COGEN EUROPE

To the attention of:

Executive Vice-Presidents Frans Timmermans and Valdis Dombrovskis,
Commissioners Thierry Breton, McGuinness, Kadri Simson,
Virginijus Sinkevičius, Janusz Wojciechowski

Brussels 28.10.2020

Subject: Concerns over unfair treatment of cogeneration in the upcoming Taxonomy Delegated Act, going against the energy efficiency first principle

Dear Executive Vice-President,

The cogeneration sector is committed to the creation of a resilient, decentralised and carbon neutral European energy system by 2050 with cogeneration as its backbone. As the European Commission is currently finalising the drafting of its Taxonomy Delegated Act[1], the European cogeneration sector would like to express its strong concerns over the possible treatment of cogeneration in its upcoming proposal. Taking an approach similar to the TEG's **will result in an unlevel playing field favouring less efficient and more polluting separate heat and power solutions. This will disincentivise investments in higher efficiency solutions like cogeneration, which is against the "energy efficiency first" principle that should be the backbone of EU energy and climate legislation.**

A fair treatment for cogeneration in EU Taxonomy

Cogeneration is the simultaneous production of heat, cool and power using one energy source. Doing so, it achieves significant primary energy savings compared to separate heat and power production solutions and is supported across EU legislation as a key energy efficiency solution.

Cogeneration cannot be fairly compared to separate heat and power generation if its primary energy savings are not considered, for less primary energy used means less CO2 emissions when a carbonised fuel is used. The Energy Efficiency Directive 2012/27/EU (EED) already provides the right framework to appropriately deal with cogeneration, which should be used in EU Taxonomy:

> In any economic activity, **each time an investment in separate electricity or heat generation is planned, cogeneration should be considered first - as a sustainability criterion on its own. To ensure the highest ambition, the definition of high efficiency cogeneration in EED[2] should apply, requiring that at least 10% primary energy savings are achieve compared with the best alternative solutions available on the market.**

Doing so will

- **Bring the Energy Efficiency first principle in the EU Taxonomy by improving energy efficiency as per article 10(1) of Regulation (EU) 2020/852** on 'substantial contribution to climate change mitigation'. Other environmental health benefits (e.g. resource efficiency, better air quality) but also economic benefits will also indirectly be addressed (e.g. secure energy supply, reduced dependence on imports, improved competitiveness). These are essential to make fully informed and successful investment decisions for the future.
- **Help avoid the waste of heat** by recovering it onsite for electricity and heat production or by feeding this heat to neighbouring businesses and local communities (delivering circular economy and industrial symbiosis).
- **Close the loop of renewables by using the fuels of the future like hydrogen (when widely available) in the most efficient way**, saving on their cost, avoiding the waste of these valuable energy sources and leaving more of them available to decarbonise other sectors of the economy.

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[1] To implement Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

[2] its Annex II, and the Commission Delegated Regulation (EU) 2015/2402

Cogeneration should not be subject to the 100gCO2e/kWh emissions threshold as

- cogeneration is not a technology but an energy efficiency principle doing more out of any energy source (conventional and renewable energy).
- a proper method is needed to calculate the emissions of cogeneration and allocate them partly to the electricity and partly to the heat outputs. Leaving this unaddressed would create a dangerous unlevel playing field in favour of less efficient and more polluting separate electricity production solutions, against EU goals.
- This threshold assumes the availability of renewable/decarbonised gases, which is not a reality in today's gas market. The EU Taxonomy should rather foster the gradual uptake of renewable and decarbonised gases in the mix. Once available, cogeneration will the best solution to use these valuable fuels without wasting them. At the same time, the EU Taxonomy should not penalize investments in fuel flexible cogeneration, which can already now significantly reduce CO2 by running on an increasing range of renewable energy sources.

Need for a level playing field

As we understand, cogeneration would be subject to the strict 100gCO2e/kWh emissions threshold, while heat pumps would not be subject to meet such a threshold for the electricity it uses. Yet this electricity is on average 296g CO2e/kWh[3] and closer to 446g CO2e/kWh or higher when heat or transport are electrified[4]. If confirmed, this would clearly be discriminatory, set an unlevel playing field and deny that electricity used in heat pumps is not Taxonomy compliant.

Need for a transitional activity

Making large carbon emitters be less polluting through energy efficiency gains can have a major impact environmental impact, even if not meeting the 100gCO2e/kWh emissions threshold. Financing the transition in industries that are necessary for the European economy and make them more environmentally friendly and sustainable industries should be the absolute priority, also to maintain job in Europe and avoid carbon leakage.

Today, cogeneration is THE best emissions performance solution for energy-intensive industry that need secure energy supply (especially high temperature) at all times, which is not possible with intermittent energy. In these situations, cogeneration meets the requirements of article 10(2) of Regulation (EU) 2020/852, which specifically addresses situations where there is no technologically and economically feasible low-carbon alternative. The EIB has recognised this role in its recently revised Energy Lending Policy by adopting an emissions threshold of 250gCO2e/kWh for electricity from gas-fired cogeneration using an appropriate emission calculation method for cogeneration[5].

Cogeneration is an energy efficiency solution that is fuel flexible and therefore future proof. As long as renewable and decarbonised gases are not available, natural gas-based cogeneration should still be considered environmentally sustainable as a transitional activity in the EU Taxonomy based on requirements that reflect today's carbon intensity of energy mixes and which is different from the 100gCO2e/kWh emissions threshold.

We urge you to take the above concerns into consideration and remain at your disposal should you require more information.

Sincerely,

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[3] According to the European Environment Agency data.

[4] See FfE study (2018)

[5] taking into account the emissions that cogeneration avoids on the heat side by using the "Heat Bonus" method which allows to fairly compare the emissions of electricity from cogeneration with electricity from power-only generation by subtracting the avoided emissions of a heat-only boiler that this cogeneration replaces.