

VIK-Feedback

to the Proposal for a Directive on the energy efficiency (EED)

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The German association of industrial energy consumers (VIK e.V.) welcomes an opportunity to provide feedback on the Proposal for a directive of the European Parliament and the Council on energy efficiency (COM(2021) 558 final)

The proposed directive is aiming 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 by at least 55% by 2030 and 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.

From 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 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. We support a targeted promotion of energy efficiency policies where other climate saving measures are more expensive, i.e. where this is beneficial from a societal point of view.

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By contrast, the energy efficiency measures in the industry have to be looked at related to the fuel switch needed for climate friendly production in the future, especially a broad industrial use of renewable energies, which is limited due to the current availability, installed capacity of renewables as well as the associated costs. Proposed detailed regulation of energy efficiency measures for the EU member states does not comply with VIK-claims for the priority of subsidiarity principle and reduction of bureaucracy burdens.

In this position paper, we analyse several legislative amendments which will have an impact on the energy-intensive industries in Germany. The following comments of this position paper refer to the case if the proposal for updating the current Energy Efficiency Directive is considered to be politically vital along with a clear intention to provide necessary adjustments and clarifications for the revised climate protection goals within the “Fit for 55” legislative package.

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-efficient 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).

Regarding the national indicative targets for energy efficiency, it must be highlighted that to remain competitive in the international markets, German companies have been reducing their specific energy consumption for decades through extensive efficiency measures. The energy savings achieved so far, however, are not automatically transferable to further efficiency increases in the future and cannot be expected to continue linearly. Energy efficiency potentials are also limited by physical constraints: for every industrial activity, a minimum basic energy requirement exists that cannot be further reduced.

Investments, needed for an increase of energy efficiency in the industrial sector, may only partly compensate rising energy costs. When important investment decisions are made, companies are also considering current conditions, including energy costs and expectations of future legislative regulations. The main barrier for energy saving is the fact that it is capital-intensive. This capital competes with other investments in e.g. new low carbon production capacity. In practice, a payback period of three years is often defined as not profitable within most companies.

2. A legal application of “Energy Efficiency First Principle” must respect constraints from conflicting targets

In line with the energy efficiency first principle, member states shall ensure that energy efficiency solutions are taken into account in policy and major investment decisions related to the energy systems and non-energy sectors which have an impact on energy consumption and efficiency. Member states should also report to the Commission, as part of the integrated national energy and climate progress reports under Article 17 of Regulation (EU) 2018/1999 on how the principle was considered in the national and regional planning and investment decisions.

It must be recognized that increasing energy efficiency is not the same as the reduction of energy consumption. For this reason, an obligation for the application of “Energy Efficiency First Principle” should be allowed voluntarily to balance with other environmental targets and ensure a secure climate-friendly economy transformation.

The argument that less energy consumption leads to fewer costs for ecological transformation and less consumption of natural resources is not always the case. The introduction of innovative technologies at an industrial scale and the electrification of different sectors, as well as a shift to less carbon-intensive energy sources (for example, biomass and natural gas as transitional technology) and climate-neutral production, will in many cases increase energy consumption. An increase of renewable energies in the energy mix may require more flexibility from large industrial energy consumers, with a likely negative impact on the energy efficiency of industrial processes.

3. National energy savings obligations 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.

It is important to guarantee the member states an application of alternative policy measures (Art. 10 of the EED) in case if they are not introducing Energy Efficiency Obligation Schemes (EEOS). Especially the strict “additionality” criteria for savings under the EEOS will pose a challenge for member states, obligated parties and end-users. An obligatory introduction of EEOS may influence adversely on the investment decisions of European businesses aimed at decarbonisation and weaken their international competitiveness; the energy prices for end consumers will rise as well. Therefore, in our view, a more effective contribution to climate protection targets and CO₂ reduction will be possible if a flexible design of policy instruments for achievement of cumulative end-use energy saving targets will be permitted for the member states in the future.

4. An application of energy audits and energy management systems should be allowed on a voluntary basis and not be connected to energy consumption level and type of the enterprises

For big companies, the proposal aims to strengthen the requirements in a focused manner. The largest energy users (using more than 100 TJ per year) that do not yet have energy management systems in place will need to do so in future. For other businesses, the obligation to have a four-yearly audit will in future only apply to those using more than 10 TJ of energy per year. It is assumed that these initiatives will reduce the burden on smaller, less energy-intensive businesses. The results of energy audits, including the recommendations, must be transmitted to the management of the enterprise and published in the annual report.

The obligations for the introduction of energy management systems for large energy users which operate several installations with relatively low specific energy consumption could lead to an additional administrative burden and additional costs without having a relevant impact. If a company applies an obligation for energy audit in line with DIN EN 16247 for installations in a certain location, an additional introduction of energy management systems (ISO 50001) would not deliver a tangible added value. Therefore, an introduction of energy audits and energy management systems should be allowed voluntarily and not be connected to the energy consumption level and type of the enterprises.

The proposed obligation to publish the results of the energy audit (Article 11(2) of the EED) along with current reporting requirements would increase the bureaucracy burden for enterprises. There is no discernible benefit for an obligation to publish the audit results, hence this proposition should be removed; all the more so, since the audit criteria in Annex VI have been expanded to include a “production” scope (new point (d)) in addition to the already existing “consumption” scope. This would lead to an impression that potential for renewable energy generation exists (e.g. when a factory has rooftops or other areas suitable for photovoltaic installations), which actually can not be realised due to practical and legal reasons, such as opposing building statics or existing spatial planning. In the end, an annual report might convey the wrong impression that potentials remain untapped, which should be avoided.

5. Policy consistency of EED with EU-ETS and avoidance of double regulations

VIK 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.

Important is also to avoid double regulations (incl. additional requirements for energy efficiency investments to receive free allocation of certificates under the ETS and distributional impacts from a possible extension of EU-ETS). These additional requirements significantly narrow the scope of obligated companies. Many industrial sectors are already subject to other pieces of legislation that aim at reducing energy consumption and GHG emissions, such as EU-ETS, Energy Taxation or Industrial Emissions Directive; therefore, the GHG-reduction obligations should not be regulated by the Energy Efficiency Directive. To maintain a fair market competition of European industries and investment security, additional climate-related obligations within the EED-scope should not be put into practice.

6. Ensuring exemptions for campaign (seasonal) manufacturing

Article 24 of the current EED proposal prescribes that by the installation of new industrial facilities with combustion performance exceeding 5MW, an access to district heating and cooling system should be checked. However, it is important to add an exemption concerning campaign (seasonal) manufacturing, as such businesses are operating only during a certain periods of the year and therefore, they can participate in local heating and cooling network operation only during a short period. Such participation will lead to increased investment costs without recognisable benefits for society.

7. To ensure a reliable legislative framework for high-efficiency cogeneration

The EU-Commission proposes a new requirement for high-efficiency cogeneration (Annex III), namely a criterion on direct emissions of the CO₂ from cogeneration when this is not fueled with renewables, waste or industrial residues. The proposed criteria for high-efficiency cogeneration are as follows: a) cogeneration production from units shall provide primary energy savings calculated according to at least 10 % compared with the references for separate production of heat and electricity; b) direct emissions of the carbon dioxide from cogeneration production that is fueled with fossil fuels, are less than 270 gCO₂ per 1 kWh of energy output from the combined generation, including heating/cooling, power and mechanical energy; c) when a cogeneration unit is built or substantially refurbished, member states shall ensure that there is no increase in the use of fossil fuels other than natural gas in existing heat sources compared to the annual consumption averaged over the previous three calendar years of full operation before refurbishment and that any new heat sources in that system do not use fossil fuels other than natural gas.

The proposed target value of direct emissions 270 gCO₂ per 1 kWh, means that only gas-fueled high-efficiency cogeneration installations will meet the criteria of Annex III.

Other conventional fuels and liquid/gaseous residual fuels resulting from chemical and steel production processes will be out of the scope of this directive, because they do not meet the prescribed criteria for high-efficiency cogeneration as well. Thus, to establish harmonised efficiency reference values, we recommend including several exemptions, namely fuel types L9, G11, G12, G13, O18, S5 and S6 which are mentioned in Annex 1 of the Commission Delegated Regulation (EU) 2015/2402. In our view, the exclusion of high-efficiency criterion with the emissions limitation of 270 gCO₂ per 1 kWh will consequently lead to the loss of unlimited feed-in priority for high-efficiency cogeneration production in accordance with Article 13 (6) of Regulation (EU) 2019/943. Residual fuels resulting from chemical processes would have to be flared by curtailment of CHP installations carried out by the operator, as currently there is no further opportunity for recycling or utilisation of these fuels. That increases the flaring period and emission freight which are currently limited by license permits.

If the proposed amendments will be adopted, it is important to ensure that the prescribed limit of direct emissions of 270 gCO₂ per 1 kWh for industrial purposes will be introduced after 2026 at the earliest. This timeframe will be needed for a transition and fuel switch from coal or oil use to natural gas.

Another amendment, concerning “no increase in the use of fossil fuels other than natural gas in existing heat sources”, should also be critically considered. Due to the coal phase-out in Germany and other decarbonisation measures, the operation of CHP-power plants will be necessary for a transitional period, which will potentially require an increase in fossil fuel use. To achieve energy efficiency targets, it is important to ensure a reliable regulatory framework for high-efficient cogeneration and avoid additional legislative restrictions.

8. Specific attention for hydrogen and synfuels production

From our view, it remains open, how topics like the use of renewable 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”? A policy coherence of all regulations within the initiatives of the “Fit for 55” Package is key. This requires a clear definition of accounting methodologies for renewable electricity, hydrogen, green hydrocarbon products and synfuels, especially clarifying their use for material and energetic purposes. It is also not clear in what way new definitions will affect energy saving obligation schemes and other indicators related to energy efficiency. In this sense, we ask for more detailed and targeted definitions and an impact assessment clarifying the effects in the current EED proposal. It is crucial to ensure that the transition to renewable energy sources, along with EED regulations will not result in additional economic disadvantages for businesses.

VIK is the association of industrial energy consumers in Germany. For more than 70 years VIK represents in his role as an industry-wide association the interests of companies from e.g. aluminium, chemicals, glass, paper, steel and cement. VIK advises its members on all energy and energy-related environmental issues.