



ETNO response to the feedback period on the EU energy efficiency directive (EED)

November 2021



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ETNO response

1. Introduction and general remarks

The European Telecommunication Network Operators' Association (ETNO) welcomes the European Commission opportunity to provide feedback to the revised EU energy efficiency directive (EED).

As stated in our response to the EC public consultation earlier this year, we believe **efficient use of energy is key to achieve the Green Deal objectives**. The original objectives of the Directive are still highly relevant, and in general they have helped to increase awareness and knowledge related to energy, which is often still seen a plain commodity.

The ICT sector, including telecom networks, has been taken decisive and continuous actions to improve energy efficiency through a variety of measures. Complementary to that, it is worth highlighting once more that the telecommunications' greatest positive environmental impact lies in its **potential to enable other sectors of the economy to reduce their own emissions and energy consumption**.

Digital solutions are indeed a pre-requisite for achieving the EU Green Deal's goals across different sectors of the economy and society. The enabling potential has a contribution across all sectors of the economy, including manufacturing, transport, buildings, healthcare and public administration, that can only achieve carbon neutrality by accelerating their digital transformation. For example, the recent ETNO BGC report¹ quantified this enabling potential **measuring up to 15% of emission reductions resulting from full digitalization** (including smart cities and buildings, transportation, industry IoT and blockchain applications, and energy).

Telecommunication companies have invested and continue to invest heavily in the build-out and upgrade of energy efficient and high-speed network infrastructure and data centres, as well as in the development and deployment of ICT services. This results in **increased energy efficiency in the provision of mobile and fixed services**. As indicated in the 2021 ETNO State of Digital Communications², **the carbon intensity of ETNO companies decreased in 2019**, with emissions at 27 grams per EUR earned as opposed to 29 grams in 2018. **ETNO companies also reduced their use of non-renewable energy** by 23% and increased their use of renewable energy by 24% in one year.

In 2019, ETNO companies deployed 70.9% of the total network investment in Europe. At the same time, and despite telecom operators' large investments, the **EU faces an investment gap for digital infrastructure**. Once built, 5G and fibre networks will have cost Europe around €500 billion.

Against this background, ETNO takes the chance to provide suggested amendments to the EED, which aims at clarifying and improving aspects that are important for our sector.

¹ "Connectivity and Beyond: How Telcos Can Accelerate a Digital Future For All" <https://etno.eu/library/reports/96-connectivity-and-beyond.html>

² <https://etno.eu/component/attachments/attachments.html?task=download&id=7973>

2. Feedback on the draft Directive

ETNO takes the chance to provide comments on selected Articles/Recitals. Text additions or changes are marked in green. Deletions are marked in red with ~~strikethrough~~.

<i>Proposed changes/Indication of the relevant article</i>	<i>ETNO comments and rationale</i>
<p>Art 2 § 45 (new)</p> <p>‘data centre’ means a structure, or group of structures, with the purpose of centralized accommodation, interconnection and operation of information technology and network telecommunications equipment providing data storage, and processing and transport services together with all the facilities and infrastructures for power distribution and environmental control and the necessary levels of resilience and security required to provide the desired service availability.</p>	<ul style="list-style-type: none"> • ETNO believes that the <i>definition of data centres</i> must be better clarified in order to narrow down the scope of the Directive. • The Directive explanatory memorandum (pag 3 and al.) seems indeed to explicitly limit the scope of the directive to data centres only. • Therefore, we believe that Art.2(45) should provide further clarity in this sense: the definition should be restricted to data centres and it should indicate a clear differentiation between data centres and telecommunication networks, by excluding references to transport services and network equipment. • We urge the Commission to ensure consistency and develop a common definition of data centre, which needs to be used as the only reference in the relevant legislation (EU Taxonomy framework, Eco-Design Directive, etc). • Having a unique data centre definition is crucial to facilitate standardization and harmonization in internal processes as well.
<p>Art 4 c. 2 (new)</p> <p>Member States shall also provide the shares of energy consumption of energy end-use sectors, as defined in Regulation (EC) No 1099/2008 on energy statistics, including industry, residential, services and transport, in their national energy efficiency contributions. Projections for energy consumption in information and communications technology (ICT) shall also be indicated.</p>	<ul style="list-style-type: none"> • Projections of ICT energy consumption might be challenging to produce in a harmonized way across companies and Member States. • As mentioned at the beginning, we believe it would be important to take into consideration also the ICT enabling potential, and not focusing on direct emissions. <p>On the one side, the telecommunications sector has been very active and it is expected to remain very active to increase energy efficiency and reduce its own emissions in its own operations, especially through innovative</p>

	<p>energy efficiency measures and the use of renewable energy.</p> <p>On the other side, the sector provides services to citizens and various verticals helping them to reduce their emissions and increase energy efficiency: enabling potential can go up to - 15% of the global CO2 emissions¹.</p> <ul style="list-style-type: none"> • In addition, in March 2021 many of our members became the founding members of the European Green Digital Coalition, and pledged that their companies would be climate neutral by 2040 at the latest, to accelerate the European Commission's green ambitions. The Coalition will have a key role in developing standards for quantifying the ICT enabling potential, as well as regarding companies reporting methodology.
<p>Art. 11 c.10 (new)</p> <p>Without prejudice to paragraphs 1 to 9, Member States shall require, by 15 March 2024 and every year thereafter, owners and operators of every data centre in their territory with a significant energy consumption to make publicly available the information set out in point 2 of Annex VI, which Member States shall subsequently report to the Commission.</p>	<ul style="list-style-type: none"> • The proposal should provide a clear explanation of the different reporting responsibilities for data centre owners and operators respectively and provide for the development of detailed guidance on the reporting process • Further clarification are needed with regards to what is meant with “significant energy consumption” as well as an appropriate definition of a “data center”. • With regards to the first aspect, we support a power capacity threshold of 1 MW. Firstly, this figure is in line with what is included in Art. 24 c.4 (d) of the EED proposal. Secondly, this approach is also consistent with the size classification of data centres included in the ongoing EC study on greening cloud computing³ which differentiates between 1) small deployments (50 kW – 1 MW), 2) large deployments (1 MW – 10 MW), and 3) hyperscale deployments (10 MW – 100 MW).

³ <https://digital-strategy.ec.europa.eu/en/policies/green-cloud>

	<p>Notwithstanding this suggestion, it is worth noting that smaller data centres operations (between 0.5 and 1MW) are responsible for a large part of the energy loaded globally.</p> <ul style="list-style-type: none"> • Finally, the power of the EU Commission to define threshold via delegated act (see Art. 31(3)) should be performed through a regulatory dialogue with the industry (consultation, request for info etc.).
<p>Annex VI - Minimum Requirements For Monitoring And Publishing The Energy Performance Of Data Centres</p> <p>The following minimum information shall be monitored and published as regards the energy performance of data centres referred to in Article 11(10):</p> <p>(a) the name of the data centre; the name of the owner and operators of the data centre; the municipality where the data centre is based;</p> <p>(b) the floor area of the data centre; the installed power; the annual incoming and outgoing data traffic; and the amount of data stored and processed within the data centre.</p> <p>(c) the performance, during the last full calendar year, of the data centre in accordance with key performance indicators about, inter alia:</p> <ul style="list-style-type: none"> - energy consumption - power utilization - temperature set points - waste heat utilization - water usage - use of renewable energy 	<ul style="list-style-type: none"> • Precise information on total data traffic and storage per data centre is often not available to operators of data centres. In many cases such information would also be considered confidential due to total risk management and commercially sensitive. • We therefore recommend to delete the letter (b) from the Annex VI, among those information that shall be monitored and published with regards to data centres energy performance. The requested detailed information are difficult to have access to. • Furthermore, it is worth also noting that some of the KPIs included in letter (c) might be challenging to gather for older data centres installations depending on the requirements that were mandated at the time.
<p>Art. 24 c.5 (c) (new)</p> <p>Data centres whose waste heat is or will be used in a district heating network or directly for space heating, domestic hot water preparation or other uses in the building or group of buildings where it is located.</p>	<ul style="list-style-type: none"> • We positively acknowledge the exemption included in this new provision, and we would suggest that the same principle would apply for those data centres with an increased energy efficiency performance.
<p>Art. 31 c.3 - Delegated Acts</p> <p>The Commission is empowered to adopt delegated acts in accordance with Article 32 to supplement this</p>	<ul style="list-style-type: none"> • In principle, the introduction of uniform sustainability indicators is a helpful step

<p>Directive by establishing, after having consulted the relevant stakeholders, a common Union scheme for rating the sustainability of data centres located in its territory. The scheme shall establish the definition of data centre sustainability indicators, and, pursuant to paragraph 9 of Article 10 of this Directive, define the minimum thresholds for significant energy consumption and set out the key indicators and the methodology to measure them.</p>	<p>towards enabling comparability of data centers in terms of energy efficiency.</p> <ul style="list-style-type: none"> • However, when defining KPIs, it should also be taken into account that the underlying business models, infrastructure and functions of the various data centres are very different: while the scaling and efficiency idea is very pronounced for IT and hyperscaler clouds, network performance (availability and operational reliability/security) dominates for telco clouds. This performance is crucial, for example, to be able to meet promised SLAs. • KPIs for the different cloud platforms should therefore mirror those differences. • Different KPIs would also need to be defined for clouds at a few but relatively large sites ("core") compared to clouds at many but comparatively small sites ("edge"). • We finally think that, especially for companies operating in multiple countries, it would also be beneficial for all countries to harmonize their full EED implementation and reporting requirements so that it becomes possible to use and benchmark the data collected for each brand of the same company. <p>Nowadays there is a lack of harmonization, and each country's fragmented implementation results in an extremely challenging benchmarking effort.</p>
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For questions and clarifications regarding this position paper, please contact [Sara Ghazanfari](mailto:ghazanfari@etno.eu), Public Policy Manager (ghazanfari@etno.eu).

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