

EEB's comments and amendments to the General Block Exemption Regulation (GBER) consultation

1. Introduction

The EEB is Europe's largest network of environmental citizens' organisations, bringing together over 170 civil society organisations from more than 35 European countries. For this reason, it is in a unique position to contribute to the definition of several parts of the present Regulation.

We welcome the opportunity to provide comments and amendments through this public consultation. Indeed, we think that the GBER is of pivotal importance to ensure the reaching of the climate neutrality and zero-pollution targets of the EU and to direct Member States' spending towards sustainable and climate-proof projects.

As a matter of fact, the GBER will allow Member States to provide State aids with no scrutiny by the Commission during a critical period to set the right ambition for fulfilling the climate and environmental targets of the Union. For this reason, we think that they should not provide room for interpretation and legal uncertainty, but instead be as straightforward as possible to encourage Member States to subsidise more selectively projects in line with the European Green Deal and the Paris Agreement.

The following aspects need to be improved:

- clarification of notion of "compliance with the 2030 and 2050 targets" and of "main use for transport of hydrogen", potentially leaving the doors open for unsustainable projects.
- the definition of "low carbon gas", which should be very explicit and allow to distinguish the different hydrogen routes (e.g. fossil gas with and without CCS, nuclear, etc.).
- more attention to the Zero Pollution Ambition of the EU, including preference for pollution prevention over reduction at source and ensuring a toxic-free environment.

When it comes to consistency across EU legislation, we noticed a lack of consideration for pivotal environmental principles, such as the Polluter Pays Principle (PPP) and the Energy Efficiency First Principle (EE1st). Whether the EE1st principle is enshrined in the recent recast of the Energy Efficiency Directive and in Regulation (EU) 2018/1999, the PPP is increasingly addressed by EU institutions (namely, the European Court of Auditors¹ and DG Environment²), since it has been poorly enforced in the last decades, partly also due to a too weak Environmental Liability Directive.

Moreover, the GBER should be consistent with and reinforce Environmental Quality Standards and other relevant EU legislation, such as the Just Transition Regulation and the related Transitional Just Transition Plans, to not contrast the difficult transition towards a climate neutral and zero-pollution economy of the most vulnerable communities in the EU.

¹ <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=58811>

² https://ec.europa.eu/environment/news/environmental-pollution-new-study-finds-polluters-do-not-pay-damage-they-cause-2021-11-12_en

In this respect, regrettably the GBER includes a long list of allowable projects that would rather contribute to lock Member States in harmful and unsustainable projects rather than facilitating their uptake of renewable energy sources and energy efficiency measures. Instead, the following projects/activities should be excluded from the scope of the GBER:

- the **special treatment of fossil gas** that does not have any legal basis, nor any environmental and climate soundness, being incompatible with the 55% reduction of greenhouse gas emission by 2030, which, according to the “2030 climate target plan impact assessment³”, would rather require a decrease by 22-37% by 2030 (compared to 2015).
- the **reliance on CCS and CCUS**, which are nowhere near to play a significant role in the EU’s decarbonisation effort, and does not consider the impact of other greenhouse gases (e.g. methane) and other pollutants.
- the **inclusion of “low carbon hydrogen” without any clarification**, which could contribute to perpetrate projects including fossil gas infrastructures.
- **Allowing tax reductions in favour of Energy Intensive Industries**. The Commission argues this would allow to balance “competitive disadvantages” affecting energy-intensive users. We see it the opposite way: by reducing environmental taxation, energy-intensive users will be allowed to increase their negative externalities that are, by definition, market failures. Therefore, by allowing the reduction of environmental taxation the Commission is implicitly distorting the market by shifting the burden of harmful private activities to communities and the environment in the form of higher health and remediation costs. In order to limit “carbon leakages”, other pieces of legislation will be available, such as the Carbon Border Adjustment Mechanism, under preparation.

The sustainability aspects of the following projects / activities should be strengthened:

- in general, the consideration of **renewable hydrogen without any selection criteria** aimed at filtering only those projects where hydrogen-based solutions will be essential to decarbonise hard-to-abate sectors.
- the **inclusion of biomass** in the list of renewable energies that fails to recognise the latest research revealing its high carbon footprint and does not detail which kind of biomass would be considered as “sustainable”.
- the previous point also reflects in the definition of “green cogeneration”, which very likely will include the co-burning of either biomass or waste.

Concerning environmental taxes, we would encourage the European Commission to go a few steps further and take it from the opposite angle: environmental “taxes” are one of the tools available to decision makers to give a price on negative externalities. The GBER should be fully consistent with the aim to internalise negative externalities at large of a given activity/product/undertaking, hence making sure the aid is fully consistent with the polluter pays and prevention principles. For good administration of public funds and to ensure compliance with those well-founded principles, it is necessary to ensure that public aid comes with a counterpart that is also of common interest and with a legitimate expectation laid upon economic actors that they fully comply with the environmental protection acquis.

³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020SC0176>

We suggest introducing further criteria and decision-making steps in the section on environmental protection to ensure that aid granted by the GBER are aligned to the Zero Pollution Ambition and proportionate to expected outcomes in terms of common interests supported. Those are notably: the Zero Pollution Ambition compatibility test” and “external cost internalisation” mechanisms, a new approach as to what defines the “counterfactual scenario” and an adapted version of the definition of “environmental protection”, factoring in the pollution hierarchy of measures to consider when considering state aids. Those changes will improve policy coherence and a more integrated approach as to added value of state aid spending.

For each of the abovementioned points, we will provide specific amendments to the Commission text, accompanied by appropriate explanations and external references when available.

2. Amendments

	Commission proposal	EEB amendments
(1)	Following the adoption of the revised Guidelines on regional State aid for the period as from 1 January 2022, definitions and Articles related to regional aid in Commission Regulation (EU) No 651/2014 should be aligned to ensure consistency between the different sets of rules targeting the same objectives. The scope of Section 1 of Chapter III of Regulation (EU) No 651/2014 should be adjusted to take into account changes in the market and the Green deal ⁴ and the European Climate Law ⁵ objectives. Operating aid to prevent and reduce depopulation should be extended to sparsely populated areas, in order to facilitate better support in areas facing demographic challenges. To facilitate the application of Regulation (EU) No 651/2014 for aided projects below EUR 50 million carried out by small and medium-sized enterprises ('SMEs'), the notification thresholds should be adjusted accordingly and clarified.	Following the adoption of the revised Guidelines on regional State aid for the period as from 1 January 2022, definitions and Articles related to regional aid in Commission Regulation (EU) No 651/2014 should be aligned to ensure consistency between the different sets of rules targeting the same objectives. The scope of Section 1 of Chapter III of Regulation (EU) No 651/2014 should be adjusted to take into account changes in the market and the Paris Agreement , the Green Deal and the European Climate Law objectives. Operating aid to prevent and reduce depopulation should be extended to sparsely populated areas, in order to facilitate better support in areas facing demographic challenges. To facilitate the application of Regulation (EU) No 651/2014 for aided projects below EUR 50 million carried out by small and medium-sized enterprises ('SMEs'), the notification thresholds should be adjusted accordingly and clarified.
(6)	In view of the adoption of revised Guidelines on State aid for climate, environmental protection and energy for the period as from 2022, definitions and Articles in Regulation (EU) No 651/2014 related to aid in the fields of environmental protection, including climate protection, and energy should be aligned to ensure consistency between the different sets of rules targeting the same objectives. The scope of Section 7 of Regulation (EU) No 651/2014 should be adjusted to take into account changes in the market and the Green Deal and the European Climate Law objectives, including the provisions introduced to amend Regulation (EU) No 651/2014 in 2021	In view of the adoption of revised Guidelines on State aid for climate, environmental protection and energy for the period as from 2022, definitions and Articles in Regulation (EU) No 651/2014 related to aid in the fields of environmental protection, including climate protection, and energy should be aligned to ensure consistency between the different sets of rules targeting the same objectives. The scope of Section 7 of Regulation (EU) No 651/2014 should be adjusted to take into account changes in the market and the Paris Agreement , the Green Deal and the European Climate Law objectives, including the provisions introduced to amend Regulation (EU) No 651/2014 in 2021
	<i>Explanation</i>	

	<p><i>Reference to the Paris Agreement is necessary to highlight the international commitments of the EU and, more importantly, to use it as a benchmark for a science-based climate action, which requires to phase out fossil fuels by 2030 to keep global warming under 1.5C. In this sense, any kind of public support to any project including fossil fuels must be stopped.</i></p>	
(12)	<p>It is necessary to broaden the scope of Regulation (EU) No 651/2014 by introducing compatibility conditions for aid in the form of environmental tax or levy reductions. Environmental taxes or parafiscal levies are imposed in order to increase the costs of environmentally harmful behaviour, thereby discouraging such behaviour and increasing the level of environmental protection. While reductions in environmental taxes or parafiscal levies may adversely impact that objective, such an approach may nonetheless be needed where the beneficiaries would otherwise be placed at such a competitive disadvantage that it would not be feasible to introduce the environmental tax or parafiscal levy in the first place.</p>	<p>It is necessary to broaden the scope of Regulation (EU) No 651/2014 by introducing compatibility conditions for aid in the form of environmental tax or levy reductions. Environmental taxes or parafiscal levies are imposed in order to increase the costs of environmentally harmful behaviour, thereby discouraging such behaviour and increasing the level of environmental protection. While reductions in environmental taxes or parafiscal levies may adversely impact that objective, such an approach may nonetheless be needed where the beneficiaries would otherwise be placed at such a competitive disadvantage that it would not be feasible to introduce the environmental tax or parafiscal levy in the first place.</p>
	<p style="text-align: center;"><i>Explanation</i></p> <p><i>Environmental taxes and parafiscal levies are among the most effective tools to enforce one of the pillar principles of the EU, the polluter pays principle. The reduction of possible competitive disadvantages due to them with artificial tax exemptions would not only be against the environmental and climate goals of the Union, but also distort the competition among undertakings by favouring the ones that shift their negative externalities to the public purse, to the detriment of those players that are changing their businesses to make them "Green Deal compatible". In general, State aids must speed up the alignment with the environmental and climate targets of the EU, and not slow down it. Possible carbon leakages should be dealt with in the frame of other pieces of legislation, such as the Carbon Border Adjustment Mechanism.</i></p>	
Art 1 (u)	<p>(92) 'innovation clusters' means structures or organised groups of independent parties (such as innovative start-ups, small, medium and large enterprises, as well as research and knowledge dissemination organisations, research infrastructures, testing and experimentation infrastructures, Digital Innovation Hubs, non-for-profit organisations and other related economic actors) designed to stimulate innovative activity and new ways</p>	<p>(92) 'innovation clusters' means structures or organised groups of independent parties (such as innovative start-ups, small, medium and large enterprises, as well as research and knowledge dissemination organisations, research infrastructures, testing and experimentation infrastructures, Digital Innovation Hubs, non-for-profit organisations promoting environmental protection and other related economic actors)</p>

	of collaboration, such as by digital means, by promoting, sharing of facilities and exchange of knowledge and expertise and by contributing effectively to knowledge transfer, networking, information dissemination and collaboration among the undertakings and other organisations in the cluster;”	designed to stimulate innovative activity, policy frameworks and new ways of collaboration, such as by digital means, by promoting, sharing of facilities and exchange of knowledge and expertise and by contributing effectively to knowledge transfer, networking, information dissemination and collaboration among the undertakings and other organisations in the cluster;”
Art 1 (v)	“(94) ‘innovation advisory services’ means consultancy, assistance and training in the fields of knowledge transfer, acquisition, protection and exploitation of intangible assets or the use of standards and regulations embedding them, as well as consultancy, assistance or training on the introduction or use of innovative technologies and solutions (including digital technologies and solutions);	“(94) ‘innovation advisory services’ means consultancy, in particular those provided by non-governmental organisations promoting environmental protection , assistance and training in the fields of knowledge transfer, acquisition, protection and exploitation of intangible assets or the design and use of standards and regulations embedding them policy design , as well as consultancy, assistance or training on the introduction or use of innovative technologies techniques and solutions (including digital technologies and solutions regulatory measures);
Art. 1 (x)	“(101) ‘environmental protection’ means any action designed to remedy or prevent damage to physical surroundings or natural resources by human activities, including to adapt to and mitigate climate change, to reduce the risk of such damage or to lead to more efficient and sustainable use of natural resources, including energy-saving measures and the use of renewable sources of energy and other techniques to reduce greenhouse gas emissions;”;	“(101) ‘environmental protection’ means any action designed to remedy or firstly prevent, then eliminate, substitute, control and ultimately remedy damage to physical surroundings or natural resources by human activities, including to adapt to and mitigate climate change, to stop environmental pollution , to reduce the risk of such damage or to lead to more efficient, circular and sustainable use of natural resources, including energy-saving measures and the use of renewable sources of energy and other techniques to reduce greenhouse gas emissions and pollution ;”;
	<i>Explanation</i>	
	<p><i>Firstly, any action aimed at ensuring environmental protection must consider the emission of harmful non-GHG pollutants to ensure full compatibility with the Zero Pollution Action Plan (ZPAP) of the EU.</i></p> <p><i>Secondly, in order to align the GBER with the ZPAP, environmental protection must follow a “zero pollution hierarchy of actions” approach, systematically applied to all policy areas. This approach will ensure that precaution and prevention are prioritised over elimination and substitution, which are as well priorities over control and reduction</i></p>	

	<i>measures. Remediation and restoration actions are considered as the last possible step to take. For existing pollution, remediation should be a top priority.</i>	
Art.1 (new)	<p>Point (102) of Article 2 (a) a mandatory Union standard setting the levels to be attained in environmental terms by individual undertakings; or (b) the obligation under Directive 2010/75/EU of the European Parliament and of the Council (1) to use the best available techniques (BAT) and ensure that emission levels of pollutants are not higher than they would be when applying BAT; for the cases where emission levels associated with the BAT have been defined in implementing acts adopted under Directive 2010/75/EU, those levels will be applicable for the purpose of this Regulation; where those levels are expressed as a range, the limit where the BAT is first achieved will be applicable;</p>	<p>Point (102b) of Article 2 is replaced by the following: “(a) a mandatory Union standard setting the levels to be attained in environmental terms by individual undertakings, or standards or targets set at Union level which are binding for Member States but not for where there is a co-responsibility by the individual undertakings to reach those said standards or targets; (b) the obligation under Directive 2010/75/EU of the European Parliament and of the Council to use the best available techniques (BAT) and ensure that environmental performance is better than what emission levels of pollutants are not higher than they would be achieved when applying BAT set for “new” installations; for cases where emission levels associated with the BAT have been defined in implementing acts adopted under Directive 2010/75/EU, those strict levels set for “new plants” will have to be overperformed be applicable for the purpose of this Regulation; where those levels are expressed as well for energy efficiency, resource consumption or waste generation (BAT-AEELS or BATAEPLs) a range, the limit level leading to higher level of environmental and human health protection where the BAT is first achieved will be applicable;”</p>
	<i>Explanation</i>	
	<p><i>The EU BREF BAT-AEELS / AEPL are based on reference plants that already achieve the levels under commercially and economically viable conditions. State of the art levels are set for “new plants”, which in fact are already existing plants/installations. The GBER should drive for a real and meaningful incentive effect to BAT uptake and should not be (ab)used for recovering costs to the polluter catching up with established BAT. An explicit link to the BAT-AEPLs should be made considering that some Member States consider those as non-binding and fail to enforce them at their full potential. In case of Energy Efficiency the upper level of the range demonstrates better performers, whereas for waste generation / resource consumption the lower range demonstrated state of the art.</i></p>	

Art. 1 (y)	“(102a) ‘recharging infrastructure’ means a fixed or mobile installation supplying vehicles with electricity for transport purposes; (102b) ‘refuelling infrastructure’ means a fixed or mobile installation supplying vehicles with hydrogen for transport purposes; (102c) ‘renewable hydrogen’ means hydrogen produced using only renewable sources of energy, in accordance with [Reference to delegated act by DG ENER pursuant to Article 28 of the RED II];”;	“(102a) ‘recharging infrastructure’ means a fixed or mobile installation supplying vehicles with renewable electricity for transport purposes; (102b) ‘refuelling infrastructure’ means a fixed or mobile installation supplying vehicles with renewable hydrogen for transport purposes; (102c) ‘renewable hydrogen’ means hydrogen produced using only renewable sources of energy, in accordance with [Reference to delegated act by DG ENER pursuant to Article 28 of the RED II];”;
<p><i>Explanation</i></p> <p><i>For this Regulation, only recharging and refuelling infrastructures providing renewable energy shall be considered to not lock the transport sector to unsustainable energy sources.</i></p>		
Art. 1 (z)	(102e) ‘low-carbon hydrogen’ means fossil-based hydrogen with carbon capture and storage or electricity-based hydrogen, where that hydrogen achieves life-cycle greenhouse gas emissions savings of at least [73.4 %] [resulting in life-cycle greenhouse gas emissions below 3 tCO ₂ eq/tH ₂] relative to a fossil fuel comparator of [94g CO ₂ e/MJ (2.256 tCO ₂ eq/tH ₂)]. The carbon content of electricity-based hydrogen shall be determined by the marginal generation unit in the bidding zone where the electrolyser is located in the imbalance settlement periods when the electrolyser consumes electricity from the grid;	(102e) ‘low-carbon hydrogen’ means fossil-based hydrogen with carbon capture and storage or electricity-based hydrogen, where that hydrogen achieves life-cycle greenhouse gas emissions savings of at least [73.4 %] [resulting in life-cycle greenhouse gas emissions below 3 tCO₂eq/tH₂] relative to a fossil fuel comparator of [94g CO₂e/MJ (2.256 tCO₂eq/tH₂)]. The carbon content of electricity-based hydrogen shall be determined by the marginal generation unit in the bidding zone where the electrolyser is located in the imbalance settlement periods when the electrolyser consumes electricity from the grid;
<p><i>Explanation</i></p> <p><i>Hydrogen from renewable electricity is the only form of hydrogen that is fully compatible with the Paris agreement⁴. It can play an important role in the decarbonisation of some industrial processes, long distance shipping and aviation, but it is not the solution to all problems for four reasons: firstly, all forms of hydrogen come at an environmental cost (i.e., water use, impacts on nature).</i></p> <p><i>Secondly, the production of hydrogen entails significant energy losses reducing its effectiveness as an energy carrier relative to direct use of electricity.</i></p>		

⁴ <https://eeb.org/library/hydrogen-eeb-position-paper/>

	<p><i>Thirdly, this makes it more expensive than electricity from renewables, potentially absorbing more public funds that can more effectively be used elsewhere.</i></p> <p><i>And fourth, before addressing projections of energy demand in the future with supply options, we should promote energy efficiency, savings through circular economy and demand reductions by rethinking our consumption and production patterns. This, together with a preference for electrification over gas, will make it easier to match the supply and demand for hydrogen by reducing demand, keep public funds needs manageable, and avoid competition for and impacts from supply.</i></p> <p><i>Alternatively, the definition of “low carbon hydrogen” should be made more stringent to exclude the most unsustainable production routes, with an ambitious threshold of at least 80% greenhouse gas reduction compared to fossil fuels.</i></p> <p><i>Moreover, we support ClientEarth position of this issues, namely paragraph 3.1.a of their submission.</i></p>		
<p>Art. 1 (af)</p>	<table border="1"> <tr> <td data-bbox="284 875 837 1485"> <p>“(109) ‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation), but excludes electricity produced as a result of storage systems;”;</p> </td> <td data-bbox="837 875 1396 1485"> <p>“(109) ‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, including electricity produced from renewable sources in a battery storage “behind the meter”, except new hydropower and new landfill gas. as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation), but excludes electricity produced as a result of storage systems;”;</p> </td> </tr> </table>	<p>“(109) ‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation), but excludes electricity produced as a result of storage systems;”;</p>	<p>“(109) ‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, including electricity produced from renewable sources in a battery storage “behind the meter”, except new hydropower and new landfill gas. as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation), but excludes electricity produced as a result of storage systems;”;</p>
<p>“(109) ‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation), but excludes electricity produced as a result of storage systems;”;</p>	<p>“(109) ‘energy from renewable sources’ or ‘renewable energy’ means energy from renewable non-fossil energy sources as defined in Article 2, point (1), of Directive 2018/2001/EU, including electricity produced from renewable sources in a battery storage “behind the meter”, except new hydropower and new landfill gas. as well as the share in terms of calorific value of energy produced from renewable energy sources in hybrid plants which also use conventional energy sources and includes renewable electricity used for filling storage systems connected behind-the-meter (jointly installed or as an add-on to the renewable installation), but excludes electricity produced as a result of storage systems;”;</p>		
	<p style="text-align: center;"><i>Explanation</i></p> <p><i>Concerning new hydropower (including small and run-of-the-river plants), its impact on biodiversity is severe. In fact, it has negative consequences on rivers’ flow, fish migration, habitat loss, sediment transport and on erosion and runs directly counter to the commitments expressed in the EU Biodiversity Strategy’s proposal to restore 25,000 km of free-flowing rivers. A recent study⁵ on the effects of dams in the Mediterranean basin shows that hydropower, including small projects, is the most important driver of potential fish species extinction. The study states that “should hydroelectric expansion in the region go ahead as planned, 74% (186) out of all (251) threatened freshwater fish species will be negatively impacted, with 65% (163) set to decline due to small projects alone”.</i></p>		

⁵ Freyhof Jörg, Bergner Laura, Ford Matthew, “Threatened Freshwater Fishes of the Mediterranean Basin Biodiversity Hotspot”, 2020.

	<p><i>Both energy sources are very water-intensive⁶: biomass is by far the most water-intensive source considering its total life cycle, being its water use three orders of magnitude higher than other types of energy sources. On the other hand, hydropower is the largest water consumer during the operational phase, one to three orders of magnitude larger than the that of other types.</i></p> <p><i>Concerning electricity produced from renewable energy stored in batteries behind the meter, we support the position of ClientEarth (point 1.4.d of their submission).</i></p> <p><i>Finally, hybrid plants should not be regarded as providers of “energy from renewable sources” to prevent greenwashing claims.</i></p>
<p>Art. 1 (NEW)</p>	<p>By way of derogating art. 1 (af), sustainable biomass is defined as follows:</p> <p>(i) it does not come from primary and highly biodiverse forests, as well as from stumps and roots;</p> <p>(ii) it produces negative greenhouse gas emissions, considering direct and indirect carbon emissions from forests and land use, as well as from the production of biomass itself;</p> <p>(iii) the timeframe for assessing its compatibility is compatible with the 1.5C Paris Agreement target;</p> <p>(iv) it does not cause harm to biodiversity and displacement of food productions;</p> <p>(v) the use of biomass residues does not harm soil quality, nutrients balance and carbon stocks;</p> <p>(vi) concerning waste biomass, it is used in line with the waste hierarchy, as defined by Art. 4 of the Waste Framework Directive;</p> <p>(vii) it does not involve the cultivation of invasive and exotic species;</p> <p>(viii) it does not expand the ecological footprint of Member States.</p>
	<p style="text-align: center;"><i>Explanation</i></p> <p><i>There are increasingly evidences that forest biomass cannot be considered as a renewable source. According to the European Academies Science Advisory Council, forest biomass when operating emits 955 g/kWh from stack and 124 g/kWh from supply chain, against 898 g/kWh from coal.</i></p>

⁶ Yi Jina,*, Paul Behrensa,b, Arnold Tukker,c, Laura Scherera “Water use of electricity technologies: A global meta-analysis”, 2021

	<p><i>Bioenergy could play a significant role, within appropriate limits, in mitigating climate change by replacing fossil fuels; but it is evident that clear and unacceptable negative impacts on, for instance, biodiversity and emissions of greenhouse gases must be avoided⁷. The following types of biomass for energy use shall be preferred:</i></p> <ul style="list-style-type: none"> • Agricultural waste • Non-forest and industrial woody residues <ul style="list-style-type: none"> • Manure • Forest harvesting residues • Ligno-cellulosic waste <ul style="list-style-type: none"> • Forest stem wood • Energy crops <ul style="list-style-type: none"> • Sewage • Used Cooking Oil <ul style="list-style-type: none"> • Landfill gas 	
Art. 1 (aj)	“(114) ‘new and innovative technology’ means a new and recently qualified technology compared to the state of the art in the industry, which carries a risk of technological or industrial failure and is not an optimisation or scaling up of an existing technology;	“(114) ‘new and innovative technology technique ’ means a new and recently qualified technology technique , including organisational innovation , compared to the state of the art in the industry, which carries a risk of technological, organisational innovation or industrial failure and , is not an optimisation or scaling up of an existing technology technique and allows to improve Union standards in terms of environmental and climate protection ;
	<p><i>Explanation</i></p> <p><i>When it comes to environmental and climate protection, public funds should be deployed only to speed up the scaling of technologies allowing to go beyond Union standards. For instance, concerning the control of emissions from industrial facilities, only technologies allowing to drastically improve the BAT Conclusions⁸ should be eligible to receive public resources. Further the term “technique” includes also the way in which an activity is designed, operated and decommissioned. The GBER should also promote sustainable business models which can deliver significant environmental and climate improvements beyond ‘technology’ such as chemicals leasing, improved resource management practice and schemes, so a cross link to new recital 96 should be made.</i></p>	
Art. 1 (an)	“(119) ‘environmental tax’ means a tax with a specific tax base that has a clear negative effect on the environment or which seeks to	“(119) ‘environmental tax’ means a tax with a specific tax base that has a clear negative positive effect on

⁷ <https://eeb.org/library/burnable-carbon-what-is-still-burnable-in-a-circular-cascading-low-carbon-economy/>

⁸ <https://www.eea.europa.eu/policy-documents/best-available-techniques-bat-conclusions>

	tax certain activities, goods or services so that the environmental costs may be included in their price or so that producers and consumers are oriented towards activities which better respect the environment;”;	the environment or which seeks to tax certain activities, goods or services so that the environmental costs may be are included in their price or so that producers and consumers are oriented towards activities which better respect the environment;”;
	<i>Explanation</i>	
	<i>The scope of environmental taxes is to have positive effects on the environment, meaning that they should orient consumers and producers towards sustainable activities. Including negative externalities into the prices of products and services is a powerful tool to allow that.</i>	
Art 1 (new)		The following point (119a) is added (119a) ‘external cost internalisation’ means taking account of external damage costs of a given activity, good or services to the amenities of the environment, human health, climate protection and other ecosystem damage costs. Those external costs are fully internalised for the purpose of estimating the value of the concerned activity, good or service, based on the methodology set out in Annex 1;
	<i>Explanation</i>	
	<i>Before allowing state aid through the GBER / other EU state aids, Member States shall be required to implement all other possible regulatory and market avenues to fix market failures, which in most cases are due to failure to internalise external costs such as pollution. This finding “European taxpayers too often have to pay instead of polluters” has been notably confirmed by a recent report by the Court of Auditors⁹ and a report commissioned by the European Commission¹⁰. Environmental taxation is one of the many economic instruments that should be employed to reflect true cost of certain activities, products or goods. This concept of external cost internalisation shall be referred to explicitly in the GBER.</i>	
Art. 1 (new)		The following point (119b) is added: (119b) ‘Zero Pollution Ambition compatibility test’ means an impact assessment carried out by an independent accreditation body that aims to verify if the supported activity, good

⁹ <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=58811>

¹⁰ https://ec.europa.eu/environment/economy-and-finance/ensuring-polluters-pay_en

		<p>or service pursuant to the application of this Regulation will satisfy all the following objectives:</p> <ul style="list-style-type: none"> • compliance with relevant EU environmental protection acquis ahead of regulatory deadlines; • no generation of greenhouse gases by human activity, carbon neutrality by latest 2040; • the toxic free environment goal, notably by ensuring the activity or good phased out and substituted chemicals of concern throughout the production lifecycle; • zero adverse impact to human health and the environment from anthropogenic emissions, deposition and exposure below critical loads, compliance with the revised WHO air protection guidelines; • it is compatible with the circular economy transition; • aid will constitute an “enabling activity” according to Regulation 2020/852.
<p><i>Explanation</i></p> <p><i>Whether a given economic activity needs to be developed / supported or not by the GBER should depend on qualitative outcomes of a given activity, service or product; a given economic activity benefitting from the measure should be scrutinized against its compatibility with the zero-pollution and climate neutrality ambitions in an integrated manner. This will prevent a silo approach as to estimation of cost and benefits and ensure a coherent assessment as to the “best value for money in the common interest” (public spending) which can be serving many interests. A conditionality to satisfy the most relevant EU Green Deal objectives should be inserted.</i></p>		
<p>Art. 1 (NEW)</p>		<p>The following point (119c) is added:</p> <p>“(119c) ‘Counterfactual’ shall correspond to a situation where the expected investment corresponds to equivalent situation in terms of service output by frontrunner economic actors, complying with strict requirements</p>

		<p>set by Union standards and other relevant EU or Member States environmental/climate protection acquis. Where the activity involves the generation and/or release of greenhouse gases, the counterfactual cost estimate shall assume a damage cost of at least 283€/tCO₂eq where the return of investment is expected as from 2040. Other relevant external costs identified are internalised and attributed to the counterfactual scenario.</p>
	<p style="text-align: center;"><i>Justification</i></p> <p style="text-align: center;"><i>The conditions established to design counterfactual scenarios are too vague as to what baseline expectations shall be that would merit state aid support. We suggest considering, when assessing the “less environmentally friendly” and the “delayed investment” scenarios, also the additional negative externalities that would result from such less sustainable or delayed interventions, so to better establish the health and environmental damages shifted to the public purse in terms of higher healthcare and remediation costs and, by doing so, optimising public spending and speeding up the use of best-in-class solutions. The proposal links also to the other suggestions concerning the zero-pollution compatibility test. The GBER should be more demanding as to the minimal expectations and conditionalities, otherwise it may risk of undermining the polluter pays principle and the promotion of frontrunners.</i></p>	
<p>Art. 1 (av)</p>	<p>“(130) ‘energy infrastructure’ means any physical equipment or facility which is located within the Union or linking the Union to one or more third countries and falling under the following categories:</p> <p>(a) concerning electricity: (i) transmission and distribution systems, whereas ‘transmission’ means the transport of electricity on the extra high-voltage and high-voltage interconnected system with a view to its delivery to final customers or to distributors, but does not include supply and whereas ‘distribution’ means the transport of electricity on high-voltage, medium-voltage and low-voltage distribution systems with a view to its delivery to customers, but does not include supply; (ii) any equipment or installation essential for the systems referred to in point (i) to operate safely, securely and efficiently, including</p>	<p>“(130) ‘energy infrastructure’ means any physical equipment or facility which is located within the Union or linking the Union to one or more third countries and falling under the following categories:</p> <p>(a) concerning electricity: (i) transmission and distribution systems, whereas ‘transmission’ means the transport of electricity on the extra high-voltage and high-voltage interconnected system with a view to its delivery to final customers or to distributors, but does not include supply and whereas ‘distribution’ means the transport of electricity on high-voltage, medium-voltage and low-voltage distribution systems with a view to its delivery to customers, but does not include supply; (ii) any equipment or installation essential for the systems referred to in point (i) to operate safely, securely and efficiently, including</p>

<p>protection, monitoring and control systems at all voltage levels and substations; (iii) fully integrated network components , as defined in Article 2, point (51) of the Directive (EU) 2019/944*; (iv) smart electricity grids, that is to say systems and components integrating information and communications technology ('ICT'), through operational digital platforms, control systems and sensor technologies both at transmission and distribution level, aiming at a more efficient and intelligent electricity transmission and distribution network, increased capacity to integrate new forms of generation, storage and consumption and facilitating new business models and market structures; (v) off-shore electricity grids, that is to say any equipment or installation of the systems referred to in point (i), having dual functionality: interconnection and transmission or distribution of offshore renewable electricity from the offshore generation sites to two or more countries, as well as any offshore adjacent equipment or installation essential to operate safely, securely and efficiently, including protection, monitoring and control systems, and necessary substations if they also ensure technology interoperability inter alia interface compatibility between different technologies;</p> <p>(b) concerning gas: (i) transmission and distribution pipelines for the transport of natural gas, bio gas and renewable gaseous fuels of non-biological origin that form part of a network, excluding high-pressure pipelines used for upstream distribution of natural gas; (ii) underground storage facilities connected to the high-pressure gas pipelines mentioned in point (i); (iii) reception, storage and regasification or decompression facilities for liquefied natural gas ('LNG') or compressed natural gas ('CNG');</p>	<p>protection, monitoring and control systems at all voltage levels and substations; (iii) fully integrated network components , as defined in Article 2, point (51) of the Directive (EU) 2019/944*; (iv) smart electricity grids, that is to say systems and components integrating information and communications technology ('ICT'), through operational digital platforms, control systems and sensor technologies both at transmission and distribution level, aiming at a more efficient and intelligent electricity transmission and distribution network, increased capacity to integrate new forms of generation, storage and consumption and facilitating new business models and market structures; (v) off-shore electricity grids, that is to say any equipment or installation of the systems referred to in point (i), having dual functionality: interconnection and transmission or distribution of offshore renewable electricity from the offshore generation sites to two or more countries, as well as any offshore adjacent equipment or installation essential to operate safely, securely and efficiently, including protection, monitoring and control systems, and necessary substations if they also ensure technology interoperability inter alia interface compatibility between different technologies;</p> <p>(b) concerning gas: (i) transmission and distribution pipelines for the transport of natural gas, bio gas and renewable gaseous fuels of non-biological origin that form part of a network, excluding high-pressure pipelines used for upstream distribution of natural gas; (ii) underground storage facilities connected to the high-pressure gas pipelines mentioned in point (i); (iii) reception, storage and regasification or decompression facilities for liquefied natural gas ('LNG') or compressed natural gas ('CNG');</p>
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<p>(iv) any equipment or installation essential for the system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations;</p> <p>(v) smart gas grids, which means any of the following equipment or installation aiming at enabling and facilitating the integration of renewable and low-carbon gases (including biomethane or hydrogen) into the network: digital systems and components integrating ICT, control systems and sensor technologies to enable the interactive and intelligent monitoring, metering, quality control and management of gas production, transmission, distribution and consumption within a gas network. Furthermore, smart grids may also include equipment to enable reverse flows from the distribution to the transmission level and related necessary upgrades to the existing network;</p> <p>(c) concerning hydrogen:</p> <p>(i) transmission pipelines for the transport of hydrogen, mainly high-pressure hydrogen, as well as pipelines for the local distribution of hydrogen, giving access to multiple network users on a transparent and non-discriminatory basis;</p> <p>(ii) underground storage facilities connected to the high-pressure hydrogen pipelines referred to in point (i);</p> <p>(iii) dispatch, reception, storage and regasification or decompression facilities for liquefied hydrogen or hydrogen embedded in other chemical substances with the objective of injecting the hydrogen into the grid;</p> <p>(iv) any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations.</p> <p>(v) Any of the assets listed under points (i), (ii), (iii), and (iv) may be newly constructed assets or assets converted from natural gas to hydrogen, or a combination of the two. Assets listed under points (i), (ii), (iii), and (iv)</p>	<p>(iv) any equipment or installation essential for the system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations;</p> <p>(v) smart gas grids, which means any of the following equipment or installation aiming at enabling and facilitating the integration of renewable and low-carbon gases (including biomethane or hydrogen) into the network: digital systems and components integrating ICT, control systems and sensor technologies to enable the interactive and intelligent monitoring, metering, quality control and management of renewable gas production, transmission, distribution and consumption within a gas network. Furthermore, smart grids may also include equipment to enable reverse flows from the distribution to the transmission level and related necessary upgrades to the existing network;</p> <p>(c) concerning renewable hydrogen:</p> <p>(i) transmission pipelines for the transport of hydrogen, mainly high-pressure hydrogen, as well as pipelines for the local distribution of hydrogen, giving access to multiple network users on a transparent and non-discriminatory basis;</p> <p>(ii) underground storage facilities connected to the high-pressure hydrogen pipelines referred to in point (i);</p> <p>(iii) dispatch, reception, storage and regasification or decompression facilities for liquefied hydrogen or hydrogen embedded in other chemical substances with the objective of injecting the hydrogen into the grid;</p> <p>(iv) any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations.</p> <p>(v) Any of the assets listed under points (i), (ii), (iii), and (iv) may be newly constructed assets or assets converted from natural gas to hydrogen, or a combination of the two. Assets listed under points (i), (ii), (iii), and (iv), which</p>
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<p>which are subject to third party access shall qualify as energy infrastructure;</p> <p>(d) concerning carbon dioxide (CO₂):</p> <p>(i) pipelines, other than upstream pipeline network, used to transport CO₂ from more than one source, i.e. industrial installations (including power plants) that produce CO₂ gas from combustion or other chemical reactions involving fossil or non-fossil carbon-containing compounds, for the purpose of permanent geological storage of CO₂ pursuant to Article 3 of Directive 2009/31/EC of the European Parliament and of the Council** or for the purpose of use of CO₂ as feedstock or to enhance the yields of biological processes;</p> <p>(ii) facilities for liquefaction and buffer storage of CO₂ in view of its further transportation. This does not include infrastructure within a geological formation used for the permanent geological storage of CO₂ pursuant to Article 3 of Directive 2009/31/EC and associated surface and injection facilities;</p> <p>(iii) any equipment or installation essential for the system in question to operate properly, securely and efficiently, including protection, monitoring and control systems. Assets listed under points (i), (ii) and (iii), which are subject to third party access shall qualify as energy infrastructure;</p> <p>(e) infrastructure used for transmission or distribution of heat/steam from multiple producers or users, based on use of zero or low carbon heat, steam or residual heat from industrial applications or from production processes (waste heat);</p> <p>(f) Projects of Common Interest, as defined in TEN-E legislation (Article 2, point (4) of Regulation (EU) 347/2013 of the European Parliament and of the Council***);</p> <p>(g) concerning other types of energy infrastructure: other infrastructure categories</p>	<p>are subject to third party access shall qualify as energy infrastructure;</p> <p>(d) concerning carbon dioxide (CO₂):</p> <p>(i) pipelines, other than upstream pipeline network, used to transport CO₂ from more than one source, i.e. industrial installations (including power plants) that produce CO₂ gas from combustion or other chemical reactions involving fossil or non-fossil carbon-containing compounds, for the purpose of permanent geological storage of CO₂ pursuant to Article 3 of Directive 2009/31/EC of the European Parliament and of the Council** or for the purpose of use of CO₂ as feedstock or to enhance the yields of biological processes;</p> <p>(ii) facilities for liquefaction and buffer storage of CO₂ in view of its further transportation. This does not include infrastructure within a geological formation used for the permanent geological storage of CO₂ pursuant to Article 3 of Directive 2009/31/EC and associated surface and injection facilities;</p> <p>(iii) any equipment or installation essential for the system in question to operate properly, securely and efficiently, including protection, monitoring and control systems. Assets listed under points (i), (ii) and (iii), which are subject to third party access shall qualify as energy infrastructure;</p> <p>(e) infrastructure used for transmission or distribution of heat/steam from multiple producers or users, based on use of zero or low carbon heat, steam or residual heat from industrial applications or from production processes (waste heat);</p> <p>(f) Projects of Common Interest, as defined in TEN-E legislation (Article 2, point (4) of Regulation (EU) 347/2013 of the European Parliament and of the Council***);</p> <p>(g) concerning other types of energy infrastructure: other infrastructure categories</p>
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<p>which share the same features as the categories referred to in points (a) to (f) above. This in particular concerns infrastructure which enable physical or wireless connection of zero or low carbon energy (or energy carrier) producers and users from multiple access and exit points and which are open to access by third parties not belonging to the infrastructure owner or manager undertakings; Assets listed under points (a) to (g) which are built for one or a small group of ex ante identified users and tailored to their needs ('dedicated infrastructure') shall not qualify as energy infrastructure.</p>	<p>which share the same features as the categories referred to in points (a) to (f) above. This in particular concerns infrastructure which enable physical or wireless connection of zero or low carbon energy (or energy carrier) producers and users from multiple access and exit points and which are open to access by third parties not belonging to the infrastructure owner or manager undertakings; Assets listed under points (a) to (g) which are built for one or a small group of ex ante identified users and tailored to their needs ('dedicated infrastructure') shall not qualify as energy infrastructure.</p>
<p style="text-align: center;"><i>Explanation</i></p> <p><i>Fossil gas and related infrastructures should not be in the scope of this Regulation. Public funds should be focused on renewables sources and not used to create new lock-ins to fossil fuels. The main reasons are:</i></p> <ul style="list-style-type: none"> • <i>Methane is the second most important greenhouse gas in terms of concentration and impact on the climate, and already contributed as much as 0.5°C to the global warming experienced today. It is emitted during the production and transport of coal, natural gas, and oil, as well as from livestock and other agriculture practices. This highlights the importance of focusing on processes that can lower the methane concentration in the atmosphere, being it a significant contributor to climate change.</i> • <i>For the EU to act in line with the Paris Climate Agreement and limit temperature rise to 1.5°C, fossil gas use must end by 2035. This must be reflected across all aspects of the GBER.</i> <ul style="list-style-type: none"> • <i>There is an overcapacity of gas in the EU: whether the total existing capacity of the EU is about 625 bcm, since 2010 imports has never gone beyond 400 bcm, with forecasts predicting steady consumption and import declines in the next decades¹¹.</i> <ul style="list-style-type: none"> • <i>Nevertheless, Europe is already building or planning to build €87 billion worth of fossil gas infrastructure¹² in a continued expansion of pipelines and LNG terminals. According to the Commission, fossil gas consumption needs to decline 36% from 2020 to 2030, but the planned public and private investment would see an increase of 35% from the current import capacity (about 222 bcm). If the investment plans are implemented, the EU risks locking itself into a more polluting future or wasting billions on infrastructure, like pipelines, which have a lifespan of around 50 years.</i> 	

¹¹ <https://globalenergymonitor.org/report/europe-gas-tracker-report-2021/>

¹² <https://globalenergymonitor.org/report/europe-gas-tracker-report-2021/>

	<ul style="list-style-type: none"> • Moreover, the Commission is already foreseeing to fund 30 fossil gas projects worth 13 billion € through the “Union list of projects of common interest” Regulation, in stark contradiction with Europe’s climate ambitions. We do not see the necessity to allow Member States to waste even more money into fossil gas projects through the GBER. • According to a report by the European Union Agency for the Cooperation of Energy Regulators (ACER)¹³, the cause of Europe’s current high energy prices is that high global gas prices, with LNG as the primary price-setter, constitute the key driver of the current high electricity and gas prices impacting Europe. This spike showed that the EU’s energy mix and its dependency on oil and gas imports is its main cause in a global market led by speculation and volatility. One of the ways to protect EU communities from experiencing similar shocks in the future is to massively deploy renewable sources by focusing all possible public streams of resources. • Finally, fossil gas is not compatible with the internal market. In this respect, we support ClientEarth position. <p>Concerning hydrogen, only the renewable version should be supported with public funds and only for hard-to-abate sectors (see explanation of Art. 1 (z)).</p> <p>Concerning transport of CO₂, it implies that CCS/CCU technologies will become mainstream soon, which will be hardly the case (see explanation of the following point).</p>		
<p>Art.1 (ay)</p>	<table border="1"> <tr> <td data-bbox="284 1160 837 1736"> <p>the following points (131a) and (131b) are inserted: “(131a) ‘carbon capture and storage’ or ‘CCS’ means a set of technologies that captures the (CO₂) emitted from industrial plants based on fossil fuels or biomass, including power plants, transports it to a storage site and injects the CO₂ in suitable underground geological formations for the purpose of permanent storage of CO₂; (131b) ‘carbon capture and utilisation’ or ‘CCU’ means a set of technologies that captures the CO₂ emitted from industrial plants based on fossil fuels or biomass, including power plants, and transports it to a CO₂-consumption site;”;</p> </td> <td data-bbox="837 1160 1396 1736"> <p>the following points (131a) and (131b) are inserted: “(131a) ‘carbon capture and storage’ or ‘CCS’ means a set of technologies that captures the (CO₂) emitted from industrial plants based on fossil fuels or biomass, including power plants, transports it to a storage site and injects the CO₂ in suitable underground geological formations for the purpose of permanent storage of CO₂; (131b) ‘carbon capture and utilisation’ or ‘CCU’ means a set of technologies that captures the CO₂ emitted from industrial plants based on fossil fuels or biomass, including power plants, and transports it to a CO₂-consumption site;”;</p> </td> </tr> </table>	<p>the following points (131a) and (131b) are inserted: “(131a) ‘carbon capture and storage’ or ‘CCS’ means a set of technologies that captures the (CO₂) emitted from industrial plants based on fossil fuels or biomass, including power plants, transports it to a storage site and injects the CO₂ in suitable underground geological formations for the purpose of permanent storage of CO₂; (131b) ‘carbon capture and utilisation’ or ‘CCU’ means a set of technologies that captures the CO₂ emitted from industrial plants based on fossil fuels or biomass, including power plants, and transports it to a CO₂-consumption site;”;</p>	<p>the following points (131a) and (131b) are inserted: “(131a) ‘carbon capture and storage’ or ‘CCS’ means a set of technologies that captures the (CO₂) emitted from industrial plants based on fossil fuels or biomass, including power plants, transports it to a storage site and injects the CO₂ in suitable underground geological formations for the purpose of permanent storage of CO₂; (131b) ‘carbon capture and utilisation’ or ‘CCU’ means a set of technologies that captures the CO₂ emitted from industrial plants based on fossil fuels or biomass, including power plants, and transports it to a CO₂-consumption site;”;</p>
<p>the following points (131a) and (131b) are inserted: “(131a) ‘carbon capture and storage’ or ‘CCS’ means a set of technologies that captures the (CO₂) emitted from industrial plants based on fossil fuels or biomass, including power plants, transports it to a storage site and injects the CO₂ in suitable underground geological formations for the purpose of permanent storage of CO₂; (131b) ‘carbon capture and utilisation’ or ‘CCU’ means a set of technologies that captures the CO₂ emitted from industrial plants based on fossil fuels or biomass, including power plants, and transports it to a CO₂-consumption site;”;</p>	<p>the following points (131a) and (131b) are inserted: “(131a) ‘carbon capture and storage’ or ‘CCS’ means a set of technologies that captures the (CO₂) emitted from industrial plants based on fossil fuels or biomass, including power plants, transports it to a storage site and injects the CO₂ in suitable underground geological formations for the purpose of permanent storage of CO₂; (131b) ‘carbon capture and utilisation’ or ‘CCU’ means a set of technologies that captures the CO₂ emitted from industrial plants based on fossil fuels or biomass, including power plants, and transports it to a CO₂-consumption site;”;</p>		
	<p style="text-align: center;">Explanation</p> <ul style="list-style-type: none"> • According to a recent UK FIRES research institute analysis, averaged over the world, we currently have 6 kg of CCS per person per year growing at 0.1 kg/year. 		

¹³ <https://www.acer.europa.eu/events-and-engagement/news/acer-submits-european-commission-its-preliminary-assessment-europes-high>

	<p><i>COP26 plans would require between 1400 and 5700 kg of new CCS capacity per person per year, which is simply unattainable under any scenario.</i></p> <ul style="list-style-type: none"> <i>Looking at CCS/CCU track record, it has never fulfilled expectations: after more than 20 years and despite the big amount of public funds deployed to support it (more than 500 million € only in the EU¹⁴), there are only 4 active facilities in Europe, of which only one is in the EU¹⁵.</i> <i>The 66 projects at various stages of completion in Europe will store around 60 MtCO₂/year by 2030, which is only 0.02% of the total CO₂ emissions of Europe (2019¹⁶). This technology is nowhere near to solve the climate neutrality equation and should be left to those private actors still wanting to bet on it.</i> <i>The Commission already foresees to fund CCS projects through the “Union list of projects of common interest” Regulation, in stark contradiction with Europe’s climate ambitions. We do not see the necessity to allow Member States to spend more money into these kinds of projects.</i> <i>In any case, CCS/CCU technology typically reaches 80-90% of captured CO₂, meaning that 10-20% is released in the atmosphere. Any CCS/CCU technology shall guarantee much better performances, such as 98% of captured CO₂.</i> <i>Also, when applied to fossil gas, CCS perpetrate its extraction and transport, which causes the emissions of methane, another greenhouse gas.</i> <i>CCS/CCU goes against the energy efficiency principle because it increases the energy consumption of coal installations by 25%¹⁷, meaning also that part of the captured CO₂ is due by the CCS/CCU infrastructure itself. For instance, the typical efficiency of a natural gas fired power plant is in the order of 54%; introducing a CCS/CCU post-combustion unit would reduce this figure to 46.5% that, in the best-case scenario for pre-combustion, would be lowered to 46.2%.</i> <p><i>Public funds should be spent on a best-value-for-public-interest basis, meaning that they should be streamlined to those projects having the biggest impact in terms of environmental, public health and climate protection in the shortest arc of time. The climate and environmental crisis are at such point that we cannot afford to lose time by funding ineffective technologies.</i></p>
<p>Art. 1 NEW!</p>	<p>‘high-efficiency cogeneration’ means cogeneration which goes beyond the definition of high efficiency cogeneration as set out in Commission Implementing Decision (EU) 2017/1442, Table 23.</p>
<p>Art. 1 NEW!</p>	<p>‘energy efficiency first principle’ means to consider, before taking energy planning, policy and investment decisions, whether cost-efficient, technically, economically and environmentally sound alternative energy efficiency measures could replace in whole or</p>

¹⁴ <https://www.euractiv.com/section/energy-environment/news/eu-clarifies-funding-scope-for-co2-capture-technology/>

¹⁵ Source: International Association of Oil and Gas Producers

¹⁶ <https://www.statista.com/statistics/450017/co2-emissions-europe-eurasia/>

¹⁷ IPCC, Special Report on Carbon Dioxide Capture and Storage

		in part the envisaged planning, policy and investment measures, whilst still achieving the objectives of the respective decisions, as per Regulation (EU) 2018/1999, recital (64).
	<p><i>Explanation</i></p> <p><i>Beyond being one of the cornerstones of the Energy Union, the Energy Efficiency First (EE1st) principle is embedded in several pieces of legislation, namely the Governance of the Energy Union Regulation and the recast of the Energy Efficiency Directive. To ensure consistence across EU legislation, the EE1st principle shall be included in this Regulation as well.</i></p> <p><i>We support ClientEarth position on this.</i></p>	
Art. 9 (1)	<p>in Article 9, paragraph 1 is replaced by the following:</p> <p>“1. The Member State concerned shall ensure the publication on a comprehensive State aid website, at national or regional level of:</p> <p>(a) the summary information referred to in Article 11 in the standardised format laid down in Annex II or a link providing access to it;</p> <p>(b) the full text of each aid measure, as referred to in Article 11 or a link providing access to the full text;</p> <p>(c) the information referred to in Annex III on each individual aid award exceeding EUR 100 000, or for beneficiaries active in primary agricultural production, other than those to which Section 2a applies, on each individual aid award for such production exceeding EUR 60 000 and for beneficiaries active in the fishery and aquaculture sector, other than those to which Section 2a applies, on each individual aid award exceeding EUR 30 000.</p>	<p>in Article 9, paragraph 1 is replaced by the following:</p> <p>“1. The Member State concerned shall ensure the publication on a comprehensive State aid website, preferably at national or regional level of:</p> <p>(a) the summary information referred to in Article 11 in the standardised format laid down in Annex II or a link providing access to it;</p> <p>(b) the full text of each aid measure, as referred to in Article 11 or a link providing access to the full text;</p> <p>(c) the information referred to in Annex III on each individual aid award exceeding EUR 100 000, or for beneficiaries active in primary agricultural production, other than those to which Section 2a applies, on each individual aid award for such production exceeding EUR 60 000 and for beneficiaries active in the fishery and aquaculture sector, other than those to which Section 2a applies, on each individual aid award exceeding EUR 30 000.</p> <p>Where the activity is subject to reporting requirements under Directive 2010/75/EU or Regulation 166/2006, the publication shall be made through the EEA Industrial Emissions Portal and shall include at least the following information:</p> <ul style="list-style-type: none"> • environmental performance data, including consumption data;

		<ul style="list-style-type: none"> • the inventory of hazardous substances used, produced and substituted; • other information relevant for the BREF information exchange process.
	<p><i>Explanation</i></p> <p><i>We suggest having only national websites for facility of consultation by enforcement authorities and civil society. For activities regulated by other EU reporting instruments, the data shall be made available at EU level so to improve the sharing of information.</i></p> <p><i>We support ClientEarth position for this article.</i></p>	
Art. 36	<p>1. Investment aid for environmental protection, including climate protection, shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.”;</p>	<p>1. Investment aid for environmental protection, including climate protection, shall be compatible with the energy efficiency first principle, the zero-pollution ambition and the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I and the general conditionality conditions are fulfilled.</p> <p>The investment pursuant to this section shall fulfil the following general conditionality conditions:</p> <p>a) it is fully compatible with the zero-pollution ambition (no negative environmental cross media effects);</p> <p>b) the external cost internalisation test finds that, after subtraction of the externalities to the polluter, the investment is of added value to the common interest;</p> <p>c) it is consistent with the zero-pollution hierarchy of options: techniques preventing negative environmental and human health impact will always be taken at source instead of pollution reduction techniques, alternative options delivering the same intended service/output have been duly considered;</p> <p>d) it will lead to improved transparency on the pollution life cycle and decision-making processes such</p>

		<p>as improved benchmarking of environmental performance;</p> <p>e) the net gains of improved environmental and climate performance are substantiated and monitorable;</p> <p>f) evidence on improvements achieved by the investment is made publicly available and compared with the counterfactual scenario;</p>
	<p><i>Justification</i></p> <p><i>This amendment builds on related suggestions linked to need demonstrating the added value of state aid to the common interest and pre-condition of fund to the integrated approach towards the zero-pollution ambition and the energy efficiency first principle. This suggestion is consistent with EEB comments made in the ZPAP and CEEAG context.</i></p>	
Art. 36 (b)	<p>(b) the following paragraph 1a is inserted: “1a. This Article shall not apply to measures for which more specific rules are laid down in Articles 36a, 36b and 38 to 48. This Article shall also not apply to investments in equipment, machinery and industrial production using fossil fuels, except those using natural gas. This Article shall apply to investments in equipment, machinery and industrial production using hydrogen to the extent that the hydrogen used qualifies as renewable hydrogen or low-carbon hydrogen. In such a case, the Member State shall ensure that the requirement to use renewable hydrogen [or low-carbon hydrogen] is complied with throughout the economic lifetime of the investment.”;</p>	<p>(b) the following paragraph 1a is inserted: “1a. This Article shall not apply to measures for which more specific rules are laid down in Articles 36a, 36b and 38 to 48. This Article shall also not apply to investments in equipment, machinery and industrial production using fossil fuels, except those using natural gas. This Article shall apply to investments in equipment, machinery and industrial production using hydrogen to the extent that the hydrogen used qualifies as renewable hydrogen or low-carbon hydrogen. In such a case, the Member State shall ensure that the requirement to use renewable hydrogen [or low-carbon hydrogen] is complied with throughout the economic lifetime of the investment.”;</p>
	<p><i>Explanation</i></p> <p><i>See previous points on gas (explainer of Art. 1 (av)) and hydrogen (explainer of Art. 1 (z)).</i></p>	
Art.36 (d)	<p>(d) the following paragraphs 2a and 2b are inserted: “2a. Investments in carbon capture and utilisation or storage (‘CCUS’) shall fulfil the following cumulative conditions: (a) the CO₂ capture, transport and use or storage, including individual elements of the CCUS chain, shall be integrated into a complete CCS, CCU or CCUS chain; (b) the net present value (‘NPV’) of the investment project over its economic lifetime</p>	<p>(d) the following paragraphs 2a and 2b are inserted: “2a. Investments in carbon capture and utilisation or storage (‘CCUS’) shall fulfil the following cumulative conditions: (a) the CO₂ capture, transport and use or storage, including individual elements of the CCUS chain, shall be integrated into a complete CCS, CCU or CCUS chain; (b) the net present value (‘NPV’) of the investment project over its economic lifetime</p>

	<p>shall be negative. For the purpose of calculating the project's NPV, the avoided costs of CO2 emissions shall be taken into account;</p> <p>(c) the investment costs shall not relate to the CO2-emitting installation (industrial installation or power plant), but solely to the CCUS project.</p> <p>2b. When the aid aims at reducing direct emissions, in particular greenhouse gas emissions, those reductions shall not be offset by increases in indirect emissions resulting from the same investment.”;</p>	<p>shall be negative. For the purpose of calculating the project's NPV, the avoided costs of CO2 emissions shall be taken into account;</p> <p>(c) the investment costs shall not relate to the CO2-emitting installation (industrial installation or power plant), but solely to the CCUS project.</p> <p>2b. When the aid aims at reducing direct emissions, in particular greenhouse gas emissions, those reductions shall not be offset by increases in indirect emissions resulting from the same investment.”;</p>
	<p><i>Explainer</i></p> <p><i>See previous points on CCS/CCU (explainer of Art. 1 (ay))</i></p>	
<p>Art.36 (g)</p>	<p>(g) paragraph 5 is replaced by the following: “5. The eligible costs shall be the extra environmental investment costs determined by comparing the costs of the investment to those of a counterfactual investment that would be undertaken in the absence of the aid, as follows:</p> <p>(a) where the counterfactual consists in a less environmentally-friendly investment that corresponds to normal commercial practice in the sector or for the activity concerned, the eligible costs shall consist in the difference between the costs of the investment and the costs of the counterfactual investment;</p> <p>(b) where the counterfactual consists in the same investment being undertaken at a later point in time, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the costs of the counterfactual investment, discounted to the point in time when the aided investment would be undertaken;</p> <p>(c) where the counterfactual would result in maintaining the existing installations and equipment in operation, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the maintenance, repair and modernisation costs</p>	<p>g) paragraph 5 is replaced by the following: “5. The eligible costs shall be the extra environmental investment costs determined by comparing the costs of the investment to those of a counterfactual investment that would be undertaken in the absence of the aid, as follows:</p> <p>(a) where the counterfactual consists in a less environmentally-friendly investment that corresponds to normal commercial practice in the sector or for the activity concerned, the eligible costs shall consist in the difference between the costs of the investment and the costs of the counterfactual investment</p> <p>(b) where the counterfactual consists in the same investment being undertaken at a later point in time, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the costs of the counterfactual investment, discounted to the point in time when the aided investment would be undertaken</p> <p>(c) where the counterfactual would result in maintaining the existing installations and equipment in operation, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the maintenance, repair and modernisation costs of the counterfactual investment, discounted</p>

<p>of the counterfactual investment, discounted to the point in time when the aided investment would be undertaken; (d) in the case of equipment subject to leasing agreements, the eligible costs shall consist in the difference in NPV between the leasing of that equipment and the leasing of the equipment that would be used in the absence of the aid; the leasing costs shall not include costs relating to the operation of the equipment or installation (fuel costs, insurance, maintenance, other consumables), irrespective of whether they are part of the leasing contract;</p> <p>In all situations listed under (a) to (d), the counterfactual shall correspond to an investment with comparable output capacity and economic lifetime that complies with applicable Union standards, in particular regarding greenhouse gas emission requirements. The counterfactual shall be credible in the light of legal requirements, market conditions and incentives generated by the EU ETS system.</p> <p>Where the investment consists in an add-on investment to an already existing facility, for which there is no less environmentally-friendly counterfactual investment, the eligible costs shall be the total costs related to environmental protection.</p> <p>The eligible costs may include costs for the construction of dedicated infrastructure and storage facilities for renewable or low-carbon hydrogen and waste heat that are necessary to enable the increase in the level of environmental protection as referred to in paragraphs 2 and 2a. The costs not directly linked to the achievement of a higher level of environmental protection shall not be eligible.”;</p>	<p>to the point in time when the aided investment would be undertaken; (d) in the case of equipment subject to leasing agreements, the eligible costs shall consist in the difference in NPV between the leasing of that equipment and the leasing of the equipment that would be used in the absence of the aid; the leasing costs shall not include costs relating to the operation of the equipment or installation (fuel costs, insurance, maintenance, other consumables), irrespective of whether they are part of the leasing contract;</p> <p>In all situations listed under (a) to (d), the counterfactual shall include a calculation and subtraction from aid of the negative externalities due to the less environmentally friendly investment (as in point a) or the delay in time of the investment (as in point b). Such a calculation shall subtract external damage costs identified through the external cost internalisation test and include notably the cost of:</p> <ul style="list-style-type: none"> • Air pollution and GHGs; • Water pollution and water scarcity; • Waste management; • Harm to biodiversity; • Resource use impacts; • Exposure costs due to use of hazardous substances, in particular substances meeting the properties of substance of very high concern; <p>Such a calculation should be based on the values as per Annex I plus the following:</p> <ul style="list-style-type: none"> • Water abstraction: 0.3 to 1.2 €/m³ <p>The counterfactual shall correspond to an investment with comparable output capacity and economic lifetime that complies with applicable Union standards, regarding greenhouse gases and</p>
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	<p>pollution requirements. The counterfactual shall be transparent and credible in the light of legal requirements, market conditions and incentives generated by the EU ETS system. Where the investment consists in an add-on investment to an already existing facility, for which there is no less environmentally friendly counterfactual investment, the eligible costs shall be the total costs related to environmental protection.</p> <p>The eligible costs may include costs for the construction of dedicated infrastructure and storage facilities for renewable or low-carbon hydrogen and waste heat that are necessary to enable the increase in the level of environmental protection as referred to in paragraphs 2 and 2a. The costs not directly linked to the achievement of a higher-beyond EU standards level of environmental protection shall not be eligible.”;</p>
	<p style="text-align: center;"><i>Explanation</i></p> <p><i>The failure to internalise the negative externalities is a well-recognised market failure: by shifting the costs of their operations to communities and the environment, polluters manage to distort competition within the internal market.</i></p> <p><i>Moreover, very often these market failures are in fact governance failure, being Member States reluctant to apply the most stringent EU legislation concerning harmful emissions (such as the LCP BAT Conclusions of the Industrial Emissions Directive), air and water quality and so on. Before providing private businesses with public money to improve their environmental performances, Member States should at least rigorously apply the legislation aimed at the same purpose.</i></p> <p><i>By internalising negative externalities as suggested in the amendment and in the related Annex I, the Commission has the opportunity not only to give strength to one of the pivotal principles of the Union, but also to help Member States to squeeze the best value-for-money from the public purse, as well as ensuring a level play field among business across the EU. The figures we include to calculate the negative externalities are taken by the recent report released by the Commission (DG Environment) “Green taxation and other economic instruments: internalising environmental costs to make the polluter pay¹⁸”.</i></p> <p><i>We also highlight that any counterfactual scenario should be transparent and drafted by a third party to ensure an independent assessment.</i></p> <p><i>We welcome the provision excluding from aid any investments that is not linked to the achievement of the highest environmental standards.</i></p>

¹⁸ https://ec.europa.eu/environment/news/environmental-pollution-new-study-finds-polluters-do-not-pay-damage-they-cause-2021-11-12_en

<p>Art. 38 (b)</p>	<p>(b) the following paragraphs 2a and 2b are inserted: “2a. By way of derogation from paragraph 2, aid may be granted under this Article for improvements to the energy efficiency of buildings for the purpose of compliance with Union standards that have been adopted but are not yet in force, provided that the investment is implemented and finalised at least 18 months before the standard enters into force. 2b. This Article does not cover aid for cogeneration and aid for district heating or cooling.”;</p>	<p>(b) the following paragraphs 2a and 2b are inserted: “2a. By way of derogation from paragraph 2, aid may be granted under this Article for improvements to the energy efficiency of buildings and the reduction of greenhouse gas emissions through their whole life cycle for the purpose of compliance with Union standards that have been adopted but are not yet in force, provided that the investment is implemented and finalised at least 18 months before the standard enters into force. 2b. This Article does not cover aid for cogeneration and aid for district heating or cooling.”;</p>
<p><i>Explanation</i></p> <p><i>The EPBD will include a whole life carbon approach for buildings that will complement energy efficiency improvements. This approach is not included in the documents. Both energy efficiency and whole life carbon should be considered at the same level.</i></p> <p><i>To achieve high energy efficiency in buildings, a renovation is needed, which should guarantee that the process does not increase GHG emissions. Therefore, these renovations should be near-zero emissions.</i></p>		
<p>Art. 38 (c)</p>	<p>paragraph 3 is replaced by the following: “3. The eligible costs shall be the extra investment costs necessary to achieve the higher level of energy efficiency. They shall be determined as follows, by comparing the costs of the investment to those of the counterfactual investment that would be undertaken in the absence of the aid: (a) where the counterfactual consists in a less energy-efficient investment that corresponds to normal commercial practice in the sector or for the activity concerned, the eligible costs shall consist in the difference between the costs of the investment and the costs of the counterfactual investment. (b) where the counterfactual consists in the same investment being undertaken at a later point in time, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the costs of the</p>	<p>paragraph 3 is replaced by the following: “3. The eligible costs shall be the extra investment costs necessary to achieve the higher level of energy efficiency guaranteeing near-zero emissions renovation processes. They shall be determined as follows, by comparing the costs of the investment to those of the counterfactual investment that would be undertaken in the absence of the aid: (a) where the counterfactual consists in a less energy-efficient investment that corresponds to normal commercial practice in the sector or for the activity concerned, the eligible costs shall consist in the difference between the costs of the investment and the costs of the counterfactual investment. (b) where the counterfactual consists in the same investment being undertaken at a later point in time, the eligible costs shall consist in</p>

<p>counterfactual investment, discounted to the point in time when the aided investment would be undertaken;</p> <p>(c) where the counterfactual would result in maintaining the existing installations and equipment in operation, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the maintenance, repair and modernisation costs of the counterfactual investment, discounted the point in time when the aided investment would be undertaken;</p> <p>(d) In the case of equipment subject to leasing agreements, the eligible costs shall consist in the difference in NPV between the leasing of that equipment and the leasing of the equipment that would be used in the absence of aid; the leasing costs shall not include costs relating to the operation of the equipment or installation (fuel costs, insurance, maintenance, other consumables), irrespective of whether they are part of the leasing contract;</p> <p>(e) In all situations listed under (a) to (d), the counterfactual shall correspond to an investment with the same output capacity and economic lifetime that complies with applicable Union standards. The counterfactual shall be credible in the light of legal requirements, market conditions and incentives generated by the EU ETS system.</p> <p>(f) Where the investment consists in a clearly identifiable investment solely aimed at improving energy efficiency in the building, for which there is no less environmentally-friendly counterfactual investment, the eligible costs shall be the total costs related to environmental protection.”;</p>	<p>the difference between the costs of the investment and the NPV of the costs of the counterfactual investment, discounted to the point in time when the aided investment would be undertaken;</p> <p>(c) where the counterfactual would result in maintaining the existing installations and equipment in operation, the eligible costs shall consist in the difference between the costs of the investment and the NPV of the maintenance, repair and modernisation costs of the counterfactual investment, discounted the point in time when the aided investment would be undertaken;</p> <p>(d) In the case of equipment subject to leasing agreements, the eligible costs shall consist in the difference in NPV between the leasing of that equipment and the leasing of the equipment that would be used in the absence of aid; the leasing costs shall not include costs relating to the operation of the equipment or installation (fuel costs, insurance, maintenance, other consumables), irrespective of whether they are part of the leasing contract;</p> <p>(e) In all situations listed under (a) to (d), the counterfactual shall correspond to an investment with the same output capacity and economic lifetime that complies with applicable Union standards. The counterfactual shall be credible in the light of legal requirements, market conditions and incentives generated by the EU ETS system.</p> <p>(f) Where the investment consists in a clearly identifiable investment solely aimed at improving energy efficiency in the building, for which there is no less environmentally-friendly counterfactual investment, the eligible costs shall be the total costs related to environmental protection.”;</p> <p>(g) All activities or systems based on fossil fuels, regardless of their energy performances, shall be excluded.</p>
<p><i>Explanation</i></p>	

	<p><i>The EPBD will include a whole life carbon approach for buildings that will complement energy efficiency improvement. This approach is not included in the documents. Both energy efficiency and whole life carbon should be considered at the same level.</i></p> <p><i>In order to achieve high energy efficiency in buildings, a renovation is needed, which should guarantee that the process doesn't increase GHG emissions. Therefore, these renovations should be near-zero emissions.</i></p> <p><i>Fossil fuels should be phased out of the market for heating and cooling as part of the building stock decarbonisation process. Economic public incentives should not support heating.</i></p>	
<p>Art. 38 (d)</p>	<p>the following paragraphs 3a to 3d are inserted:</p> <p>“3a. Provided that the aid induces a reduction in primary energy demand of at least 20 % compared to the situation prior to the investment in the renovation of existing buildings and primary energy savings of at least 10 % compared to the threshold set for the nearly zero- energy building requirements in national measures implementing Directive 2010/31/EU in the case of new buildings, the entire investment costs necessary to achieve a higher level of energy efficiency shall constitute the eligible costs, where the investment relates to the improvement of the energy efficiency of one of the following:</p> <p>(i) residential buildings;</p> <p>(ii) buildings dedicated to the provision of education or social services;</p> <p>(iii) buildings dedicated to activities related to public administration or to justice, law enforcement or fire-fighting and civil protection services;</p> <p>(iv) buildings referred to in (i), (ii) or (iii) and in which activities other than those mentioned in (i), (ii) or (iii) occupy no more than 50 % of the internal floor area.</p> <p>3b. For the buildings referred to in paragraph 3a, the aid granted for the improvement of the energy efficiency of the building may be combined with aid for any or all of the following measures:</p> <p>(a) the installation of integrated on-site renewable energy installations generating electricity, heat or cold;</p>	<p>the following paragraphs 3a to 3d are inserted:</p> <p>“3a. Provided that the aid induces a reduction in primary energy demand of at least 260 % compared to the situation prior to the investment in the renovation of existing buildings and primary energy savings of at least 10 % compared to the threshold set for the nearly zero- energy building requirements in national measures implementing Directive 2010/31/EU in the case of new buildings, the entire investment costs necessary to achieve a higher level of energy efficiency shall constitute the eligible costs, where the investment relates to the improvement of the energy efficiency of one of the following:</p> <p>(i) residential buildings;</p> <p>(ii) buildings dedicated to the provision of education or social services;</p> <p>(iii) buildings dedicated to activities related to public administration or to justice, law enforcement or fire-fighting and civil protection services;</p> <p>(iv) buildings referred to in (i), (ii) or (iii) and in which activities other than those mentioned in (i), (ii) or (iii) occupy no more than 50 % of the internal floor area.</p> <p>3b. For the buildings referred to in paragraph 3a, the aid granted for the improvement of the energy efficiency of the building may be combined with aid for any or all of the following measures:</p> <p>(a) the installation of integrated on-site renewable energy installations generating electricity, heat or cold;</p>

<p>(b) the installation of equipment for the storage of the energy generated by the on-site renewable energy installations;</p> <p>(c) the construction and installation of recharging infrastructure for use by the building users, and related infrastructure, such as ducting, where the parking facilities are located either inside the building or are physically adjacent to the building;</p> <p>(d) the installation of equipment for the digitalisation of the building, in particular to increase its smart-readiness, including passive in-house wiring or structured cabling for data networks and the ancillary part of the passive network on the property to which the building belongs but excluding wiring or cabling for data networks outside the property;</p> <p>(e) investments in green roofs and equipment for the recovery of rain water. In case of any such combined works, as set out in points (a) to (e), the entire investment cost of the various installations and equipment shall constitute the eligible costs. The costs not directly linked to the achievement of a higher level of energy efficiency shall not be eligible.</p> <p>3c. The aid may be granted either to the building owner(s) or the tenant(s), depending on who is commissioning the energy efficiency works.</p> <p>3d. Aid may also be granted for the improvement of the energy efficiency of the heating or cooling equipment inside the building. Aid for the installation of oil-fired, coal-fired or gas-fired energy equipment shall not be exempted under this Article from the notification requirement of Article 108(3) of the Treaty. Aid may be granted for the installation of more energy-efficient gas-fired energy equipment provided that it replaces oil-fired or coal-fired energy equipment and that it is ensured that the gas-fired energy equipment is replaced by equipment using renewable fuels by 2050 at the latest.”;</p>	<p>(b) the installation of equipment for the storage of the energy generated by the on-site renewable energy installations;</p> <p>(c) the construction and installation of recharging infrastructure for use by the building users, and related infrastructure, such as ducting, where the parking facilities are located either inside the building or are physically adjacent to the building;</p> <p>(d) the installation of equipment for the digitalisation of the building, in particular to increase its smart-readiness, including passive in-house wiring or structured cabling for data networks and the ancillary part of the passive network on the property to which the building belongs but excluding wiring or cabling for data networks outside the property;</p> <p>(e) investments in green roofs and equipment for the recovery of rain water. In case of any such combined works, as set out in points (a) to (e), the entire investment cost of the various installations and equipment shall constitute the eligible costs. The costs not directly linked to the achievement of a higher level of energy efficiency shall not be eligible.</p> <p>3c. The aid may be granted either to the building owner(s) or the tenant(s), depending on who is commissioning the energy efficiency works.</p> <p>3d. Aid may also be granted for the improvement of the energy efficiency of the heating or cooling equipment inside the building. Aid for the installation of oil-fired, coal-fired or gas-fired energy equipment shall not be exempted under this Article from the notification requirement of Article 108(3) of the Treaty. In any case, aid may shall not be granted for the installation of more energy-efficient any oil-fired, coal-fired and gas-fired energy equipment. provided that it replaces oil-fired or coal-fired energy equipment and that it is ensured that the gas-fired energy equipment is replaced by equipment using renewable fuels by 2050 at the latest.”;</p>
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<i>Explanation</i>	
<p><i>The draft criteria currently specify that the aid induces a reduction in primary energy demand of at least 20 %; however (one-step) deep renovations lead to at least 60% energy savings that are essential to improve the building stock in line with the EU's climate objectives. Deep renovations for improving energy efficiency should be prioritised.</i></p> <p><i>Any kind of fossil fuels should be phased out of the market for heating and cooling as part of the building stock decarbonisation process. Economic public incentives should not support heating.</i></p>	
<p>Art. 38 (e)</p>	<p>the following paragraphs 6a and 7 are inserted:</p> <p>“6a. The aid intensity may be increased by 15 percentage points for aid granted to improve the energy efficiency of the buildings referred to in paragraph 3a, where the energy efficiency improvements lead to a reduction in primary energy demand of at least 40 % in the case of renovation of existing buildings.</p> <p>7. Aid for the improvement of the energy efficiency of buildings may also relate to the facilitation of energy performance contracting subject to the following cumulative conditions:</p> <p>(a) the support takes the form of a loan or guarantee to the provider of the energy efficiency improvement measures under an energy performance contract, or consists in a financial product aimed to refinance the respective provider (for example, factoring or forfaiting);</p> <p>(b) the nominal amount of total outstanding financing provided under this paragraph per beneficiary does not exceed EUR 30 million;</p> <p>(c) the support is provided to SMEs or small mid-caps that are providers of energy performance improvement measures;</p> <p>(d) the support is provided for the facilitation of energy performance contracting within the meaning of Article 2, point (27) of Directive 2012/27/EU;</p> <p>(e) the energy performance contracting relates to a building referred to in paragraph 3a.”;</p>
<i>Explanation</i>	

	<p><i>The draft criteria currently specify that the aid induces a reduction in primary energy demand of at least 20 %; however (one-step) deep renovations lead to at least 60% energy savings which are essential to improve the building stock in line with the EU's climate objectives. Deep renovations for improving energy efficiency should be prioritised.</i></p>	
Art. 41 (c)	<p>paragraphs 2, 3 and 4 are replaced by the following: “2. Investment aid for the production of biofuels, bioliquids, biogas and biomass fuels shall be exempted from the notification requirement of Article 108(3) of the Treaty only to the extent that the aided fuels are compliant with the sustainability and greenhouse gases emissions saving criteria of Directive (EU) 2018/2001 and its implementing or delegated acts and are made from the feedstock listed in Part A of Annex IX to that Directive. 3. Investment aid for the production of hydrogen shall be exempted from the notification requirement of Article 108(3) of the Treaty only for installations producing exclusively renewable hydrogen. For renewable hydrogen projects consisting of an electrolyser and one or more renewable generation units behind a single grid connection point, the capacity of the electrolyser shall not exceed the combined capacity of the renewable generation units. The investment aid may cover dedicated infrastructure for the transmission or distribution of renewable hydrogen, as well as storage facilities for renewable hydrogen. 4. Investment aid for new or refurbished high-efficiency cogeneration units shall be exempted from the notification requirement of Article 108(3) of the Treaty only to the extent that they provide overall primary energy savings compared to separate production of heat and electricity as provided for by Directive 2012/27/EU or any subsequent legislation replacing this act in full or in part.”;</p>	<p>paragraphs 2, 3 and 4 are replaced by the following: “2. Investment aid for the production of biofuels, bioliquids, biogas and biomass fuels shall be exempted from the notification requirement of Article 108(3) of the Treaty only to the extent that the investment is consistent with the energy efficiency first principle, the aided fuels are compliant with the sustainability and greenhouse gases emissions saving criteria of Directive (EU) 2018/2001 and its implementing or delegated acts and are made from the feedstock listed in Part A of Annex IX to that Directive. 3. Investment aid for the production of hydrogen shall be exempted from the notification requirement of Article 108(3) of the Treaty only for installations producing exclusively renewable hydrogen. For renewable hydrogen projects consisting of an electrolyser and one or more renewable generation units behind a single grid connection point, the capacity of the electrolyser shall not exceed the combined capacity of the renewable generation units. The investment aid may cover dedicated infrastructure for the transmission or distribution of renewable hydrogen, as well as storage facilities for renewable hydrogen. 4. Investment aid for new or refurbished high-efficiency cogeneration units running on renewable energy shall be exempted from the notification requirement of Article 108(3) of the Treaty only to the extent that they provide overall primary energy savings compared to separate production of heat and electricity as provided for by Directive 2012/27/EU or any subsequent legislation replacing this act in full or in part.”;</p>
Art. 41 (d)	<p>the following paragraph 4a is inserted:</p>	<p>the following paragraph 4a is inserted:</p>

	“4a. Investment aid for high-efficiency cogeneration shall be exempted from the notification requirement of Article 108(3) of the Treaty only if it is not for fossil fuel fired cogeneration installations, with the exception of natural gas where compliance with the 2030 and 2050 climate targets is ensured.”;	“4a. Investment aid for high-efficiency cogeneration running on renewable energy shall be exempted from the notification requirement of Article 108(3) of the Treaty only if it is not for fossil fuel fired cogeneration installations, with the exception of natural gas where compliance with the 2030 and 2050 climate targets is ensured.”;
	<i>Explanation</i>	
	<i>See previous points on gas (explainer of Art. 1 (av)).</i>	
Art. 41 (e)	The aid intensity shall not exceed: (a) 30 % of the eligible costs for the production of energy from renewable energy sources, renewable hydrogen and high-efficiency cogeneration;	The aid intensity shall not exceed: (a) 30 % of the eligible costs for the production of energy from renewable energy sources, renewable hydrogen and high-efficiency cogeneration;
	<i>Explanation</i>	
	<i>Fossil fuels are not compatible with the Paris agreement, especially when applied to long-lasting infrastructures such cogeneration facilities.</i>	
Art. 43 (a)	Operating aid for the promotion of energy from renewable sources and renewable hydrogen in small scale installations and for the promotion of renewable energy communities shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled. 2. Operating aid for small-scale installations shall be exempted from the notification requirement of Article 108(3) of the Treaty only up to the following size thresholds: (a) for electricity generation or storage projects: projects below the applicable threshold set out in Article 5 of Regulation (EU) 2019/943; (b) for heat generation and renewable gas production technologies: projects below 400 kW installed capacity. For the purpose of calculating those maximum capacities, small scale installations	Operating aid for the promotion of energy from renewable sources and renewable hydrogen in small scale installations and for the promotion of renewable energy communities shall be compatible with the energy efficiency first principle , the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled. 2. Operating aid for small-scale installations shall be exempted from the notification requirement of Article 108(3) of the Treaty only up to the following size thresholds: (a) for electricity generation or storage projects: projects below the applicable threshold set out in Article 5 of Regulation (EU) 2019/943; (b) for renewable based heat generation and renewable gas production technologies: projects below 400 kW installed capacity.

	with a common connection point to the electricity grid shall be considered as one installation.”;	For the purpose of calculating those maximum capacities, small scale installations with a common connection point to the electricity grid shall be considered as one installation.”;
Art. 44 (5)	<p>Tax reductions in favour of energy-intensive businesses defined in Article 17(1), point (a) of Council Directive 2003/96/EC shall be exempted from the notification requirement of Article 108(3) of the Treaty. Beneficiaries under such schemes that are large enterprises shall in addition:</p> <p>(a) comply with the obligation to conduct an energy audit in the sense of Article 8 of Directive 2012/27/EU of the European Parliament and of the Council*, either as a stand-alone energy audit or within the framework of a certified Energy Management System or Environmental Management System, for example the EU eco-management and audit scheme (EMAS); and</p> <p>(b) within [three years] from the moment the reduction is granted to it:</p> <ul style="list-style-type: none"> – implement recommendations of the audit report, to the extent that the pay-back time for the relevant investments does not exceed 3 years and that the costs of their investments are proportionate; or alternatively – invest a significant share of at least 50 % of the amount of the reductions in projects that lead to substantial reductions of the installation’s greenhouse gas emissions. Where applicable, it should lead to reductions well below the relevant benchmark used for free allocation in the EU Emissions Trading System. 	<p>Tax reductions in favour of energy-intensive businesses defined in Article 17(1), point (a) of Council Directive 2003/96/EC shall be exempted from the notification requirement of Article 108(3) of the Treaty. Beneficiaries under such schemes that are large enterprises shall in addition:</p> <p>(a) comply with the obligation to conduct an energy audit in the sense of Article 8 of Directive 2012/27/EU of the European Parliament and of the Council*, either as a stand-alone energy audit or within the framework of a certified Energy Management System or Environmental Management System, for example the EU eco-management and audit scheme (EMAS); and</p> <p>(b) within [three years] from the moment the reduction is granted to it:</p> <ul style="list-style-type: none"> – implement recommendations of the audit report, to the extent that the pay back time for the relevant investments does not exceed 3 years and that the costs of their investments are proportionate; or alternatively – invest a significant share of at least 50 % of the amount of the reductions in projects that lead to substantial well below the relevant benchmark used for free allocation in the EU Emission Trading System reductions of the installation’s greenhouse gas emissions. Where applicable, it should lead to reductions of emissions of other pollutants well below the relevant Union standards, including electrification obligation when the activity foresees combustion of fuels.
	<i>Explanation</i>	
	<p><i>The obligation to conduct an energy audit is quite poor in terms of requirements for large enterprises benefitting of State aids. Instead, more significant obligations able to make the difference in terms of decarbonisation efforts should be foreseen, to squeeze the best value for money and for the common interest by the public purse.</i></p>	

<p>Art. 45</p>	<p>2. The aid shall be granted for investments leading to one or several of the following results:</p> <p>(a) the remediation of environmental damage, including damage to the quality of the soil, surface water or groundwater or to the marine environment;</p> <p>(b) the rehabilitation of natural habitats and ecosystems from a degraded state;</p> <p>(c) the protection or restoration of biodiversity or of ecosystems where those investments contribute to achieving the good condition of ecosystems or to protecting ecosystems that are already in good condition;</p> <p>(d) the implementation of nature-based solutions for climate change adaptation and mitigation.</p> <p>2a. This Article shall not apply to aid to make good the damage caused by earthquakes, avalanches, landslides, floods, tornadoes, hurricanes, volcanic eruptions and wild fires of natural origin that is covered by Article 50 of this Regulation.</p> <p>2b. Aid for rehabilitation following the closure of power plants and mining operations shall not be exempted under this Article from the notification requirement of Article 108(3) of the Treaty.</p> <p>3. Without prejudice to the Union rules on liability for environmental damage, in particular Directive 2004/35/EC of the European Parliament and of the Council*, where the undertaking liable for the environmental damage under the law applicable in each Member State is identified, that undertaking shall finance the works necessary to prevent and correct environmental degradation and contamination in accordance with the 'polluter pays' principle, and no aid shall be granted for the works that the undertaking would be legally required to conduct. The Member State shall take all necessary measures, including legal actions, to identify the liable undertaking and make it bear the relevant costs. Where the entity liable under</p>	<p>2. The aid shall be granted for investments leading to one or several of the following results:</p> <p>(a) the remediation of environmental damage, including damage to the quality of the soil, surface water or groundwater or to the marine environment;</p> <p>(b) the rehabilitation of natural habitats and ecosystems from a degraded state;</p> <p>(c) the protection or restoration of biodiversity or of ecosystems where those investments contribute to achieving the good condition of ecosystems or to protecting ecosystems that are already in good condition;</p> <p>(d) the implementation of nature-based solutions for climate change adaptation and mitigation.</p> <p>2a. This Article shall not apply to aid to make good the damage caused by earthquakes, avalanches, landslides, floods, tornadoes, hurricanes, volcanic eruptions and wild fires of natural origin that is covered by Article 50 of this Regulation.</p> <p>2b. Aid for rehabilitation following the closure of power plants and mining operations shall not be exempted under this Article from the notification requirement of Article 108(3) of the Treaty.</p> <p>3. Without prejudice to the Union rules on liability for environmental damage, in particular Directive 2004/35/EC of the European Parliament and of the Council*, Where the undertaking liable for the environmental damage under the law applicable in each Member State is identified, that undertaking shall finance the works necessary to prevent and correct environmental degradation and contamination in accordance with the 'polluter pays' principle, and no aid shall be granted for the works that the undertaking would be legally required to conduct. The Member State shall take all necessary measures, including legal actions, to identify the liable undertaking and make it bear the relevant costs. Where the entity</p>
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<p>the applicable law cannot be identified or made to bear the costs, in particular because the liable undertaking has ceased to legally exist and no other undertaking can be regarded as its legal successor, or where there is insufficient financial security to meet the costs of remediation, aid may be granted to support the entire project. Aid shall not be granted for the implementation of compensatory measures referred to in Article 6(4) of Council Directive 92/43/EEC**. Aid may be granted under this Article to cover the extra costs necessary to increase the scope or ambition of those measures, beyond the legal obligations under Article 6(4) of Council Directive 92/43/EEC.</p> <p>4. For investments in the remediation of environmental damage or the rehabilitation of natural habitats and ecosystems, the eligible costs shall be the costs incurred for the remediation or rehabilitation works, less the increase in the value of the land or property.</p> <p>5. Evaluations of the increase in the value of the land or property resulting from remediation or rehabilitation shall be carried out by an independent qualified expert.</p> <p>5a. For investments in the protection or restoration of biodiversity and in the implementation of nature-based solutions for climate change adaptation and mitigation, the eligible costs shall be the total costs of the works resulting in the contribution to protecting or restoring biodiversity or in the implementation of nature-based solutions for climate change adaptation and mitigation.</p> <p>6. The aid intensity shall not exceed:</p> <p>(a) 100 % of the eligible costs for investments in the remediation of environmental damage or the rehabilitation of natural habitats and ecosystems;</p> <p>(b) 70 % of the eligible costs for investments in the protection or restoration of biodiversity and in nature-based solutions for climate change adaptation and mitigation.</p> <p>7. The aid intensity for investments in the protection or restoration of biodiversity and</p>	<p>liable under the applicable law cannot be identified or made to bear the costs, in particular because the liable undertaking has ceased to legally exist and no other undertaking can be regarded as its legal successor or mother company, or where there is insufficient financial security to meet the costs of remediation, aid may be granted to support the entire project. Aid shall not be granted for the implementation of compensatory measures referred to in Article 6(4) of Council Directive 92/43/EEC**. Aid may be granted under this Article to cover the extra costs necessary to increase the scope or ambition of those measures, beyond the legal obligations under Article 6(4) of Council Directive 92/43/EEC.</p> <p>3a. Aid shall not be granted where undertakings did not stipulate financial security instruments to meet the costs of remediation before the entering into force of this Regulation. In these cases, the undertaking, its legal successor or mother company shall directly handle all remediation costs.</p> <p>4. For investments in the remediation of environmental damage or the rehabilitation of natural habitats and ecosystems, the eligible costs shall be the costs incurred for the remediation or rehabilitation works, less the increase in the value of the land or property.</p> <p>5. Evaluations of the increase in the value of the land or property resulting from remediation or rehabilitation shall be carried out by an independent qualified expert.</p> <p>5a. For investments in the protection or restoration of biodiversity and in the implementation of nature-based solutions for climate change adaptation and mitigation, the eligible costs shall be the total costs of the works resulting in the contribution to protecting or restoring biodiversity or in the implementation of nature-based solutions for climate change adaptation and mitigation.</p> <p>6. The aid intensity shall not exceed:</p> <p>(a) 100 % of the eligible costs for investments in the remediation of environmental damage</p>
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	<p>in the implementation of nature-based solutions for climate change adaptation and mitigation may be increased by 20 percentage points for aid granted to small undertakings and by 10 percentage points for aid granted to medium-sized undertakings.</p>	<p>or the rehabilitation of natural habitats and ecosystems; (b) 70 % of the eligible costs for investments in the protection or restoration of biodiversity and in nature-based solutions for climate change adaptation and mitigation. 7. The aid intensity for investments in the protection or restoration of biodiversity and in the implementation of nature-based solutions for climate change adaptation and mitigation may be increased by 20 percentage points for aid granted to small undertakings and by 10 percentage points for aid granted to medium-sized undertakings.</p>
	<p style="text-align: center;"><i>Explanation</i></p> <p style="text-align: center;"><i>Directive 2004/35/EC of the European Parliament and of the Council has not been considered as a fit-for-purpose piece of legislation to assess liability issues for the following reasons by EU institutions themselves.</i></p> <p style="text-align: center;"><i>As a matter of fact, the European Court of Auditors as found¹⁹ that “With regards to environmental liability, the Commission’s actions to support Member States’ implementation of the Environmental Liability Directive had not solved key weaknesses, such as unclear key concepts and definitions and the absence of financial security in cases of insolvency. The EU budget is sometimes used to fund clean-up actions, that should under the Polluter Pays Principle have been borne by polluters”.</i></p> <p style="text-align: center;"><i>Additionally, the precited study commissioned by DG Environment has found “that EU polluters are not being made to pay in full – across all pollutants, in all Member States and across all sectors of the economy. The evidence is strongest in the case of air pollution and GHGs and water pollution, for which good data on both costs and emissions is available, but more localised evidence about other forms of environmental damage tells the same story”.</i></p> <p style="text-align: center;"><i>Finally, the Commission has started the evaluation of the ELD and of its implementation and the review of the ELD itself in 2023; it would be incautious to refer to such an old and weak piece of legislation, which could jeopardize an effective enforcement of the polluter pays principle.</i></p> <p style="text-align: center;"><i>To identify liable undertakings, Member States should also consider possible “mother companies” and not only legal successors as responsible for carrying out remediation works.</i></p> <p style="text-align: center;"><i>Insufficient financial security should not automatically lead to the possibility of asking for state aid to not reward reckless behaviours by undertakings.</i></p>	
<p>Art. 46</p>	<p>1. Investment aid for the construction or upgrade of energy efficient district heating and cooling systems shall be compatible with</p>	<p>1. Investment aid for the construction or upgrade of energy efficient district heating and cooling systems shall be compatible with</p>

¹⁹ <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did={65BF4FEB-10FC-4415-99BA-875B7F471BE3}>

<p>the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>1a. Aid shall only be granted for the construction or upgrade of district heating and cooling systems which are or are to become energy efficient. Where the system does not yet become energy efficient as a result of the supported works, the further upgrades required to reach the standard of energy efficiency shall commence within three years from the start of the supported works.</p> <p>1b. Aid shall not be granted for the construction or upgrade of fossil fuel based generation facilities, except for natural gas. Aid for the construction or upgrade of natural gas based generation may be granted only where compliance with the 2030 and 2050 climate targets is ensured.</p> <p>1c. Aid for upgrades of storage and distribution networks that transmit heating and cooling generated based on fossil fuels may only be granted where all of the following conditions are met:</p> <p>(a) the distribution network is or becomes suitable for the transmission of heating or cooling generated from renewable energy sources;</p> <p>(b) the upgrade does not result in an increased generation of energy from fossil fuels except for natural gas;</p> <p>(c) in case of an upgrade to the storage or network distributing heating and cooling generated from natural gas, compliance with the 2030 and 2050 climate targets is ensured.</p>	<p>the energy efficiency first principle, the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>1a. Aid shall only be granted for the construction or upgrade of district heating and cooling systems working on renewable energies which are or are to become energy efficient. Where the system does not yet become energy efficient as a result of the supported works, the further upgrades required to reach the standard of energy efficiency shall commence within three years from the start of the supported works.</p> <p>1b. Aid shall not be granted for the construction or upgrade of fossil fuel based generation facilities, except for natural gas. Aid for the construction or upgrade of natural gas based generation may be granted only where compliance with the 2030 and 2050 climate targets is ensured.</p> <p>1c. Aid for upgrades of storage and distribution networks that transmit heating and cooling generated based on fossil fuels may only be granted where all of the following conditions are met:</p> <p>(a) the distribution network is or becomes suitable for the exclusive transmission of heating or cooling generated from renewable energy sources, thus excluding any blending with fossil energy carriers;</p> <p>(b) the upgrade does not result in an increased generation of energy from fossil fuels except for natural gas;</p> <p>(c) in case of an upgrade to the storage or network distributing heating and cooling generated from natural gas, compliance with the 2030 and 2050 climate targets is ensured.</p>
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<i>Explanation</i>	
<p><i>See previous points on gas (explainer of Art. 1 (av)). We want to add here that there is no legal basis for excluding natural gas from the list of fossil fuels. By keeping it in the scope of this Regulation, there is a serious risk that several Member States will lock themselves in this fossil fuel.</i></p> <p><i>Moreover, alternatives to heating and cooling systems based on fossil fuels are already on the market at competitive prices.</i></p>	
<p>Art. 48</p>	<p>1. Investment aid for the construction or upgrade of energy infrastructure shall be compatible with the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. Aid for energy infrastructure that is partly or fully exempted from third party access or tariff regulation in accordance with internal energy market legislation shall not be exempted under this Article from the notification requirement of Article 108(3) of the Treaty.</p> <p>3. Aid for gas infrastructure shall only be exempted from the notification requirement of Article 108(3) of the Treaty where the infrastructure in question is dedicated to the use for hydrogen and/or for renewable gases, or mainly used for the transport of hydrogen and renewable gases.</p> <p>4. The eligible costs shall be the [total] investment costs.</p> <p>5. The aid intensity may reach up to 100 % of the funding gap, calculated as the difference between the positive and negative cash-flows over the lifetime of the investment and discounted to their current value using the cost of capital.”;</p>
	<p>1. Investment aid for the construction or upgrade of energy infrastructure shall be compatible with the energy efficiency first principle, the internal market within the meaning of Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled.</p> <p>2. Aid for energy infrastructure that is partly or fully exempted from third party access or tariff regulation in accordance with internal energy market legislation shall not be exempted under this Article from the notification requirement of Article 108(3) of the Treaty.</p> <p>3. Aid for gas infrastructure shall only be exempted from the notification requirement of Article 108(3) of the Treaty where the infrastructure in question is dedicated to the use for hydrogen and/or for renewable gases, or mainly used for the transport of hydrogen and renewable gases.</p> <p>4. The eligible costs shall be the [total] investment costs.</p> <p>5. The aid intensity may reach up to 100 % of the funding gap only for projects concerning renewable energy, calculated as the difference between the positive and negative cash-flows over the lifetime of the investment and discounted to their current value using the cost of capital.”;</p>
<i>Explanation</i>	
<p><i>Gas infrastructure is primarily conceived for transporting and using gas. Simply saying that it should be hydrogen-ready, without any provision specifying how the transition should look</i></p>	

	<p><i>like, does not make it cleaner. The Commission should exclude all fossil fuels from this Regulation or, at least, be more precise concerning the phase out of natural gas.</i></p>
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NEW – ANNEX I

Calculations of negative externalities could be made at Member State level by using the following methodologies:

1. DG Environment: Green Taxation and other economic instruments

a. Air pollution

	NH ₃	NMVOC	SO ₂	NO _x			PM2.5		
				Agriculture	Transport	Average	Transport	Electricity	Average
AT	27.8	2.3	16.2	24.3	31.8	28.7	174.9	26.8	53.7
BE	38.2	3.6	17.1	15.1	19.0	18.0	157.8	34.6	81.1
BG	5.6	0	4.2	5.9	8.0	7.0	73.2	7.1	9.2
CY	3.8	0	7.8	4.5	6.4	5.4	40.0	10.9	14.0
CZ	27.4	1.1	11.6	14.8	19.5	17.4	144.7	22.6	35.0
DE	28.1	1.8	17.8	21.6	27.8	25.5	154.5	37.6	68.5
DK	14.0	1.5	11.1	9.6	12.4	11.3	142.2	13.9	25.8
EE	10.5	0.3	6.2	3.4	4.2	3.9	58.1	5.9	8.4
EL	4.8	0.3	6.8	3.1	4.2	3.6	125.9	7.7	14.6
ES	6.4	0.7	7.9	5.1	7.0	6.0	132.5	9.8	20.3
FI	7.0	0.4	5.8	3.5	4.2	3.9	112.8	4.8	10.1
FR	15.4	1.5	15.0	16.2	20.3	19.0	156.5	25.1	42.9
HR	17.9	0.9	8.8	11.4	14.5	13.3	106.8	16.2	21.2
HU	18.9	0.8	10.9	15.8	20.5	18.6	124.8	20.3	33.0
IE	4.1	1.7	13.6	10.1	13.5	12.1	248.0	13.6	29.6
IT	21.6	1.1	14.0	15.1	18.4	17.7	141.7	21.1	46.2
LV	8.7	0.4	5.6	4.4	5.5	5.1	107.6	5.7	9.6
LT	7.9	0.6	7.3	7.1	9.6	8.4	101.3	7.7	13.9
LU	60.0	6.2	31.7	38.4	48.3	45.7	212.0	63.7	111.8
MT	6.4	0.4	5.0	1.4	1.9	1.7	44.8	6.2	8.5
NL	30.0	2.8	21.5	15.3	19.8	18.2	144.1	37.3	81.3
PL	14.4	0.7	9.0	8.9	11.2	10.4	104.1	16.3	27.9
PT	4.3	0.5	5.1	1.7	2.4	2.0	112.5	5.2	21.2
RO	9.4	0.5	8.1	11.2	15.4	13.3	86.8	12.4	20.9
SE	10.6	0.7	6.8	6.0	7.4	6.9	127.0	6.2	17.6
SI	23.8	1.2	10.0	13.7	17.5	15.9	63.9	16.0	26.7
SK	24.4	0.7	11.1	14.7	19.5	17.3	76.9	18.4	28.3

Table 1: Costs per kg/year of air pollutants by pollutant, sector and Member State (€, 2016 prices)

b. Water pollution

MS	AT	BE	BG	CZ	DE	DK	EE	IE	EL
N surplus	0.88	6.00	0.20	1.40	2.33	2.99	0.45	1.23	0.77
P	1.19	4.35	0.32	0.94	2.02	2.54	0.24	0.93	0.73

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International non-profit association • Association internationale sans but lucratif (AISBL) • EC register for interest representatives:
ID number: 06798511314-27 • BCE ID number: 0415.814.848 • RPM Tribunal de l'entreprise francophone de Bruxelles

MS	ES	FR	HR	IT	CY	LV	LT	LU	HU
N surplus	0.85	1.75	1.15	1.89	1.40	0.16	0.15	3.72	0.33
P	0.90	1.22	0.51	2.13	0.87	0.23	0.28	3.10	0.67
MS	MT	NL	PL	PT	RO	SI	SK	FI	SE
N surplus	2.72	5.71	0.59	0.82	0.30	0.58	0.61	0.16	0.27
P	2.16	4.93	0.70	1.00	0.45	0.91	0.89	0.21	0.31

Table 2: Costs in €/kg/year of water pollution by pollutant and Member State

2. European Environmental Agency: Cost of air pollution from European industrial facilities 2008-2017 (ETC/ATNI report 04/2020²⁰)

a. Air pollution

	NO _x (VSL)	PM _{2.5} (VSL)	PM ₁₀ (VSL)	SO ₂ (VSL)	VOC (VSL)	NH ₃ (VSL)
AT	75 653	227 195	147 529	113 123	8 225	75 210
BE	67 360	512 037	332 491	159 275	7 953	162 757
BG	39 745	309 647	201 070	46 368	2 791	57 968
CY	15 125	48 390	31 422	18 212	889	14 690
CZ	49 078	282 451	183 409	71 227	8 138	131 597
DE	74 611	266 647	173 147	116 457	5 721	90 380
DK	25 273	124 113	80 593	54 274	1 483	25 429
EE	6 947	26 735	17 360	6 789	508	12 426
EL	26 639	145 705	94 614	36 550	3 480	40 964
ES	42 076	201 671	130 955	71 915	3 611	22 620
FI	14 457	65 365	42 445	17 104	634	13 494
FR	63 549	208 191	135 189	111 252	6 209	42 489
HR	59 756	192 306	124 874	79 013	5 231	59 766
HU	68 822	261 548	169 836	77 634	4 795	74 032
IE	29 780	50 219	32 609	77 934	1 779	15 412
IT	108 056	592 650	384 838	93 755	15 641	92 536
LT	18 333	62 144	40 353	25 598	648	20 409
LU	71 925	247 472	160 696	150 220	4 639	82 699
LV	19 089	98 627	64 043	28 699	666	16 887
MT	7 159	150 194	97 529	17 077	2 487	87 032
NL	79 355	294 599	191 298	135 753	6 051	112 094
PL	26 911	129 265	83 938	42 598	3 070	70 230
PT	31 399	234 012	151 956	35 283	2 221	25 279
RO	52 360	217 324	141 119	61 831	3 747	48 566
SE	18 595	53 538	34 765	20 188	933	17 332
SI	84 337	373 078	242 259	93 509	10 127	80 286
SK	50 172	233 434	151 580	60 571	5 753	104 013

²⁰ <https://www.eionet.europa.eu/etcs/etc-atni/products/etc-atni-reports/etc-atni-report-04-2020-costs-of-air-pollution-from-european-industrial-facilities-200820132017>

Table 3: Overall marginal damage costs of major air pollutants including impacts on health, crops and forests and material damage in €2019/tonne of pollutant

Climate change avoidance costs in €/tCO₂ equivalent (€2019 prices)	
Short and medium term (until 2030):	Longer term
Central: 105 – High: 254	Central: 283 – High: 524

Table 4: Climate change avoidance costs in €/tCO₂ equivalent (€2019 prices)

NOTE: The high estimate scenario is to be used if the Member State is either not on track with its RES targets, has not enacted in law a coal phase out by latest 2030, nor a fossil gas phase out by latest 2035. Where the share of RES in electricity production exceeds 80%, the central estimate may be used.

Pollutant	
Arsenic	11 044
Cadmium	185 175
Lead	32 531
Mercury	16 903
Dioxins / Furans (TCDD equiv.)	60.1 million

Table 5: Marginal damage costs of heavy metals and organics for European emissions (€2019 per kg pollutant emitted to air)

	1,3 Butadiene	Benzene	Formaldehyde	Benzo[a]Pyrene	Chromium hexavalent	Nickel
AT	1.31	0.36	0.25	6 804	3 128	24.3
BE	2.17	0.59	0.42	11 231	5 163	40.1
BG	0.72	0.20	0.14	3 746	1 722	13.4
CY	0.87	0.24	0.17	4 511	2 074	16.1
CZ	1.32	0.36	0.25	6 684	3 131	24.3
DE	1.96	0.53	0.38	10 124	4 655	36.1
DK	0.65	0.18	0.12	3 343	1 537	11.9
EE	0.36	0.10	0.068	1 844	848	6.6
EL	0.75	0.20	0.14	3 888	1 787	13.9
ES	0.74	0.20	0.14	3 810	1 752	13.6
FI	0.36	0.10	0.068	1 844	848	6.6
FR	1.56	0.42	0.30	8 082	3 716	28.8
HR	1.29	0.35	0.25	6 684	3 073	23.8
HU	1.24	0.34	0.24	6 441	2 961	23.0
IE	0.67	0.18	0.13	3 464	1 592	12.4
IT	1.41	0.38	0.27	7 318	3 364	26.1
LT	0.43	0.12	0.083	2 235	1.336	10.4
LU	1.57	0.43	0.30	8 101	3 725	28.9
LV	0.56	0.15	0.11	2 905	1 027	8.0
MT	0.49	0.13	0.09	2 540	1 168	9.1
NL	2.31	0.63	0.44	11 965	5 501	42.7

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PL	1.14	0.31	0.22	5 894	2 710	21.0
PT	0.77	0.21	0.15	3 977	1 828	14.2
RO	0.86	0.23	0.16	4 436	2 039	15.8
SE	0.58	0.16	0.11	3 021	1 389	10.8
SI	1.29	0.35	0.25	6 684	3 073	23.8
SK	1.22	0.33	0.23	6 330	2 910	22.6

Table 6: European and country-specific marginal damage costs of heavy metals (€2019 per kg pollutant emitted to air, central values)

3. Contacts

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