

Carl Berglöf
Swedenergy
+46 701 64 44 46
carl.berglof@energiforetagen.se

Assessment of Delegated Act Proposal under the Taxonomy Regulation

General Remarks

Swedenergy is worried that a large part of Swedish electricity and heating sectors may not be considered taxonomy aligned according to the proposed delegated acts under the Taxonomy Regulation. Sweden has today a practically decarbonized electricity system. Nevertheless, large investments are foreseen until 2050 to meet an increased demand due to high electrification ambitions and to accomplish necessary reinvestments. Swedenergy finds it deeply problematic that large amounts of climate neutral production may be left outside the taxonomy given the high climate and environmental performance of the Swedish electricity and heating systems, the tremendous investment needs and the system's potential in driving the decarbonization of the entire society. The taxonomy, applied as proposed, would significantly increase the capital cost of the transition to a climate neutral economy in Sweden.

The criteria of the delegated acts shall not go beyond other legislation within the EU or nationally. When financial criteria become stricter than current regulations, ordinary decision-making processes are overridden, which brings substantial legal uncertainty into activities that aim at improving climate and environmental performance. Thus, the DA criteria may counter-act the aim of already existing regulation and cause sub-optimized and more expensive environmental protection.

The Commission should ensure technology neutrality in the criteria of the taxonomy. Criteria specifically designed for individual activities create political arbitrariness. Swedenergy regrets that not all electricity production activities are included in the assessment, thus making the decision basis incomplete. Moreover, the criteria within the proposal should be more homogenized. In particular, obligation (or non-obligation) to perform life-cycle analyses and reference to existing regulations as a sufficient criterion to be met.

The taxonomy may be used successfully as proposed to describe specific sustainable activities. However, the taxonomy fails in describing a sustainable system. A mechanism that allows an optimal system to be described from a sustainability perspective must be added to the taxonomy.

Activity 4.5: Electricity Production from Hydropower

Swedenergy welcomes that hydropower is no longer being categorized as a transitional activity, as suggested in the final TEG report. Furthermore, we appreciate that no distinction between different hydropower capacities (small / big) is made, as possible adverse effects are always site-specific and cannot be attributed to a specific plant size.

Concerning the exemption for hydropower facilities with a power density above 5 W/m², it is unclear how this measure is defined. We see particular challenges to calculate the measure for hydropower cascades, which are very common in the Nordic countries, i.e., when one plant utilizes the water to different extent from multiple reservoirs. Since most hydropower plants are well below the threshold of 100 gCO₂eq/kWh, Swedenergy recommends that the requirement to perform the life cycle analysis is removed for all hydropower facilities, which would also make the regulation technology-neutral between all the renewable power sources.

Regarding the DNSH-criteria, Swedenergy strongly argue that the specific requirements listed under (3) "Sustainable use and protection of water and marine resources", are removed and replaced by a reference to the Water Framework Directive (WFD), which has been in place for 20 years, and where large efforts have been put into developing a common understanding, as well as guidance and clarification of various requirements. The environmental objectives in WFD, Art 4.1 – 4.9, cover operation of existing hydropower plants, as well as construction of new plants (Art. 4.7), while further details are elaborated within other articles and annexes, in particular WFD Annex V.

The DNSH-criteria refer to "good status/potential of the specific water body", which obviously refers to the WFD. However, the WFD also introduces exemptions, articles 4.4 - 4.7, for deviation from good status/potential under certain circumstances. These environmental objectives, defined by art. 4.4 – 4.7, are certainly defined in accordance with art. 1, implying sustainable use of the water resources. Moreover, the cumulative impact assessment envisaged in the Annex I/II of the new regulation for construction of new hydropower plants are fully covered by the reporting requirements in WFD. Thus, the proposed regulation criteria should fully adopt the definitions from WFD where relevant.

The Swedish National plan for environmental adaptation of all hydropower plants is intended to find the best balance between local environmental values and hydropower to support the energy system transformation and electrification.

Since the 1st of January 2019, Sweden has got new legislation in place to ensure that Swedish hydropower, over a 20 years period, will comply with the requirements of the Water Framework Directive and EU Nature legislation, e.g., the Habitats directive. On the 25th of June 2020, the Swedish government decided on a national plan to work through all water bodies affected by hydropower over a twenty-year period in a systematic way to find the best balance between local environmental measures and the societal need for hydroelectric power to support the ongoing and very ambitious Swedish electrification plans and the simultaneous transformation of the European power system, where the share of wind and solar power is increasing rapidly and other dispatchable sources such as nuclear power are partly being phased out.

The Swedish national plan recognizes the fact that environmental measures, such as those proposed as DNSH criteria in the Delegated Acts proposal, are not motivated or even biologically desirable everywhere. Environmental measures must be decided site by site on the basis of careful analysis, taking both biological and other aspects into account. It must for instance be considered that the "unnatural" regulation of water to a large extent is necessary to be able to balance the power system, which in turn is important to be able to integrate other renewable electricity sources, such as wind and solar power, in the Northern European power system in a sustainable and cost effective way. The whole purpose of the Swedish national plan is to find the best balance between these conflicting objectives, river by river, in accordance with the WFD and all other relevant EU

regulation. Thus, adding a new regulatory framework, focusing on one of these objectives only inevitably leads to an environmental sub optimization.

Furthermore, the DNSH criteria listed under “Sustainable use and protection of water and marine resources” are written in such a way that it is almost impossible for the plant owners to show that they are fulfilled. Requirements that cannot be met will not lead to any real improvement. It is actually the other way around – the only effect classification of hydropower as non-sustainable is that all investments in hydropower – including environmental measures – will be more costly, hence less investments will be made. The Swedish hydropower sector fully support the Swedish national environmental adaptation plan and has agreed to finance a major part of its execution through a unique fund solution. The taxonomy proposal with the suggested DNSH criteria will retroactively make this very large effort more costly, thus reducing the room for all investments in hydropower. This counteracts the very purpose of the taxonomy itself.

When it comes to the DNSH-criteria for building new hydropower, we want to add our concerns about the intention to introduce compensatory continuity measures on another location in the same river basin district. With different legal bodies having the property rights, as the case often is in Sweden, that can simply be impossible.

Considering that the proposed DNSH criteria for hydropower are counterproductive, Swedenergy strongly argue that they are removed and replaced by references to other relevant EU legislation in place to protect the European waters and ecosystems – legislation built on targets and requirements that are possible to reach. By doing so, the European hydropower resources can be adapted to meet both local environmental objectives and multi-national energy system needs, thus fulfilling the purpose of the Sustainable finance regulation.

Activity: 4.8. Electricity generation from bioenergy, 4.20. Cogeneration of heat/cool and power from bioenergy, 4.24. Production of heat/cool from bioenergy

The criteria proposed by the Commission will go beyond provisions in the RED Directive since requirements are set on plants below 20 MW and all existing plants will be included and shall apply sustainability criteria and climate savings set in RED. In the RED Directive, all plants below 20 MW were excluded considering requirements on sustainability criteria for biomass from forest and agricultural land. According to article 29.1 “Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria laid down in paragraphs 2 to 7 and 10 if used in installations producing electricity, heating and cooling or fuels with a total rated thermal input equal to or exceeding 20 MW in the case of solid biomass fuels”.

According to Article 29.10 in RED Directive: “The greenhouse gas emission savings from the use of biofuels, bioliquids and biomass fuels taken into account for the purposes referred to in paragraph 1 shall be at least 70 % for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2021 until 31 December 2025, and 80 % for installations starting operation from 1 January 2026.”. Swedenergy is strongly opposed that the EU Commission go beyond their own regulation on sustainability criteria which has not yet been implemented in Member States. The Commission must have its own legislation as a starting point. The Commission must clarify that the limit of 20 MW applies, also that climate savings of 70 percent apply

to plants that come into operation after 1 January 2021 and 80 percent for plants that come into operation after 1 January 2026.

We are concerned that bioenergy is mentioned as a transitional technology. We believe that bioenergy must be seen as a long-term renewable energy source that meet sustainability criteria set.

In the case of bioenergy, there are synergies with coming delegated acts for the Commissions' goals for circular economy, biodiversity and pollution reduction. There is a risk that the requirements will also be tightened in other parts that are underway. If the Commission strengthen the requirements for the coming delegated acts, plants using bioenergy for production of electricity, heat and cold will be significantly more expensive than necessary and this will reduce the use of bioenergy from today's level, contrary to the ambitions set by the Commission for the role of bioenergy in achieving climate goals and improvement of the bioeconomy. For small plants below 20 MW it is a huge administrative burden to apply to the sustainability criteria and they also generally make use of local biomass sources. We are also concerned that the Commission is tightening up the requirements of the Renewables Directive in next year's revision in line with what is now set out in the taxonomy for sustainable finance. We are also concerned that the criteria for bioenergy is set at lower levels as in sections 4.19 and 4.23 covering other kinds of fuels.

Double regulation of bioenergy with criteria in points 4.7. Electricity generation from gaseous and liquid fuels 4.19. Cogeneration of heat/cool and power from gaseous and liquid fuels and 4.23. Production of heat/cool from gaseous and liquid fuels:

In points 4.7, 4.19 and 4.23 it is written that all fuels are covered: "Construction and operation of combined heat/cool and power generation facilities using gaseous and liquid fuels (not exclusive to natural gas, oil or other refined products)." We believe that biofuels for electricity and heat production should not be double regulated in several points in the taxonomy. It is not acceptable that there are tighter criteria for bioenergy than for other kinds of fuels. We believe that for instance Nordic conditions with a large-scale sustainable forestry must be taken into account and not introduce any further restrictions for bioenergy which go beyond RED provisions.

Activity: 4.9. Transmission and distribution of electricity

The delegated act requires the DSOs that construct or operate a transmission line or distribution network to monitor the emission levels of equipment connected to the infrastructure. This is outside the control of the DSO. The DSO may not put such requirements on entities that connect equipment to the DSO network. This criterium, if implemented, may lead to increased capital costs which are today not included in the envelope of costs agreed with Swedish authorities. Thus, Swedenergy see problematic compatibility issues with current regulation.

Activity: 7.7. Acquisition and ownership of buildings

In point 1, the Commission proposes "For buildings built before 31 December 2020, the building has at least Energy Performance Certificate (EPC) class A. 2". This is a very high set criteria since A class stipulates 50% better than nearly zero-energy buildings requirements. This criteria set too high energy efficiency ambitions that will be counterproductive and even make it easier to fulfil criteria for new buildings where the criteria in point 7.1 is that the Primary Energy Demand (PED) 511, defining the energy

performance of the building resulting from the construction, is at least 20 % lower than the threshold set for the nearly zero-energy building (NZEB) requirements. From an environmental point of view, the criteria A class is not beneficial as it means that a major part of all building in Europe must be renovated or rebuilt. As it is well-known today, the construction phase of a building stands for more than 80 percent of the climate emissions of a building's lifetime (50-100 year). This is also unreasonable from a cost point of view and will lead to huge amounts of waste in the near future.

We believe more reasonable energy performance criteria should be set which take into account the levels of energy performance in the existing building stock. It is unrealistic for example for a F class building to achieve A class without a very deep renovation which in practice would need very large investments that could make it more viable to actually demolish an existing building and construct a new building which is not in line with the sustainability ambitions.