



Eneco contribution to the consultation on the revision of the Energy and Environmental State Aid guidelines ('EEAG')

Eneco is an energy service company with customers in the Netherlands, Belgium, Germany and the United Kingdom. We develop and operate on- and offshore wind assets, solar farms, gas-fired power plants, heat networks, renewable heat sources, storage assets (batteries, heat), energy management systems and charging services for electric vehicles. Eneco also provides industries with assistance in decarbonisation, for example by offering services for electric boilers replacing conventional heat production for industrial processes.

Eneco is committed to an EU climate target that is compatible with the 2015 Paris Agreement's goal to keep temperature increase well below two degrees Celsius and strive for 1.5 degrees Celsius. We therefore support an increase of the EU's economy-wide climate target to at least 55 percent by 2030 and the implementation of this target through the relevant EU regulations and directives. We also welcome that the European Commission is preparing an update of its state aid guidelines for environment and energy in this context.

Include clear rules for large-scale direct and indirect electrification in the guidelines

Electrification, combined with the decarbonisation of the power sector, is key to achieving a carbon-neutral EU economy and reaching more ambitious 2030 targets, as set out in the European Green Deal and the 2030 Climate Target Plan. Electrification is an important abatement technology for industrial sectors and heat production for district heating. Direct electrification (e.g. electric boilers supplying heat for industrial processes) and indirect electrification (e.g. electrolysers producing hydrogen) will require a significant increase of investments. Also, electrification of industrial processes can have higher operational costs than current processes due to the price difference between electricity and currently used fuels (e.g. natural gas) and differences in network charges. Therefore, additional financial support can be necessary to ensure a timely introduction and development of electrification, delivering CO₂-emission reductions and other common objectives.

However, the current 2014-2020 Guidelines on State aid for environmental protection and energy do not address the specific issues related to aid for electrification. While renewable and low carbon hydrogen production is identified in the questionnaire as a possible technology area for the revision of the guidelines, direct electrification of industrial processes and heat production for district heating is missing unfortunately. This is remarkable, considering electrification is a relatively cost-effective abatement measure and electrification is expected to play a significant role in reaching the EU's targets. Moreover, a non-discriminatory approach for both direct and indirect electrification options is important to prevent unnecessary market distortion.

We call on the Commission to include large-scale direct and indirect electrification as a separate technology area in the revised guidelines, in order to provide more clarity to both Member States and investors on the compatibility of aid. Currently, methodological issues related to the evaluation of emissions and the related abatement costs of electrification undermine investment certainty. Clear rules will help the timely development of large-scale electrification as a key technology to achieve ambitious CO₂ targets in combination with decarbonisation of the electricity sector.

Proposals for the revised guidelines

The Commission's guidelines should acknowledge that aid for large-scale direct and indirect electrification (including for example for electrolysers, electric boilers, electric crackers, industrial

ovens and industrial heat pumps) can contribute to the common objectives of environmental protection and a competitive, sustainable and secure energy system.

Moreover, the guidelines should provide a methodological toolbox for Member States to evaluate the contribution of electrification technologies to the common environmental and energy objectives. Member States should have, amongst others, at least have the following three options for assessing the contribution of electrification to emission reductions:

1. the indirect emissions associated with the use of electricity for electrification may be evaluated by reference to the CO₂-output of the relevant electricity mix;
2. the indirect emissions may be evaluated on the basis of evidence for the use of a *physical direct connection* between the electricity user and a specified renewable or carbon-free energy source, in which case the indirect emissions are deemed to be zero;
3. the indirect emissions may be evaluated on the basis of evidence for the use of a *virtual direct connection* between the electricity user and a specified renewable energy or carbon-free source, in which case the indirect emissions can also be deemed to be zero.

The method to demonstrate a *virtual direct connection* should entail amongst others providing a power purchasing agreement with a specific renewable energy or carbon-free source in combination with evidence that the electricity is used simultaneously with the production by the contracted zero-carbon source (e.g. by using telemetry). The purchase and usage of the related guarantees of origin in accordance with Directive 2009/28/EC should also be required, in the case of renewable energy use.

Limiting the methods to only a direct physical connection would in practice mean that the majority of industrial installations is excluded for investment support for electrification, as they do not have a possibility to establish a direct physical connection with a CO₂-free source.

In order to reduce the costs for Member States and prevent unnecessary market distortion, the selection process for aid for direct and indirect electrification should be conducted in a non-discriminatory, transparent and open manner, without unnecessarily favouring one electrification technology, or one renewable or zero-carbon source, over another. The selection process should lead to the selection of beneficiaries that can address the environmental or energy objectives using the least amount of aid or in the most cost-effective way.

With regard to aid for small-scale applications with direct or indirect electrification, such as vehicles propelled by electricity or hydrogen or domestic heat pumps, the Commission should allow Member States to follow an administratively less complex approach, based on direct (or tailpipe) emissions. In this context we refer to paragraph 15 of the current 2014-2020 on State aid for environmental protection and energy on the scope of the guidelines.