

Treepower's answers to the EU Taxonomy

Treepower is a regional initiative for production of sustainable aviation fuels, and more specifically biojetfuels, in the North of Sweden, based on renewable resources from forest industry residues and renewable power. Partners in Treepower include the financial and investment sector, university, the forest industry, the national aviation industry, regional power companies and municipalities in the northern Sweden.

Treepower welcome the initiative with the Taxonomy and the common work towards a sustainable fossil free future, as the foundation of our existence is characterized by sustainability and the objective of making the aviation sector fossil free. Although, we have identified parts of the current proposal in the Taxonomy that needs to be revised to mirror the conditions and the contribution of the enormous possibilities of bioenergy and renewable power that our region can offer. The society have to act immediately, to be able to reach the Paris Agreement and the ambition of the Green Deal. We have focused on parts in the Taxonomy relevant for Treepower that needs to be revised.

Following are our comments.

1. Short timespan given for feedback

First of all, we consider the time given to respond on this 529 pages of the delegated act and its Annexes being very short. Furthermore, we encourage the commission to spend sufficient time to consider the feedback before a decision is being made.

2. Biofuels should not be seen as a transitional activity

For the aviation sector, the solution to become sustainable is communicated by the EU Commission, in the EU Strategy for Energy System Integration, where stated that advanced biofuels and electro-fuels is a key to reduce the carbon footprint. We fully support that biofuels needs to be produced in a sustainable way in accordance with the RED II (2018/2001). However, classifying biofuels as a transitional activity within the Taxonomy is not justified since biofuels can be 100% CO₂ neutral and renewable, if avoiding using fossil energy in manufacturing and logistics. For an unmanageable time ahead, SAF will be the way forward to make the major part of the air traffic sustainable. Bioenergy, and more specific biojetfuels, can therefore not be seen as a transition technology. Further, we advise that "Manufacturing of Biofuels" should be classified in the same way as "Manufacturing of Hydrogen" via renewable power.

Our concern is if any transitional activity at all (additional bio-refineries) will be financed to be built, if classified as such.

3. Sustainable aviation efficiency

Focus on zero tailpipe CO₂ emissions in section 6 is wrong in our view. A well-to-wheel approach must be considered. Zero tailpipe can, if not analyzed in a well-to-wheel perspective, contribute to more CO₂ emissions in total. The difference

compared to some other sectors in the transport business is that aviation cannot easily be electrified. There are several successful attempts to electrify aviation, but the airplanes have relatively short range and can only take a few passengers. Hydrogen is another possibility, but that would mean a transition of the entire aircraft fleet from what we have today. New engines need to be constructed as well as on board storage of the fuel.

OEM:s estimate that construction of a new liquid fuel type aircraft probably would take 14-19 years to reach an introduction phase. Furthermore, the fuel distribution system must be adopted. By this not saying that hydrogen shouldn't be explored, on the contrary this is welcomed. The average life time of an aircraft is approximately 30 years and the aviation industry will not have the financial power to replace the entire fleet anytime soon. The sustainability in scrapping well-functioning aircrafts is low. Therefore, biojetfuel is essential.

4. The regional potential

We advise that the Taxonomy should align with the legislative initiative entitled "ReFuelEU Aviation – Sustainable Aviation Fuels", based on Article 191 TFEU & Article 192(1) TFEU. The regional conditions must be taken into account.

In the north of Sweden there are large quantities of forest residues which is today not used, suitable as feedstock for biojetfuel/biofuels production. We also have a large production of renewable power. A combination of these resources makes great pre-requisites for producing large volumes of biojetfuel.

5. New bio-opportunities

Classification of "transitional activities" would also disqualify research, development and innovation on bioenergy (see Annex I, 9.1). In our effort to innovate what we can produce from forest biomass, in addition to the traditional products, we are trying to see how we can create the right conditions for new bio refineries, where research is an essential activity.

All industrial side streams in the forest value chain are used, partly as raw material in other processes like for wood chips, but mainly as different kinds of "energy carriers". Nothing ends up in landfill today. The virgin "energy carriers" from the side streams are used internally or externally in other industries or to produce heat for district heating, often combined with production of electrical power. Biomass side streams from various industries can also be increased by energy efficiency of existing processes. This enables new bio-based innovations, i.e. biofuels.

Forestry is extremely important regarding its characteristics of binding carbon dioxide, not only in trees but also importantly in the renewable materials that are created from it during their lifecycle. The possibility to build for example houses and furniture from trees as raw material, where the material continues to bind the carbon, eliminates the need to use fossil raw materials. This contribution needs to be made explicit in the taxonomy. IEA and IPCC evaluate sustainable bioenergy as long-term climate mitigation activity.



We need all sustainable energy alternatives. Only then we can reach the overall climate goals including the aviation industry.