



Green Finance Observatory response on the Call for feedback on TEG report on EU Taxonomy

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The Green Finance Observatory is an independent non-profit association set up in 2017. Our mission is to analyse sustainable finance legislative proposals and related market-based solutions in European environmental policies, to assess whether they can meet their stated environmental, economic and social objectives.

The Green Finance Observatory is registered under the EU Transparency Register with ID 852329329251-06. Only the questions that are relevant to GFO are reproduced here. We agree to the publication of this response.

General comments

As a general comment, we note that on climate mitigation activities, the taxonomy exhibits a strong focus on carbon capture and storage rather than emissions reduction.

This is consistent with net zero emission objectives that combine both emission reduction and carbon capture / offsetting. This is however problematic in our view, as it creates a strong risk that carbon capture and storage will come instead of and not in addition to emission reductions, despite the many documented issues associated with the former.

In this respect, the statement '*Net-Zero is a means to ensure that even where GHG emissions cannot be reduced to zero, they can be compensated for through increased removals (through carbon sequestration)*' fails to define clearly what is meant by 'where GHG emissions cannot be reduced to zero.' This potentially opens the door to fostering sequestration over emissions reduction, when the former is cheaper for polluting industries.

In our opinion, separating the 2 objectives of reducing emissions and sequestering carbon would provide far more transparency and accountability, and remove the illusion that both are comparable.

There is indeed considerable evidence that storing carbon in soils and trees is not permanent and highly uncertain. This is in fact the reason why forest conservation was

excluded from the Clean Development Mechanism, and the EU decided to ban offset credits from forestry and land use land change activities in the EU-ETS. And for very good reasons. There is an inherent high risk that forest offset credits do not represent real emission reductions due to leakage, the impermanence of forest carbon, inflated baselines, problematic additionality testing and difficult monitoring reporting and verification. A 2017 study published by the European Commission also found that 85% of the carbon offset projects used by the EU under the UN's Clean Development Mechanism failed to reduce emissions.

In addition, the way carbon capture and storage will be financed is as or more important than the activity itself. To avoid repeating mistakes of the past, the activity should not give rise to the granting of tradable offset credits equating temporary sequestration with permanent fossil fuel emissions.

We would recommend the 4 below changes:

- Defining clearly what is meant by 'when emissions cannot be reduced to zero', to reduce the risk of fostering sequestration over reduction
- Refocusing the taxonomy on reducing emissions over carbon capture and storage
- More broadly separating within net zero targets emission reductions and offsetting / carbon capture and storage, and disclosing sub-objectives for each, in order to improve transparency and accountability
- Ensuring no granting of offset credits for carbon capture and storage activities

Links to evidence:

Carbon Market Watch, NOT SMART: climate smart agriculture in carbon markets, November 2014. Online. Available at: <https://carbonmarketwatch.org/2014/11/25/promoting-climate-smart-agriculture-with-carbonmarkets-would-not-be-a-smart-move/>

Green Finance Observatory: the fallacy of environmental markets (p76). May 2019. Online. Available at: <https://greenfinanceobservatory.org/wp-content/uploads/2019/05/50-shades-biodiversity-final.pdf>

Carbon Market Watch, REDD, April 2013. Online. Available at: <https://carbonmarketwatch.org/2013/04/09/redd/>

Öko Institut, Study prepared for DG CLIMA, How additional is the Clean Development Mechanism?, March 2016, https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf

Green Finance Observatory part I: carbon <https://greenfinanceobservatory.org/wp-content/uploads/2019/03/50-shades-carbon-final.pdf>

European Commission, Use of international credits https://ec.europa.eu/clima/policies/ets/credits_en#tab-0-2

Agriculture and forestry - Livestock production

The TEG report acknowledges that *'one opportunity for emissions reductions in the agriculture sector as a whole is to switch from higher emitting activities to lower emitting activities (for example, by reducing cattle numbers and increasing legume production as an alternative source of protein), with a corresponding consumption switch between agricultural commodities.'* It states, however, that *'these criteria and thresholds, which focus specifically on emissions within the perennial crop production activity, cannot address this type of mitigation action. The criteria and thresholds proposed therefore focus on ensuring that emissions are substantially reduced and removals substantially increased at the economic activity (NACE code) level.'*

We fully agree with the assessment by the TEG report that fostering a reduction in cattle number and an increase in legume production as an alternative source of protein are a major opportunity to emissions reductions in the agriculture sector as a whole.

We fully acknowledge the related short-term economic issues that would need to be addressed and the need to support farmers financially during the related transition.

We strongly regret, however that this shift is not even considered in the taxonomy. We find the reason given, namely the fact that criteria and thresholds proposed are at economic activity (NACE code) level and thus *'cannot address this type of mitigation action'* not very convincing: the taxonomy could indeed decide to include also mitigation actions across economic activities. In fact, such transversal actions across activities are a big part of the response, such as between air travel and rail travel.

Agriculture and forestry – Reforestation

As discussed above, reforestation is not a bad activity per se (when it is not monoculture tree plantations) but there is considerable evidence that its additionality is incalculable. Calculating it would require being able to determine with reasonable certainty a hypothetical world without the project and then assign a single number to the greenhouse gas emissions associated with that world over the next 100 years – the approximate residence time of carbon dioxide in the atmosphere. To put in perspective the staggering level of uncertainty involved, *'if you can imagine Marconi and the Wright brothers getting together to discuss whether in 2009, EasyJet and the internet would be facilitating each other through internet booking, that's the level of ... certainty you'd have to have over that period. You cannot have that.'*

What that means in practice is that we are unable to measure with precision and certainty the emission reductions linked to reforestation.

As a consequence, it must be ensured in our view at the very minimum that:

- reforestation is not fostered instead of emission reductions
- reforestation activities are not financed through the granting of tradable offset credits with dubious equivalences.

Links to evidence:

Lohman L, Uncertainty Markets and Carbon Markets: Variations on Polanyian Themes, New Political Economy,
<http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/NPE2high.pdf>

United States General Accounting Office, 'International Climate Change Programs: Lessons Learned from the European Union's Emissions Trading Scheme and the Kyoto Protocol's Clean Development Mechanism', GAO Report GAO-09-151 (November 2008), p. 39,
<https://www.gao.gov/new.items/d09151.pdf>

Permanent sequestration of captured CO₂

Permanent sequestration of captured CO₂ in geological formations should also be excluded from the taxonomy in our opinion, as this technology has been shown to be *'expensive, unproven, and according to researchers at Duke University, there's the troubling possibility that captured carbon could leak into groundwater aquifers, potentially rendering water undrinkable.'* Captured carbon could also leak into the atmosphere, compromising climate mitigation.

Two major cases of leakage have already occurred. The first one occurred in 1986, when naturally sequestered CO₂ rose from a lake in Cameroon and asphyxiated 1,700 people. A 2011 study also found evidence of CO₂ leakage in the land above the world's largest carbon capture and storage site in Canada.

Links to evidence:

Fast Company, Schwartz A, The Problem With Carbon Capture: CO₂ Doesn't Always Stay Captured, 19 November 2010, <https://www.fastcompany.com/1704105/problem-carbon-capture-co2-doesnt-always-staycaptured>

The New York Times green blog, Barringer F, What if Captured Carbon Makes a Getaway?, 19 November 2010,

Phelps J, Blackford J, Holt J, Polton J, Modelling large-scale CO₂ leakages in the North Sea, International Journal of Greenhouse Gas Control Volume 38, July 2015,
<https://www.sciencedirect.com/science/article/pii/S1750583614003144?via%3Dihub>

IPCC Special Report. Carbon Dioxide Capture and Storage. Technical Summary,
<http://docplayer.net/20437054-ippc-special-report-carbon-dioxide-capture-and-storage-technical-summary.html>

GEOCHEMICAL SOIL GAS SURVEY A Site Investigation of SW30-5-13-W2M Weyburn Field, SASKATCHEWAN, 27 August 2010,
<https://web.archive.org/web/20110219025128/http://www.ecoju>

Climate change adaptation – list of economic activities

We found two things striking looking at the initial list of adaptation economic activities:

1. What is not in it:

Ensuring resilient food supply and affordable public healthcare services able to cope with the consequences of natural catastrophe are almost absent from the initial list despite their crucial importance, and we hope to see them among the activities added in the future.

2. The very broad inclusion of the (re)insurance sector:

We agree that reinsurance sector plays a key role in transferring natural catastrophe risks and to some extent for incentivising risk reduction behaviour.

We also acknowledge that some so-called innovative risk transfer mechanisms such as insurance-linked securities (ILS, i.e. so-called catastrophe bonds) may have a role to play.

What needs to be fostered and strengthened for adaptation purposes, however, is the States' role of insurer of last resort, i.e. providing relief in a continuous fashion to all citizens based on national solidarity principles.

In this respect private reinsurance and sovereign catastrophe bonds only transfer some of the risk, leaving the State with the much worse risk of non-renewal of insurance coverage, when the private insurer or investors stops coverage after a catastrophe, as happened after 9/11 or hurricane Katrina, or increases premiums very sharply.

As private (re)insurance and sovereign catastrophe bonds offer only partial risk transfer, allowing private reinsurance and ILS in the taxonomy could generate perverse incentives and moral hazard.

Other issues linked to catastrophe bonds include a much-reduced flexibility for emergency interventions due to the use of parametric triggers (see the recent pandemic bond on Ebola).

It is also worth noting that the (re)insurance sector already stands to benefit greatly from climate change, as acknowledged by Warren Buffett. This questions the need for additional public subsidies for this sector.

Only the role of insurer of last resort meaningfully contributes to adaptation and increased resilience of populations, and therefore deserves to be in the taxonomy in our opinion.

Strengthening States' capacities to play their role of insurer of last resort would also be preferable to fostering and subsidising microinsurance in our view.

Future development of the taxonomy

1. What economic activities that can make a substantial contribution to the climate change mitigation objective should next be considered for the Taxonomy?

Agreeing with the UN's recent acknowledgement that infinite growth is not possible with finite resources (<https://www.sciencealert.com/un-draft-report-says-we-must-transition-economy-to-tackle-climate-change>), it would be extremely useful to consider fostering via the taxonomy a reduction in resource and energy consumption, via the reduction of some

economic activities and the promotion of alternative activities that are less resource-intensive.

As another broad comment, climate change is known to have a differentiated impact on populations depending on their financial means. In this respect we note that the current taxonomy does not take into account distributional issues, despite their utmost importance both for geopolitical purposes and to get public buy-in for EU environmental policies. At the very least, measures related to adaptation should include distributional issues, which would greatly strengthen population resilience to natural catastrophes.

2. Should any of the economic activities included in the Technical report be reconsidered as regards their inclusion in the taxonomy?

It is important to remember that what is being discussed here is not whether to ban any economic activity, but merely whether some particularly useful activities with regards to climate change mitigation and adaptation should deserve an Ecolabel and related potential public subsidies, favourable prudential treatment and government guarantees.

While we appreciate the intention to incentivise best behaviour across all sectors with a best in class approach, a very broad definition of green economic activities would risk undermining public trust and buy-in in the related Ecolabel.

In this respect, activities including livestock production, manufacture of cement, aluminium, iron and steel among others, while useful, may be considered by some controversial from a climate perspective, and should thus in our view not be part of the taxonomy.

Permanent sequestration of captured CO₂ in geological formations should also be excluded from the taxonomy in our opinion, as this technology has been shown to be expensive, unproven, with risks of leaks into groundwater aquifers and the atmosphere.

Lastly, it is essential to ensure in our view that both carbon and biodiversity offsets are explicitly excluded from the taxonomy, consistent with the Do Not Harm principle. There is indeed considerable empirical and academic evidence that these activities suffer from intractable conceptual issues preventing them from reaching their environmental objectives.