information that, as such, cannot be disclosed to the public.

Cefic recommendation: Design the energy audit recommendations in a way that considers also the production/ consumption of low-carbon energy carriers, avoids tensions between GHG- and energy consumption reductions, and reduces administrative barriers, for instance, by easing the recognition of PPAs as compliance options.

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About Cefic
Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.1 million jobs and account for 15% of world chemicals production.