IFIEC feedback on: EU energy efficiency directive (EED) – evaluation and review

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IFIEC’s contribution to Commission’s consultation on the Energy Efficiency Directive

The proposed directive aims to stimulate EU efforts to promote energy efficiency and achieve energy savings. As part of the Commission’s package “Delivering on the European Green Deal”, the revision of the EED should contribute to net greenhouse gas emissions reductions of at least 55% by 2030 with the ultimate objective of becoming climate neutral by 2050. The proposed “Energy Efficiency First principle” should go along with a sustainable energy supply. For this purpose, the EU Commission is initiating a detailed adaptation of energy-saving targets and obligations for different sectors.

In our view, the existing EED-Directive should primarily contribute to the EU climate protection targets. However, climate protection instruments are already a subject of regulation in other European legislative acts, partially covered by double regulations: on the one hand, by EU ETS Directive (Directive (EU) 2018/410) and Effort Sharing Regulation (Regulation (EU) 2018/842); on the other hand, by the current sector-related regulations, for example, in the mobility and buildings sectors (Energy Performance of Buildings Directive 2010/31/EU, Directive (EU) 2019/1161 on the promotion of clean and energy-efficient road transport vehicles).

These directives and regulations should provide support to tap the existing potential for better energy efficiency in the mentioned economic sectors, along with an implementation of climate protection policies whilst taking into account the limited availability of renewable energies in Germany. Energy efficiency measures remain important to save energy and reduce GHG emissions, but will not be sufficient to reach climate neutrality by 2050. The production and import of abundant low carbon energy at competitive prices combined with the implementation of new low carbon technologies will be crucial for industry to make the transition.

1. The absolute targets for final and primary energy consumption should remain non-binding

The EU Commission plans to introduce an increased - now binding - target for reducing primary (39%) and final (36%) energy consumption by 2030 at the EU level, in line with the Climate Target Plan, up from the current target of 32.5% (for both primary and final consumption). It introduces an obligation for Member States to set their national
indicative contributions to the binding EU target. The new directive also proposes to nearly double Member State annual energy savings obligations in end-use.

To ensure future economic stability and growth, the prescription of absolute targets for energy efficiency should be avoided. Industrial growth is essential for the further development of innovative energy- and resource-effective technologies. For these reasons, a clear distinction should be made between the definition of "energy savings" (absolute consumption reduction) and "energy efficiency" (reduction of specific energy consumption).

The new low carbon technologies require more energy and could lead to less energy efficiency performance and other targets might interfere with the energy efficiency targets. For example an increase in the share of renewable energy might also lead to lower energy efficiencies due to the need for a more flexible energy demand, possibly leading to processes operating under non-ideal conditions, or energy losses due to energy storage and conversion. IFIEC therefore welcomes the recognition of the possible increase in industry’s energy demand that may result from its decarbonisation in recital 9 and article 4.

2. National energy savings obligations must be achievable and should focus on economic sectors with high untapped potential

Due to the new amendment, the member-states are obligated to increase the annual energy savings between 2024 and 2030 to 1.5% in comparison to the current 0.8%. The EU-Commission considers this as an important instrument to accelerate energy savings in end-use sectors such as buildings, industry and transport. However, Art. 8 of EED is not defining the sector-specific obligations for energy efficiency.

Efforts to increase energy efficiency and reduce greenhouse gas emissions should be expected mainly from sectors that have a high cost-effective potential for energy savings. In this sense, it is important to introduce sector-specific programs for all economic sectors: buildings, transportation and industry. An introduction of new obligations for industry should take into account the current economic framework, namely:

- increasing energy needs for low carbon technologies,
- industrial growth to serve growing global markets,
- competitiveness compared to regions without such obligations,
which actually means that the main contribution to energy savings must come from other sectors.

IFIEC generally supports the harmonisation of different policy instruments under the “Fit for 55” package. However, the EU proposal for energy-saving obligations in line with ESR and the assumption that these obligations provide incentives for member-states to implement policies that exceed the minimum energy performance requirements (e.g. higher classes of appliances) should be analysed more precisely.

Other directives, such as the Energy Performance Directive of Buildings, the Clean Vehicles Directive, energy labelling are important for efficient energy use in the EU. Annex V however excludes all achieved energy efficiency by EU legislation like for example by energy labelling, or standards. In the review of EED annex V is further extended so MS cannot include reduced energy use in EU ETS sectors. This would pose an ever less achievable implementation challenge for Member States, obligated parties and, by extension, end-users and erodes the support to improve standards.

IFIEC therefore recommends that all achieved energy efficiency, either as a result of EU regulations or within ETS sectors, is included in the accounting and not excluded like specified in annex V.

3. Policy consistency of EED with EU-ETS and any other environmental regulation and avoidance of double regulations

The revised EED objectives should not come in conflict with the provisions of other related directives such as ETS, RED, or any other environmental regulation. Some of their provisions could have a conflicting impact on the energy efficiency objective, e.g.:

- Switching from fossil fuels to renewable fuels does reduce energy efficiency (a biomass-fired boiler has a lower efficiency than a natural gas fired boiler),
- Mitigating emissions through for example Capture Carbon and Storage (CCS) increase by 15 to 20 % the energy consumption of the whole production chain,
- The increasing share of intermittent renewable energies may require more energy flexibility from large industrial energy consumers, with the consequence that Industrial processes might be not operate with the highest efficient 100 % of the time.
• The increase of environmental protection may require new equipment that will reduce the emissions to air or water but will increase energy consumption without any increase of output, so energy efficiency index will increase for a justified reason: environmental protection.

The EU-Commission proposes a new requirement for high-efficiency cogeneration (Annex III), namely a criterion on direct emissions of the CO$_2$ from cogeneration when this is not fueled with renewables, waste or industrial residues.

As overlap between directives must be avoided and CO$_2$ emissions are already regulated by other directives (e.g. ETS), IFIEC recommends to remove the CO$_2$ criterium from the definition of high-efficiency cogeneration as it deals with energy carrier use and not with energy efficiency.

4. Specific attention for hydrogen and synfuels production

From our view, it remains open, how topics like the use of electricity for the production of hydrogen, synfuels and green hydrocarbons are accounted for in the current EED-proposal: for example, is the electricity for hydrogen or synfuels, used in industry for feedstock purposes, counted as non-energetic use of electricity - like current material use of fossil fuels or otherwise? How exactly are hydrogen and synfuels taken into account in the “Primes-model”?