

Revising the primary energy factor for electricity

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This Commission **Delegated Regulation** concerns the revision the primary energy factor for electricity in application of [Directive 2012/27/EU](#) of the European Parliament and of the Council on energy efficiency (EED).

Background

The primary energy factor (PEF) for electricity is a crucial indicator for energy efficiency and energy savings. The PEF for electricity was first established in Directive 2006/32/EC on energy end-use efficiency and energy services. Directive 2012/27/EU on energy efficiency (EED) which repealed Directive 2006/32/EU, did not revise the PEF methodology or its value ('coefficient'). Therefore, the value of 2,5 as defined in footnote 3 of Annex II to Directive 2006/32/EC was maintained and reflected in footnote 3 of Annex IV of the EED.

As defined in footnote 3 of Annex IV to the EED, Member States were allowed to use the default coefficient of 2,5 or could apply a different coefficient, provided that they can justify it.

However, under [Directive \(EU\) 2018/2002](#) (EED 2018) amending the EED, a study was carried out on the PEF value and its coverage. The methodology used to calculate the PEF value for electricity is defined in Recital 40 of the EED 2018 and requires the Commission to 'reflect technological progress and the growing share of renewable energy sources in the electricity generation sector'.

Based on the results of the study, the EED 2018 revised the default coefficient PEF for electricity to **2,1** and amended Annex IV, footnote 3 of the EED.

In accordance with the provision in footnote 3 of Annex IV to Directive 2012/27/EU, by 25 December 2022 and every four years thereafter, the Commission shall review the default coefficient on the basis of observed data.

The Commission has carried out a study on the review of the primary energy factor (PEF) in order to reflect the technological progress and the growing share of renewable energy sources in the electricity generation sector since 2018.

The study supports the methodology set out in Recital 40 of the 2018 EED which uses the 'physical energy content' accounting method for nuclear electricity and heat generation, the 'technical conversion efficiency' method for electricity and heat generation from fossil fuels and biomass, and the direct equivalent method based on the 'total primary energy' approach for non-combustible renewable energy.

The study acknowledges the need to use a forward looking PEF in order to reflect the impact of energy efficiency in the future.

Annex IV to Directive 2012/27/EU should therefore be amended accordingly.

Content

The delegated act **revises the default coefficient, PEF for electricity**, using the average PEF value for 2024 and 2025, and following the methodology and the requirements defined in the EED 2018. The delegated act replaces Annex IV, footnote 3 of the EED.

The footnote specifies that for savings in kWh electricity, Member States will apply a coefficient established through a transparent methodology on the basis of national circumstances affecting primary energy consumption, in order to ensure a precise calculation of real savings. Those circumstances shall be substantiated, verifiable and based on objective and non-discriminatory criteria.

For savings in kWh electricity, Member States may apply a default **coefficient of 1,9** or use the discretion to define a different coefficient, provided that they can justify it.

When doing so, Member States will take into account the energy mix included in their integrated national energy and climate plans to be notified to the Commission in accordance with Regulation (EU) 2018/1999.