

Position Note on the Impact Assessment SWD (2016) 405 final and the PEF value proposed for the EED

MARCOGAZ and GERG have followed with interest the arguments relating to the modification of the Primary Energy Factor. However we are ultimately disappointed that the value of the PEF of electricity of 2.0 does not adequately reflect or acknowledge the arguments and could have consequences opposite to the ones sought.

Calculation methods: Average vs. marginal

- **Average method** = calculation based on a yearly average electricity generation mix;
- **Marginal/consequential method** = calculation taking the impact of a new appliance on the balancing of the grid (during peak demand, the additional demand due to a new appliance will have to be offset by an additional supply from the least efficient generation units).

Application of an average method on a future mix does not send the right signal to those making investment decisions

Contrary to a marginal method, application of an average method on a future mix does not send the right signal to those making investment decisions, project managers and consumers, on the impact of their decisions.

The use of an average method together with projections or extrapolations will even lead to an outcome opposite to the one sought, before the actual energy mix meets that which is intended. A projected mix implies that we assume to have already narrowed the gap between the current energy mix and the desired objective of a mix with a larger share of renewables. **It therefore reduces the incentive to take actions to improve overall energy efficiency.**

MARCOGAZ and GERG recommend a value of 2,26 for the PEF of electricity

MARCOGAZ and GERG consider that the calculation for the PEF for electricity should be carried out with the latest data published, i.e. the ones published (earlier in 2017) by Eurostat for 2015 leading to a value of 2,26 to be specified in the revised Energy Efficiency Directive.

One need to acknowledge the contradiction between values obtained using the PRIMES model for method 3 for 2015 (2,21 in May 2016 Discussion Paper; 2,09 in the September 2016 Impact Assessment Document) and the actual EUROSTAT data for 2015 which result in a value of 2,26. This clearly highlight the risks linked to an inappropriate acknowledgment of the actual state of the current EU electricity generation mix.

A PEF equal to 2.0 based on 2020 projections will lead to an electrical overconsumption

The value of the PEF in the EED will also impact the Ecodesign and Energy Labelling Directives which enable the comparison of the performance of various systems providing the same function (e.g. for heating: gas boilers vs. electrical heat pumps).

The PEF equal to 2.0 based on 2020 projections will automatically make electrical applications unduly more attractive and lead to an electrical overconsumption which will be detrimental to the network, the future share of renewables, and costs to consumers.

Gross Calorific Value should be used instead of Net Calorific Value

For consistency, Gross Calorific Value should be used instead of Net Calorific Value for the calculation of the PEF to avoid a distortion in the calculations within the different fuel types.