EuropeOn feedback on the review of the PEF for electricity

The Primary Energy Factor (PEF) for electricity is a useful tool to account for energy consumption from a system perspective. However, it has been extended to rate the energy performance of buildings and products where its use is more questionable. In such cases, the PEF distorts their true energy performance rating and consumer information potential with elements far upstream in the energy system. In addition, the methodology behind the PEF for electricity does not seem to be consistent with or conducive to the current policy goals of the EU for emissions reductions and phase-out of fossil fuels.

Ahead of the Commission's consultation process on the review of the PEF for electricity, EuropeOn, along with 11 other concerned stakeholder representatives, called on the Commission to ensure the PEF does not distort energy ratings and align the PEF methodology with the current policy goals of the EU[1]. Indeed, thinking in silos cannot take place anymore and it is crucial that all policymakers dealing with energy coherently direct all EU policy tools towards our decarbonisation objectives. Hence, we also wrote to Director General Juul-Jorgensen calling on her to see that the PEF methodology is in line with and contributes to the objectives set by the Commission and its own services, such as increases in electrification, renewable energy consumption or phase-outs of fossil fuels[2].

However, while the Commission has displayed ambition and recognition of the climate crisis and then of the current energy crisis with several legislative propositions, the non-legislative review of the PEF for electricity seems to have escaped this new green impetus making the latest proposal presented during the 20 October workshop appear disconnected from the current context, with misoriented methodological choices.

1. The PEF for electricity must recognise the **true value of non-combustible renewables**. Currently, solar, wind and hydro power have a PEF of 1, the same as for fossil fuels. The methodologies for PEFs for electricity and fossil fuels should be adjusted to differentiate the two while keeping in mind the EU's decarbonisation goals.

While the zero-equivalent method of accounting provides a legitimate basis to set this PEF to 0, this has been dismissed on the premise that a PEF below 1 is an incentive to waste energy. This reasoning is inaccurate for several reasons:

- Energy is just too expensive to be wasted by any consumer, private, commercial or industrial just because of a lower PEF. This is especially true in the context of the current energy crisis.
- PEFs below 1 already exist in the case of district heating. Indeed, the latest workshop included a presentation on the "PEF in practice", which displayed the discrepancies created with the use of the PEF in EPBD and with the way renewables non-combustible (RES) are counted. It showed that in Austria, in 2030 electricity should be renewable with 0gCO2/kWh, yielding a PEF of 1 for electricity consumption within EPCs. On the other hand, the same slide showed that district heating in 2022 would still emit 20gCO2/kWh and would yet benefit from an extremely low PEF of 0.3. According to this presentation, by 2030, it will be more climate friendly to use electricity than DHC and yet, the current PEF framework is steering consumers towards away from electricity,

[1] https://europe-on.org/wp-content/uploads/2022/06/20220613-Review-of-the-Primary-Energy-Factor-Position-Paper.pdf
[2] https://europe-on.org/wp-content/uploads/2022/07/Primary-Energy-Factor-letter-to-DG-Juul-Jorgensen-July-2022-FINAL.pdf

while devices and buildings built and bought today will most likely still be operational in 2030 and possibly beyond.

- Having the same PEF for non-combustible RES and fossil fuels suggests they have the same value and should be treated the same way in energy performance certificates, product policy or energy savings targets. This sends a signal that is complete contradiction to the stated goals of the EU and of Member States.
  For instance, consumers who are pushed to opt for an electric heat pump as their primary heating system might be confused as the PEF will, in many cases, largely offset the stated efficiency gains from their coefficient of performance in their Energy Performance Certificates. On the other hand, gas consumed in a fossil boiler will have a PEF of 1, the same as for non-combustible renewables, and appear almost as efficient as the heat pump. Also, it should also be clear that applying the EU average PEF to product policy does not take into account the possibility to power an appliance with onsite renewables, such as solar energy, poised to be mainstreamed under current proposals for the revised EPBD.

2. With its adoption of a **forward-looking PEF** the Commission has sought to make the PEF for electricity an instrument that can lead the way for energy policies and investments towards the stated aims of the EU, such as increasing electrification and decreasing fossil fuel consumption. However, the PEF in the draft delegated act only looks as far as 2024-2025. It is not a sensible choice to only look 2 years ahead as it does not provide any meaningful predictability to steer investments.

The PEF should be set by using the 2030 value. This would better match the lifetime of the products that are affected by the PEF under Ecodesign and Energy Labelling requirements. Further, buildings erected or renovated today will not be altered before 2030 and need more than 2 years of predictability as currently proposed. Finally, 2030 would correspond to other deadlines in EU policies such as the RED/EED targets that have been set for 2030, as well as NECPs which can provide insight as to the state of EU energy systems until that date. At the very least, the PEF must be set to the 2026 value a to match its validity period, as suggested in the consultant's latest report.

3. The inclusion of a **life-cycle analysis (LCA) is extremely biased against electricity**. Fossil fuels currently benefit of a PEF of 1 which completely disregards the energy used and lost upstream of the point of consumption. The cited complexity of LCA calculations cannot be an excuse to turn a blind eye to the detrimental impact of the fossil fuel supply chain, especially as methane leakage has come under increased scrutiny and has been the subject of dedicated regulatory attention from the Commission, and as several Member States already do already set a higher PEF for fossil fuels.
On the other hand, the methodology behind the PEF for electricity does adopt an LCA by including grid losses. This discrepancy should be redressed by including an LCA to the calculation of PEFs for fossil fuels.

We welcome the debate around the question "**How can the PEF help to incentivize energy transition?**" that was initiated during the latest PEF workshop organised by DG ENER on 20 October, which hopefully signals a more advanced consideration of the dire impact of the current PEF framework on emission reduction goals. It is our hope that this is the start of a new reflection on the PEF and that the Commission will see a way to work around the claimed methodological difficulties which currently hamper the PEF calculation (complexity of LCA, claimed lack of data to look beyond 2024-2025) and to ensure that the PEF leads to GHG reductions, as emphasised by the European Parliament in their report on EED[3].

[3] https://www.europarl.europa.eu/doceo/document/A-9-2022-0221_EN.html