POSITION PAPER

LET'S KEEP FOSSIL FUELS OUT OF GREEN INVESTMENTS!

@ECOS_Standard | ECOS-EU

Brussels, September 2019

Introduction

In order to tackle the climate emergency and meet the Paris Agreement objectives it is essential to shift financial investments away from fossil fuels. The European Commission is developing a number of documents shaping the future of sustainable finance in the European Union.

One of the documents is a classification of "climate-friendly activities" that the European Commission's Technical Expert Group (TEG) made public in June 2019. These activities are meant to substantially contribute to climate mitigation goals, while not significantly causing harm to the other five environmental dimensions: adaptation to climate change, water quality, circular economy, pollution prevention, and healthy ecosystems (i.e. the "Do No Significant Harm" criteria).

Such classification is essential to channel funds to the more environmentally friendly activities. However, the main risks are the enabling of green claims on investments which would have happened even without the taxonomy as incentive, or the inclusion of unsustainable activities meeting the mere CO2 emissions reduction criteria in spite of being harmful to the environment.

We therefore call for the exclusion of all fossil-generated hydrogen, electricity and heat from the EU taxonomy. This will allow the focus to remain on the many existing safe, efficient and economically viable ways to produce fully decarbonised electricity and heat from renewables.

European Commission's TEG position on fossil-generated energy

The draft taxonomy lists a number of electricity and heat activities relying on fossil fuels and eligible to be labelled as "green", such as **hydrogen from natural gas or electricity and heat generation from gas combustion**.

In stating that "economic activities such as unabated fossil fuel-based power generation cannot be considered to make a 'substantial' contribution to climate change mitigation"[1], the **TEG implies that abated fossil fuel-based power generation might actually be considered as "green"**. This is confirmed by a further statement later in the report on Carbon Capture and Storage (CCS) reading that "**CCS can be eligible in any sector/activity if it enables that primary activity to operate in compliance with the threshold - for example, (...) electricity production**"[2].

[1] European Commission Technical Expert Group Report on an EU-wide taxonomy, p. 32, link to the report
[2] Idem, p. 293

In addition, since "the list of economic activities covered in this report is not exhaustive"[3] it is possible that the Platform on Sustainable Finance includes addition fossil-generated electricity and heat activities in the taxonomy in the future.

ECOS is extremely concerned about the possibility to label investments in fossil fuels as "green". The reasons for our concern are threefold:

1. The taxonomy is meant to be a list of positive activities to channel investments towards clean activities only.

The voluntary nature of the taxonomy means it should aim at the highest ambition and not reward business-as-usual activities or transitional solutions to climate change that extend the life span of old technologies. The **inclusion of unambitious activities in the taxonomy stands in the way of the tool's own credibility**.

There seems to be **a confusion between activities which contribute to a sustainable future on the one hand, and activities which are not worse practice within a specific sector on the other.** Not being worse practice, for instance producing electricity from gas instead of coal or producing electricity from fossil fuels with CCS rather than without, should not suffice to qualify the activity as "green". With this approach, the EU risks **diverting investments into unsustainable fossil fuels and lock-in technologies** and, as a consequence, delaying the transition to renewable energies.

2. Zero emission activities are different from carbon-neutral ones.

In including abated fossil fuel-based power generation in the taxonomy, the TEG does not differentiate between absolute zero emission activities and carbon neutrality. Yet, from a risk management perspective, the two concepts are very different: in the first case, emissions do not occur, greatly limiting the risk of climate change. In the latter case, emissions do occur, but they are captured, liquefied, transported and stored underground.

Every step of CCS, however, bears the risk of CO_2 leakage to the atmosphere and/or to the aquifers. Besides, we have no experience with long-term storage of CO_2[4]. Also, the CCS process is highly costly[5] and inefficient. As pointed out by the EEA, "CCS technologies **require approximately 15 – 25 % more energy** (…), so plants with CCS need more fuel than conventional plants. This, in turn, can lead to increased 'direct emissions' occurring from facilities where CCS is installed, and increased 'indirect emissions' caused by the extraction and transport of the additional fuel"[6]. Besides, the inclusion of non-renewable hydrogen, be it from steam reforming or fossil-power plants using CCS, drives a continuing reliance on fossil energy supply chains, which are associated with other risks of leakages such as methane leakage[7]

3. Fossil-generated energies perform worse from an overall environmental point of view.

Numerous LCA studies[8] show that fossil-generated electricity and heat, including from natural gas, have a higher contribution to eutrophication, acidification and air pollution than any

[3] Idem, p.10

[4] Parliament of Australia, the environmental benefits and risks of CCS and public perception, link

[5] WWF, Recommendations on the Draft EIB Energy Lending Policy, 2019, link to the paper

[6] EEA, 2011, Air pollution impacts from carbon capture and storage (CCS), links to the report and press release

[7] IEA, World Energy Outlook 2017, link to the report

[8] See for instance, the meta-analysis of 33 LCA publications including 167 case studies performed by Turconi, R., Boldrin, A., & Astrup, T. F. (2013). Life cycle assessment (LCA) of electricity generation

renewably sourced energy, not to mention their much higher contribution to the depletion of abiotic resources. These aspects should have led the TEG to conclude that **even abated fossil-generated heat and power significantly cause harm to at least three environmental objectives: pollution prevention, water quality and protection of ecosystems.**

ECOS recommendations for the taxonomy

Based on the above, we call on the European Commission to exclude the following activities from the taxonomy:

- Production of electricity from gas combustion
- Production of heat and cold from gas combustion
- Cogeneration of Heat/cool and Power from Gas Combustion
- Manufacturing of hydrogen - Use of CCS

We also urge the TEG as well as the future Platform on Sustainable Finance not to include any further fossil-fuel generated electricity and heat activities in the taxonomy.

Should the TEG decide to keep these activities in the taxonomy or allow for these activities to be included in the future, it is imperative that the following aspects be integrated:

- The activity system boundaries should be better defined, and more guidance should be provided for the **Life Cycle Emissions (LCE) assessment showing compliance with the GHG emissions threshold**.

  It is currently unclear for all fossil generated energy activities listed in the taxonomy whether the whole fossil fuel extraction and manufacturing are taken into account (notably for the manufacturing of hydrogen, where the whole natural gas chain is not mentioned as part of the LCE), and whether the emissions related to the entire CCS process are included.

  These emissions must be accounted for as part of the activity carbon footprint assessment, to avoid that the GHG assessment stops at the plant where the carbon is captured. We also see the need for much more activity-related/sector-specific guidance for the users of the taxonomy to ensure that LCE results are robust and comparable. While generic standards such as ISO14044 are a useful basis, they are not specific enough. Indeed, numerous methodological choices are still left to the LCA practitioner, such as the system boundaries, allocation procedure or assumptions regarding the lifetime of the assessed infrastructure[9].

- **The Do No Significant Harm criteria** should not be a mere reminder of existing legislation, as any activity must comply with the law. For instance, many DNSH criteria

technologies: Overview, comparability and limitations. Renewable and Sustainable Energy Reviews, 28, 555- 565, link to the study.

[9] Turconi, R. et al, ibid, see section 2 on LCA methodology aspects.

remind the existence of Best Available Techniques Conclusion Documents which, four years after their publication, are mandatory anyway.

Instead, these criteria should point to concrete environmental shortcomings of the proposed activities. In the specific case of fossil-generated energy (with or without CCS technologies), these criteria should specifically address the risk of carbon leakage, require concrete air pollution mitigation measures (to address the increase in fine, coarse particles, nitrogen oxides and ammonia in the atmosphere of CCS plants) and the pollution risk to water resources.

Authors:
Mathilde Crêpy, Programme Manager, ECOS · mathilde.crepy@ecostandard.org
Rita Tedesco, Programme Manager, ECOS · rita.tedesco@ecostandard.org