



## Making clean hydrogen and aluminium manufacturing eligible in the Sustainable Taxonomy

*Challenge: The current Taxonomy screening criteria disqualifies grid-connected manufacturing of hydrogen and aluminium, regardless of the technology used.*

### Background

In the “EU Taxonomy Report: Technical Annex” that was published on 9 March 2020, the screening criteria specifies that the average carbon intensity for the electricity that is used for manufacturing of hydrogen and aluminium must be at or below 100 gCO<sub>2e</sub>/kWh.

In order for any electricity grid-connected hydrogen and aluminium manufacturing to be defined as sustainable according to the Sustainable Taxonomy, there is a need to adjust or make an addition to the screening criteria in the Technical Annex to the Taxonomy report under 3.5 Manufacture of Hydrogen and 3.3 Manufacture of Aluminium.

This amendment is crucial to allow for electricity grid-connected sustainable hydrogen and aluminium manufacturing, enabling timely scale-up of clean hydrogen.

### Proposal

Under 3.5 Manufacture of Hydrogen and 3.3 Manufacture of Aluminium, in the Taxonomy Report: Technical Annex, the third threshold specifies that the average carbon intensity of the electricity used for hydrogen and aluminium manufacturing must be at or below 100 gCO<sub>2e</sub>/kWh, in order to comply with the European Taxonomy. The electricity grid carbon intensity equals (or is below) this threshold in only very few EU member states. This threshold would therefore disqualify almost all electricity grid-connected hydrogen and aluminium manufacturing sites, regardless of the technology used, thus jeopardising sustainable hydrogen and aluminium according to the European Taxonomy. This would suggest that all manufacturing will have to rely on smaller installations that are not connected to the electricity grid or, effectively, be deemed as not sustainable.

There is a need to complement this screening criteria with other mechanisms to enable timely scale-up of hydrogen manufacturing, whilst guaranteeing that electricity grid-connected manufacturing of clean hydrogen and aluminium receive the appropriate electricity input, in order to qualify under the European Taxonomy.

### **ZEP recommends the following additions to the electricity threshold:**

Power Purchase Agreements (PPAs), and

A methodology that ensures that such PPAs have both temporal and geographical correlation between the unit producing the threshold-compliant electricity and the hydrogen / aluminium manufacturing unit that is using it, in the same manner as described in the Renewable Energy Directive:



- A temporal correlation – based on when the electricity is produced and when it is consumed in the manufacturing
- A geographical correlation – ensuring that the electricity production purchased is dispatched in the same integrated electricity grid.