



Brintbranchen / Hydrogen Denmark's response to call for evidence for an impact assessment re. European Grid Package

Brintbranchen / Hydrogen Denmark is the national association for renewable hydrogen and Powerto-X in Denmark, representing companies and institutions from across the entire value chain. We thank the European Commission for the opportunity to provide feedback on this topic.

In our view, there is need for additional EU action to improve the way we build out energy infrastructure in the path to a full green transition. Concretely, it is crucial to introduce more stringent requirements and criteria for multi-system assessments on the development of future energy grids. By this we mean specifically that a new grid development must be assessed considering alternatives not only within the same energy vector, but across the entire energy spectrum. For instance, a new electricity grid should be assessed against alternative routes, but also against e.g. a hydrogen line (or at least against a join development to deliver the same energy partially as electricity and partially as hydrogen).

This position is based on the following evidence, which we strongly suggest you include in the impact assessment:

1. Hydrogen Europe's paper "Hydrogen infrastructure: The recipe for a hydrogen grid plan" (link)

In this paper, Hydrogen Europe details how hydrogen infrastructure can be much cheaper that electricity infrastructure. Hydrogen Europe refers to the Grids Action Plan, that estimates that electricity grid investments towards 2030 in Europe should be of the order of 584 bn EUR. On the other hand, the Commission also expects investment needs for hydrogen infrastructure to be over 10 times smaller.

Of course, wherever it is technically and socioeconomically feasible, direct electrification should be the preferred choice. But there are many efficient applications of hydrogen and its derivatives, and choosing between the two vectors should be a decision made on the basis of the entire cost, i.e. including energy infrastructure.

The paper also argues that hydrogen pipelines are made of cheaper materials compared to electricity cables, and are less dependent on critical raw materials. Furthermore, the vast potential of repurposing natural gas infrastructure for hydrogen gives additional savings and reduces permitting challenges.





2. Energinet's tariff cap until 2030 (link)

The Danish electricity, hydrogen and natural gas TSO, Energinet, has recently announced that they will reduce electricity consumption charges by up to 10% from 2026 and put a cap on them until 2030.

Normally, Energinet sets the charge levels one year at a time. In fact, the TSO expected the charges to increase in the coming years, and point at the green transition and increased electrification as the drivers for this increase (due to the upward pressure on prices for cables, transformer stations and components caused by increased demand). However, they now choose to cap tariffs towards 2030 to give users – and specially new potential users – more security about the costs they will face, in order to encourage more electrification.

We see this as an example of how accelerated electrification can in fact work against the green transition and discourage more electrification if grid charges aren't kept in check. Multiple infrastructures / energy vectors can alleviate the pressure on system charges.

Furthermore, these news from Energinet also point towards the need of rethinking grid financing models, including (but not limited to) the value of anticipatory investments.

Hydrogen Denmark is of course happy to receive and address comments or questions on all the points above, should they arise.

