

# IOGP Initial Feedback to the Taxonomy: Final report of the Technical Expert Group on Sustainable Finance

## a) TEG Report (short paper – [here](#))

Topic/section	Pag.	Comment	Rationale	Supporting documents
Sectors covered by the Taxonomy	<a href="#">13</a>	We recognise the challenges imposed by the ambitious timeline to deliver the detailed TEG report and we welcome the progress made so far. However, we believe that each sector must contribute to the energy transition and therefore we encourage further efforts to be made to cover a wide(r) range of activities.	The energy transition will require enabling policies, significant investments and behavioural changes across the economy.	
Types of economic activity that substantially contribute	<a href="#">14</a>	<p>The adopted EU Taxonomy Regulation introduced an additional, new category of “transitional activities” which is considered to contribute substantially to climate change mitigation by phasing out greenhouse gas emissions, in particular from solid fossil fuels (article 6.1.a). The addition of transitional activities is supported by the industry as enormous potential exists in the market for the transformation of existing carbon-intensive industries and processes.</p> <p>Given this development, we believe that a separate, additional list of transitional activities (including retrofit options) with its own specific Technical Screening Criteria (TSC) reflecting its transitional nature, should be created in the delegated acts (instead of having these activities as a subcategory of “green activities” as outlined in the TEG report).</p> <p>Establishing such a list will add clarity to the framework and will help the EU to deliver its climate and energy objectives while providing a wide range of opportunities for the energy transitions across Europe. The policy focus should include feasible, near-term steps that act as building blocks and timely reduce emissions to deliver the Paris Agreement and the EU’s long-term climate targets. There is no silver bullet to combat climate change. All technologies reducing GHG emissions in all economic activities will need to be considered to deliver on the Green Deal ambition, and will be necessary for this energy transition.</p>	The Taxonomy Regulation agreed by the Council and the Parliament clearly sets 3 different categories of activities that substantially contribute to climate change mitigation: 1) activities that directly contribute to climate change mitigation, 2) transition activities and 3) enabling activities. However, TEG’s proposed technical screening criteria do not sufficiently consider item 2) transitional activities.	Taxonomy Regulation 2018/0178 (COD) – <a href="#">Final Compromise Text</a>



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Life-cycle considerations	<a href="#">16</a>	<p>'Greening by' and 'greening of' activities should be based on a Life Cycle Analysis to create a level playing field among all technologies and assess their total impact on climate.</p> <p>We believe a lifecycle requirement should be technology neutral. In order to ensure an operational taxonomy, it is important that any LCE or LCA methodology has a clearly defined scope and is aligned with EU policies both in terms of design and time of introduction.</p>	<p>Having a simple indicator such as % reduction in GHG emissions per unit (e.g. kWh or tonne of product produced) or considering the total CO<sub>2</sub> reduction is the most suitable metric. Overall, to achieve a long-run transition to a climate-neutral economy, there is a need for the wider greening of markets and other incentives to promote innovation (2).</p>	<p>(1) <a href="#">HERE</a> (2) <a href="#">HERE</a></p>
Thresholds	The entire doc	<p>The threshold level should be technology-neutral and be based on GHG emission to be achieved and not technology types. It should allow all energy types that meet the threshold to be accepted.</p> <p>The first step in the 5 yearly threshold reduction cycle is an independent review of power generation and power systems/ grid technologies to set guidance on the capabilities of existing technologies with the aim to set the reduced threshold and still allow for stable power supplies to all.</p>	<p>Technical screening criteria should reflect a gradual approach and efficiently incentivise transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. Therefore, the threshold level should be technology-neutral and based on GHG emission reductions on life-cycle analysis to be achieved, and not on technology. In our view, the single threshold proposed by the TEG is not appropriate for the transitional activities. We, therefore, encourage the Commission to determine a methodology for establishing dedicated thresholds for these activities. For example, the transitional activity threshold should be aligned with existing legislation such as the Electricity Regulation. Such an alignment will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology, that can contribute to the transition or could be retrofitted, will be excluded already at this stage.</p> <p>The threshold is proposed to reduce to 0g CO<sub>2</sub>e / kWh by 2050. With current technologies, in order to provide stable electricity grids, there is the need to have a range of different power generation sources feeding into the grid. Renewables are critical for the supply of electricity, but there is a need for other power generation sources to be operational to address the times when renewable sources are unavailable due to, e.g. lack of wind or darkness. Care needs to be taken that the Taxonomy and the proposed 5 yearly threshold reductions process takes account of power generation technology developments and any challenges to CO<sub>2</sub>e g / kWh reductions. There is a need to ensure that there is a stable electricity grid from a variety of power generation sources – if the technology faces a hurdle and can't meet the threshold for a certain period of time, decisions on allowing for this in the Taxonomy need to be taken to prevent there being a potentially unstable and/or unreliable power supply.</p>	



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Minimum safeguards	<a href="#">17</a>	<p><i>The European Parliament and the Council established that for an economic activity to be Taxonomy-aligned, the activity should be carried out "in alignment with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation's ('ILO') declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights". Where applicable, more stringent requirements in EU law still apply.</i></p> <p>Section 2.1.5 of the TEG report aims to provide understanding of these standards' frameworks and how to apply them in the context of the Taxonomy. There are a few additional elements that we believe should be considered in this context (see rationale).</p>	<p>The TEG report refers to the risk-based approach to due diligence as promulgated by the OECD Guidelines and Due Diligence Guidance for Responsible Business Conduct. However, there is no overarching recognition in the report that the means through which a business enterprise meets its responsibility to respect human rights is proportional to factors like size amongst others (as provided in UNGP, commentary to GP 14). In addition to this recognition, a statement which notes that there is no "one-size fits-all" approach in aligning with these Guidelines and Principles is important as it underscores the practical reality of implementation. This statement would not take away from the importance of aligning but would show that the TEG recognises that the way of alignment may differ depending on a variety of factors.</p>	
International use of the EU Taxonomy	<a href="#">18</a>	<p>The EU Taxonomy should recognise that other regions and jurisdictions may have different drivers and boundary conditions and, therefore, the proposed EU requirements may not be applicable as such globally.</p> <p>The Taxonomy should aim for international coordination, in this context, we recommend that the EU continue its efforts at the global level.</p>	<p>For example, the Report of the Expert Panel on sustainable finance "Mobilizing Finance for Sustainable Growth" outlines recommendations for Canada.</p>	<a href="#">HERE</a>
Definition of lock-in/ carbon lock-in	<a href="#">20</a>	<p>The EU Taxonomy should be inclusive and allow all sectors and technologies/activities that can contribute to the energy transition to be part of the solution. To meet EU targets it will be necessary for all economic sectors to lower their carbon emissions. Therefore, all sectors should have the ability to be recognised for decarbonisation efforts within the scope of the Taxonomy.</p>	<p>The Taxonomy Regulation only excludes solid fossil fuels. The Taxonomy screening criteria should be consistent with this Regulation and not go beyond.</p>	
Fossil fuels	<a href="#">20</a>	<p>Natural gas should be recognised for the enabling and transition role that it can play alongside renewables in the energy transition.</p> <p>The challenges that certain regions face to decarbonise and switch to low carbon solutions should be acknowledged and addressed. Investment in transitional activities that can become low carbon in the long-term should be encouraged in these regions.</p>	<p>Switching from coal to gas can be done easily contributing to deliver immediate CO<sub>2</sub> emissions reduction (up to 50%) and to improved air quality by reducing emissions of NO<sub>x</sub>, SO<sub>x</sub> and particulate matters. In the long-term natural gas can decarbonise (e.g. with CCS, via hydrogen).</p> <p>In 2019, the EU electricity sector decreased its GHG emissions by approx. 12% thanks to higher renewables generation and coal-to-gas switching, bringing about a substantial contribution to Europe's decarbonisation efforts.</p>	<p><a href="#">HERE</a></p> <p>European Commission, Electricity Market Report <a href="#">here</a></p>
Disclosure	<a href="#">26-27</a>	<p>It is of utmost importance that the Taxonomy is operational and easy-to-use by those for whom disclosure is required.</p>		



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Financial metrics	<a href="#">28</a>	% of turnover and capex/opex of taxonomy eligible activities is likely to take time to set it up	<p><b>Rationale (calculation):</b> The calculation of these metrics requires tagging (and maintenance of the tagging over time) of companies' economic activities against the taxonomy. This is a highly complex task which represents a significant practical constraint for many companies. The fact that the Taxonomy remains a "live" list of activities that will continue to change is particularly challenging. To accurately capture financial transactions and records in line with the tagging would require a complex business/system solution (which does not exist yet in the market) on top of companies' core financial transaction processing and reporting systems. These challenges should be carefully weighed in terms of implementation timeline.</p> <p><b>Rationale (comparability):</b> Turnover may be meaningful for certain sectors but not for other sectors. Similarly, certain sectors are inherently more capital intensive than others (e.g. manufacturer vs retailer). Further, some companies are multi-sectorals, but others are not. These differences render these metrics inherently unrepresentative and incomparable across the different economic players therefore undermining their utility as decision-useful criteria for the investment community.</p>	
Due diligence	<a href="#">32</a>	EU legislation on due diligence could have adverse economic implications and may also deter broader stakeholder engagements done as part of businesses voluntarily adhering to the UN Guiding Principles on Business and Human Rights (UNGPs).	<p>The state's duty to protect and fulfill human rights includes the duty to enforce legislation.</p> <p>With globalisation, the management of supply chains has become very complex and involves a broad range of suppliers and sub-contractors, comprising multiple tiers with hundreds or thousands of locations and individuals. While offering expanded sourcing opportunities for companies, it also brings challenges in identifying and managing possible adverse environmental or social impacts caused at different stages of the supply chain.</p> <p>In order to manage these risks, companies generally refer to international guidelines like the OECD Guidelines for Multinational Enterprises or the UN Guiding Principles on Business and Human Rights (UNGPs). These texts set out clear recommendations as to how businesses are expected to address possible negative impacts of their activities through the supply chain.</p> <p>The concept of due diligence is highly complex and requires the collaboration of many stakeholders, within but also outside companies: suppliers, sub-contractors, clients, investors, States, local authorities and communities, NGOs, consumers:</p> <ul style="list-style-type: none"> <li>a) Companies alone cannot be expected to solve all the problems arising from failing states or weakly governed states in which protective laws, guaranteeing human rights or the protection of the environment, are either inexistent or not applied.</li> <li>b) It would be unfair to hold only European companies liable for damages occurring through global supply chains when it is impossible to fully control every single part of the chain and many other actors in third countries are involved.</li> </ul>	

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Brown taxonomy	<a href="#">51</a>	The principle of technology neutrality should be the basis of the EU Taxonomy.	<p>We recognise the EU Taxonomy Regulation contains a review clause to assess activities with negative impact. However, the EU Taxonomy should adopt an inclusive approach that considers that all different technologies/activities and sectors can contribute to the energy transition and can be part of the solution.</p> <p>This inclusive approach is showcased in the Canadian Report of the Expert Panel on sustainable finance "Mobilizing Finance for Sustainable Growth". The document outlines opportunities to develop and scale up market structures and financial products that would have particular impact in facilitating Canada's transition and adaptation. For example how governments at every level should support the oil &amp; gas industry to transition to deliver low-emission solutions. As our industry underpins the whole economy while providing solutions to mitigate climate change, it is very important to include our sector in the EU Taxonomy.</p>	<a href="#">HERE</a>

## b) Technical Annex ([here](#))

Topic/section	Pag.	Comment	Rationale	Supporting documents
<b>Screening criteria climate change mitigation</b>				
Manufacture of Iron and Steel	<a href="#">176-179</a>	<p>We note a reference to a specific form of hydrogen on page 177 (subsection: Rationale): <i>hydrogen steelmaking in shaft furnaces using H2 produced via water electrolysis (e.g. using renewable electricity sources)</i>.</p> <p>We propose to replace the aforementioned text with: <i>hydrogen steelmaking in shaft furnaces using clean H2 produced via water electrolysis (e.g. using renewable electricity sources)</i>.</p>	We propose to recognise all forms of clean hydrogen in the manufacturing of products as these thresholds are further developed.	<p><a href="#">The future of Hydrogen</a>, IEA, June 2019</p> <p>SINTEF:</p> <p>a) The pre-study Executive <a href="#">Summary</a></p> <p>b) The full pre-study report can be accessed <a href="#">here</a></p> <p><a href="#">IEAGHG Techno-Economic Evaluation of SMR Based Standalone Hydrogen Plant with CCS</a></p> <p>Zero Emission Platform (2017): Commercial Scale Feasibility of Clean Hydrogen <a href="#">here</a></p> <p>See relevant studies performed by Navigant (Gas for Climate) <a href="#">here</a></p> <p>Poyry (Fully decarbonising Europe's energy system by 2050) report on decarbonisation <a href="#">here</a></p> <p>Frontier economics (the future value of gas infrastructure in a climate-neutral Europe) <a href="#">here</a></p>

Topic/section	Pag.	Comment	Rationale	Supporting documents
CCS and CCU (section on manufacturing)	<a href="#">157</a>	<p>We agree CCS is a key technology to reach the EU carbon neutrality objective by 2050.</p> <p>It is important that there is the ability for CCU to qualify, if the emission mitigation benefit can be demonstrated. There is a need to define what “substantial mitigation” means so that any demonstrations of this can be performed on a fair basis.</p>	<p>The IEA, IPCC Report and EC Pathways show that CCS is essential to meet the targets set by the Paris Agreement and the EU. CCS will be a necessary part of the decarbonisation of industry, representing one of the most cost-effective way to reduce post-combustion and process-related emissions. Gas-fired power plants (and CHP plants) with CCS can help ensure grid resilience as renewable generation grows, supporting decarbonised energy system flexibility. Techniques to capture CO<sub>2</sub> released by industrial processes can be converted into valuable applications (e.g. construction materials, raw materials for the chemical industry, etc.). This way CCU can contribute to a circular economy subject to a lifecycle analysis and clear carbon accounting rules.</p>	<p>The IEA, IPCC Report, European Commission “Clean Planet for All” Zero Emissions Platform (2017): Climate solutions for EU industry – Interaction between electrification, CO<sub>2</sub> use and CO<sub>2</sub> storage <a href="#">here</a></p> <p>IOGP (2019): The Potential for CCS and CCU in Europe – Report to the thirty second meeting of the European Gas Regulatory Forum 5-6 June 2019 <a href="#">here</a></p> <p><a href="#">Article 33 of CCS Directive (EU Directive 2009/31/EC) states that it must be economically and technically possible to retrofit all new combustion plants for CO<sub>2</sub> capture.</a></p>
Hydrogen manufacturing	<a href="#">180-182</a>	<p>We support the classification of manufacturing of hydrogen as an environmentally sustainable activity.</p> <p>We also request that all forms of clean hydrogen are recognised in the manufacturing of products as these thresholds are further developed.</p> <p>For the clarification purposes, we propose to combine two metrics (Electricity use for hydrogen produced by electrolysis is at or lower than 58 MWh/t Hydrogen) and (Average carbon intensity of the electricity produced that is used for hydrogen manufacturing is at or below 100 gCO<sub>2e</sub>/kWh) in the following way:</p> <p>“Electricity use for hydrogen produced by electrolysis is at or lower than 58 MWh/t Hydrogen and Average carbon intensity of the electricity produced that is used for hydrogen manufacturing is at or below 100 gCO<sub>2e</sub>/kWh (Taxonomy threshold for electricity production, subject to periodical update)”</p> <p>Our understanding is that the last threshold (100 gCO<sub>2e</sub>/kWh) is intended for electrolysis only.</p> <p>We also encourage the Commission <b>to add a section on transportation of hydrogen</b> to link to the manufacture of hydrogen and storage of hydrogen.</p>	<p>Hydrogen from natural gas with CCS has the potential to provide significant volumes of near zero-carbon energy to the EU. With technical adaptation, hydrogen can be transported in existing EU gas infrastructure, thereby using current gas infrastructure in a cost-effective way and avoiding the need to duplicate transmission. For this reason, we also encourage the Commission to incorporate a section on transportation of hydrogen.</p>	<p><a href="#">The future of Hydrogen</a>, IEA, June 2019</p> <p>SINTEF:</p> <p>a) The pre-study Executive <a href="#">Summary</a></p> <p>b) The full pre-study report can be accessed <a href="#">here</a></p> <p><a href="#">IEAGHG Techno-Economic Evaluation of SMR Based Standalone Hydrogen Plant with CCS</a></p> <p>Zero Emission Platform (2017): Commercial Scale Feasibility of Clean Hydrogen <a href="#">here</a></p> <p>See relevant studies performed by Navigant (Gas for Climate) <a href="#">here</a></p> <p>Poyry (Fully decarbonising Europe’s energy system by 2050) report on decarbonisation <a href="#">here</a></p> <p>Frontier economics (the future value of gas infrastructure in a climate-neutral Europe) <a href="#">here</a></p>

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Electricity, gas, steam, and air conditioning supply	<a href="#">205-211</a>	<p>The threshold level should be technology-neutral and based on GHG emission reductions to be achieved and not technology types. It should allow all energy types that meet the threshold to be accepted.</p> <p>Technical screening criteria should reflect a gradual approach and efficiently incentivise transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. Therefore, the threshold level should be technology-neutral and based on GHG emission reductions on life-cycle analysis to be achieved, and not on technology. In our view, the single threshold proposed by the TEG is not appropriate for the transitional activities. We, therefore, encourage the Commission to determine a methodology for establishing dedicated thresholds for these activities. For example, the transitional activity threshold should be aligned with existing legislation such as the Electricity Regulation. Such an alignment will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology, that can contribute to the transition or could be retrofitted, will be excluded already at this stage.</p> <p>Furthermore, future taxonomy should take into account EU regulations on methane emissions.</p>	<p>We believe a lifecycle requirement should be technology neutral. In order to ensure an operational taxonomy, it is important that any lifecycle methodology has a clearly defined scope and is aligned with EU policies both in terms of design and time of introduction.</p> <p>Regarding methane emissions measurement, the EC is currently developing an EU strategy to regulate and reduce methane emissions. The Taxonomy must be aligned with EU regulation and should look into harmonising standards rather than developing diverging ones. This will facilitate implementation and comparison of activities across various policy frameworks.</p>	Our slides on natural gas
Waste to Energy - Electricity, gas, steam, and air conditioning supply	<a href="#">209</a>	<p>“The TEG has not included WtE, but recommends bringing this matter for further discussion and consideration to the Platform on Sustainable Finance, in light of the changes in the political agreement text”</p> <p>However, following the Taxonomy Regulation, waste incineration of non-recyclable hazardous waste with energy recovery should be considered a sustainable activity offering a substantial contribution to climate mitigation.</p>	<p>Not all residual waste can be reused or recycled (as acknowledged by the EC in its Communication COM(2017)34 on ‘the role of waste-to-energy in the circular economy.</p> <p>The final text of the EU Taxonomy Regulation agreed by the European Parliament and Council stipulates that the incineration of waste is not considered an eligible activity, <b>with the exception of the incineration of non-recyclable hazardous waste</b>, Article 12(d).</p> <p>The technical screening criteria need to reflect this exception that was added by the co-legislators to the European Commission’s initial proposal.</p>	<p><a href="#">EC Communication (2017)34</a> on The role of waste-to-energy in the circular economy</p> <p>Taxonomy Regulation 2018/0178 (COD) – <a href="#">Final Compromise Text</a></p>

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Production of Electricity from Gas	<a href="#">231-233</a>	<p>The threshold level should be technology-neutral and be based on GHG emission to be achieved and not technology types. It should allow all energy types that meet the threshold to be accepted.</p> <p>Technical screening criteria should reflect a gradual approach and efficiently incentivise transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. Therefore, the threshold level should be technology-neutral and based on GHG emission reductions on life-cycle analysis to be achieved, and not on technology. In our view, the single threshold proposed by the TEG is not appropriate for the transitional activities. We, therefore, encourage the Commission to determine a methodology for establishing dedicated thresholds for these activities. For example, the transitional activity threshold should be aligned with existing legislation such as the Electricity Regulation. Such an alignment will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology, that can contribute to the transition or could be retrofitted, will be excluded already at this stage.</p>	<p>We understand that if power generation has CCS (geological storage) facilities, it is eligible under taxonomy. We welcome this approach.</p> <p>We also support the fact that if the power generation is from H2 fired power plant, the H2 must come from any clean hydrogen (produced from reforming natural gas, pyrolysis or electrolyzers).</p>	Our slides on natural gas
Production of Electricity from Bioenergy (biomass, biogas, biofuel)	<a href="#">234 - 237</a>	Propose to merge Section 4.7 – Production of Electricity from Gas (not exclusive to natural gas), with Section 4.8 – Production of Electricity from Bioenergy (Biomass, Biogas and Biofuels)	<p>The TEG proposal does not make it clear whether biomethane is included under the “biogas” category, and whether “biogas” should be considered as ‘other natural gas’ under section 4.7 Production of Electricity from Gas.</p> <p>The TEG proposal leaves ambiguity between these categories and proposes different thresholds for them. Product blends such as biomethane and natural gas, which provide decarbonisation opportunities, are potentially excluded depending on which criteria apply (4.7 or 4.8)</p>	
Storage of Hydrogen	<a href="#">247-248</a>	We support this section.		





Topic/section	Pag.	Comment	Rationale	Supporting documents
Manufacture of biomass, biogas or biofuel	<a href="#">249-251</a>	TEG's restrictions are not aligned with the EU existing legislation: all types of biofuels meeting the carbon intensity and sustainability criteria will be needed to help decarbonize transport sector to 2030 and be further needed in the long term for aviation, marine and heavy duty.	<p>Under RED II, any biofuel meeting the sustainability criteria is eligible, not only biofuels made from feedstock listed in Annex IX, Part A. TEG's criteria would remarkably narrow the raw material base for replacing conventional fuels.</p> <p>Therefore, we are calling on the Commission to ensure alignment between different pieces of EU legislation. Otherwise, we are limiting the impact of RED and making it more difficult to finance the investments required.</p>	
Retrofit of Gas Transmission and Distribution Networks	<a href="#">252-254</a>	The boundaries of the activity should be extended to cover the construction and operation of networks for gaseous fuels, mirroring the provisions for electricity transmission and distribution lines.	<p>The existing gas transmission and distribution networks support the integration of renewable energy both in electric form and gaseous form (biomethane, hydrogen, synthetic methane) into the energy system. They also support significant GHG emissions reductions from fuel switching or merit order optimisation in industry, power generation, heating, and transport. The transition from natural gas to renewable and decarbonized gas relies on the possibility to connect production units to the grid and final customers. Renewable gas can be carbon neutral and even negative as outlined in Annex VI of REDII. Gas transmission and distribution are regulated businesses falling in the scope of the Directive 2009/73/EC that has introduced rules aimed at creating not only a competitive secured but also environmentally sustainable market, in line in particular with the EU climate objectives. The foreseen gas market reform currently prepared by the Commission should define its contribution to the 2030 energy and climate objectives and make them future-proof so they can bring their full contribution to reach climate neutrality in 2050. The TEN-E regulation and the EU support to the Projects of Common Interest (PCI) has fostered a high level of security of supply and integration of the European energy market. Only a few major PCI projects still need to be implemented. In the context of the energy transition, the pressing need to ensure optimal use of existing gas infrastructure (to avoid the risk of stranded assets and technological lock-in) implies thorough Cost Benefits analysis taking all externalities into account before making any decision on a major gas project such as an interconnection between member states. Moving forward the next revision of the TEN-E regulation should support the projects facilitating the integration of renewable and low-carbon gases (including hydrogen). Setting as a priority the decarbonisation of existing gas networks would contribute to the EU energy transition objectives in a smart and cost-efficient way. This would also ensure that upcoming investments are futureproofed, when it comes to environmental impacts in particular.</p>	

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District Heating / Cooling Distribution	<a href="#">255-257</a>	<p>Metric and thresholds state: "Construction and operation of pipelines and associated infrastructure for distributing heating and cooling is eligible, if the system meets the definition of efficient district heat/cool systems in the EU Energy Efficiency Directive"</p> <p>However, this threshold would effectively exclude some sources that could deliver heating and cooling with far lower GHG emissions.</p>	<p>The EED defines efficient district heating and cooling as a "district heating or cooling system using at least 50% renewable energy, 50% waste heat, 75% cogenerated heat or 50% of a combination of such energy and heat".</p> <p>Operating such infrastructure with e.g. 100 % blue hydrogen (ref. e.g. H21 North of England) would then not be eligible – despite being able to deliver H&amp;C with a far lower carbon footprint than the definitions above. This is probably not the intention and it seems not to be consistent with the other principles and framework of the TEG report.</p>	H21 North England website
Cogeneration of Heat/ Cool and Power from Gas	<a href="#">266-268</a>	<p>Technical screening criteria should reflect a gradual approach and efficiently incentivise transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. Therefore, the threshold level should be technology-neutral and based on GHG emission reductions on life-cycle analysis to be achieved, and not on technology. In our view, the single threshold proposed by the TEG is not appropriate for the transitional activities. We, therefore, encourage the Commission to determine a methodology for establishing dedicated thresholds for these activities. For example, the transitional activity threshold should be aligned with existing legislation such as the Electricity Regulation. Such an alignment will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology, that can contribute to the transition or could be retrofitted, will be excluded already at this stage.</p>	<p>We understand that if power generation has CCS (geological storage) facilities, it is eligible under taxonomy. We welcome this approach.</p> <p>We also support the fact that if the power generation is from H2 fired power plant, the H2 must come from a blue H2 source, or green H2.</p>	



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Production of Heat/Cool from Gas Combustion	<a href="#">278-280</a>	<p>Technical screening criteria should reflect a gradual approach and efficiently incentivise transitional efforts. Setting thresholds and ceilings too low at the beginning could de facto exclude relevant activities regardless of both their potential contribution to the transition and their ability to improve their own environmental performance, running the risk of unintentionally creating a niche market. Therefore, the threshold level should be technology-neutral and based on GHG emission reductions on life-cycle analysis to be achieved, and not on technology. In our view, the single threshold proposed by the TEG is not appropriate for the transitional activities. We, therefore, encourage the Commission to determine a methodology for establishing dedicated thresholds for these activities. For example, the transitional activity threshold should be aligned with existing legislation such as the Electricity Regulation. Such an alignment will ensure a trajectory for meeting the targets and ensure inclusion of activities that contribute to emission reduction including retrofitting of existing processes. The threshold can be reduced with time but should not be set too low too early as otherwise suitable technology, that can contribute to the transition or could be retrofitted, will be excluded already at this stage.</p>	<p>We understand that if power generation has CCS (geological storage) facilities, it is eligible under taxonomy. We welcome this approach.</p> <p>We also support the fact that if the power generation is from H2 fired power plant, the H2 must come from a blue H2 source, or green H2.</p>	
CCS (section on water, sewerage, waste, remediation)	<a href="#">289-291</a>	<p>We agree CCS is a key technology to reach the EU carbon neutrality objective by 2050.</p>	<p>We understand that if power generation has CCS (geological storage) facilities, it is eligible under taxonomy. We welcome this approach.</p> <p>We also support the fact that if the power generation is from H2 fired power plant, the H2 must come from a blue H2 source, or green H2.</p>	
Direct Air Capture of CO <sub>2</sub>	<a href="#">311-312</a>	<p>We support this section.</p>	<p>CCS is critical to achieving negative emissions when applied to bioenergy, which is viewed by the IPCC as crucial to achieving the 1.5 °C objective under the Paris Agreement.</p>	

Topic/section	Pag.	Comment	Rationale	Supporting documents
Capture of Anthropogenic Emissions	<a href="#">313-315</a>	<p>We support this section. CCS with power generation is key. Delivery of CO<sub>2</sub> transportation and storage networks is key to meet the emissions reduction targets.</p> <p>However, an ISO standard linked to carbon capture for power generation is proposed as metric for several activities for which it is not relevant: ISO/CD 27919-2 - Carbon dioxide capture – Part 2: Evaluation procedure to assure and maintain stable performance of past-combustion CO<sub>2</sub> capture plant.</p> <p>We agree with the observation that the efficiency of power generation plants and capture plants is increasing and will continue to be a focus of many suppliers.</p>	<p>The ISO/CD 27919-2 refers to integration in a power station and should be removed where it is not relevant. Capturing of CO<sub>2</sub> is relevant for a number of activities and is not limited to power stations. There is not an ISO standard for carbon capture in general.</p> <p>The addition to this last TEG report of "ISO/TR 27912 - Carbon dioxide capture – Carbon dioxide capture systems, technologies and processes" is an improvement and a better standard for carbon capture, but should replace the ISO/CD 27919-2 and not add to it.</p> <p>We would like to draw the Commission's attention to the fact that there is ongoing work by equipment manufacturers, universities and others, with aim of improving both power plant efficiencies and capture plant efficiencies. Put together, be it via the Allam cycle or combined cycle technology, this work is chipping away at the energy efficiency challenge. Therefore, it is suggested that the TEG note that enhanced efficiencies in power generation with carbon capture facilities are being delivered through various lines of technology development, and are not limited to the work of a single supplier/technology developer. The energy intensity of carbon capture is being reduced.</p>	
Transport of CO <sub>2</sub>	<a href="#">316-318</a>	<p>We support this section, in particular that all modes of CO<sub>2</sub> transportation are recognised, and we request that any combination of transportation modes is eligible as long as they meet the leakage requirements and arrive at a permanent sequestration site.</p> <p>As drafted, there is ambiguity under Metric and Threshold section:</p> <p>"Transport modalities that contribute to the transport of CO<sub>2</sub> to eligible permanent sequestration sites are eligible, only if the asset operates below the leakage/tonne of CO<sub>2</sub> threshold."</p> <p>We also propose to remove the following statement under "metric &amp; threshold": <i>Assets or activities that enable carbon capture and use (CCU) will deem all the connected elements of an existing transport network ineligible.</i></p>	<p>Under the TEG proposal, it could be understood that only transport modalities which lead directly to an eligible permanent sequestration site are eligible. The threshold needs to include for instance ship-to-ship or ship-to-well, as future options which are currently being developed in Europe.</p> <p>The 0.5% CO<sub>2</sub> leakage rate threshold for the transport of CO<sub>2</sub> by ship might pose a challenge to enabling large scale shipping of CO<sub>2</sub>. The performance threshold might mean that there is a need for more complex ship-bourne systems to be developed and deployed, which might result in a possible delay or limitation to the deployment of large scale shipping of CO<sub>2</sub> from industrial clusters as part of the CCS chain to reduce emissions in Europe. This area is being investigated and a better understanding is anticipated later in 2020. We would welcome the opportunity to share findings with the Platform when available.</p> <p>We believe the Commission should include the role of CCU into the delegated acts to be published by the end of 2020.</p> <p>Not including CCU now may, through limiting/stopping access to financing, slow down technical development of CCU which could provide valuable means to meet the net zero target. Perhaps more importantly, it may also prevent the development of the rest of the associated CO<sub>2</sub> transport and storage network which may send most of the CO<sub>2</sub> to geological storage.</p>	

Topic/section	Pag.	Comment	Rationale	Supporting documents
Permanent Sequestration of Captured CO <sub>2</sub>	<a href="#">319-320</a>	<p>We support this section. We support the reference to ISO 27914:2017. However, we believe the following statement under DNSH assessment should be modified:</p> <ul style="list-style-type: none"> <li>the long-term lack of geological containment of the reservoirs, central issues regarding the monitoring and the interrelation of carbon with physical, chemical and geological conditions in the reservoir <b>is still a debated argument</b> (change for → <u>discussed</u> however the safety of CO<sub>2</sub> storage may be assured with the implementation of specific rules and requirements.</li> </ul> <p>(similar language exists in the section on climate change adaptation, therefore, similar change should be made )</p>	<p>It is important that the periodical review is performed, and the revision of the ISO 27914 that is applicable is updated so that learning from storage activities is accounted for in this.</p> <p>CO<sub>2</sub> storage in saline aquifers is a mature technology which is in operation worldwide at &gt;5 large-scale CCS projects</p> <p>CCS is a proven technology. There are 19 large-scale CCS facilities in operation globally.</p>	<p>GCCSI's <a href="#">Global Status of CCS report</a></p>
Transport	<a href="#">321-358</a>	<p>Transport of low carbon and blended fuels should be eligible, especially if meeting the criteria mentioned in the report.</p> <p>The threshold level should be technology-neutral and be based on GHG emission to be achieved and not technology types. It should allow all energy types that meet the threshold to be accepted. The threshold can be reduced with time but should not be set too low too early or suitable technology that can contribute to the transition will be excluded.</p> <p>Establishing only thresholds on tank-to-wheel (tailpipe) values is inappropriate as it does not take into account the GHG emissions associated with the production of the fuel or the vehicles and so it will give an inaccurate picture of the true GHG performance of each drive train (energy and vehicle) Therefore, tailpipe values should at least be replaced by an LCA/WTW metric. The thresholds to be used should be consistent with those defined in the Clean Vehicle Directive as this already sets out the definition of a clean vehicle for LDV and HDV.</p> <p><b>Section 6.3 Public transport:</b> Through the introduction of a uniform threshold (50gCO<sub>2</sub>/km), a number of investments delivering emission reductions in public transport will be excluded.</p> <p><b>Section 6.5 Passenger cars and commercial vehicles:</b> We should keep <b>consistency across the legislation</b>. If not then FCEV and BEVs should also only qualify when their production emissions are below a certain threshold as some battery technology is more carbon intensive than others.</p>	<p>The transition to zero-emission mobility will take time and during the transition, <b>the use of blends will be critical to delivering the GHG reduction ambitions</b>. Therefore, freight rail transport that transports blends of fossil and sustainable fuels should be eligible. The TEG report's restriction to narrow sustainable raw materials only to those listed in Part A of Annex IX (in RED II), would differ significantly from the sustainability definitions in the RED II. Under RED II, any biofuel meeting the sustainability criteria are sustainable, not only biofuels made from feedstock listed in Annex IX, Part A. Moreover, when compared with the RED II, the criteria would remarkably narrow the raw material base for replacing conventional fuels. This cannot be considered acceptable, especially when taking into account the need for rapid and significant emission reductions in the transport sector (including aviation and maritime). All sustainably produced raw materials as allowed by RED II, incl. waste and residue materials are therefore needed.</p> <p>The Communication 'Clean Planet for All' shows that within the NZE scenarios, biofuels and synthetic fuels (liquid and gas) will be needed in those sectors that will continue to need high-density energy. Until there is sufficient volume to use 100% drop-in biofuels and synfuels there will be a continued need to use these as blends. Therefore, <b>the Taxonomy definitions should not preclude infrastructure dedicated to the transport and use of blends. In the context of the transitional activities, the following ones should be taken into account:</b></p> <ul style="list-style-type: none"> <li>Natural gas and Europe's natural gas infrastructure play a decisive role in climate mitigation. Europe can only benefit from natural gas if it has a functioning, safe and efficient gas infrastructure. To reach the European Union's climate targets gas technologies, including the infrastructure, must be considered as sustainable technologies. It is widely agreed upon that in Europe the most efficient way to reduce CO<sub>2</sub> emissions significantly is to replace coal with gas. When natural gas replaces coal, 15 percent of total GHG emissions can be saved throughout Europe – in the electricity sector even 40 percent. This positive contribution must be taken into account accordingly.</li> </ul>	<p>Several studies showing that there are different pathways / solutions to decarbonize maritime transport DNV-GL (2018). Energy Transition Outlook report. Main Report. <a href="http://www.Dnvgl.com">www.Dnvgl.com</a></p> <p>DNV-GL (2018). Energy Transition Outlook report. MARITIME — FORECAST TO 2050. <a href="http://www.Dnvgl.com">www.Dnvgl.com</a></p> <p><a href="https://www.lr.org/en/insights/global-marine-trends-2030/zero-emission-vessels-transition-pathways/">https://www.lr.org/en/insights/global-marine-trends-2030/zero-emission-vessels-transition-pathways/</a></p> <p>According to the IEA WEO 2019 and the Commission's 'Clean Planet for All', liquid fuels will still be needed in 2050, at least for the sectors where there are currently no alternatives. According to the IPCC Special Report on the impacts of global warming of 1.5°C, titled 'Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development' - in the 1.5 scenarios, fossil share of primary energy in 2050 is approximate ~33%. [Chapter 2, page 133].</p>



Topic/section	Pag.	Comment	Rationale	Supporting documents
			<ul style="list-style-type: none"><li>• Furthermore, natural gas together with its infrastructure is central to gas in mobility applications. Compressed natural gas (CNG) can contribute to a low carbon economy, as it is currently the most cost-effective way to significantly reduce road traffic emissions. Gas-powered vehicles save 20 to 30 percent CO<sub>2</sub> compared to diesel or petrol and emit hardly any fine particles. Also, using LNG as fuel for trucks and ships can lower GHG emissions notably as well. The current climate targets can be reached only if natural gas and its infrastructure are fully utilized and understood as sustainable.</li></ul> <p><b>Eligible infrastructure should include biofuels, PtX synthetic fuels (produced from blue H<sub>2</sub> and CO<sub>2</sub>) plants</b> as these can produce very low carbon fuels that will be needed both in the transition as blends and eventually as final fuels in hard to decarbonize sectors such as aviation, marine, and heavy-duty road transport. It is not clear what is meant by excluding Infrastructure that is predominantly dedicated to the transport of fossil fuels (more than 50%). Many alternative fuelling locations could likely be co-located on retail sites and it is possible the proposed exclusion could preclude the development of these alternative fuel locations on retail sites. The threshold can be reduced with time but should not be set too low too early or suitable technology that can contribute to the transition will be excluded. This is particularly true for <b>heavy-duty transport where battery-electric and hydrogen driven trains are still at a development stage and costly</b>. In the short to medium term, biofuels and biogas represent a cost-effective pathway to decarbonization of heavy-duty transport and therefore should be supported. Efficient ICE and gas vehicles that can use these fuels should also be supported. Freight transport dedicated to the transport of blended fuels should not be excluded as it will also contribute to the overall GHG emission reduction from freight transport. If it is excluded, then the transport of blended fuels could continue using higher emission freight transport.</p> <p><b>The Taxonomy should not exclude barges that use blends during the transition to the use of 100% advanced biofuels or RFNBOs, as these vessels will be able to use the 100% advanced biofuels and RFNBO when they are available in sufficient quantities.</b> As the average age of a barge is 20-30 years, this would allow investment in new barges now and this will have the added benefit of better efficiency and air quality benefits immediately. The production of biomass, biogas, and biofuels should not be reduced to only Annex IX A of the 2018/2001. The TEG report considers eligible only the production of advanced biofuels as per Art 2.34, RTFNBOs per Art. 2 (36) and certified low-ILUC risk biofuels, in line with the requirements of RED II. The approach in the TEG report would differ significantly from the sustainability definitions in the RED II. Under RED II, any biofuel meeting the sustainability criteria are eligible, not only biofuels made from feedstock listed in Annex IX, Part A. Moreover, when compared with the RED II, the criteria would remarkably narrow the raw material base for replacing conventional fuels. This cannot be considered acceptable, especially when taking into account the need for rapid emission reductions in the transport sector (including aviation and maritime). All raw materials as allowed by RED II, incl. waste and residue and recycled materials are therefore needed and recycle carbon fuels (RCF) should also be included.</p>	



Topic/section	Pag.	Comment	Rationale	Supporting documents
Information and communications	<a href="#">359-367</a>	We support the TEG's recommendation for the Commission to work on the criteria to support more software investments that will digitally enable GHG reduction.	Further to the examples listed, for transport, significant opportunities to improve emissions can be enabled by software innovations. We suggest to include further examples to illustrate this point:  Smart charging/vehicle-to-grid, telematics to inform better driving, locational services to enable autonomous/shared vehicles and more on-demand last mile solutions.  Even in the Sector on Forestry projects, issues relating to long term monitoring requirements over a vast geography can be enabled by digital solutions.	
Forestry	<a href="#">40-102</a>	We support and are encouraged by the inclusion of forestry as a sector given the significant potential such projects have to contribute to EU's NZE ambitions, as outlined in the IPCC report.  For all categories of Forestry Projects, we agree that Additionality and Permanence will be important criteria to ensure environmental integrity of such projects. One comment on the baseline:  Criterion 2: Verified GHG Baseline (Additionality) for all categories of Forestry (e.g. pg.45) – it would be useful to create a list of approved verification bodies and standards that meet the required criteria to be made available to investors on public domain.		