

Comments on the Taxonomy and its impact on the decarbonization of the transport sector

Executive Summary

The 2030-secretariat is committed to the decarbonization of the transport sector. We support the introduction of sustainability in the finance sector and welcome the rationale behind the Taxonomy.

We see some very positive initiatives. There are very clear-cut limits set out for determining whether hydrogen is sustainable or not. Setting a limit of a certain amount of CO₂ allowed (xtCO₂eq/tH₂) is a technologically neutral approach that can be used for all fuels. The level set can, and should, be adopted to technological development on the market.

We would like to see a more open approach to alternative solutions in order to allow for a smooth transition to net zero. As the Taxonomy stands today, it relies much on future solutions, leaving us with inadequate alternatives in the short term. Picking the winners of the future now is hampering innovation in existing businesses.

Having said that, biofuels, electrification and advanced biofuels are technologies in different levels of maturity. It is good that the taxonomy incentivises future, and somewhat immature technologies, as they need more support to come to market.

We are concerned that the Taxonomy could be counterproductive. By turning investments to the promising solutions of the future, we miss the important period where mature technologies provide the base for new technologies to take off. The industrial platforms of future fuels are built on today's mature solutions.

This has the consequence of hindering business that are the developing platforms for new technologies and stops Europe from remaining in the lead of decarbonization.

We also note that the Taxonomy is not harmonized to existing EU directives and regulations - many the result of a yearlong democratic dialogue and negotiation. RED, LULUCF and the Clean Vehicles Directive are examples where the Taxonomy differs from democratic decisions, which creates uncertainty – the biggest enemy of investment.

We suggest that the commission in the coming months takes into account:

- Most carbon dioxide reduction until the late 2030's will come from growing mature technologies like increased energy efficiency, biofuels, biogas and other non-fossil mobility. Those solutions are enablers for many years, and the taxonomy should rely more on their impact for many years to come. Building on the mature technology there will lead to development and innovation.
- Allow for a smooth transition. The transformation of the transport sector is not done overnight, and we need all available, sustainable alternatives to phase out fossil

fuels. The next decades will see all technologies as transitional with one common objective – to phase out fossil fuels.

- Allow for an including strategy, that both offers support for developing technologies, and sees a place for mature technologies with high climate reduction potential
- Align the Taxonomy with current directives in order to create a transparent playing field for the market. It is counterproductive for the financial sector to be governed by different rules than those set by governments.

Where we come from

The Swedish 2030-secretariat was founded to support the decarbonization of the transport sector in Sweden. The target has since become Swedish law, with a sector target of 70% reduction of carbon dioxide in 2030 compared to 2010.

The secretariat is a coalition of the willing, more than 70 partners from different business sectors, organizations and municipalities. The work of the secretariat is **neutral** on choice of vehicle or energy provider – we are aiming for a sustainable decrease of emissions well-to-wheels, i.e. from a life cycle perspective including the efficiency of the vehicle. We work on behaviour change, where a low fossil emission mobility by digital means and new ways of interaction is key.

Sweden is doing well on its road to the 2030 target. More than 30 percent of all passenger cars registered in 2020 were chargeable, and the legislated target for CO2 reduction from fuels is 26 percent for diesel and 6 percent for gasoline in 2021. This amounts to about 24 percent biofuels mix by volume.

Developments in Sweden may not be important as such, but they are a fore runner and testing ground for other member countries, and an example of how Europe can take the lead. This development is threatened by the proposed taxonomy.

General comments

70 percent of all biofuels used in Europe are crop based. As there is an overproduction from European farming, and farmers are incentivised to put millions of hectares in fallow, the biofuel production is no threat to food supply, it is a way for farmers to make an extra income.

Future expansion is projected in biofuels from other sources, today more immature technologies, but with large potential. The Taxonomy must allow for the development of those technologies, and not limit the resource base in the development phase. The fact that the Taxonomy sees a phase out of combustion engine vehicles does seem counterproductive, as these newly developed biofuels will have a very high climate reduction potential and have according to the Well-to-wheels analysis by the [JEC](#).

Technological neutrality is key for an efficient path to climate neutrality. The technical screening criteria contained in the draft delegated acts have not been developed with a use-case of taxonomy in mind and is excluding biofuels and a number of technologies which can play a part in our short to medium term sustainability.

Even though electrification will be the most important strategy to decarbonize light vehicles, the uptake of electric vehicle fleet is slow. The reasons are both technological challenges and the fact that only a portion of the fleet is renewed every year. In Sweden the average lifetime of a passenger car is 17 years. The European Commission echoes this in the [Strategy for Smart Mobility](#) of December 2020. The commission suggests that there will be 30 million electric vehicles on the roads in 2030 – the problem is that this is only 10% of all vehicles on the road. Will the rest be fuelled by fossil fuels?

The [IEA](#) projects that biofuels will be a bigger carbon dioxide reduction factor than electrification until 2035-2040.

It is clear that we will need parallel strategies to reach the climate targets. **The taxonomy as proposed severely limits both biofuels and vehicle technology and public transport by imposing too strict restrictions on what is defined as sustainable.** Already today, investors are backtracking for planned investments.

The customer perspective

This may seem outside the remit of the taxonomy, but the underlying effect of directing investment to sustainable practises also involves the customer and the customers customer. The customer side of the value chain needs clear emission values for the different technologies available. A well-defined emission value per energy unit would help the market to understand and invite public participation.

Vehicles

There are CO₂ limits set for the release of vehicles on the European market. These targets are will be revised 2021. The Taxonomy should build on that development. In a recent report by the [JEC](#), well-to-wheels emission results from more than 1500 production combinations were presented. In the long perspective, post 2030, a concept of a 'well-to-wheel with split responsibilities' could be applied in the CO₂ fleet regulations for the automotive (tank-to-wheel) and energy and fuel sectors (well to-tank).

The absence of Life Cycle Analysis of transport related activities creates an uneven playing field where so called 'zero emission' options (tailpipe) are systematically considered as sustainable, independently from the origin of the energy and emissions related to battery production. This technology-biased tailpipe approach excludes the use of sustainable biofuels and biomethane in transport from the scope of climate change mitigation activities. It is in sharp contrast to REDII and scientific findings showing that, from all combinations of fuel/energy carriers and powertrains explored, biomethane represents one of the absolute lowest greenhouse gas intensive routes (<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/jec-well-wheels-report-v5>).

Move towards applying a Life-Cycle Analysis to set TSC for all transport activities to create a consistent level playing field that supports all available solutions to decarbonize road transport. The TSC for activities linked to transport, vehicles and vessels should align with the Annex IX of the REDII to include biomethane used in transport in the climate change mitigation activities.

The Clean Vehicle Directive sets out procurement regulations for national authorities, with targets to 2026, and strengthened targets thereafter.

The taxonomy should align itself to the CO2 targets and the targets of the Clean Vehicle Directive, and measure emissions through well-to-wheels.

Public transport and heavy vehicles

Heavy vehicles will rely on combustion engines for a longer time than light vehicles, and their continued development will be severely hampered if the taxonomy phases out the combustion engine too early. Public transport is at the core of decarbonization of the transport sector. It has been negatively affected by the pandemic and needs to regain its position. Trucks form the core of the transport networks and cannot transform to technologies not yet on the market.

The Taxonomy should recognize the role of public procurement of vehicles and set demands for both public transport and trucks in line with the Clean Vehicles Directive (that has specific targets for busses and trucks).

Long haul trucks is more difficult to electrify and biodiesel, liquid biogas and hydrogen might be better solutions for many applications. In the two former examples, a diesel engine (combustion engine) is needed.

Hydrogen - electrification – liquid biofuels - biogas

The clearly defined emission targets for hydrogen are good examples, and a model. The Life Cycle Assessment need to be transparent and include the full value chain.

In general, we support setting emission targets per produced unit of energy. This is a technologically neutral target and can be developed in a stepwise more ambitious approach.

Electrification is likewise well covered. As all fuels should be treated similar, there should be logical comparison. On the fuel side

On the production side, even if it is slightly outside the remit of the 2030-secretariat, we naturally see the production emission as part of the well-to-wheel approach, and for electric vehicles it is logical to include the CO2 cost of the batteries.

Classification of biofuels as transitional activities rather than sustainable is ill-suited. Several Member States will be relying on significant greenhouse gas emission reductions from the

use of biofuels in transport when aiming for carbon-neutrality by 2030-2050. As we will have the largest carbon dioxide reduction from biofuels for light vehicles biofuels for many years it should be seen as an “enabler” until the day they no longer serve that role. Biofuels should be judged on their merits, and we must allow for the efficient biofuels that are soon produced by waste and residues from the plank production from forests.

The Commission's draft would exclude R&D on biofuels from taxonomy-eligibility, as R&D on enabling and transitional activities is not considered "sustainable". R&D is the fundament of the new biofuels that we soon will see on the market.

The Taxonomy is not aligned with Renewable Energy Directives where biofuels conditions are regulated, and where for instance crop-based biofuels is the larger part of the 2030 target, and we have a separate quota for advanced biofuels. Delegated acts should not go further, or differ, from existing EU legislation.

Biofuels should, independent of origin providing they fulfil the sustainability criteria in RED, be judged on the same CO₂eq criteria per energy unit as other fuels.

Biogas has several values for society, it uses waste and manure, it improves the manure by taking out the methane and it is a fuel with an extremely low wtw emissions. The whole chain of benefits must be taken into account.

Scientific findings show that biogas contributes, directly or indirectly, to every one of the 17 UN Sustainable Development Goals (<http://liu.diva-portal.org/smash/get/diva2:1161103/FULLTEXT01.pdf>). Qualifying sustainable biogas as a ‘transitional’ activity, even if it complies with sustainability criteria of RED II, is certainly not justified. It would severely hamper investments in sustainable biogas solutions with multiple benefits, thus, go against the objectives of the EU Green Deal. Biogas complying with sustainability criteria in REDII should be encouraged and considered as enabling activity, regardless of end use. Remove the word ‘transitional’ in all references to biogas and other forms of bioenergy complying with sustainability criteria in REDII.

Infrastructure enabling low-carbon transport

Providing the taxonomy is based on technologically neutral emission values per unit energy, all technologies providing low carbon fuels (under the thresh-hold) should be allowed (as enabler). We do not see the reason to specify technologies like hydrogen as it only is an enabler if it is produced under the emission thresh-hold.

Infrastructure suitable for both fossil fuels and sustainable alternatives is enabling the decarbonization of transport by providing a cost effective solution for producing and distributing low carbon fuels.

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