

## Comments on the “Proposal for a directive EU Green Deal – Revision of the Energy Taxation Directive”

We applaud the aim to address fuel subsidies. All fossil fuel subsidies must be discontinued immediately. This should be done regardless of the outcome of the proposed revision of the ETD.

We must point out that climate neutrality really needs to be achieved earlier than 2050 if the European Union wants to honor its commitment to the Paris agreement.

The initiative aims to align taxation of energy products and electricity. The overriding perspective here must be that this taxation should first and foremost be used to reduce the GHG emissions, and that the revenue-raising aspect should be given lower priority. Electricity should therefore be taxed based on emissions per kWh, independently of how the electricity was generated.

The excessive amounts of carbon dioxide in the atmosphere may lead to irreversible threshold effects. The level must be lowered as soon as possible [1]. Therefore, all carbon dioxide emissions must cease. The atmosphere does not discriminate between a molecule of CO<sub>2</sub> from fossil fuels from one coming from a biofuel. Emissions from biofuels are however often not counted, as it is assumed that other plants will bind the released carbon as they grow. But this process (“the payback period”) can take decades, so the net effect is an increased risk of irreversible effects. The European Academies’ Science Advisory Council cautions [2] that biomass “should not be regarded as a source of renewable energy under the EU’s Renewable Energy Directive (RED) unless the replacement of fossil fuels by biomass leads to real reductions in atmospheric concentrations of CO<sub>2</sub> within a decade or so.”

We must in this context raise strong concerns also over “advanced biofuels”. We assume that the wording about “advanced biofuels” in the roadmap implies that biofuels in general are not to be promoted by the revised ETD. An often used definition of advanced biofuels (International Energy Agency, 2017) is “sustainable fuels produced from non-food crop feedstocks, which are capable of delivering significant life-cycle GHG emissions savings compared with fossil fuel alternatives, and which do not directly compete with food and feed crops for agricultural land *or cause adverse sustainability impacts*” (our emphasis). It should be noted that this is a very high bar and that the amount of such fuels that is commercially available must be very low. An often-used definition of sustainability is “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” [3]. With the risk of irreversible damage to the biosphere increasing with increasing carbon dioxide levels, and with that damage clearly threatening future generations very existence, it is clear that biofuels are not

sustainable unless the time it takes for replacing biomass to bind the released carbon is on the order of a year.

We propose that

- all GHG emissions from fuels be transparently accounted for and reported, regardless of their origin being fossil fuels or biofuels. Transparency is necessary for citizens to make informed choices and for fair competition in the markets.
- all emissions of GHG be taxed regardless of the origin of the fuels. There should be no preferential treatment for biofuels.
- the time factor is considered. Energy from combustion should be carbon taxed based on the emissions caused today, and no discounting of possible future uptake by replacing biomass should be made.
- energy from burning of wastepaper, cardboard and garbage should be carbon taxed.
- if waste or residues are used in the production of a biofuel, this use should not be allowed to increase the demand for the main product of the process if the process itself is harmful to the climate (e.g. the fact that energy can be produced from wood chips must not lead to logging becoming more profitable).
- taxation of electricity be based on the amount of GHG released per kWh produced.
- GHG taxes increase over time, until emissions cease.
- revenue from the taxes be recycled to citizens on a monthly basis to assist them in the drastic transition to a decarbonized economy.

[1] <https://doi.org/10.1371/journal.pone.0081648>

[2] <https://easac.eu/publications/details/forest-bioenergy-carbon-capture-and-storage-and-carbon-dioxide-removal-an-update/>

[3] World Commission on Environment and Development (1987). Our Common Future. Oxford: Oxford University Press. ISBN 019282080X.