

Consultation on the Revised Climate, Environment and Energy Aid Guidelines post-2022

ClientEarth's comments on the draft CEEAG

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Acronyms

| | |
|-----------------|--|
| CCS / CCU | Carbon Capture and Storage / Carbon Capture and Usage |
| CEP | Clean Energy Package for All Europeans |
| CHP | Combined Heat and Power |
| CJEU | Court of Justice of the European Union |
| CRM | Capacity Remuneration Mechanism |
| EEAG | State Aid Guidelines for Environmental Protection and Energy |
| EED | Energy Efficiency Directive (EU) 2018/2002 |
| EE1st principle | Energy Efficiency First Principle |
| EIU | Energy Intensive User |
| EMD | Electricity Market Directive (EU) 2019/944 |
| EMR | Electricity Market Regulation (EU) 2019/943 |
| ETD | Energy Taxation Directive 2003/96 |
| EU | European Union |
| GBER | General Block Exemption Regulation |
| PCI | Project of Common Interest |
| PPA | Power Purchase Agreement |
| REC | Renewable Energy Community |
| REDII | Renewable Energy Directive (EU) 2018/2001 |
| RES | Renewable Energy Sources |
| RFNBO | Renewable fuel of non-biological origin |
| TEU | Treaty on the European Union |
| TFEU | Treaty on the Functioning of the European Union |
| WFD | Waste Framework Directive 2008/98/EC |
| ZEEV | Zero Emission Electric Vehicles |

ClientEarth is a not-for-profit environmental law organisation comprising legal, scientific, policy, and communications experts working to shape and enforce the law to tackle environmental challenges. For several years, ClientEarth has been advocating for State aid rules to align with environment and climate protection objectives that are now contained in the European Green Deal and for an effective internalisation of pollution costs.

We welcome the opportunity to comment on the draft Climate, Environment and Energy State Aid Guidelines (CEEAG). We generally find that the CEEAG are more complete and stronger than the 2014 EEAG towards a higher level of environmental protection including decarbonisation of the energy sector. Nevertheless, we see room for improvement in several sections, that seem to have yielded to political compromises over much needed environmental protection ambitions.

This note contains an annex, which encompasses our proposals of amendments to the draft CEEAG. Amendments to the draft CEEAG text are explained hereunder whenever such are necessary. For a full understanding of ClientEarth's feedback, this note and the annex should therefore be read in conjunction.

1. General and cross-sectional remarks

1.1 The Union's environmental protection ambitions should suffer no compromise

Placing the CEEAG under the headings of the European Green Deal's objectives and the Union's climate targets for 2030 and 2050, as adopted under the European Climate Law, is both welcome and necessary.

ClientEarth welcomes the strong and necessary focus on decarbonisation in the draft CEEAG. Broader environmental issues should however not fade into the background. Negative environmental impacts on nature and human health cannot be resolved unless they are tackled *per se* and together with climate change.¹

In order to be **consistent** with other policy and regulatory objectives, as well as truly **future-proof**, the CEEAG must also integrate (i) the Energy Efficiency First principle (see section 1.3 below), (ii) the energy solidarity principle² (see section 1.4 below), (iii) the Union's renewable energy sources and energy efficiency targets for 2030, (iv) the objective to phase out fossil fuels and other environmentally harmful subsidies, as well as (v) the increased level of ambition proposed in the Fit for 55 package presented on 14 July 2021, including increased targets for energy efficiency and strengthened emissions reductions targets in the Effort Sharing Regulation for buildings, road and domestic maritime transport, agriculture, waste and small industries.

¹ See e.g. IPBES, [Tackling biodiversity & climate crises together and their combined social impacts](#) (June 2021)

² Case C-848-19P, 15 July 2021, *Germany v. Commission (OPAL)*, ECLI:EU:C:2021:598

Aid measures notified by Member States under the CEEAG must be consistent with and actively contribute to reaching these principles, targets and objectives. No aid measure should allow a Member State to slow down its own and the Union's trajectory towards meeting them, according to their obligations of sincere cooperation and solidarity. When trade-offs need to be made to take into account different areas and policies, environmental and human health protection requirements must prevail in the assessment.

1.2 Compliance with relevant Union law should include at least environmental protection and energy laws and principles

ClientEarth welcomes in principle that the CEEAG require that aid measures and activities of aid beneficiaries comply “with relevant Union law” (point 32). Nonetheless as we expressed in several occasions³, we believe that **environmental law compliance is a prerequisite** for aid to any projects including in the energy sector, as held by the Court of Justice in *Austria v. Commission*.⁴ The word “relevant” in point 32 suggests that the Commission or the Member States may be (allowed to be) selective in their control depending on the purpose and conditions of the aid measure, e.g. checking only compliance with energy law for energy aid measures whereas building energy infrastructure, just for one example, must obey environmental legislation as well.

Whereas we appreciate that not all Union law can be checked for every aid measure and aid beneficiary, the Commission and the Member States, under their duty of sincere cooperation (Article 4(3) TEU), should not compromise with verifying and ensuring **systematic compliance of activities with environmental law and principles**. ClientEarth cannot imagine that the Commission can pretend that the CEEAG aim at pursuing a higher level of environmental protection if the basic requirements of legal compliance of aid beneficiaries is not strictly enforced. By contrast, point 49 of the new Regional Aid Guidelines post-2022⁵ specifies that environmental legislation must be complied with, including the need to conduct environmental impact assessments when required by law; point 52 of the Agriculture and Forestry Aid Guidelines for 2014-2020⁶ refer to Article 11 TFEU and require that Member States identify the negative environmental impacts of their aid measures, as well as justify compliance of projects with Union law in their notification files.

³ The Hinkley Point C ruling: Why and how the Commission must implement the Green Deal in State aid rules (March 2021), at: <https://www.clientearth.org/latest/documents/why-the-hinkley-point-c-ruling-obliges-to-implement-the-green-deal-in-state-aid-practice/>;

ClientEarth's reply to the roadmap on the CEEAG (January 2021), at: <https://www.clientearth.org/latest/documents/revision-of-the-state-aid-guidelines-for-environmental-protection-and-energy-and-exemption-rules/> ;

Competition policy supporting the Green Deal: Our call for a sustainable competition policy (November 2020), at: <https://www.clientearth.org/latest/documents/competition-policy-supporting-the-green-deal/>;

A State Aid Framework for a Green Recovery: Mainstreaming climate protection in EU State aid law (October 2020), at: <https://www.clientearth.org/latest/documents/a-state-aid-framework-for-a-green-recovery-mainstreaming-climate-protection-in-eu-state-aid-law/>

⁴ Judgement of 22 September 2020, Republic of Austria v European Commission, C-594/18 P, ECLI:EU:C:2020:742, para. 44-45 and 100

⁵ OJ C 153/1, 24.4.2021

⁶ OJ C 204, 1.7.2014, p. 1–97

We thus propose to add a second paragraph to point 32 as follows:

In light of Articles 11, 191 and 194 TFEU, and Article 37 EU Charter of Fundamental Rights, compliance with Union environmental law and principles is of particular importance for achieving the environmental protection and energy policy objectives pursued by the aid measures notified under these guidelines. Therefore, the Commission will systematically control, in particular, compliance of the activities supported and aid measures notified under these guidelines with Union environmental law and principles. State aid notifications should provide information demonstrating that the aid measure or supported activity will not result in an infringement of applicable Union environmental protection legislation.

For the sake of consistency, the same clause should be replicated in the GBER, the Communication on aid to IPCEI, the R&D&I aid guidelines – that all are under revision – as well as across all State aid frameworks.

Practically, we keep on recommending that aid measures **notification forms be amended** in order to require Member States to provide due evidence of compliance of aid beneficiaries with Union law and more specifically, environmental and energy law. The Commission is well-equipped to establish a checklist, as called for by the European Parliament as well in its amendment to the proposal to amend the Aarhus Regulation. Example can be taken of Annex II of the Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation.⁷

Beyond the wording in the CEEAG, we anticipate that much will depend on the Commission’s actual practice. We believe that the Commission as a whole, by **involving relevant services at an early stage**, should be able to perform an adequate and in-depth control of Union law compliance, as well as verifying whether aid measures can lead to environmental harm beyond mere legal compliance. To make this control really effective, we recommend that:

- Union law compliance under point 32 CEEAG should be **one of the first criteria to be assessed**: since an aid cannot be declared compatible with the internal market if the beneficiary activities breaches Union law, and since this assessment does not leave any margin of discretion to the Commission because it is an objective criterion, there is no need to assess the other compatibility criteria if that one is not met.
- **Relevant Commission’s services should be involved as early as possible** in the assessment when a Member State pre-notifies or notifies an aid scheme, both in order to leave them enough time to conduct the assessment and in order not to delay the preliminary examination procedure by information requests to the Member State arising at a late stage.
- **Supporting documentation and evidence** that the Member State would (be required to) provide should be communicated to the relevant services in order to ensure they can make an appropriate assessment, and identify what would need to be specifically monitored, if anything, after the aid measure is authorised by the Commission to ensure that it keeps on complying with Union law.

⁷ Commission notice of 12 February 2021, C(2021) 1054 final

We appreciate that the degree of control may differ for individual aid measures and for aid schemes, the latter involving a higher degree of complexity given that the number (which may be large) and identity of aid beneficiaries may be unknown when the scheme is notified. We propose that:

- Aid to individual undertakings, or to a known limited number of beneficiaries, should be subject to an **in-depth control** by the Commission of compliance with Union law as per point 32. When the notification takes place before the projects are finalised, the Commission must either **withhold its decision** until all evidence has been satisfactorily submitted, or the grant of aid must be subject to a **condition precedent** of compliance – which the Member State must report on **before they pay** the aid.
- Aid schemes to a very large number of beneficiaries or when those are unknown, must equally be subject to a **condition precedent** of the Member State being satisfactorily convinced that the activity does not breach Union law.
- For all aid measures, the payment of aid under a scheme must also be subject to a resolutive condition, thus to **recovery**, should the activity actually breaches Union law.

1.3 Placing aid in the energy sector under the overarching EE1st principle

As the Commission itself puts it: “*The cheapest and cleanest energy is the energy we don’t use.*”⁸

Surprisingly, the Energy Efficiency First principle (EE1st principle) is not mentioned anywhere in the draft CEEAG whereas “*It is recognised as a guiding principle of the Union energy policy*” to ensure we only produce the energy we really need.⁹ The EE1st principle is a key pillar of the Energy Union, aiming to ensure secure, sustainable, competitive and affordable energy supply.¹⁰ It must be, as per the Governance of the Energy Union Regulation, driving the EU institutions’ decisions and legislation as well as Member States’ energy planning, policy and investment decisions (notably for energy security, energy infrastructure and market integration decisions).¹¹ The Energy System Integration Strategy released in July 2020 also insists on applying the EE1st principle consistently across the whole energy system.¹²

The EU is likely to meet its 2020 energy efficiency target only because of the covid-19 pandemic¹³ and risks not reaching the 2030 target. The proper and systematic implementation of the EE1st principle is

⁸ Fit for 55 package “Q&A on Making our Energy Systems fit for our Climate Targets”, question 1

⁹ As outlined in the European Green Deal, the EU strategy on Energy System Integration, the EU Renovation Wave and the Commission’s proposal for a recast of the Energy Efficiency Directive presented in the Fit for 55 package (COM(2021) 558 final 2021/0203 (COD), p. 2)

¹⁰ See this [European Parliament’s factsheet on energy efficiency](#).

¹¹ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, OJ L 328, 21.12.2018, p. 1–77, recital (64) and Article 2(18)

¹² Communication from the Commission, Powering a climate-neutral economy: An EU Strategy for Energy System Integration, COM(2020) 299 final, page 5

¹³ Communication from the Commission, Stepping up Europe’s 2030 climate ambition Investing in a climate-neutral future for the benefit of our people, COM/2020/562 final

necessary to reduce that gap. As a matter of consistency, the revision of the State aid framework should reflect: the Green Deal objectives, the provisions of the Clean Energy Package, as well as the Commission's "Fit for 55" legislative package which sets a legal basis for the application of the EE1st principle.¹⁴ The CEEAG should also align with the approach promoted in other frameworks, e.g. the revised TEN-E Regulation which requires to consider the EE1st principle in the development and assessment of projects of common interest, EU funding requirements such as for InvestEU, for which the climate proofing requirements include to *"firmly integrate the EE1st in the project design, options analysis and cost-benefits analysis"* and more generally into the project development cycle.¹⁵ The revised CEEAG should therefore reinforce this principle and its full implementation by Member States and the EU institutions.

Applying the EE1st principle goes far beyond promoting granting of State aid for energy efficiency. As per the principle, *"Energy efficiency solutions should be considered as the first option in planning and investment decisions, when setting new rules for the supply side and other policy areas"* and *"To contribute to the creation of a single market, all Member States, National Regulatory Authorities, transmission and distribution system operators should apply the 'Energy Efficiency First' principle and remove all regulatory, technical and non-regulatory measures for energy efficiency improvements in the operation of energy net"*.¹⁶

First, it implies that Member States shall consider as a matter of priority whether cost-efficient, technically, economically and environmentally sound alternative energy efficiency measures could replace in whole or in part the envisaged measures, whilst still achieving the objectives of the respective decisions. In accordance with Article 2(18) of the Governance Regulation, this includes, in particular, the treatment of energy efficiency as a key consideration in future investment decisions on energy infrastructure and in decisions on measures to ensure security of supply *"by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy"*. As outlined by the Commission, *"Member States should take into account potential benefits from demand side flexibility in applying the energy efficiency first principle and where relevant consider demand response, energy storage and smart solutions as part of their efforts to increase efficiency of the integrated energy system"*.¹⁷ Demand side flexibility, including demand response, has indeed many benefits including reducing peak demand and the need for generation and transmission capacity¹⁸, thus improving efficiency of energy systems and reducing energy costs. Demand response should therefore be considered beyond the context of aid for security of supply.¹⁹

¹⁴ Article 3 of the Proposal for a Directive on energy efficiency (recast), COM(2021) 558 final, 2021/0203 (COD)

¹⁵ Commission Notice Technical guidance on the climate proofing of infrastructure in the period 2021-2027, 29 July 2021, C(2021) 5430 final, pp. 6, 10 and 11

¹⁶ Commission's proposal for a recast of the Energy Efficiency Directive presented in the Fit for 55 package, COM(2021) 558 final 2021/0203 (COD), pp. 3 and 13 (we highlight)

¹⁷ Preamble, para. 14 of the Commission's proposal for a Directive on energy efficiency (recast), COM(2021) 558 final, 2021/0203 (COD)

¹⁸ Para. 275 of the Staff Working Document accompanying the Final Report of the Sector Inquiry into capacity mechanism.

¹⁹ We refer to the Regulatory Assistance Project's reply to the CEEAG consultation and their proposals in this respect. In addition, as recognised by the Commission in the staff working document accompanying the report of the 2015-2016 Sector Inquiry into Capacity Mechanisms: *"(462) [...] differences may be justified since they help support the development of demand response and should allow it to play an increasingly significant role in the electricity markets of the future. This discrimination in favour of demand response in particular may be justifiable because it is a lack of demand response that contributes to the market failures targeted by a capacity mechanism. By targeting the long term development of demand response, a capacity mechanism can therefore help to ensure the market develops so that the mechanism is not required in the longer term. However, any different treatment between*

Therefore, Member States should clearly demonstrate the reasons why cost-efficient, technically, economically and environmentally sound alternative energy efficiency and/or demand response measures cannot be expected to replace in whole or in part the envisaged measure, taking into account on-going market and technology developments.

Second, as suggested by the Commission, the EE1st principle should not only apply to energy systems, but also to non-energy sectors, where those sectors have an impact on energy consumption and energy efficiency.²⁰

ClientEarth therefore recommends that:

- (i) the **EEAG define what the EE1st principle implies for Member States** in terms of comparison between alternative energy measures and obligations to justify why energy efficiency and demand response measures cannot apply (in line with Article 2(18) of the Governance Regulation and the Commission's implementation guidelines in preparation);
- (ii) The **EE1st principle be used as a priority baseline** for assessing whether a measure in the energy sector **is necessary**, in particular:
 - a. Aid measures for energy production (Section 4.1)
 - b. Aid for security of supply, notably in the context of capacity remuneration mechanisms (Section 4.8)
 - c. Aid to energy infrastructure (Section 4.9)

This would imply that notification forms contain a field on the conformity of the aid measure in the energy sector with this principle.

- (iii) With regard to schemes for energy efficiency (e.g. technology specific tender under the first aid category), the improvement of the energy and environmental performance of building or for district heating and cooling, **the EE1st principle should be integrated into the rationale of such measures**. The possibility to grant aid to district heating networks that are not 'efficient' foreseen under Section 4.10 (see our comments on that section below) should be assessed on a case by case basis and always duly considering the EE1st principle.

Lastly, we stress that the CEEAG must implement the EE1st principle and the Commission must assess energy measures against compliance with this principle immediately: the principle is already set in Union legislation and policies. Its possible inclusion in the recast Energy Efficiency Directive and the expected Commission's interpretative guidance will be useful additions but are not necessary for an **effective and immediate application** of the EE1st principle in State aid law.

capacity providers needs to be carefully considered to avoid any unjustifiable discrimination" "(471) Because of the long term benefits of demand response, some differentiation in obligations and penalties between generation and demand response is justifiable in the short term to enable the development of demand response."

²⁰ Article 3 of the Commission's Proposal for a Directive on energy efficiency (recast), COM(2021) 558 final, 2021/0203 (COD)

1.4 Energy solidarity principle

The **principle of solidarity** is a general principle of EU law. It can be found across EU primary law, including the preamble to the TEU (*“Desiring to deepen the solidarity between their peoples while respecting their history, their culture and their traditions”*), Article 2 TEU, which links it to the values of the EU, and Article 3 TEU, which places it among the aims of the EU (*“[The Union] shall promote economic, social and territorial cohesion, and solidarity among Member States”*). The principle of solidarity is also mentioned in EU primary law in respect to different areas of EU policy.²¹

The **principle of energy solidarity** is the specific expression of the principle of solidarity in the field of energy. It emanates from Article 194 TFEU. This provision states that the Union’s policy on energy should pursue its objectives *“in a spirit of solidarity between Member States”*. In this context it is worth reminding that the objectives EU energy policy should pursue, in a spirit of solidarity, are to: *“(a) ensure the functioning of the energy market, (b) ensure security of energy supply in the Union; (c) **promote energy efficiency and energy saving and the development of new and renewable forms of energy**; and (d) promote the interconnection of energy networks.”*

The **nature, scope and derived obligations** of the energy solidarity principle were clarified by the CJEU in case T-883/16²² and recently on appeal in C-848/19 P²³ (the “OPAL judgment”). The OPAL judgment confirmed that the energy solidarity principle produces **binding legal effects on the Union’s institutions** and on the Member States²⁴ and that **acts adopted by EU institutions**, including the Commission, **shall be interpreted and legally assessed in the light of this principle**.²⁵ The OPAL judgment also made clear that the energy solidarity principle binds the EU and the Member States not only for security of supply, but **for all objectives of the Energy Union**²⁶, including the objective of **promoting energy efficiency and the development of renewable energies**.²⁷

The energy solidarity principle *“entails rights and obligations both for the European Union and for the Member States, the **European Union being bound by an obligation of solidarity towards the Member States** and the Member States being bound by an obligation of solidarity between themselves and with regard to the common interests of the European Union and the policies pursued by it.”*²⁸ In order to comply with their solidarity obligation, the **EU institutions must**, in the exercise of their respective competences in EU energy policy, **take into account the interests of all stakeholders potentially affected**, by avoiding the adoption of measures that might affect their interests, and do so in order to take account of

²¹ For example, the principle of solidarity acts as one of the guiding principles of the Union’s external actions (Art. 21(1) TEU.)

²² ECLI:EU:T:2019:567

²³ ECLI:EU:T:2021:598

²⁴ OPAL judgment, para 38

²⁵ Ibid, para 44

²⁶ Ibid, para 47

²⁷ TFEU, Art. 194(1)(c)

²⁸ OPAL judgment, para 49

their interdependence and *de facto* solidarity²⁹. The energy solidarity principle also requires to balance the various **interests affected wherever there is a conflict between them**.³⁰

In the OPAL case, the Court found the Commission's decision to be in breach of the energy solidarity principle because it failed to identify its potential impact on the interests of Member States, to take such interests into account, and to balance them with the main purpose of the decision. In particular, the Court noted that the **principle of energy solidarity was only not mentioned**, but also that the **decision itself did not disclose that an examination of the principle had been carried out**.³¹ Indeed, the Commission **did not assess the consequences of its decision** on a particular Member State, and thus did not balance such consequences against the main purpose of the decision.³² The Court also specified that the **Commission will have to gather information *motu proprio*** in order to ensure that the examination of the energy solidarity principle is carried out correctly.

Based on the Court's interpretation of the energy solidarity principle, this principle will be **relevant at two different levels** for State aid:

- (i) **At Member State level**: Member States are bound by the energy solidarity principle and must take into account the interests of the Union and of the other Member States when adopting State aid measures that are part of energy policy. Therefore when reviewing compliance of aid with Union law (point 32), the Commission **need to verify Member States duly took the energy solidarity principle into account** when designing an energy aid measure.
- (ii) **At EU level**: The Commission **will have to undertake an examination of the energy solidarity principle in its State aid decisions** relating to energy. Given that this general principle of EU law constitutes a criterion for assessing the legality of measures adopted by the Commission³³, it will be crucial to set a robust and transparent process to ensure its correct examination. In this respect, we suggest that the Commission:
 - Duly **reflects the energy solidarity principle across the CEEAG**, in particular for assessing the legal compliance, necessity and appropriateness of an aid measure, to provide clarity and avoid unnecessary litigation about this principle.
 - Establishes a **solid and transparent mechanism to guarantee compliance with the energy solidarity principle in its State aid decisions**. In particular, such mechanism shall provide a formal procedure that ensures (i) that sufficient information on the affected interests of the Union and Member States is systematically gathered by the Commission, (ii) that an assessment of the impacts of the State aid decision on the different interests is carried out, and (iii) that a balancing exercise is undertaken wherever there is a conflict between the interests. The provisional examination of the energy solidarity principle that

²⁹ Ibid, para 71

³⁰ Ibid, para 73

³¹ Case T-883/16, para 79

³² Ibid, para 82

³³ Ibid, para 54

the Commission has been carrying out in the last year regarding fossil gas exemption decisions³⁴ will not suffice to ensure a correct examination of the principle as required by the OPAL decision.

The energy solidarity principle binds EU institutions and Member States in respect to all the objectives of the Energy Union, which includes the Union's objective of promoting energy efficiency and renewable forms of energies, embodied in the Union's energy efficiency and renewable energy targets. These targets can be especially impacted by State aid decisions regarding fossil gas projects (which we discourage, since their alleged support to renewable energy integration can also be provided by cleaner alternatives such as demand-side response and storage), or indiscriminate support to hydrogen projects (which present low energy conversion efficiency). We therefore recommend the Commission to **be especially careful when examining the energy solidarity principle and undertaking the balancing of impacts of energy-related State aid measures to ensure that the interest of the Union and the Member States of promoting energy efficiency and renewable energy is not harmed by jeopardising the attainment of the corresponding targets.**

1.5 Making public consultations effective tools to design adequate aid schemes

ClientEarth strongly supports in principle the new public consultation requirements applying for greenhouse gas reduction measures (Section 4.1.3.4) and security of supply measures (Section 4.8.4.4). Public consultations can certainly, if conducted seriously by the Member States, help them design aid schemes that are genuinely necessary, appropriate, proportionate and not unduly distortive of competition.

This new requirement comforts the good practices of Member States that already conduct public consultations on aid schemes, since that would in fact not put a new obligation on them. We believe it should help accelerating the pre-notification and notification procedures, by **informing the Commission better on the facts, compliance and impacts of the aid measures.**

ClientEarth would welcome that public consultations requirements also apply to schemes falling within the scope of the revised GBER, otherwise they won't take place for many aid measures, in particular in Member States putting in place schemes of smaller budgets whilst having few operators and thus an important risk that schemes distort competition on their territories.

We also stress that public consultations organised under environment protection legislation such as for permits or environmental impact assessments do not address whether or how a project would receive public financial support, hence **consultations conducted under environmental law are not a substitute to those proposed under the CEEAG.** We have no objection against Member States combining environmental consultations and State aid consultations into a single process to smoothen procedures and not to delay projects, so long as all relevant questions are asked in a distinct manner and that all

³⁴ Vid. Commission Decision C(2020) 8377 final of 25 November 2020 (*Alexandroupolis*), Commission Decision C(2020) 8948 final of 8 December 2020 (*South Hook LNG Terminal*)

respective requirements (scope, timelines etc.) are complied with.³⁵ In this respect, the Commission could offer to provide assistance to the Member States, notably during the early stages of application of the CEEAG, to ensure that public consultations documents are complete and reflect all the new requirements in the CEEAG.

We recommend to **extend public consultations to other aid categories** and in particular to energy efficiency (4.2), clean mobility (4.3), resource efficiency (4.4), prevention and reduction of pollution (4.5), energy infrastructure (4.7), district heating and cooling (4.10) and coal, peat and oil shale activities closure (4.12): such schemes can also be highly distortive of competition and, based on the current draft CEEAG and could be supporting technologies that are not the cleanest as per current or expected market developments. Hence, stakeholders should be able to present why cleaner technologies would be more competitive or should also benefit from support when a scheme is being designed. *“Otherwise, our competition rules will fall short and fail to do justice to the interests of the very parties to considered to be at the heart of the new climate legislative impetus.”*³⁶

In order to be truly effective tools to achieve these objectives, ClientEarth proposes the following improvements to the draft CEEAG:

1. **Public consultations should apply to all schemes**, even if their scope or eligibility are not amended. The derogation in points 85 and 306 should thus be removed. Stakeholders should precisely be able to comment on the distortive effect of a scheme that has an inappropriate scope or eligibility conditions that is not being improved.
2. **The derogation at points 86 and 307 should also be removed**: competitive bidding processes being the allocation rule for greenhouse gas reductions measures and security of supply measures, public consultations would too rarely apply. It is also largely expected (and hoped) that very few of those schemes would include fossil fuel based energy production, since they are supposed to be decarbonisation measures and, for security of supply measures, at least be aligned with the Union’s climate targets! The eligibility of fossil fuels or not can influence whether the scheme is distortive of competition in either direction, depending on its purpose and design, so that is also not a relevant factor to determine whether a consultation should or not occur. Furthermore, a competitive bidding process is not less distortive of the market because the scheme is less costly overall; it rather depends on the size of the market (especially in smaller Member States) and its design.
3. We are particularly supportive of the items that consultations should cover, listed under points 85(a) and 306(a). **All these items should equally apply for aid schemes below EUR150 million per year** (EUR100 million for security of supply measures) for the following reasons:

³⁵ This might not be practicable though when the consultation under the CEEAG concerns a scheme whereas environmental permits or EIAs relate to individual projects.

³⁶ Leigh Hancher’s blog [“Pre- notifications, Preliminary Investigations and the Rights of Third Parties in State Aid Procedures – Beware of the Black Hole!”](#), 29 July 2021

- a. item (ii) relating to the estimate of subsidy per tonne of CO₂ equivalent emissions avoided is a crucial feature of the schemes since their very purpose (in particular for greenhouse gas reduction measures) is decarbonisation. Since point 98 requires that “*the subsidy per tonne of CO₂ equivalent emissions avoided must be estimated for each beneficiary or reference project*”, there is no valid reason why the results should not be communicated in all public consultations.
 - b. items (iv) and (v) relating to the aid allocation process and the assumptions underlying the necessity, proportionality and incentive effect of the aid schemes are crucial to determine whether the schemes comply with the criteria. Consultations on schemes below EUR100 or 150 million that do not include these questions would be pointless.
 - c. For security of supply measures, stakeholders should also be consulted on cost-recovery methodologies.
4. Consultations must be open to all stakeholders established in the EU (or the EEA), since they may be affected by the grant of aid in another Member State than where they are established. This is required in particular for capacity mechanisms, since stakeholders of neighbouring Member States must be consulted, in accordance with Article 21(2) Regulation (EU) 2019/943.

Lastly, we fail to understand what “duly justified exceptional circumstances” would allow a Member State not to organise a consultation on this type of schemes that require long preparation and are never granted in emergency, whilst aid beneficiaries’ genuine business secrets enjoy protection in any case. This derogation should be removed.

1.6 Aid to fossil gas is not compatible with the internal market

1.6.1. The draft CEEAG erroneously identifies fossil gas as a transition fossil fuel

The International Energy Agency (IEA) has clearly signaled that the net-zero by 2050 pathway requires the immediate and massive deployment of renewables and no more investments in fossil fuels.³⁷ Similarly, in the framework of the 8th Environment Action Program, the European Parliament has recently called for the phase out of all direct and indirect fossil fuel subsidies by 2025.³⁸ The Union’s aspiration to phase out fossil fuel subsidies has been present in State aid frameworks for more than a decade. Ending fossil fuel subsidies would free up resources to be invested in energy efficiency measures and renewables.

Yet, throughout the draft CEEAG, **fossil gas is being treated differently from other “most polluting fossil fuels”**. There is **no sound scientific justification nor legal basis for this preferential treatment**. The CEEAG should support aid to activities which actively contribute to the achievement of EU policies and EU goals to reach at least a 55% reduction of GHG emissions in 2030 and carbon neutrality in 2050 - which simply is not the case for fossil gas. Although ClientEarth considers that these EU targets will be

³⁷ IEA report of May 2021, “Net Zero by 2050: a roadmap for the Global Energy Sector”

³⁸ The European Parliament adopted the ENVI Committee Report unamended as its negotiating position for the trilogues on 8 July 2021

insufficient to limit global temperature rise to 1.5°C (Paris Agreement) and that the EU should rather aim to phase out fossil gas completely by 2035³⁹, meeting the EU targets will nonetheless require a reduction of 22-37% of the EU's consumption of fossil gas by 2030 (compared to 2015) and a continued decline to negligible levels by 2050.⁴⁰ **Supporting fossil gas in the CEEAG by describing it as “less polluting” than other fossil fuels will strongly undermine the Union’s targets.**

The assumption throughout the draft CEEAG that fossil gas can help reduce GHG emissions in the short term is **based on a completely flawed notion of the role of fossil gas in climate change mitigation**. While the CO₂ emissions associated with gas-fueled energy are readily discernible, the EU itself acknowledges that it lacks reliable data on methane emissions, which occur throughout the fossil gas supply chain. Fugitive methane emissions from extraction and transportation of fossil gas are often sufficient to undermine any carbon dioxide emissions reductions (compared to coal) at the point of combustion. The most recent scientific studies are showing that global methane emissions have been underestimated and that fossil gas does not necessarily constitute a cleaner source of energy than coal due to its combined emissions of CO₂ and leaked methane.⁴¹ A lack of data must not be used as a justification to support fossil gas investments in the draft CEEAG – this would constitute a fundamental failure to apply the precautionary principle (article 191(2) TFEU), on a mass scale.

Hence, the draft CEEAG contains a major contradiction when it states that the “most polluting fossil fuels” can increase the negative environmental externalities in the market (point 71): fossil gas is probably **benefitting even more from the externalisation of negative environmental costs than coal or oil** because methane emissions are not taxed or priced – and the EU currently has no plans to change the regulatory framework to allow this.

The draft CEEAG should be amended to take into account that **aid measures which directly or indirectly support any fossil fuels**, not only the so-called “most polluting ones”, **are unlikely to create positive effects for society at large, and are scientifically incompatible with positive environmental effects. On the contrary, such measures will have significant negative effects** because they are premised on denial of the latest scientific knowledge, and actually increase the negative externalities in the market.

Finally, support for fossil gas infrastructure cannot be justified in the draft CEEAG since there is **no need for more fossil gas infrastructure**, as has recently been concluded by the IEA⁴² and Artelys.⁴³ This is

³⁹ [European Civil Society Gas Manifesto](#), EU climate and energy policies must deliver a fossil gas phase out in Europe by 2035 (June 2021)

⁴⁰ 2030 Climate Target Plan Impact Assessment, Figures 6 and 37

⁴¹ International Energy Agency, [The Role of Gas in Today's Energy Transitions](#) (2019), p. 41; Oil Change International, [Burning the Gas 'Bridge Fuel' Myth: Why Gas is not Clean, Cheap or Necessary](#) (2019), p. 4; Ramon Alvarez et al, [Greater focus needed on methane leakage from natural gas infrastructure](#) (2012)

⁴² See IEA report of May 2021, “[Net Zero by 2050: a roadmap for the Global Energy Sector](#)”, p.21: “there is no need for investment in new fossil fuel supply in our net zero pathway.”

⁴³ Artelys found that “the existing EU gas infrastructure is sufficiently capable of meeting a variety of future gas demand scenarios in the EU28, even in the event of extreme supply disruption”, for more: Artelys, [An updated analysis on gas supply security in the EU energy transition](#); Similarly, Global Energy Monitor published a report “[Gas at a Crossroads – Why the EU should not continue to expand its gas infrastructure](#)” in which it found that: “Building all the gas infrastructure currently in preconstruction or construction would add more than 30% to the EU's current gas import capacity of 707 bcm per year.” It shows that the EU gas import capacity

explained further below (Section 2.6 of this note). The Commission's stance in the revision of the TEN-E regulation reflects this situation, by confirming that fossil gas infrastructure is sufficiently connected in Europe, all the more given the expected decrease of fossil gas consumption.⁴⁴ This conclusion is relevant not just to PCI projects but all fossil gas infrastructure projects. Hence, **as the development of this economic activity should not be facilitated further, State aid cannot be justified.**

Support to fossil gas will also find difficulties to survive the examination of the **energy solidarity principle** that the Commission will have to undertake in its State aid decisions. The Commission will find a conflict between the very limited positive effects of aid to fossil gas and its huge impacts on other interests of the Union and the Member States, most importantly the achievement of the targets in renewable energy consumption and energy efficiency.

1.6.2. Safeguards on aid to fossil gas & notion of "lock in"

As a subordinate position, in the regrettable event that the Commission would decide to allow the continued propping up of fossil fuels, it is of utmost importance to set clear guidance for aid to fossil gas. Hence, **the suggested provisions in the different aid categories limiting State aid to fossil gas** (hereafter "safeguards against fossil gas") **need to be strengthened** to reduce climate and economic risks as much as possible. ClientEarth makes the following comments and suggestions in this respect:

The undefined "low-carbon" and "renewable" gases create confusion and open the door to greenwashing. Hence, it is important to include clear definitions and methodologies for greenhouse gas accounting to determine when a gas is renewable or low-carbon.⁴⁵ If the purpose of each category of gas is to reduce emissions, these gases should not be equated with each other and placed on an equal footing, as is currently the case in the draft CEEAG. This is because the climate impact and technology-readiness of the energy sources for the production of low-carbon versus renewable gas differ greatly, making the first clearly less suitable for decarbonisation. The lack of clear delineation (i.e. definition) between renewable and low-carbon gases could lead to disproportionate and distortive competition advantages for gases with a higher carbon intensity (the externalities for which are not costed into their fuel price) at the expense of lower intensity gases. In turn, this would keep stimulating the development of fossil-based gases and hamper the development of cleaner alternatives.

The Commission seems aware of these risks and therefore opted to limit the scope of aid for refueling infrastructure in the recently amended GBER to renewable hydrogen only and will reconsider extending the scope to low-carbon hydrogen once a harmonised definition is adopted.⁴⁶ Even if the Commission

is nearly twice as high as EU gas consumption, and that EU gas-fired power plants generate only about one third the electricity that they could (see p. 15).

⁴⁴ Commission proposal for a regulation on guidelines for trans-European energy infrastructure and repealing Regulation 347/2013, COM(2020) 824, recitals 5 and 11

⁴⁵ For more on the definition of low-carbon and renewable gases and fuels: Bellona, "[*Briefing, Defining low-carbon and renewable gases and fuels*](#)" (June 2021); A similar greenwashing situation exists for the revision of the TEN-E regulation where the gas industry clearly uses the terms "low-carbon", "decarbonized" and "renewable" is a creative way to justify the development of fossil gas infrastructure.

⁴⁶ OJ L 270, 29.7.2021, p. 39–75, see recital (15)

adopts a different approach in the draft CEEAG, likely based on the fact that aid measures are under its *ex ante* review, it should remain extremely cautious as to how Member States present renewable and low-carbon gas projects. We would recommend that any definition of renewable hydrogen, as adopted in the revised GBER (new Article 2(102c)), be limited to hydrogen produced through electrolysis of water powered by renewable energy or through reforming of renewable fuels of non-biological origin (to limit demand for crop-based fuels that are expected to be in very limited supply and for which there will be demand from the transport sector).

ClientEarth welcomes the effort made to add **general considerations on fossil fuels** in Section 3.2.2 regarding the criterion of “avoidance of undue negative effect on competition and trade” as well as in Section 3.3 on the balancing test, especially points 65, 70 and 71 of the draft CEEAG.

These general considerations **should apply to all aid categories** of Section 4.

The reasoning in point 65 that “*the closer the aided investment is in time to the relevant target date, the greater the likelihood that its transitory benefits may be outweighed by the possible disincentives for cleaner technologies*” is highly relevant for the assessment of any aid measure relating to fossil gas. We would add that the lifespan of the project is also relevant to assess the risk of locking in a technology.

Nevertheless, the current draft CEEAG excludes the application of Section 3.2.2 and point 65 to aid categories in which fossil gas can be supported, i.e. decarbonisation measures (Section 4.1), security of supply (Section 4.8), energy infrastructure (Section 4.9), district heating and cooling (Section 4.10). Even if these aid categories provide overall for more detailed or stringent conditions than set out in Section 3.2.2, **they should contain the same rationale as point 65**. In any event, in case of potential inconsistencies, the specific provisions set out per aid category (Section 4) are *lex specialis* compared to Section 3.2.2 which remains *lex generalis*, so there is no risk of inconsistencies.

The same reasoning applies to Section 3.3: the highly-relevant point 70 should apply to aid measures for decarbonisation (Section 4.1).

For these reasons, we recommend to delete points 97, 315, 339 and the first sentence of point 347, or to adapt the wording like for the other aid categories, by stating “*the requirement set out in this section apply in addition to those set out in Section 3.2.2*” (same as for Section 3.3).

1. **The safeguards against unconstrained aid to fossil gas set out in the different aid categories**, notably points 110, 134, 326, 339, 348 of the draft CEEAG, follow a similar reasoning, yet **contain significant differences without specified justification**. For some aid categories, such as decarbonisation measures (Section 4.1) and district heating and cooling (Section 4.10), the draft CEEAG suggests that aid measures to fossil gas can be seen as having positive environmental effects, which is scientifically impossible, as set out above. For energy performance in buildings (Section 4.2), the Commission takes a more cautious approach when it considers that the positive effects of aid are unlikely to outweigh their negative effects. For security of supply (Section 4.8), a

more neutral position seems to be chosen in the balancing test whereby it should be assessed whether negative effects of aid to fossil gas (externalities) can be offset by any positive effects.

Finally, the Commission adopts a very concerning approach for fossil gas infrastructure when it presumes that the positive effects outweigh the negative effects if infrastructure is fit for renewable and low-carbon gases of non-biological origin (more detailed comments on this under Section 2.6 of this note).

For all aid categories, some to a greater extent than others, **aid measures to support fossil gas lead to a further lock-in of fossil gas, increase the risk of stranded assets, reduce investment in existing cleaner technologies and slow down the development of new cleaner technologies.**

Therefore, the **general stance towards investments in fossil gas in all aid categories should be:** *“Measures that incentivize investments in fossil gas may reduce emissions in very limited circumstances⁴⁷ in the short run but aggravate negative environmental externalities in the longer run, compared to alternative investments. Moreover, aid for fossil gas investments unduly distort competition where it displaces investments into cleaner alternatives already available on the market, or where it locks in certain emitting technologies, hampering the wider development of a market for and the use of cleaner technologies. **The Commission therefore considers that the positive effects are unlikely to outweigh the negative effects on competition**, except if the Member State demonstrates and makes a binding commitment that the investment contributes to the Union’s 2030 climate target and 2050 neutrality target and the lock-in of this gas-fired energy generation will be avoided.”* (Our comments on these binding commitments are developed below in point 4.).

We suggest to amend points 110, 134, 326, 339 (c) and 348 of the draft CEEAG accordingly.

2. **The conditions set out in the proposed safeguards are too weak and unrealistic to limit and provide stringent guidance for aid to fossil gas.** The conditions proposed by the Commission rely on terms which are not defined in the draft CEEAG and will therefore be subject to various interpretations. We understand that these terms will be shaped in future decision-making (and perhaps consolidated in an analytical grid). Nevertheless, setting at least strict boundaries in the draft CEEAG would increase legal certainty for Member States and aid beneficiaries. The Commission should also make sure that the CEEAG are a tool that is legally consistent with, and contributes to, the Green Deal and Climate Law objectives – not one which undermines them.⁴⁸

⁴⁷ This should be considered in light of the potent short-term global warming impact of methane emissions and the IPCC-stated need to reduce global emissions from the energy sector by 45% by 2030.

⁴⁸ ClientEarth reserves the right to provide additional feedback on how these notions should be interpreted in the future, depending notably on Member State’s plans and the application of the CEEAG in specific State aid cases.

a) Member States should demonstrate how aid to fossil gas can **contribute to the 2030 and 2050 targets**

The EU Commission's proposed 55% emissions reduction target for 2030 would require the bloc's consumption of fossil gas to reduce 29-37% by 2030 (compared to 2015) and continue to decline to negligible levels by 2050.⁴⁹ In light of the extent of existing gas infrastructure lock-in within the EU, building new fossil gas projects will very likely undermine the achievement of the EU's 2030 and 2050 climate targets. There should therefore be a **very strong presumption that fossil gas projects will not contribute to the targets**.

It would be unreasonable for climate-target compatibility to be assessed based on comparisons with other highly polluting fossil fuels – rather, assessment should be based on consistency with emissions targets. Given growing scientific evidence of the climate impact of methane emissions, decision-makers and applicants should certainly not be able to rely on any assumption that fossil gas is cleaner than coal. Indeed, if all lifecycle climate impacts were accounted for (which is not the case under current reporting requirements), any relative benefits of fossil gas could very well be nullified.

The EU Ombudsman has noted that climate impact assessments of fossil gas projects should take into account the level of greenhouse gas emissions and efficiency impacts, as well as the impact on the overall greenhouse gas intensity of energy production in EU Member States and the emissions related to the functioning of the infrastructure itself.⁵⁰ It was emphasised that such emissions assessment should encompass not just carbon dioxide emissions, but methane as well.

Hence, a Member States should demonstrate how any fossil gas project contributes to achieving the Union's climate targets including through **a detailed assessment of its greenhouse gas and efficiency impacts, the emissions intensity of energy produced within the Member State and emissions related to the relevant infrastructure**.

b) Member States should demonstrate **how “lock-in” can be avoided**

The requirement of avoiding “lock-in” is used transversally in points 71, 110 (decarbonisation measures), 134 (energy efficiency in buildings), 162 (acquisition/leasing clean vehicles), 185 (charging infrastructure), 326 (security of supply), 339 (energy infrastructure), 348 (district heating/cooling) in order to grant aid for fossil gas projects. As the draft CEEAG does not define this notion which will be highly relevant in future decision-making practice, it is important to expressly outline **a comprehensive approach to interpreting “lock in”**.

Defining “lock-in”

⁴⁹ 2030 Climate Target Plan Impact Assessment, Figures 6 and 37

⁵⁰ Decision in case 1991/2019/KR on the European Commission's action concerning sustainability assessment for gas projects on the current List of Projects of Common Interest (17 November 2020)

An investment supported by State aid should be considered as contributing to “lock-in” under the draft CEEAG if such investment is likely to:

- (i) limit cleaner alternative solutions entering the market and therefore have a **distortive effect on competition, and**
- (ii) either:
 - a. cause or contribute to the relevant jurisdiction **failing to meet its emissions reduction targets because of the emissions-intensity of the asset**, or
 - b. become a **stranded asset**, whereby the asset is retired before its intended economic lifetime due to its distortive effect on the market or its incompatibility with climate targets.⁵¹

In assessing whether an investment is likely to lead to lock-in, regard should be given to the **committed emissions**, *i.e.* the cumulative emissions that would occur over the operational lifetime of an asset. Aid for any project should be contingent on demonstration that its cumulative emissions would be consistent with the Union meeting its climate targets.

Supporting with State aid investments prone to lock-in reinforces dependency on a carbon intensive pathway, restricts future flexibility and increases the costs of achieving the climate targets (or, in the worst case, will prevent climate targets being met). The greater the carbon lock-in, the less chance of achieving, and the more it will cost to achieve, the climate targets.⁵² The assessment of the likelihood of lock-in should be based around these dimensions:

- (i) the lifetime of the equipment,
- (ii) the scale of increase in emissions,
- (iii) the financial barriers to subsequent replacement with cleaner alternatives, and
- (iv) the institutional mechanisms that strengthen the high-carbon technologies at the expense of cleaner alternatives.⁵³

Indicators of lock-in

Lock-in can cause distortions in competition that favour incumbent forms of production over clean alternatives, and **limit consumers’ and industrial users’ ability to switch to a cleaner technology at a reasonable cost**. For instance, this could occur where housing and buildings which are being equipped with fossil gas cannot switch to cleaner technologies (such as heat pumps) at a reasonable cost. Using fossil gas infrastructure to heat homes with renewable and low-carbon hydrogen is highly undesirable and unrealistic due to the energy intensity of the hydrogen production process (compared to direct electrification) and the scarcity of low-carbon and renewable hydrogen. But if households continue to be connected to fossil gas (and possibly hydrogen-blended gas) instead of being provided

⁵¹ In its Report “Transforming the EU power sector: avoiding a carbon lock-in” (No 22/2016), the EEA described “lock-in” in energy as “a large (fossil fuel-based) technological overcapacity in the power sector, compared with its optimal configuration. It conveys a certain risk of path dependency and inertia in large fossil fuel-based energy systems that inhibit attempts to introduce alternative energy technologies and energy efficiency measures designed to reduce GHG emissions. (...)”.

⁵² IEA 2013 Redrawing the Energy-Climate Map: World Energy Outlook Special Report.

⁵³ Peter Erickson et al, Assessing carbon lock-in, 2015 Environmental Research Letters 10 084023.

with incentives to electrify, they could become locked in to relying on a harmful source of energy that is likely to be far more expensive in the longer-term.

The existence of **stranded assets**⁵⁴, *i.e.* the fact that an economic asset has become non-performing before the end of its useful lifetime (premature retirement), regardless of whether that is the result of changes in legislation, market forces, disruptive innovation, societal norms or environmental risks⁵⁵, is another **indicator of lock-in**. Asset stranding is a financial accounting term that relates to amortisation and economic lifetime of projects. **Projects should only receive State aid if the emissions over their economic lifetime are consistent with the Union meeting its climate targets**. This means that even if a project would reach amortization at a time that would be consistent with climate targets, the residual period of an average economic lifetime of the relevant type of project should be taken into account in assessing overall climate target compatibility. For instance, if the Union phases out fossil gas by 2035⁵⁶ any new fossil gas investment should not have an amortisation period and economic lifetime beyond that date. **If the economic viability of an investment project is negative or uncertain with economic lifetime and amortisation restricted to ensure climate target compatibility, the project cannot receive State aid.**

Finally, it must be stressed **that the assessment of “lock-in” cannot be made by reference to the 2030 and 2050 targets to justify further fossil gas investment now**. In other words, lock-in of fossil gas investments does not only happen in 2030, or worse, 2050. Rather, as set out above, lock-in must be avoided pre-emptively and assessed on a rolling basis from now. This should take into account that there is already existing carbon lock-in in the EU which must not be further aggravated through additional investments in fossil fuels.⁵⁷

In light of the above, **avoidance of lock-in** should mean that Member States cannot grant State aid to a fossil gas-based projects if:

- **more sustainable, non-fossil based alternatives** are readily available or could be available within a reasonable time;⁵⁸
- An **amortisation period and economic lifetime of a project in line with climate target compatibility** makes the project economically unviable or uncertain.

⁵⁴ Stranded assets should be distinguished from stranded resources which are resources which are considered uneconomic or cannot be developed or extracted due to technological, spatial, regulatory, political or market limitations or changes in social or environmental norms. For instance, oil and gas fields which will be left untouched, forests which are not converted in biomass, etc. As long as a resource is not commercially invested in and used, it is not a stranded asset.

⁵⁵ Generation Foundation, *Stranded Carbon Assets: Why and How Carbon Risks should be incorporated*, in Investment Analysis, The Generation foundation, London, 2013, Appendix A.

⁵⁶ *European Civil Society Gas Manifesto*, EU climate and energy policies must deliver a fossil gas phase out in Europe by 2035 (June 2021)

⁵⁷ It must also be kept in mind that the current carbon lock in is not due to the demand for fossil fuels as in reality there is mainly a demand for energy, not fossil fuels in particular.

⁵⁸ For instance, the draft CEEAG supports aid for the installation of gas-fired heaters in buildings in the event they are substituting previously installed oil- or coal-fired equipment (point 134) whereas non-fossil based alternatives are readily available on the market and be widely deployed (ex. heat pumps). The same goes for the support to the acquisition or leasing of CNG and LNG vehicles (point 162) if the Member States ensures that these vehicles would be operated using blending of biogas or RFNBO whereas electric vehicles are readily available on the market and be widely deployed.

c) On the examples of binding commitments to prevent lock-in:

The well-intentioned examples of **binding commitments to prevent lock-in** in points 110, 326, 339, 348 may have uncontrolled adverse effects and need to be handled with extreme caution. These examples mostly focus on tackling greenhouse gas emissions as such without considering the other aspects of lock-in described above (point b), making the provisions potentially contradictory.

Moreover, any commitments made by Member States need to be **binding** for granting State aid, **implemented at the same time as the State aid measure is granted to the beneficiary**, and subject to **accountability**. This implies that the Commission should require an *ex-post* evaluation by the Member State of the aid measure, in order to verify compliance and to order the recovery of the aid in case of lack of implementation of the binding commitment.

On the examples of binding commitments as suggested by the Commission more specifically:

- The **implementation of decarbonisation technologies like CCS and CCU** may in some situations **worsen the negative effects of fossil gas** due to their high costs, unproven emissions-reduction capabilities, and long amortisation periods. It may allow aid beneficiaries to rely on what is currently highly speculative, un-commercialised emissions abatement instead of renewable energy. As the Commission itself admits, widespread CCS and CCU are unrealistic as the pledge for CCS-readiness has so far not led to the implementation of CCS.⁵⁹ The use of these technologies as such also refrains users from implementing structural sustainable solutions. These technologies must therefore only be eligible for support as **a last resort** in the pursuit of decarbonisation, and **should be subject to rigorous performance criteria and extraterritorial emissions accountability**. As CCS and CCU are eligible for aid as a decarbonisation technology, further comments on these solutions are set out below (Section 2.1.6 of this note).
- The proposed commitment in the draft CEEAG to **substitute fossil gas with renewable or low-carbon gas** is ineffectual without a deadline for conversion. Moreover, it is problematic because renewable gas and low-carbon gas are treated equally even though they have very different climate impacts. Substituting fossil gas with low-carbon gas may actually guarantee the continued use and lock-in of fossil gas – particularly given the unproven state of CCS technology.⁶⁰ Further, the pledge to use renewable gas is unrealistic at large scale due to the limited availability of these gases. As such:
 - The requirement to substitute fossil gas with other gases (and the necessary associated technology conversion) should be subject to a deadline that ensures alignment with the EU's climate targets;

⁵⁹ A 2009 roadmap from the International Energy Agency projected that 22GW and 170 million tonnes of CCS would be installed by 2020, but only 13% of that was delivered. IEA, '[CCUS in Clean Energy Transitions](#)' (September 2020)

⁶⁰ See, eg, [Chevron's failed CCS project in Australia](#)

- Any conversion to low-carbon gas should account for the higher lifecycle emissions (including ongoing methane leaks) that occur from this fuel source compared to renewable gases;
 - Given the scarcity of renewable gases, and the likely constraints on low-carbon gases, aid to allow continuation of these energy sources should remain a last resort option only after clean alternatives are comprehensively evaluated, using the same approach as set out in relation to avoiding lock-in of gas.
- The commitment to “**close the plant on a timeline consistent with the Union’s climate targets**” is a step in the right direction but will be subject to very divergent interpretations. This should be based on independent scientific assessment and on no account should it mean a closure of the plant only in 2050. As set out above, the Commission should verify that the economic lifetime of the equipment is in line with plant closure timing that would avoid stranded assets or carbon lock-in due to the imperative of meeting climate targets. We would add that setting binding dates is preferable.

1.7 Aid for hydrogen

Hydrogen production and infrastructure is supported in several aid categories of the draft CEEAG. Aid measures for decarbonisation (Section 4.1) support the production of hydrogen and investment aid for electrolyzers but also dedicated hydrogen networks. Hydrogen infrastructure (transport and storage) is supported as energy infrastructure (Section 4.9). Electrolyzers which qualify as PCIs may also be supported in the energy infrastructure aid category if included in the scope of the revised TEN-E Regulation. Moreover, hydrogen is also supported as a solution for clean mobility (Section 4.3). The main general comments on aid to hydrogen set out in this section apply to all these different aid categories. Additional specific comments are developed below in the sections addressing the particular aid categories.

1.7.1. Aid should be limited to renewable hydrogen and subject to conditions

Due to its notable inefficiencies⁶¹ and high costs compared to direct (renewables-based) electrification, hydrogen can only be a solution for hard-to-abate sectors requiring very high temperature heat and as an energy carrier. There is a great deal of hype from vested interests around hydrogen, but independent experts are emphasising that it is not a silver bullet for the energy transition and risks diverting limited resources away from where they are most needed.⁶² **Any State aid to hydrogen should be heavily conditioned and handled with extreme caution.**

⁶¹ For instance, regarding the role of hydrogen to provide long-term buffer storage i.e. converting electricity through electrolysis into hydrogen and then hydrogen back into electricity (so called round-trip), this would come with a loss of around 60% of the original electricity. See IEA, *The Future of Hydrogen*, June 2019, p. 158

⁶² Falko Ueckerdt et al “Potential and risks of hydrogen-based e-fuels in climate change mitigation” (2021) *Nature Climate Change* DOI:10.1038/s41558-021-01032-7.

If aid to hydrogen is facilitated under the CEEAG nonetheless, **ClientEarth reiterates⁶³ its call for the Commission to only support aid for renewable hydrogen.**⁶⁴

Supporting the granting of State aid to low-carbon hydrogen, i.e. fossil gas-derived hydrogen, would be a mistake, economically and climatically.⁶⁵ Such aid would raise similar problems to that for low-carbon gas, namely (i) the EU has a proven pattern of overinvesting in the nominal fuel source for low-carbon hydrogen, fossil gas, (ii) there are economic and climate advantages of bypassing fossil gas-based hydrogen and moving straight to renewable hydrogen⁶⁶ and (iii) further fossil gas lock-in would have adverse consequences on future governments' budgets (and therefore future tax payers who will also be bearing the economic impact of climate change), on energy prices and on the climate.⁶⁷ This view is supported by Austria, Denmark, Luxemburg, Portugal and Spain, as indicated in the context of the Hydrogen IPCEI.⁶⁸

In terms of aid to renewable hydrogen, “**additionality**” will be a crucial consideration. For instances where renewable electricity is not transported by a direct link between the electrolyser and the renewable energy source (in other words, if the electrolyser is not grid-connected), an emissions assessment of the electricity used in the electrolyser is necessary to ensure that renewable hydrogen is truly renewable.⁶⁹ Such assessment underlines the importance of properly accounting for the GHG emissions intensity (covering both lifecycle methane and carbon dioxide) of grid electricity to prevent greenwashing.⁷⁰ **To guarantee**

⁶³ See also ClientEarth's responses to, amongst others: [the IPCEI Communication](#) (April 2021), [the EEAG consultation](#) (January 2021), [the IPCEI roadmap](#) (December 2020), the [REDII Inception Impact Assessment](#) (September 2020).

⁶⁴ Using the terminology of the Hydrogen Strategy, this would exclude any support to “electricity-based hydrogen”, “fossil-based hydrogen”, “fossil-based hydrogen with carbon capture”, “low carbon hydrogen” and “hydrogen-derived synthetic fuels”.

⁶⁵ We also refer to E3G factsheets on hydrogen (April 2021) outlining science-based approaches to the debates on this topic. These focus on hydrogen supply, blending of hydrogen into the gas grid, the role for heating and the infrastructure needs for hydrogen deployment.

⁶⁶ Agora Energiewende states that the investment window for fossil-based hydrogen with CCS is open today, but will be closing soon, likely by the end of the 2020's or early 2030's, See Agora Energiewende, ‘[No-regret hydrogen: Charting early steps for H2 infrastructure in Europe](#)’, pp.15-17. BloombergNEF is drawing similar conclusions in its 2021 Hydrogen Levelized Cost Update and confirms that renewable hydrogen will cost less than hydrogen made from fossil gas with CCS in all 28-modelled markets by 2030. This clearly shows the risks of asset stranding of gas-based hydrogen as confirmed by BloombergNEF: “By 2030, it will make little economic sense to build ‘blue’ hydrogen production facilities in most countries, unless space constraints are an issue for renewables. Companies currently banking on producing hydrogen from fossil fuels with CCS will have at most ten years before they feel the pinch. Eventually those assets will be undercut, like what is happening with coal in the power sector today.”

⁶⁷ Global Witness, ‘[EU companies burn fossil gas and taxpayer cash](#)’ (22 February 2021)

⁶⁸ Declaration from AT, DK, ES, LU, PT on the adoption of the ‘[Manifesto for the development of a European “Hydrogen Technologies and Systems” value chain](#)’: “this initiative should exclusively refer to hydrogen from renewable energy sources since we consider this technology as the only long-term sustainable solution to achieve climate neutrality by 2050.”; This firm position has been repeated by these Member States at the High Level Conference on Hydrogen “Hydrogen in Society - Bridging the Gaps” organised by the Portuguese Presidency on 7 April 2021.

⁶⁹ The emissions intensity of hydrogen depends on the efficiency of the electrolyser and the emissions intensity of the electricity powering the electrolyser. Hence, a formula should be used that calculates the emissions intensity (covering both carbon dioxide and methane) of hydrogen ($\text{tCO}_2\text{-e/tH}_2$) = (emissions intensity of the electricity * efficiency of the electrolyser) / 30. This is adapted from Bellona, [Electrolysis Hydrogen Production in Europe](#) (April 2021), pp.5-6.

⁷⁰ Bellona, “Cannibalising the Energiewende? 27 shades of Green Hydrogen” (June 2021), p.3: “European grids are overall still in a transitional phase, where running an electrolyser inevitably leads to an increase of demand that will be covered by ramping up the available dispatchable generation, namely gas and coal electricity generation. Without the necessary safeguards in place, producing hydrogen today on the majority of the European grids will result in the cannibalisation of the renewable energy production that was deployed to decarbonise other parts of our economies, hampering the transition of the electricity system and increasing emissions.”

the availability of renewable hydrogen at scale, “additionality”⁷¹ of renewable energy should be a condition for granting aid to renewable hydrogen – as rightfully called for by several Member States⁷² and required by the Commission in its guidance on the assessment of the “do no significant harm” principle in the national recovery plans.⁷³

In light of the above, we urge the Commission to amend the draft CEEAG to:

- (i) **Exclude any direct or indirect support to hydrogen that is not renewable.** This exclusion should not only apply to the production of hydrogen but equally to hydrogen infrastructure which should not serve to transport or store fossil gas-derived hydrogen.
- (ii) **Allow aid to renewable hydrogen subject to the following cumulative binding requirements:**
 - a) The hydrogen will only be for use in hard-to-abate priority sectors where alternatives are not readily available;
 - b) Support to electrolysed hydrogen should be matched with additional renewable energy (“additionality”), which should either be available when the project launches or available within a very short binding timeframe;⁷⁴ and
 - c) An emissions assessment shall be provided to ensure that the electricity to produce hydrogen will be renewable in accordance with the additionality requirement.

These shall be aid-granting conditions for eligibility, meaning that any non-compliance shall result in an immediate suspension and/or recovery of the granted aid.

1.7.2. At least, aid to low-carbon hydrogen should be subject to stringent requirements

As a subordinate position, in the regrettable event that the Commission would maintain its support for both low-carbon and renewable hydrogen, ClientEarth wishes to make several comments and suggestions.

⁷¹ Investment in renewable hydrogen should be matched to an equal extent (at least) with renewable energy.

⁷² “*Additionality in renewable hydrogen production*”, Joint contribution from AT, DK, ES, IE, LU and PT, 9 November 2020.

⁷³ The Commission’s Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation, 2021/C 58/01, p.6 and Annex III

⁷⁴ For instance, if a Member State wishes to grant State aid for the production of renewable hydrogen, the latter should be subject to additional renewable energy which needs to be in available/in operation at the moment the aid is being granted, or within a very short timeframe thereafter (ex. Permits have been granted and the construction has started). The purpose is to avoid situations where a beneficiary receives aid for renewable hydrogen based on a non-binding promise to invest in additional renewable energy whereas the electrolyser remains connected to the grid in the meantime (similar to “CCS readiness” which did not lead to the deployment of CCS). Given the fact that European grid contain mainly gas and coal electricity generation, this would make such hydrogen very carbon intensive. For more, Bellona, [Electrolysis hydrogen production in Europe](#) (April 2021).

First, the terms “**low-carbon**” and “**renewable**” hydrogen are not defined in the draft CEEAG and we understand that references will be made to evolving sectoral legislation. In order to avoid further confusion, used by certain industries for greenwashing purposes⁷⁵, it is of utmost importance to include a clear reference to the interpretations given to these notions.

Moreover, it must be stressed that **these two types of hydrogen should not be placed on equal footing** as is currently the case in the draft CEEAG. First, the climate impact of the energy sources for the production of low-carbon and renewable hydrogen obviously differs greatly, making the former clearly less suitable for decarbonisation. Second, this equal treatment contradicts the EU’s Hydrogen Strategy⁷⁶ and the Energy System Integration Strategy⁷⁷ that clearly indicate that the EU’s priority is to develop renewable hydrogen.

In any event, in line with the Green Deal, **direct or indirect support through aid to low-carbon hydrogen should only be granted subject to cumulative binding conditions** to limit the climate and economic risks as much as possible. Not being duped into the notion of “low-carbon hydrogen”, as occurred with “low emission coal” (which was meant to incorporate CCS)⁷⁸, should be the overriding purpose of such conditions. These shall therefore constitute **conditions for eligibility** to State aid, meaning that any non-compliance shall result in an immediate suspension and/or recovery of the granted aid. ClientEarth’s suggests the following eligibility conditions:

1. Aid is allowed only for use in **hard-to-abate priority sectors** where alternatives are not readily available. The list of hard-to-abate sectors might be reduced overtime as technologies evolve, so the wording of the CEEAG should allow for that evolution;
2. The use of the **best available CCS technologies should be mandatory** from the outset for all generation and upstream extraction facilities associated with the project to ensure overall CO₂ emissions are limited in accordance with the EU’s and relevant national emissions reductions targets⁷⁹;
3. The Member State shall provide **a plan regarding the captured CO₂** showing that:
 - (i) captured CO₂ waste from the project will be stored or utilised in a safe manner for the time required for CO₂ to break down (see also our comments on the CCS/CCU in section 2.1.6 of this note),
 - (ii) the lifecycle emissions from this storage or utilisation would not cause or contribute to any exceedance of the EU’s climate targets;

⁷⁵ For more on the definition of low-carbon and renewable gases and fuels: Bellona, “[*Briefing. Defining low-carbon and renewable gases and fuels*](#)” (June 2021); A similar greenwashing situation exists for the revision of the TEN-E regulation where the gas industry clearly uses the terms “low-carbon”, “decarbonized” and “renewable” is a creative way to justify the development of fossil gas infrastructure.

⁷⁶ Commission Communication, Hydrogen Strategy for a climate-neutral Europe (COM(2020) 301 final), p.5.

⁷⁷ Commission Communication, Powering a climate-neutral economy: an EU Strategy for Energy System Integration (COM (2020) 299 final).

⁷⁸ The notion of “low emissions coal” with CCS lead to stranded assets on a mass scale because there were no legally binding measures to ensure it was actually low-carbon.

⁷⁹ A way to implement this would be to ensure overall carbon dioxide emissions are capped.

- (iii) the estimated lifetime economic costs of CO₂ management including comprehensive analysis of economic liabilities associated with the ongoing CO₂ management can be managed on an ongoing basis by the relevant project proponent or Member State;
- (iv) the entities which would be responsible for insuring against those costs are adequately resourced to do so on an ongoing basis;
- (v) the term of such proposed insurance cover all reasonably likely environmental and economic contingencies in accordance with sound risk management; and
- (vi) they conducted an evaluation that, taking into account the information submitting under above requirements, it is still preferable for the gas-derived hydrogen project to be developed instead of clean alternatives.

This plan must be independently assessed using a science-based approach for the purposes of determining its feasibility, and any economic, environmental (including climate) and social risks associated with it. This assessment should be conducted by a party with the requisite expertise that is proven to have no conflict of interest associated with the project or broader industrial strategy associated with the project. If, by the time the assessment is undertaken, the European Scientific Advisory Board on Climate Change has produced reports or other materials relevant to the assessment, the assessment should be consistent with them.

4. **Lifecycle methane leakage** relating to any fossil gas used to produce hydrogen associated with the relevant plant or infrastructure shall, by the start of 2025, be no higher than 0.2% for upstream emissions⁸⁰, 0.12% for distribution-level emission⁸¹, and a commensurate level for midstream emissions. Alternatively, if the EU has adopted a methane performance standard or import standard which is in line with the 2050 carbon neutrality objective, the methane emissions for hydrogen shall comply with the future EU standard⁸²;
5. For any fossil-based hydrogen (abated or unabated), **a binding date shall be set for the project to fully transition to renewable hydrogen**, which is in alignment with the EU's and relevant country's emissions reductions targets;
6. An independent assessment plan (with the same standards as described under (3)) shall be provided showing **that the project's conversion to renewable hydrogen within the required timeframe** is reasonably **viable and cost-effective**, including details of the renewable fuel source and its proven additionality to the energy system. Conditions of aid shall be set to ensure these representations are met.
7. In order to ensure the implementation of the polluter pays principle, **a guarantee by a financial institution** shall be provided which covers the aid recipient's environmental liability during its

⁸⁰ As committed by the key global and national-level gas industry companies through the Oil and Gas Climate Initiative – see 'Methodological note for OGCI methane intensity target and ambition'

⁸¹ GIE and Marcogaz, 'Potential ways the gas industry can contribute to the reduction of methane emissions' (5-6 June 2019).

⁸² On the EU standard proposed by ClientEarth, see our [Response to the Roadmap / Inception Impact Assessment on the Hydrogen and gas markets decarbonisation package](#) (March 2021)

operation, its ongoing environmental management and in the event the aid beneficiary would cease to exist.

In addition to these eligibility criteria for low-carbon hydrogen projects and in order **to incentivise renewable hydrogen before it is cheaper than low-carbon hydrogen**, in line with the commitments under the EU's Hydrogen Strategy⁸³, we also strongly recommend that **absolute aid amounts** (such as through the eligible costs for the funding gap or aid intensities), **be commensurately higher for renewable hydrogen than for low-carbon hydrogen**.

1.8 Aid for going beyond Union standards

The definition of 'Union standards' under 78(b) indicates, in relation to best available techniques (BAT) under the Industrial Emissions Directive (IED) that *"where those levels are expressed as a range, the limit where the BAT is first achieved will be applicable"*. It suggests that the CEEAG rely on the lowest level of pollution prevention (or put it differently, on the highest level of emissions) allowed under BAT ranges, and that aid could be granted to meet higher levels of prevention that are still within the BAT ranges. ClientEarth disagrees with the lack of ambition of this approach that **undermines the achievement of the Union's zero pollution ambitions**.

Instead, the definition should read: "(...) 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 emission levels of pollutants **and other environmental performance levels** are not higher than they would be when applying BAT; for cases where emissions levels **and environmental performance 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 these guidelines; where those levels **and standards** are expressed as a range, the **lowest emission limit and the strictest performance level** of that range will be applicable."

The IED's focus is on the prevention of pollution, especially at the source, in line with EU environmental principles. One of its key elements is the determination of "best available techniques" and the associated emission limit values and environmental performance standards. The IED is under revision and will thus define the future for industry's (non-)polluting technology. The role of industrial operators in reaching EU's objectives cannot be overstated. The Commission itself acknowledges that: *"[a]chieving a climate neutral and circular economy requires the full mobilisation of industry. It takes 25 years – a generation – to transform an industrial sector and all the value chains. To be ready in 2050, decisions and actions need to be taken in the next five years."* (European Green Deal, Section 2.1.3.). In its recent targeted stakeholder survey on the revision of the IED, the consultancy RICARDO (commissioned by the Commission) stated that *"(Agro-)industrial plants continue to pollute the environment. Whilst the IED has led to reductions of pollution from (agro-)industrial plants, BAT and their associated emission performance (BAT-AELs) may not always be achieved because: ELVs are often set in permits by default at the upper level of the BAT-*

⁸³ Commission Communication, Hydrogen Strategy for a climate-neutral Europe (COM(2020) 301 final), p.5

AEL range, without consideration of whether BAT could lead to lower emissions closer to the lower end of the range (...)”, thus recognising that the limit where the BAT is first achieved is insufficient to prevent pollution to a satisfactory degree. **The CEEAG would be failing to meet the Union’s zero-pollution ambition if it continued relying on the lowest environmental protection standards.**

Moreover, the “best available techniques” are based on techniques that are already available on the market (hence ClientEarth’s call to look forward best “achievable” techniques with a higher degree of ambition⁸⁴, noting that those can develop through market demand as well as State intervention under the RDI guidelines of these CEEAG) and include the consideration of economically viable conditions, “taking into consideration the costs and advantages” (see Art. 3(10)(b) IED and BREF on Economics and Cross-media Effects (ECM REF, 07/2006)). It is thus assumed that (agro-)industrial plants can achieve all emissions levels in a given range with techniques that are available to them. We therefore do not see a reason why aid to meet more ambitious emissions prevention levels would be allowed when it is part of a BAT range; only reaching a level of ambitions that goes beyond the highest Union standards should be allowed. In this respect, we stress the current ‘default practice’ of public authorities of referring to the upper level of BAT-AEL ranges, undermining the level of ambition of the IED in practice.⁸⁵

We stress that in any case, we expect the Commission to conduct a strict control of compliance with the IED (including for the obtaining of derogations) of activities falling under its scope that apply to State aid of any type – not only for meeting or going beyond Union standards – as required by point 32 (and our proposed addition in a point 32*bis*) CEEAG.

1.9 Other remarks

Point 24 provides that “Member States must also describe **if and** how the aid will contribute to the achievement of objectives of Union climate policy, environmental policy and energy policy” (we highlight). Instead, it should require Member States to demonstrate how environmental protection will be ensured for energy measures; it must not be optional as the word “if” suggests.

Likewise, point 68 should clarify that the distortive effect of **energy aid measures will also be balanced against their contribution to effective environmental protection objectives** (and not only pursue the mere step to “transition” to that). Article 194 TFEU clearly puts the functioning of the internal market and the need to preserve and improve the environment on an equal footing, and the energy policy objectives listed under Article 194(1) are not set in a hierarchical order. Conversely, Article 11 TFEU obliges the Union to integrate environmental protection requirements into every Union policy, so that demonstration cannot be omitted when assessing the compatibility of aid in the energy sector with the internal market.

Point 72 indicating that other factors for assessing the balance between the negative and positive effects of the aid on competition is extremely vague: it applies to “*certain categories of aid schemes in certain*

⁸⁴ See Revision of the Industrial Emissions Directive – ClientEarth’s response to the Targeted Stakeholder Survey | ClientEarth, April 2021, in particular p. 42 et seq.

⁸⁵ *Idem*, pp.42-44. This issue has been described by RICARDO consultancy, as well as in other reports, such as **by the Commission, Study: The costs of not implementing EU environmental law – Final Report**, March 2019, Section 7.3.; or in particular for permits for cement facilities, and iron and steel facilities using Electric Arc Furnaces in Chowdhury/Beechener/Hutchens/Kulesza/Duffield, Eunomia, An Assessment of IED Permitting Stringency, 19/12/2019,

cases”, projects must be notified beyond “*a certain size*” or if they present “*certain characteristics*”; and the time limitation is not specified. If these factors are to contribute to assessing whether an aid measure affects competition to an extent contrary to the internal market or not, which is a crucial condition of compatibility under Article 107(3)(c) TFEU subject to judicial review, the criteria must be specified. Besides, Chapter 5 already explains when ex post evaluation is required, to satisfy criterion (a); the rationale for criterion (b) is unclear since all aid schemes under the CEEAG must be notified, regardless of their size (that condition would better fit under the GBER), and a mere notification will not help draw a balance between the positive and negative effects of the aid ; and criterion (c) limiting the schemes duration should apply to all measures so they are not overly distortive of competition in the longer term. Overall, we fail to understand the rationale and use for point 72 and therefore **we propose to delete it**.

2. Categories of aid

2.1. Aid for the reduction and removal of greenhouse gas emissions (Section 4.1)

2.1.1. Definition of energy from renewable sources

The draft CEEAG seems to exclude from the definition of energy from renewable sources (RES) (point 18 (34)) electricity produced from renewable energy sources, stored in a battery storage behind the meter and later reinjected behind the meter or in the grid. If this interpretation is correct, this type of energy will lose its right for support (and its traceability through guarantees of origin).

This risks to limit support for storage coupled with renewable energy, while storage is and will become even more important in the future to face intermittency of renewables and thus the deployment scale of renewable energy projects.

As a result of losing its green quality, stored renewable electricity will not longer be entitled to any private or public support for RES, including:

- Tax and fees exemptions when the renewable energy is stored and consumed behind the meter;
- Support in the form of FIT/FIP or under a Power Purchase Agreement based on the electricity market price when the electricity stored is then injected into the grid.

Revenues from flexibility markets are currently limited given that they are not yet fully developed in all Member States, especially for residential customers⁸⁶.

Not only does this approach seem inconsistent with the support for renewable hydrogen (produced by converting renewable electricity through electrolyzers), but it also does not appear to be in line with the

⁸⁶ We refer here to SolarPower’s contribution to the present consultation. See e.g. : « Le besoin des marchés de la flexibilité : l’adaptation du design des marchés électriques aux productions d’énergies renouvelables », Dominique Fenon, paper 2015 ;

Electricity Market Design Directive (EU) 2019/944 definition, under which energy storage allows the consumption of the same energy to be postponed to a later point - without the energy losing its renewable nature⁸⁷.

2.1.2. Competitive bidding procedures

The draft CEEAG promotes multi-technology tenders as a matter of principle allowing, by exception, technology specific tenders including for renewable energy or energy efficiency measures (point 83). We are generally in favour of technology specific tenders and would like to make the following remarks on the Commission's proposed approach:

Allowing **sector-specific auctions for renewable energy schemes appears to be more in line with the REDII provisions**. Pursuant to Article 4(5) REDII, "*Member States may limit tendering procedures to specific technologies where opening support schemes to all producers of electricity from renewable sources would lead to a suboptimal result*", in particular "*in view of a) the long-term potential of a particular technology; (b) the need to achieve diversification; (...)*". Technology neutral tenders based on price might systematically favour one single technology against other complementary technologies (e.g. storage and solar PVs or solar PVs and wind turbines). This would undermine the achievement of a diversified and resilient energy mix and would directly affect the REDII provisions. **This is why we recommend that the Commission broadly interprets the exception set out in point 83, (a) of the draft CEEAG;**

Exceptions from multi-technology or multi-projects tenders do not include an exception for **renewable energy communities**. However, Article 22(7) REDII requires Member States to specifically take them into account in their schemes. The REDII also recognises the specific benefits they can provide to the energy transition, notably in terms of social acceptance of renewable energy technology, social cohesion and fight against energy poverty. Renewable energy communities are thus a valuable self-organised means of addressing security of supply issues, particularly in the context of the phase out of coal and fossil gas. **Member States should be allowed and encouraged to organise specific auctions for them or to set tailored bidding criteria to allow them to effectively participate in tenders and get financial support;**

It is overall very difficult to **set all the parameters right when organising decarbonisation multi-technology tenders in a climate and cost-effective way**. The first tender of the Dutch SDE++ scheme recently approved by the Commission⁸⁸ clearly shows that the implementation of the scheme can have some adverse results in terms of decarbonisation.⁸⁹ For instance, CCS is taking up a very large part of the total State aid budget whereas more sustainable and long-term decarbonisation solutions (such as heat

⁸⁷ The definition of energy storage under the Electricity Market Design Directive (EU) 2019/944 is as follows: "(59) 'energy storage' means, in the electricity system, **deferring the final use of electricity to a moment later than when it was generated**, or the conversion of electrical energy into a form of energy which can be stored, the storing of such energy, and the subsequent reconversion of such energy into electrical energy or use as another energy carrier;"

⁸⁸ Commission decision on SA.53525 - The Netherlands SDE++ scheme for greenhouse gas emissions.

⁸⁹ Different environmental organizations have been providing the Dutch government with feedback on the elaboration of the SDE++ scheme.

pumps and renewable hydrogen)⁹⁰ receive little to no aid. The success of CCS in this first tender seems to have been exacerbated by an artificially low cost per tonne of CO₂ equivalent emissions avoided, for CCS. Unfortunately, this means that industry is mainly being pushed to CCS and not to structural sustainable solutions.⁹¹ The Commission should therefore **closely monitor the real impact of these decarbonisation schemes**.

Moreover, in order to give different decarbonisation technologies a fair chance and have them play a complementary decarbonisation role, direct competition between technologies addressing completely different necessities (such as CCS and renewable hydrogen) should be treated with caution and avoided where possible. Such adverse effect on multi-technology tenders can be avoided by allocating separate (sub-)budgets. Points 90 and 91 of the draft CEEAG should be interpreted in that way.

When putting different technologies into competitive bidding process and calculating the subsidy per tonne of CO₂ equivalent emissions avoided (point 98 draft CEEAG), the **lifecycle climate impact and economic costs of all technologies** should be taken into account. This includes the assessment of:

- (a) Lifecycle climate impact of the technologies, including all greenhouse gases. For methane and other short-lived gases, the Commission should ensure the global warming potential conversions used are reflective of the short- and long-term climate implications of each energy solution;
- (b) The economic costs of associated infrastructure to deliver the technology;
- (c) The economic costs of the relevant technology over time using realistic forecasts of their likely cost curves. The IEA has for instance consistently underestimated the falling costs of renewable energies, while overestimating the role of CCS.⁹²
- (d) The estimated economic cost of any waste disposal required for the energy solution – specifically, for CCS, the cost of storing CO₂ safely forever, or until it can be utilised.
- (e) For partial decarbonisation solutions, the future costs of achieving climate-neutrality (plant close, switching from fossil-based feedstock to renewable feedstock)

2.1.3. Energy communities

ClientEarth regrets that the draft CEEAG does not mention renewable energy communities (RECs) at all despite the Member States' obligation under Article 22(7) REDII to take into account their specificities when designing support schemes. The EEAG must recognise explicitly the existence and specific benefits

⁹⁰ The intermediary results (June 2021) show that there were 3,486 applicants of which 3,426 concerned solar PV, 6 concerned CCS, 25 concerned heat pumps. Nevertheless, CCS projects receive almost half of the 4,6 billion euro budget, with 2,1 billion going to the Porthos-project in Rotterdam.

⁹¹ Following the result of the first SDE++ tender, Greenpeace Netherlands called upon the Dutch government to be very cautious with the SDE++ subsidies to CCS. It notably urges the Netherlands to avoid an increase in greenhouse gas emissions by subsidizing CCS for instance by supporting non-efficient CCS (capture of 50 to 60%). It also suggests different adaptations to the scheme to give real sustainable solutions a fair chance in the tender for instance by reserving a budget for certain solutions.

and obstacles of energy communities⁹³, while explicitly obliging Member States to design schemes that leave them room to receive adequate support.

Whilst we welcome the Commission's intention to provide a regime for aid for RECs into the GBER, the details are still unknown. We recommend that only those greenhouse gas reduction measures, including RES schemes, that explicitly recognise and support RECs adequately can be exempted from notification under the GBER. If the distinction between the GBER and the CEEAG remains driven by aid budget thresholds, this will not solve the issue that RECs are facing that is, their hardship for competing in auctions on a level playing field with commercially-driven undertakings.

In fact, the organisation of multi-technologies auctions by principle will make it increasingly difficult for RECs to compete with other undertakings⁹⁴, especially if the thresholds are lowered as proposed under point 92(b)⁹⁵ and that Member States are limited from providing for non-price based criteria in auctions beyond 25% (wherever this figure comes from) (point 49). We therefore propose to leave more flexibility for Member States in this respect. We expect that at least, the Commission will verify that greenhouse gas reduction measures comply with Article 22(7) RED II when assessing compliance with Union law under point 32 CEEAG. This evidence must be brought by the Member States when notifying their schemes. The public consultations organised under section 4.1.3.4 should also help verify that the eligibility criteria and aid allocation parameters put RECs on a level playing field with other undertakings. Consulting on the scope and eligibility of measures, even when aid is allocated by auctions, is crucial to ensure that REDII and the EMR are respected.⁹⁶ However, clear requirements for the Member States to integrate, from the outset, RECs into aid schemes would reduce the burden on RECs to have to fight in each public consultation for recognition of the rights they hold under REDII.

The Commission should therefore consider the following options:

1. **Making explicitly reference to the specific benefits and obstacles of energy communities;**
2. **Require that Member States design schemes** that leave RECs room to receive adequate support as laid down by Article 22(7) of the REDII; and
3. **Increasing the level of thresholds for exempting RECs from bidding procedures and for granting them feed-in tariffs**, or at least maintaining the same levels as in the EEAG. We refer to our proposals in the draft CEEAG with track-changes; or
4. **Dedicating a special regime for energy communities in the CEEAG.** This would be justified by the significant environmental and grid benefits they provide as well as their positive impact on regional and local development opportunities, on social cohesion and social acceptance of the transition. Concretely, the EEAG could explicitly allow specific auctions for renewable energy communities (i.e. reserving a certain quantity of capacity to be procured only from energy

⁹³ As already recognized by the REDII. See ClientEarth's [reply to the roadmap on the CEEAG](#) (January 2021), pages 30-31.

⁹⁴ For further developments and evidences of the difficulties faced by energy communities within tenders, we refer to ClientEarth's [reply to the roadmap on the CEEAG](#) (January 2021) and Rescoop's contribution to the present consultation.

⁹⁵ For the first time, the Commission makes a link between the thresholds for tenders' exemptions and balancing responsibility, making the thresholds stricter than in the current EEAG (para. 127). Same lowered thresholds apply for exemptions from market premium (footnote 62). The link between the exempting thresholds and balancing responsibility is however not relevant. See Rescoop' contribution for details.

⁹⁶ See our more detailed observations on public consultations under section 1.5.

communities' projects, like in Ireland), relaxing the rules for participating in call for tenders e.g. in terms of the financial guarantees required or totally exempt them from bidding procedures.

2.1.4. Biomass

The draft CEEAG makes the approval of the support for biofuels, bioliquids, biogas and biomass fuels conditional on the compliance with the sustainability and greenhouse gases emissions saving criteria in the REDII (point 76). The current biomass sustainability criteria are however not sufficiently protective of the environment, in particular because they do not consider the full carbon lifecycle nor the limited supply of truly-sustainable feedstock.⁹⁷ As stressed by the Commission, these criteria need to be reinforced to achieve the Green Deal objectives⁹⁸. Although the future CEEAG must reflect the new provisions of the "Fit for 55" package, we have some reservations regarding some of those developments.

First of all, we welcome the proposed increasing of the renewable energy target from 32% to 40%, subject that it does not result in an increase combustion of forest biomass. The effort to reach this new target should be based on the deployment of other renewable technologies.

We very much welcome the Commission's proposal to phase out subsidies for extracting biomass for energy production from primary forests, peatlands and wetlands. Since the rationale for this limitation stems from the high biodiversity value and high carbon capacity stock of these resources, the CEEAG should adopt the same stance and should make clear that the distortive impact of aid for burning these precious resources cannot be offset due to its dramatic negative environmental impact.

We also welcome the introduction of the phase-out of support for electricity-only installations using biomass from 2027 in the proposal for amending the REDII⁹⁹, although this is not sufficient, should apply as soon as the amended REDII enters into force and be extended to the much more widespread biomass-based cogeneration.

Applying the Union's sustainability criteria to smaller heat and power installations (from 5MW) is not satisfactory either since any support to such installations should be prohibited. This point is further developed below (under the high-efficient cogeneration section).

The prohibition of support for the use of some bioenergy feedstocks (i.e. saw logs, veneer logs, stumps and roots) to produce energy is a modest first step.¹⁰⁰ Saw-logs and veneer-logs are generally not burnt

⁹⁷ In addition, the applicability of these criteria is limited to installations with a total rated thermal input equal to or exceeding 20 MW in the case of solid biomass fuels, and with a total rated thermal input equal to or exceeding 2 MW in the case of gaseous biomass fuels (Article 29(1)(c) of REDII). See M. S. Booth, B. Mitchell, ["Why the EU's RED II biomass sustainability criteria fail forests and the climate"](#), 2020

⁹⁸ *"The current REDII sustainability criteria for bioenergy need to be reinforced in a targeted way in light of the increased climate and biodiversity ambition of the EU Green Deal"*, Proposal for a Directive amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652, COM(2021) 557 final

⁹⁹ New Article 3(3) of the REDII as amended by the Fit for 55 Proposal

¹⁰⁰ New Article 3(3) of the REDII as amended by the Proposal

since they are too valuable on the market and the extraction of roots and stumps for burning does not usually take place.¹⁰¹ Instead, the Commission should focus on ending the burning of tree trunks and whole trees that are not of saw-log quality.

In any case, we call on the Commission to adapt the future CEEAG in light of the changes foreseen in the proposal for a revision of REDII taking into account those recommendations.

Furthermore, we endorse the draft CEEAG's recognition that support for biofuels, bioliquids, biogas and biomass fuels "*can aggravate indirect negative externalities*" and of "*the need to avoid distortions on the raw material markets from biomass support, in particular for forest biomass*" (point 77). However, these assertions still allow support for forestry biomass burning. **Aid to forest biomass should not be found compatible with the internal market.**

Lastly, we find interesting the Commission's proposal to prohibit incentives for energy production that would displace less polluting forms of energy (point 107). Nevertheless, the Commission still approves support for fossil-based cogeneration and for forest biomass, whereas they compete with actual low-carbon and clean technologies, that must thus be prioritised. The Commission should explain further how it will, and how the Member States are supposed to assess "*times when zero air pollution RES would be curtailed*" in practice.

2.1.5. High efficient cogeneration

The draft CEEAG still allows aid for high-efficient cogeneration (also called 'CHP') despite unambitious efficiency standards and the need to support renewable heating technologies instead.

The EED's approach assuming that cogeneration, irrespective of the type of fuels fired, contributes to the EU and national energy efficiency targets¹⁰², is outdated and not consistent with the Union's new climate ambitions. Cogeneration is mainly a fossil fuel or biomass based technology which must thus cease to be supported if the Union is to achieve its pledge to phase out fossil fuel subsidies and more broadly, to eliminate environmentally harmful subsidies as required by the 8th Environmental Action Plan. In addition of this currently favourable State aid framework, CHP plants still receive other benefits e.g. in the form of free allocation of emission allowances under the EU Emissions Trading Scheme, creating significant competitive advantage to cogeneration over renewable heat generation.

Furthermore, although the State aid regime for CHP is based on the definition of high-efficient CHP set in the EED, some studies demonstrate that high efficient CHP **are not in practice as efficient as they should be**. For instance, CHP plants in Germany are only around 12% more efficient than plants with

¹⁰¹ See Fern, What does 'Fit for 55' mean for forests?, page 2: "The removal of subsidies for these specific feedstocks will have little effect on the present problems. Saw and veneer logs are barely burnt because of their high market value, and while burning roots and stumps is a terribly destructive practice for forest soils whose ending is much-needed, it has remained rather marginal."

¹⁰² In their annual monitoring report to assess their progress toward EE target, Member States shall analyse various indicators including electricity and heat generation from CHP. See Article 24 para. 1 of the Energy Efficiency Directive

separate energy generation without even considering grid losses which amount to around 10%.¹⁰³ The calculation method of efficiency in the EED is also highly questionable.¹⁰⁴ The legal requirement for receiving aid to large CHP plants is to save 10% of primary energy compared to the separate production of electricity and heat.¹⁰⁵ However, the choice of comparative plants to assess this energy saving is not adequate and technically obsolete.¹⁰⁶ No efficiency minimum requirement applies to small CHP¹⁰⁷, which means that any “primary energy savings” qualify them as highly efficient and alternative energy production that emits less carbon is also not considered.

For these reasons, ClientEarth calls on the Commission to:

- (i) **remove the regime of aid to high-efficient CHP** as defined in the EED¹⁰⁸ since this technology uses either fossil fuels or scarce raw materials and its high efficient nature is disputable in practice;
- (ii) allow **State aid to renewable heat technologies only**, with the exception of those using forest biomass for the reasons explained above;¹⁰⁹
- (iii) remove Article 40 GBER and require that all aid to cogeneration be notified under the EEAG.

2.1.6. Hydropower

Hydropower can have many negative impacts on habitats and species associated with changes to habitat, hydrological and hydrogeological regimes, water chemistry, and interference with species migration pathways.¹¹⁰ Point 117 EEAG used to recognise this and ClientEarth regrets that this stance is not repeated in the CEEAG.

Small hydropower plants often have additional negative impacts as their size allows them to be built in more remote natural areas with undisturbed waters. The contribution of small hydropower plants of a

¹⁰³ See the reports from Prognos AG, Fraunhofer IFAM, Öko-Institut e.V, BHKW-Consult “Evaluierung der Kraft-wärme-Kopplung, Analysen zur Entwicklung der Kraft-WärmeKopplung in einem Energiesystem mit hohem Anteil erneuerbarer Energien”, 25 April 2019; DPG, “Energie Forschung und Perspektiven”, Prognos AG, Fraunhofer IFAM, Öko-Institut e.V, BHKW-Consult, 25 April 2019; DPG, “Energie Forschung und Perspektiven”, March 2016

¹⁰⁴ *Ibidem*.

¹⁰⁵ See EED, Annex II

¹⁰⁶ E.g. as a comparison for separate electricity generation, a gas-fired power plant with an electrical efficiency of 53% is stipulated, although gas and steam power plant technology with electrical efficiencies of at least 60% has been state of the art for years. The heat pump, which has been well established for years, is not mentioned as a comparative system for separate heat generation (not even in the new edition for 2016 and subsequent years).

See for further details: Gerhard Luther, Wärmepumpe oder KWK – was passt zur Wärmewende?, pp. 123 and seq.;

See also Commission Delegated Regulation (EU) 2015/2402 of 12 October 2015 reviewing harmonised efficiency reference values for separate production of electricity and heat in application of Directive 2012/27/EU of the European Parliament and of the Council and repealing Commission Implementing Decision 2011/877/EU, Annex I

¹⁰⁷ See EED, Annex II

¹⁰⁸ The definition provided for in the EED must be reviewed within the ongoing EED revision in particular to address the issues exposed above (e.g. improving comparison methodology to define what is high-efficiency, adding efficiency minimum requirement for small CHP, etc)

¹⁰⁹ We refer to our developments under the biomass section.

¹¹⁰ The problems relate to changes in riverine habitats, water quality deterioration, disruption of sediment dynamics, biological diversity loss, changes in landscape, barriers to fish migration, dispersal of protected species, etc.; For more on the environmental impacts: Hydropower pressure on European rivers, The story in numbers, WWF, Geota, RiverWatch, EuroNatur, 2019; European Environment Agency, European waters: Assessment of status and pressures, 2018.

capacity 10MW or less to the European energy production¹¹¹, security of supply and CO₂ reduction is limited¹¹², while their impact on the environment is disproportionately severe.¹¹³

To address these kinds of negative impacts and to stop the further fragmentation of European rivers, the Commission's 2030 Biodiversity Strategy aims to restore at least 25,000 km of free-flowing rivers by 2030 through amongst others the removal of obsolete barriers, such as hydropower plants.¹¹⁴

It is also for these reasons that the Technical Expert Group on Sustainable Finance recommends to prioritise refurbishment of existing hydropower plants and rehabilitation of existing barriers, and to avoid the construction of hydropower projects below 10MW.¹¹⁵

Nonetheless, although the draft CEEAG does not explicitly refer to it, all hydropower could be supported under Section 4.1 of the draft CEEAG, without any specific conditions. The exemptions for small hydropower projects below 400kW (200kW in 2026) to participate in competitive bidding process in combination with the feed-in tariffs (point 92(b)) will continue, as it is the case under the 2014 EEAG, to contribute to the proliferation of small hydropower, despite the important environmental impacts and the Commission's clear acknowledgement of the need to restore free flowing rivers.

ClientEarth stresses that the removal of the reference to the Water Framework Directive does not mean that the Commission should not check compliance with it. Rather, as compliance with relevant Union law is a compatibility condition (point 32), the Commission will have to verify whether supported hydropower is in compliance with all environmental law, notably the Water Framework Directive and the Habitats Directive.¹¹⁶

On this basis, we recommend the Commission to amend the draft CEEAG (after point 77) to:

- (i) consider **any aid to small hydropower plants below 10MW located in natural environments unlikely to have positive environmental effects in terms of decarbonised energy production and often to have important negative effects due to the increased negative externalities, which are unlikely to be offset.** Such presumption should not apply to small hydropower plants

¹¹¹ 91% of hydropower is small (less than 10 MW) but generates only 13% of all hydropower electricity, source Commission Guidance on the requirements for hydropower in relation to EU nature legislation (C/2018/2619).

¹¹² Recommendations on small hydropower plants from the Federal Environmental Agency in Germany, in the Commission Guidance on the requirements for hydropower in relation to EU nature legislation (C/2018/2619): "(...) *in many cases, even in favourable circumstances, electricity can hardly be produced economically. Economic considerations show that a subsidy that covers the operating costs of small hydroelectric power plants — in particular plants with a capacity of under 100 kW — leads to high macro-economic costs for the avoidance of CO₂ emissions. Against the background of negative ecological effects, further exploitation of the potential of small hydroelectric power plants is not a priority for climate protection.* (...)". For these reasons, the German Agency recommends notably: "On account of their higher efficiency, large hydroelectric power plants are generally to be given preference to small and micro-installations for secondary use on waters already developed and impounded. When developing hydropower capacity attention should be focused on their optimisation (...)"; See also, [Policy Guidelines by the Energy Community Secretariat on small hydropower projects in the Energy Community](#) PG02/2020/17 September 2020.

¹¹³ WWF conducted [several case studies of small hydropower plants](#) supported by State aid in Germany and France. Several inconsistencies of the projects with environmental policies were found. We also refer to the ongoing and planned hydropower projects cited by Bankwatch in its response to the public consultation.

¹¹⁴ See the Report of the European Environmental Agency, [Tracking barriers and their impacts on European river ecosystems](#), February 2021.

¹¹⁵ Technical annex to the TEG final report on the EU taxonomy, p. 465.

¹¹⁶ Especially article 6.4 of the Habitats Directive for projects that have a proven impact on the water status and habitats and species

in existing water infrastructure outside the natural environment and river basins where energy production is not the primary aim.¹¹⁷

In the alternative, at the very least, the exemption for very small projects (point 92 b.) should not apply to small hydropower.

- (ii) allow **aid to the refurbishment of existing hydropower plants**, provided they are in full compliance with environmental law, including laws governing impacts on protected areas and species, **to improve the level of environmental protection beyond Union Standards and the technical efficiencies of the plant.**

2.1.7. CCS and CCU

Given that the majority of attempted carbon capture projects failed¹¹⁸, the implementation of CCS or CCU requires a cautious and selective approach. These forms of technology are expensive due to high deployment and energy costs (that is, they are highly energy intensive processes); for combustion-point CO₂, only up to around 85% is captured, and extraction-point emissions capture is proving highly unreliable. CCS and CCU do not capture other air pollutants, they are commercially unproven despite decades of public funding, there are serious environmental risks relating to leakage from the geological sequestration of CO₂¹¹⁹, and even if combustion and extraction point emissions capture and storage/use is improved, CO₂ and other greenhouse gases are emitted at other points in the supply chain.¹²⁰ As the role of CCS and CCU in decarbonisation is very unclear, these technologies should not be placed on an equal footing with renewable energy and energy efficiency, as is currently the case in the draft CEEAG.

Given the need for a cautious and selective approach, the current definitions of CCS and CCU in the draft CEEAG (point 18 (13) and (14)) should be refined to more clearly define which CCS and CCU applications can be supported with aid.

First, **the eligibility for aid for CCS and CCU should be limited to hard to abate industrial applications** where they can constitute valid decarbonisation solutions, where more sustainable alternatives are not readily available. Generally, CCS/CCUS for fossil fuel energy production should not be eligible¹²¹ as such support would incentivise use of unsustainable fuel sources (fossil and forestry) and be detrimental to alternative investments in non-emitting technologies (such as renewable energy

¹¹⁷ Municipal water systems (drinking water supply, sewage, treated wastewater, storm water) or industrial water use (hydraulic circulation systems in cooling and heating systems, desalination plants).

¹¹⁸ A recent study of CCS in the US found a failure rate of over 80%: Ahmed Abdulla et al, "Explaining successful and failed investments in U.S. carbon capture and storage using empirical and expert assessments" (2021) *Environmental Research Letters* 16:014036; for European examples, see also Conor Sullivan, "[Carbon capture eyes renewed backing despite past failures](#)" (*Financial Times* - 26 April 2021) .

¹¹⁹ Jamie Smyth and David Sheppard, "[Monster problem: Gorgon project is a test case for carbon capture](#)" (*Financial Times* - 26 July 2021) *Financial Times*

¹²⁰ See also: Friends of the Earth Scotland, [Carbon Capture and Storage \(CCS\) technologies](#) (July 2020).

¹²¹ Like in the Dutch SDE++ Scheme where aid for CCS for electricity generation is excluded and only industrial applications are eligible.

deployment). It should also not be available for enhanced gas recovery, or any other processes that incentivise the continued or increased extraction of fossil fuels.

Second, **only the best available CCS technologies** should be eligible for support to ensure overall CO₂ emissions are limited in accordance with the EU's and relevant national emissions reductions targets.¹²²

Third, a CCS/CCU project shall provide **a plan regarding the captured CO₂** showing:

- (i) that captured CO₂ waste from the project will be stored or utilised in a safe manner for the time required for CO₂ to break down;
- (ii) the lifecycle emissions from this storage or utilisation would not cause or contribute to any exceedance of the EU's climate targets;
- (iii) the estimated lifetime economic costs of CO₂ management including comprehensive analysis of economic liabilities associated with this management can be managed on an ongoing basis by the relevant project proponent or Member State;
- (iv) That the entities which would be responsible for insuring against those costs are adequately resourced to do so on an ongoing basis and that the term of such proposed insurance covers all reasonably likely environmental and economic contingencies in accordance with sound risk management.

2.

Moreover, the definition of CCS in the draft CEEAG encompasses the capture, transport and storage of CO₂, implying that all stages of the process can be eligible for aid whereas different business models with disaggregated value chains exist and not all parts of the value chain are confronted with inefficiencies or market failures. Not all modes of transport of CO₂ require support, such as shipping which is subject to normal competitive market conditions.

In addition, CCS and CCU being mature technologies (even if not widely commercially deployed), **a residual market failure for CCS and CCU can no longer be presumed** and the necessity of State aid has to be duly demonstrated by the Member State, especially since the rising carbon price should increase the commercial and competitive scale up of CCS in the (near) future.

Finally, adding on to the selective approach and conditions which should apply for aid to CCS and CCU, **granting State aid for the implementation of CCU as a decarbonisation measure should trigger additional caution**. Using CO₂ does not necessarily lead to decarbonisation but can simply lead to a postponement of emissions and thus not have a positive climate impact. For instance, when captured CO₂ is combined with low-carbon hydrogen to make synthetic fuels, which is a highly energy intensive process, it is subsequently released in the atmosphere. State aid for CCU should therefore be subject to an independent life-cycle emission assessment and storage plan to ensure that supported CCU projects effectively contribute to decarbonisation and not only circularity.

2.1.8. Aid to hydrogen and dedicated infrastructure

¹²² A way to implement this would be to ensure overall carbon dioxide emissions are capped.

We understand that the production of low-carbon and renewable hydrogen, investments in electrolyzers as well as the development of dedicated hydrogen networks are eligible for aid under this category. We refer to our general comments regarding aid to hydrogen set out above (Section 1.7 of this note).

We understand that the Commission will assess the distortive effect of dedicated (hydrogen) infrastructure on competition on a case-by-case basis (points 105 and 106). This method is problematic for several reasons:

- It does not address the **core question as to whether there is a need for such dedicated infrastructure** (and for the wider Union network) **or whether it is a cost-effective means of addressing energy needs**, taking into account demand requirements, the EE1st principle and electrification alternatives. The case for an EU-wide hydrogen backbone has not been justified, and potential clusters need to be very carefully and strategically planned in a cost-effective way to avoid further carbon lock-in and future stranded assets.¹²³
- The assessment criteria do not take into account to what extent such support for dedicated infrastructure would inhibit competition and other more sustainable alternatives.
- The presumption that the distortive effect of a dedicated infrastructure can be mitigated if it is part of a plan to connect to a wide network would allow small hydrogen infrastructure projects to benefit from an assumption that could enable development of hydrogen networks that have highly distortive effects on the market. In any event, being “part of a plan to develop” is vague and not legally enforceable.

2.1.9. Other remarks

Pursuant to footnote 64, we understand that Member States cannot grant aid for switching from the “most polluting fossil fuels” to fossil gas but that the additional element that delivers emission reduction (such as CCS) would be eligible for aid. Such statement should not only apply for aid for decarbonisation measures (section 4.1) but should equally apply to all aid categories, especially for district heating/cooling. Moreover, it must be kept in mind that capturing carbon at combustion stage does not make the energy low carbon if it stems from a carbon intensive production site.

¹²³ Agora Energiewende carried out an in-depth study based on EU-wide modeling with concrete recommendations for policy makers. Its key conclusion “*A no-regret vision for hydrogen infrastructure needs to reduce the risk of oversizing by focusing on indispensable demand, robust green hydrogen corridors and storage.*”. See, Agora Energiewende, “No-regret hydrogen. Charting early steps for H2 infrastructure in Europe” (February 2021).

2.2. Aid for the improvement of the energy and environmental performance of buildings (Section 4.2)

The 2014 EEAG and the GBER did not lead to the investments required to tap the savings potentials, in particular in the building sector.

The building sector is crucial for the EU's energy efficiency policy as it accounts for almost 40% of final energy consumption¹²⁴, making it the largest energy consumer in the Union. 75% of the Union's buildings are reported energy inefficient.¹²⁵ A refurbished building stock is therefore needed for the transition to a flexible, renewable-based and decarbonised energy system. The Commission underlines the role of energy efficiency and of the building sector in achieving the Union's energy and climate targets, as well as a climate neutral economy by 2050.¹²⁶ The Renovation Wave Strategy sets the ambition to at least double renovation rates in the next ten years.¹²⁷

We welcome the introduction of an aid category for the improvement of the energy and environmental performance of buildings in the draft CEEAG (section 4.2). Nevertheless, we see room for improvement in order to properly ensure the achievement of the EU's and national energy efficiency targets.

2.2.1. Complex definition of eligible costs

Eligible costs are defined as the investments costs directly linked to the achievement of a higher level of energy efficiency or environmental performance (point 125). This definition is similar to the one under Article 38 of the GBER.¹²⁸

However, as set in the State aid fitness check, the energy efficiency-related provisions of the GBER are too restrictive and complex to apply for Member States. In particular, the methodology to assess eligible costs under Article 38 GBER is not suitable for complex ownership and contracting models including professional landlords, commercial real estate owners and Energy Service Companies (ESCO). This is notably because only "additional costs" necessary to achieve the higher level of energy efficiency are

¹²⁴ Commission Recommendation (EU) 2019/1019 of 7 June 2019 on building modernisation, C/2019/4135, OJ L 165, 21.6.2019, p. 70–128

¹²⁵ European Commission, Driving energy efficiency in the European building stock: New recommendations on the modernisation of buildings

¹²⁶ Impact Assessment accompanying the document Communication from the Commission to the European Parliament and the Council Energy Efficiency and its contribution to energy security and the 2030 Framework for climate and energy policy (SWD(2014) 255 final); Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank 'A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy' (COM(2015) 80 final); Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank 'A Clean Planet for all — a European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy' (COM(2018) 773 final).

¹²⁷ Communication from the Commission, A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives, COM(2020) 662 final.

¹²⁸ Article 38 of the GBER provides that the eligible costs shall be the extra investment costs necessary to achieve the higher level of energy efficiency.

eligible, while private homeowners get funding based on total costs of projects. We thus suggest to make eligible **the entire investment costs necessary to achieve a higher level of energy efficiency**.

The recently revised GBER¹²⁹ provides for exceptions to the principle that only additional costs can be eligible, for energy efficiency improvements of residential buildings, buildings dedicated to the provision of education or social services, and to activities related to public administration or to justice, police or fire-fighting services, or one of those buildings in which activities other than those mentioned occupy less than 35 % of the internal floor area.¹³⁰ In these cases, the entire investment costs necessary to achieve a higher level of energy efficiency constitute the eligible costs. We call for the same exceptions to be included in the future CEEAG.

2.2.2. Limited aid intensity

Aid intensities set in the draft CEEAG are similar to what Article 38 of the GBER and the 2014 EEAG currently provide and are too restrictive to give enough flexibility to Member States to support energy efficiency in buildings. As said above, the Union is not on track to reach its 2030 energy efficiency target (that would be increased pursuant to the “Fit for 55” package proposals).

By comparison, aid intensities for renewable energy are not limited in the draft CEEAG and were higher than for energy efficiency measures in the 2014 EEAG.

We therefore advocate for increasing **aid intensity for the improvement of energy and environmental performance of buildings** to 100%, or at least the same level as those provided for aid to renewable energy sources in the EEAG, i.e. 65% for small enterprises, 55% for medium-sized enterprises and 45% for large enterprises, or 100% for all when the aid is allocated pursuant to a bidding process.

We also suggest an **aid intensity increase in case where the beneficiary use sustainable materials** of non-fossil fuel origin for the renovation and/or construction of new buildings.

2.2.3. Lack of ambition of energy performance improvements requirement

In the draft CEEAG, the Commission requires that renovation of existing buildings leads to a primary energy demand reduction of at least 20% as compared to the situation before the investment. This first requirement is quite low if we compare it to levels set in the Taxonomy Regulation (30%)¹³¹ or even referred by the Commission itself in recent reports. If we refer to the Commission’s recommendation of 8 May 2019 on building renovation, a 20 % of primary energy saving demand would be less than a light renovation.¹³² This does not reflect the Commission’s Renovation Wave, which stresses the need to increase very

¹²⁹ OJ L 270, 29.7.2021, p. 39–75

¹³⁰ New Article 38(3)b of the Amended GBER.

¹³¹ Annex to the Commission Delegated Regulation supplementing Regulation (EU) 2020/852 by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives

¹³² In the recommendation (EU) 2019/786 of 8 May 2019 on building renovation, the Commission refers to the following renovation depths developed in the context of the EU Building Stock Observatory on the basis of primary energy savings:
- light (less than 30 %); - medium (between 30 % and 60 %); and - deep (over 60 %).

significantly the number of deep renovations, typically defined as delivering at least 60% energy savings. We therefore call for **a more ambitious energy performance improvements requirement** for the renovation of existing buildings.

For the construction of new buildings, a reduction of at least 10% in primary energy demand compared to the threshold set for the nearly zero-energy building (nZEBs) requirements is probably not enough and difficult to assess. This is because not all Member States have applied their obligations related to nZEBs (Article 9 of the EPBD). A recently published report by BPIE shows that the implementation of nZEBs requirement¹³³ is widely heterogeneous among Member States¹³⁴. We therefore recommend that **another more ambitious reference be used for defining energy efficiency improvement for new buildings, or that, at least, the revision of the upcoming CEEAG reflects the changes in the future EPBD revision regarding the NZEB requirements if those are more stringent on Member States and well implemented by them.**

The recently adopted amending GBER ("the Amended GBER")¹³⁵ raises the same issues: it specifies exemptions to the definition of eligible costs provided that same energy performance improvements requirements as in the draft CEEAG are met.¹³⁶

2.2.4. Complexity of aid in the form of financial instrument

As already provided by Article 39 of the current GBER, the draft CEEAG allows granting aid in the form of financial instrument (points 132 and 136). However, the Fitness Check Report concluded that Article 39 of the GBER was little used by Member States because of its complexity.¹³⁷ The requirements set out in the draft CEEAG seem to have been simplified though.

More specifically, point 136 does not clarify what the terms 'energy efficiency or renewable energy fund or another financial intermediary' mean (nor does Article 39 of the GBER). For this reason, we are unsure whether or how RECs might be impacted by this provision. It seems indeed that the language used in point 136(b) could result in direct discrimination against RECs since they are not traditional commercial market operators; the core of their model being that they are not profit-oriented. We thus recommend either to delete this requirement or at the very least, to adapt the provision to avoid any discrimination against RECs (e.g. by providing an exemption from this requirement for them).

It was also our understanding that the financial instruments listed in Article 39 point 4 of the GBER do not represent the full scope of financial instruments suitable for all the different energy efficiency projects in buildings. The draft CEEAG uses exactly the same list though it is extended to renewable energy funds. **The list should therefore be broadened** so as to enhance the possibilities of developing energy efficiency schemes and not preclude opportunities of using innovative business models for building

¹³³ The Commission makes a connection between the requirement and Article 9 of the EPBD, which notably stipulates that all new buildings occupied and owned by public authorities constructed after 31 December 2018 must be nZEBs and that all new buildings constructed within the EU must be nZEBs as of beginning of 2021.

¹³⁴ BPIE, [Nearly zero: a review of eu member state implementation of new build requirements](#) (June 2021)

¹³⁵ Commission Regulation (EU) of 23.7.2021 amending Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, C(2021) 5336 final ("the Amended GBER").

¹³⁶ New Article 38, para. 3, b) of the Amended GBER.

¹³⁷ Fitness Check Report, PART 1/4, page 66

renovations, such as ESCOs. We also recommend the Commission to **provide guidance** to Member States and sharing best practices on how to interpret and implement aid in the form of financial instruments it in a very practical way.

2.3. Aid for clean mobility

2.3.1. Aid for the acquisition and leasing of clean transport vehicles

In its recent “Fit for 55” proposals, the Commission announced that average emissions of new cars should come down by 55% by 2030 and all new cars registered as of 2035 should be zero-emission. **To meet this increased climate and health ambition for road transport, State aid should be limited to zero tailpipe emission vehicles** (i.e. battery-electric or fuel-cell electric vehicles to a much lesser extent given the scarcity of renewable hydrogen).¹³⁸ However, the current definition of “clean road vehicle” in the draft CEEAG (point 18 (20)(a) and (b)) encompasses plug-in hybrid vehicles which rely on the combustion of fossil fuels and emit far more CO₂ than advertised.¹³⁹ **The CEEAG will fail to be a future-proof tool which contributes to the increased climate and health protection ambitions if it supports internal combustion engine vehicles as is currently proposed.**

As a general remark, the notion of “less environmentally friendly” vehicles (notably aircraft) that can be replaced or refurbished under this section, should be replaced by “more polluting” vehicles (that must be replaced by or refurbished to cleaner ones). This wording would better reflect the rationale for supporting the transformation of vehicles fleets, in line with the Union’s zero pollution objectives.

In line with what is set out for fossil gas above (Section 1.6 of this note), compliance with the condition to avoid further carbon lock-in should imply, as the Commission proposed, that Member States should not grant State aid to fossil gas-fuelled (including CNG and LNG) transport vehicles when cleaner alternatives are readily available or expected in the short term (point 161). However, the first exception to this principle (point 162, 1st sentence) stating that there is no lock-in if cleaner alternatives are not readily available or expected in the short term, cannot in any way apply to road transport vehicles since **zero-emission alternatives are readily available on the market**. This also implies that the Commission’s considerations about vehicles using the “most polluting” fossil fuels (point 163) should apply more broadly to road vehicles using all fossil fuels. Moreover, the second exception (point 162, 2nd sentence) does not safeguard against lock-in effects since fossil fuels would continue to be supported (up to 80%). **This exception should therefore be removed.**

Concerning **shipping**, support to fossil gas-fuelled waterborne vessels will undermine long-term real sustainable shipping solutions. Moreover, the support for LNG is based on the wrong premise that fossil gas is less polluting than other fossil fuels, which is also not the case for shipping where the use of LNG

¹³⁸ For cars, vans, urban buses and trucks under 16t, battery electric vehicles (BEV) are clearly the most energy-efficient choice and have the lowest total Cost of Ownership (purchase price plus the operation costs of a product, including charging energy costs). The same is true for trucks over 16t although the current shorter refuelling time and the greater autonomy of fuel cell trucks present certain advantages. For a detailed comparison: Transport & Environment, Comparison of hydrogen and battery electric trucks (June 2020)

¹³⁹ Transport & Environment, “Plug-in hybrids: Is Europe heading for a new dieselgate?” (November 2020).

has an equal or even worse climate impact than the fuels it seeks to replace (marine gas oil), especially given the upstream unreported methane leakages.¹⁴⁰

Concerning **aviation**, the definition of “clean aircraft” (point 18 (20)(h)) is problematically far from ambitious. An aircraft with a propulsion system based on fossil fuels can by no means be considered as clean, even if certain improvements have been made in terms of consumption and emissions compared to older aircraft. The same conclusion applies if 100% sustainable aviation fuels would be used. Supporting “clean aircraft” as currently defined in the draft CEEAG will not incentivise the further development of zero-emission aircraft, which is the only way for aviation to not undermine the climate targets. In any event, point 166 must maintain the condition that the aircraft replacement must not increase the fleet of the beneficiary. It should also allow and encourage the replacement of a more polluting aircraft by a cleaner aircraft **of a lower class** in terms of capacity, in order to downsize fleets - not simply to replace an aircraft by one of the same class.¹⁴¹

Finally, in any event, if the Commission does not limit aid to zero-emission vehicles or does not do so for all types of transport vehicles, the difference in aid intensity between zero-emission vehicles and other eligible vehicles should be higher than 10% in order to clearly incentivise zero-emission vehicles over the others (point 158).

2.3.2. Aid for the deployment of recharging or refuelling infrastructure

Similar to what is set out for clean vehicles above, **supporting the deployment of CNG and LNG infrastructure with State aid is not in line with the increased climate ambitions of the Commission’s “Fit for 55” proposals.**

The deployment of CNG and LNG infrastructure does create carbon lock-in effects since cleaner alternatives are available or expected in the short term on the market (point 184). The first exception (point 185, 1st sentence) can therefore not apply to road, water and rail transport. In the second exception (point 185, 2nd sentence), beyond the fact that it is unrealistic¹⁴², the blending requirement does not safeguard at all against lock-in of fossil gas. It should therefore be removed.

Besides, although ClientEarth welcomes the considerations made by the Commission regarding hydrogen in points 170, 179 and 186, the impact of these considerations remains vague as the notions of “carbon-intensive hydrogen”, “low-carbon hydrogen” and “renewable hydrogen” are undefined in the draft CEEAG. It appears that the Commission shares these concerns to a certain extent, including the risk of greenwashing, as it restricted investment aid for publicly accessible recharging or refuelling infrastructure to renewable hydrogen in the recently amended GBER and may extend the scope to low-carbon hydrogen only once a harmonised definition is adopted.¹⁴³ We refer to our comments above on these different

¹⁴⁰ Transport & Environment, “CNG and LNG for vehicles and ships - the facts” (October 2018)

¹⁴¹ For instance, when an airline or aircraft leasing company replaces a less environmentally friendly aircraft with a cleaner aircraft with lower MTOW and cargo/passenger capacity. In other words, the downsize of the fleet in terms of capacity and emissions should also be supported, not only equal capacity.

¹⁴² According to a study by Transport & Environment, there is an extremely limited potential of biomethane to replace CNG or LNG (around 6.2 to 9.5% of the transport demand in 2030). See Transport & Environment, “CNG and LNG for vehicles and ships - the facts” (October 2018)

¹⁴³ OJ L 270, 29.7.2021, p. 39–75

notions of hydrogen and confirm our position that **aid should be limited to renewable hydrogen subject to conditions for refuelling infrastructure** as well.

Finally, in the regrettable event that both low-carbon and renewable electricity and hydrogen infrastructure would be eligible for aid, the difference in aid intensity between renewable-based infrastructure and the other should be higher than 10% in order to clearly incentivise the first over the latter (point 182) (which appears to be in line with the Commission's intention in points 178 and 179).

2.4. Exemptions from environmental taxes and levies (section 4.7), and for energy intensive users (section 4.11)

ClientEarth regrets that the Commission persists in maintaining a permissive regime of reductions from environmental taxes, parafiscal levies and electricity levies for energy intensive users. Point 353 of the draft CEEAG indicates that the Commission *"has used appropriate measures to identify those sectors"* at risk of carbon leakage, without referencing any study, and whereas the impact assessment of the ETS State Aid Guidelines indicated there is no demonstrated risk of carbon leakage and that *"political considerations seem to remain the main driver for Member States"* to grant aid for ETS allowances.¹⁴⁴ The Commission failed to demonstrate so far, including in that impact assessment, that there is a clear correlation between relocations of industries outside the EU and electricity costs. An increase of electricity costs does not necessarily affect the competitiveness of industries when they offer high quality or niche products or have an efficient business model, amongst others. We thus fail to understand on what legal and market basis these aid regimes should be maintained in the CEEAG. Rather, the Commission should first establish a methodology to assess the plausibility of undertakings being priced-out or moving to third countries in order to better target aid to those actually at risk.

At the very least, point 351 should recognise that such reductions **shift the weight of the levies and taxes on other categories of consumers**, impacting their competitiveness or purchase power, and may undermine the social acceptance of the transition towards decarbonised energy systems. According to the Commission itself, *"Large industrial consumers generally pay around half the taxes paid by small industrial consumers. This spread has widened in recent years."*¹⁴⁵ It is therefore necessary to draw a fair balance between these various interests. Hence, we welcome the new requirement under point 355 that Member States **notify at once all reductions** they plan on granting to energy intensive industries so one can assess them altogether, especially in light of their necessity, incentive effect and proportionality. Reductions from taxes under section 4.7 should also be notified together with reductions from levies under section 4.11.

Although we plead for removing these regimes overall, we are proposing amendments to the draft CEEAG in annex, the main ones being:

¹⁴⁴ Commission Staff Working Document, Evaluation accompanying the document Impact assessment on Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post 2021, SWD(2020) 194 final, pp. 23-24 and 31

¹⁴⁵ Commission Staff Working Document, Evaluation accompanying the document Impact assessment on Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post 2021, SWD(2020) 194 final, p. 25

1. The simplified approach to environmental tax exemptions that used to be provided under section 3.7.1 of the 2014 EEAG seems to have been systematized for all tax exemptions in Section 4.7 of the draft CEEAG. We recommend, on the contrary, to adopt a stricter approach.
2. The prohibition of tax rates that are below minimum rates of Union harmonized taxes must be reintroduced in point 269. Compliance with the Energy Taxation Directive, currently under revision, is a prerequisite and allowing Member States to reduce tax rates below ETD's levels would seriously undermine the ETD's revision objectives of eaching fair taxation of fuel products based on their carbon content.
3. We maintain that allowing exemptions only beyond a certain threshold of levies could artificially inflate the sum of levies in a Member State so aid can be granted (point 356). Since those levies will *in fine* be supported by smaller consumers and households because energy intensive industries will largely be exempted, this is not acceptable. Rather, a strict limitation on the exemptions intensities, cumulation and proportionality would be more appropriate.
4. The so-called commitments or conditions set out under points 269(c), 270 and 365 draft CEEAG must be drastically strengthened:
 - a. The efficiency or renewable energy investments must be strict and binding, requiring that the aid be reimbursed if the commitments are not met – and not leaving it only to the Member States and aid beneficiaries to define what penalties are appropriate under point 270(c).
 - b. These investments must be conducted by the aid beneficiary itself and reduce the negative externalities of its own installations. Collective compliance through associations of beneficiaries (point 269(c)), or carbon offsetting (point 365(c)), are insufficient to ensure that the aid beneficiary contributes its fair share to reducing its energy consumption and to the decarbonisation efforts, whereas they greatly contribute at present to increase these externalities.
 - c. We reiterate that the so-called conditions under point 365 are not ambitious and are too easily met. Similar to our comments on the ETS State Aid Guidelines¹⁴⁶:
 - It is still unclear whether an undertaking that meets the conditions prior to receiving State aid would be deemed to fulfill the conditions (for example the second one on being supplied at 30% by carbon-free electricity). We argue that, for conditions to be true, they should be new. If an undertaking already meets some of them, the Member State should impose higher requirements or other conditions that are not already met.
 - The possibility to receive State aid for making the required investments is a real concern¹⁴⁷: **receiving aid to become eligible to receive another aid**

¹⁴⁶ ClientEarth's observations on the draft ETS State Aid Guidelines, March 2020

¹⁴⁷ Since the conditions under point 365 replicate those in the ETS State Aid Guidelines post-2021 and have the same logic, referring to the documentation accompanying the ETS State Aid Guidelines is relevant. Annex 4 of the Commission Staff Working

is a non-sense and would simply **shift the full cost of the aid beneficiary's transition on the public**, in addition to the costs the public already bears due to the taxes or levies reductions. The CEEAG must therefore exclude the grant of aid to make the investments.

- Being supplied by carbon-free electricity at 30% is far from ambitious and won't contribute enough to supporting the renewable energy targets. Carbon-free also does not exclude nuclear power, whereas it is clear that much more must be done to support the deployment of renewables. It is also unclear whether an undertaking may simply rely on a Member State's energy mix to pretend they fulfill the condition, or whether they would need to prove that they have renewable energy generation on-site or electricity supply contracts with renewable energy suppliers who guarantee to provide that amount of decarbonized electricity – we favour the latter option, since **that is the one that could trigger a shift in the aid beneficiary's consumption patterns**.

Lastly, the transitional rules for unlawful aid schemes under **point 366 are unacceptable and we believe, unprecedented**. This derogation exempts Member States from complying with any of the conditions, including a minimum level of contribution to levies, set under the 2014 EEAG – whereas by granting unlawful aid they are already at fault. The principle set in point 413 according to which “*unlawful aid will be assessed in accordance with the rules applicable at the date on which the aid was awarded*” is long standing and ensures equality of treatment of cases. Point 366 certainly results from a political compromise and cannot be justified legally; it must be removed.

2.5. Aid for the security of electricity supply (section 4.8)

We propose a substantial number of amendments in annex that we invite the Commission to look at in addition to this note.

Terminology and concepts under Section 4.8 should align better with EU sectoral legislation, especially with the Electricity Market Regulation (EU) 2019/943. Doing so would increase certainty about the interpretation and application of the CEEAG and prevent future conflicts. For example, the concept of resource adequacy, defined in point 18(40), is restricted to generation capacity and does not align with the provisions of the Electricity Market Regulation, which require to take into account all available resources including future generation capacity, storage, sectoral integration, demand response and import and export possibilities (and not just existing capacity) when undertaking resource adequacy assessments.¹⁴⁸

Document “Who is affected and how” (SWD(2020) 195 final) states that “*Large Undertakings will have to bear separate investment costs to fulfil the conditionality requirements, which will either be profitable investments or receive separate investment aid.*” See table II p. 6. The purpose of the conditions under point 365 should be to incentivise the beneficiaries to decarbonise and support renewable energy sources. Reducing their costs through various reductions from taxes and levies, and inducing them to reduce their energy costs by improving their efficiency and modifying their consumption patterns, already contributes to increase their profitability. The profitability of the investments imposed under point 365 should be irrelevant.

¹⁴⁸ Regulation (EU) 943/2019, Article 23(5)(d)

The CEEAG should also reflect in all points that **capacity mechanisms** (including strategic reserves and interruptibility schemes) **are last resort and temporary measures**. They can only be introduced after identifying a resource adequacy concern, after introducing a wide range of market reform measures, and only if a residual resource adequacy concern remains.¹⁴⁹ We are proposing wording for a few points (268, 298) in the annex in order to strengthen the obligation for Member States to **prioritise market reforms over capacity mechanisms**.

The CEEAG should **avoid discrimination against demand-side response**. Security of supply measures damage competition by dampening the price signals that are necessary to incentivise demand-side response. As provided in point 299 of the draft CEEAG, the design of capacity mechanisms should take into account its potential impact on demand-side response. We add that this involves, to the extent possible, the need to ensure that the measures meet certain characteristics, such as a right dimensioning of the capacity to be purchased by the mechanism, cost-reflectiveness of recovery/charging mechanisms and respect to technological neutrality. In respect of the latter, the Commission is well aware that the contracts lengths, eligibility criteria, bidding size requirements, lead time between contracting and delivery periods, are relevant parameters.¹⁵⁰ Many aspects of capacity mechanism design have a relevant **impact on demand-side response** access to these markets and should be considered in the CEEAG as part of the analysis on minimisation of distortions of competition and trade. Below is a non-exhaustive list of positive design elements¹⁵¹:

- Length of contracts. Shorter contracts are more consistent with the temporary nature of capacity mechanism and are desirable to limit market distortion.
- Minimum bid size. Large minimum bid sizes create an obstacle for demand-side response. A minimum bid size of 100kW, as is the standard in the US, would minimise this barrier.
- Firmness or de-rating factors. They should be non-discriminatory and correctly reflect the level of firm capacity that different technologies, including demand-side response, can provide.
- The possibility for different technologies (renewable capacity, storage, demand-side response) to present joint bids as clean energy portfolios.¹⁵²
- Collateral. Setting high upfront collateral requirements can act as barrier to new market participants, especially when the minimum bid size is also high.

¹⁴⁹ Regulation (EU) 943/2019, Articles 20 and 21 EMR

¹⁵⁰ Commission Staff Working Document accompanying the Final Report of the Sector Inquiry on Capacity Mechanisms”, SWD/2016/0385 final, para. 282

¹⁵¹ We also refer to the Regulatory Assistance projects’ reply to the consultation on the CEEAG, 2 August 2021

¹⁵² Carbon Tracker, Foot of the gas (February 2021)

- Remuneration of capacity, not of energy: remuneration of energy through capacity mechanisms has negative market effects¹⁵³, and is rightfully prohibited by the Electricity Market Regulation.¹⁵⁴ It should not be allowed under point 319 CEEAG. Moreover, the draft CEEAG do not explain the rationale for this novelty and how an “additional attention” can effectively safeguard against market distortion and the risk of increasing electricity generation, especially from fossil fuels.
- Avoid overcompensation. As noted in the Preamble to the Electricity Market Regulation “*Capacity mechanisms should not result in overcompensation*” and “*should be constructed to ensure that the price paid for availability automatically tends to zero when the level of capacity which would be profitable on the energy market in the absence of a capacity mechanism is expected to be adequate to meet the level of capacity demanded.*”¹⁵⁵

2.6. Aid to energy infrastructure (section 4.9)

The comments for this aid category add on to what is set out for fossil gas and hydrogen above (sections 1.6 and 1.7 of this note).

The development of fossil gas infrastructure is no longer needed for the EU’s security of supply¹⁵⁶, nor justified in view of the EU’s climate targets. Such conclusion applies undoubtedly for PCIs¹⁵⁷, but also for other fossil gas infrastructure projects. Since there is no economic activity that should be developed, State aid cannot be justified.

Support to fossil gas projects will also find difficulties to survive the examination of the **energy solidarity principle** that the Commission has to undertake in its State aid decisions (Section 1.4 above). The Commission would have to balance the very limited positive effects of aid to fossil gas (given that there are no security of supply concerns) with its heavy impacts on other interests of the Union and the Member States, such as the achievement of the targets in renewable energy consumption and energy efficiency.

¹⁵³ The outcome of one of the working groups on capacity mechanisms led by the Commission in April 2015 on this matter was: “Operating aid payments for electricity capacity paid per MWh are likely to have a far greater distortive effect on electricity prices and the short term running decisions of a generator than payments based on capacity (per MW). This is true for both renewable and conventional capacity, but with conventional capacity the damage of payments per MWh to market prices and the efficiency of cross border trade flows could be particularly severe because conventional generators still set market clearing prices for the majority of hours. If payments under a capacity mechanism are made for each MWh of energy delivered, then capacity providers would have an incentive to generate more, and more often, than otherwise. If significant capacity payments were granted based on production hours, there would be a risk that prices at times of scarcity no longer reflected even the marginal costs of electricity production.”

¹⁵⁴ Article 22(3)(b) Regulation (EU) 943/2019 provides that capacity mechanisms other than strategic reserves shall “*remunerate the participating resources only for their availability and ensure that the remuneration does not affect decisions of the capacity provider on whether or not to generate*”.

¹⁵⁵ Regulation (EU) 943/2019, recital (50)

¹⁵⁶ See IEA report of May 2021, “Net Zero by 2050: a roadmap for the Global Energy Sector”, p.21; Artelys, An updated analysis on gas supply security in the EU energy transition

¹⁵⁷ Commission proposal for a regulation on guidelines for trans-European energy infrastructure and repealing Regulation 347/2013, COM(2020) 824, recitals 5 and 11

The general developments on necessity and appropriateness of aid (Sections 3.2.1.1. and 3.2.1.2 CEEAG) to overcome market failures to develop energy infrastructure should apply to this aid category. There does not seem to be any justification for excluding them and, in any event, the specific considerations set out for energy infrastructure (Section 4.9.3.1) would apply as a matter of priority on the basis of the *lex specialis* principle. Instead, the need for aid for PCIs subject to internal energy market rules is presumed whereas PCIs exempted from internal energy market rules are subject to a case-by-case assessment. The factors set for this assessment do however not allow to determine whether aid is actually needed. More broadly, **the current test (point 337) neither allows to determine whether aid is needed, nor questions whether the supported energy infrastructure is needed, notably based on the application of the EE1st principle¹⁵⁸, nor whether aid is the appropriate instrument to facilitate the development of the energy infrastructure** (although appropriateness is mentioned in the title, it is not addressed in the section). As we recommend under Section 1.5 on public consultations, Member States should be required to demonstrate the necessity of aid to incentivise the deployment of energy infrastructure by means of an **ex ante open public consultation supported by an independent market study**.

Moreover, although the risk of lock-in and stranded assets is high for any type of fossil gas project (falling in the scope of other aid categories), the risk is perhaps the greatest for energy infrastructure. Safeguards are thus all the more important. Yet, the current wording in point 339(c) **will not counter the risk of lock-in and stranded assets**.

First, the **presumption that the positive effects on competition outweigh the negative effects in case of support to fossil gas infrastructure fit for use for hydrogen and renewable gases or fuels of non-biological origin (RFNBOs), is by no means a safeguard against unbridled support to fossil gas** for several reasons:

- **“Fit for use”** is not a binding commitment that the infrastructure will be used by hydrogen and renewable gases. Instead, the presumption will be (ab)used to keep transporting fossil gas, in a similar way as “CCS-ready” infrastructure has not lead to the deployment of CCS or as “low emission coal” remained theory. This means that unabated fossil gas projects will continue to emit CO₂ from the outset, under the **false pretence of sustainability** due to eligibility with hydrogen and decarbonized gases.
- The fact that fossil gas infrastructure can be used for the transport of any type of hydrogen (not only renewable or low-carbon), does also not make the infrastructure climate-friendly or reduce the risk of lock-in. Especially, given the fact that 95% of hydrogen produced today is made using unabated fossil fuels.

¹⁵⁸ See our comments on the EE1st principle above. See also, by analogy with the conditions for the grant of EU funds, Commission Notice Technical guidance on the climate proofing of infrastructure in the period 2021-2027, 29 July 2021, C(2021) 5430 final, pp. 6, 10 and 11, in accordance to which the climate proofing requirements for projects financed by InvestEU and other funds include to “*firmly integrate the EE1st in the project design, options analysis and cost-benefits analysis*” and more generally into the project development cycle.

- If the Commission considers that the positive effects of fossil gas infrastructure which realistically (can) transport(s) hydrogen and renewable gases or FNBO outweigh the negative effects on competition, *quod non*, the Member State should be able to demonstrate this. There is no valid justification to exempt Member States from such demonstration given the high risk of lock-in and impairment to the climate targets.

For all of these reasons, **ClientEarth strongly urges the Commission to remove this presumption and to submit all energy infrastructure projects to the same competition balancing test.**

Second, on the second part of point 339(c), regarding the conditions to be fulfilled for a Member State to demonstrate that the negative effects on competition are off-set by the positive effects, we refer to our comments regarding the notions of “lock-in” and “contribution to the 2030 and 2050 targets” (section 1.6.2 of this note). As stressed, the interpretation of these notions will be key to ensure a strong and proper safeguard against aid to fossil gas.

As a final comment, we note that **electrolysers** do not fall within the scope of energy infrastructure whereas they fall within the Commission’s current proposal of the TEN-E regulation.¹⁵⁹ This means that, depending on whether or not an electrolyser has a PCI status, it will be able to receive State aid under this category or may have to compete with other decarbonisation technologies (Section 4.1 draft CEEAG). Given the high cost of electrolysers and the lack of commercial deployment so far, the Commission should ensure that electrolysers have a real possibility to receive support¹⁶⁰, regardless of the category they are placed in, subject to conditions (see our suggestions in Section 1.7), in order to prioritise the production of renewable hydrogen over low-carbon hydrogen in line with the Hydrogen Strategy.¹⁶¹

2.7. Aid to district heating and cooling (section 4.10)

Section 4.10 of the draft CEEAG is disappointing in light of the Commission’s increased level of ambition in the “Fit for 55” package and more generally, of the pathway the Union and Member States need to take in order to **protect the environment and human health**.

Prior to the European Green Deal, the Commission used to consider that “*upgrading the heating networks around fossil fuel based heating plants **risks creating a lock in effect** where, thanks to the upgrades and (in some cases) expansions to the heat network, these plants remain operational longer than they would otherwise have done. With fewer distribution losses and in some cases more consumers connecting to the networks there is clearly a risk that the network upgrades improve the economic situation of the district heating systems and thereby **prolong the life of the power plants generating the heat (and pollution)**. (...) Support to the networks connected to power plants that do not meet the ‘efficient’ definition is therefore likely to **prolong the use of fossil fuels for heating, acting at least in the medium to long term against***”

¹⁵⁹ Commission proposal for a regulation on guidelines for trans-European energy infrastructure and repealing Regulation 347/2013, COM(2020) 824

¹⁶⁰ For instance, in the Dutch SDE++ Scheme, renewable hydrogen has so far not been able to compete with the other decarbonisation measures. See our comments on the SDE++ Scheme under section 2.1.1 above.

¹⁶¹ Commission Communication, Hydrogen Strategy for a climate-neutral Europe (COM(2020) 301 final), p.5

*any environmental protection objective by leading to increased CO₂ and fine particulate emissions.”*¹⁶²
The Commission therefore doubted the State aid could be found compatible with the 2014 EEAG.

Strangely, now that the European Green Deal is leading the Commission’s policies and that the CEEAG aim at increasing the level of environmental protection, granting aid to networks that do not meet the ‘efficient’ definition and keep using coal and gas would be acceptable.

We strongly warn against political trade-offs based on individual cases¹⁶³ for shaping State aid guidelines that will apply to all Member States and for several years, at a time when it is critical to take the right direction.

The “Fit for 55” package proposes to reach at least a 49% renewable share in the energy used in buildings by 2030. This objective can be met, in particular, by district heating and cooling, which can use renewable energy sources as well as waste heat and cold from industrial and service sector processes – those technologies already exist and must be deployed. In this respect, the Commission proposed to make the renewable heating and cooling target increase of a minimum annual 1.1% mandatory.¹⁶⁴ Therefore, ClientEarth argues that public financial support to district heating and cooling investments should be primarily directed towards increasing the share of energy from renewable sources and phase out fossil fuels-based support schemes.

Specifically on the draft CEEAG:

- Point 343 allowing a Member State to invest in a non-efficient network should apply only in exceptional circumstances, for example if there is a risk that the network be abandoned and closed completely instead of modernized. The Commission should also duly consider compliance with the EE1st principle. In addition, at the very least this point should include an end-date for completion of the works (for example within a maximum of 7 years after the aid was granted). Simply starting works within three years postpones the problem without solving it.
- Point 347 should equally apply to fossil gas. Cleaner alternatives already exist.
- Point 347 should not contain any exceptions to the use of “the most polluting fossil fuels”. Even if the eligible costs are limited to upgrades of existing networks, this would lock in fossil fuels precisely for the reasons described by the Commission in the Polish municipalities cases quoted above.
- Point 347(b) is particularly weak. On the one hand, if the network is fit for renewables-based heating, renewables should be used instead of polluting fossil fuels and we fail to see how the distortive impacts of aid for using fossil fuels in that situation could be offset at all. On the other hand, it is unclear if the Commission requires the network to “become fit for use” of RES-based heating/cooling due to the aid – in which case the same reasoning applies; or simply if the Member State must

¹⁶² Commission decision of 25 October 2019 on State Aid SA.51987 (2018/N) – District heating network – Tarnobrzeg; SA.52084 (2018/N) – District heating network – Ropczyce; SA.52238 (2018/N) – District heating network – Lesko; SA.54236 (2019/N) – District heating network – Dębica; and SA.55273 (2019/N) – District heating network – Ustrzyki Dolne, para. 36-37 (we highlighted); see also para. 42

¹⁶³ Indeed, the CEEAG should apply to the Polish municipalities’ district heating cases mentioned above if the Commission takes a final decision after the CEEAG enter into force, in accordance with point 413

¹⁶⁴ Fit for 55 package” Q&A on Making Our energy system fit for our climate targets”, question 6

commit that the network will one day become fit for such use. In the latter case, we refer to our criticism of the notion of fitness for use under the section related to energy infrastructure. Furthermore, not imposing any timeline by which the conversion must occur equals not imposing a condition at all.

2.8. Closure of coal activities (Section 4.12)

Caveat: our comments under section 4.12 relate to the closure of coal activities only, not to peat and oil.

ClientEarth welcomes the Commission's intention to systematise its case practice on aid for the closure of coal activities in the CEEAG. We continue to doubt that aid for the closure of an economic activities meets the "positive condition" that aid must aim at developing an economic activity¹⁶⁵ and could be authorised under Article 107(3)(c) TFEU. In any case, the rationale that closure aid can help other energy activities to develop (point 372) is valid only for aid to profitable activities, and not for aid to cover exceptional costs of uncompetitive ones that would close anyway (other activities would take the space left by those uncompetitive coal activities without the need for an aid measure). Nevertheless, we appreciate that Section 4.12 builds on some of ClientEarth's earlier proposals aiming at framing what types of aid, and in what proportions, can be paid for the closure of coal activities.

We notably support the following elements:

1. Point 369 clearly states that *"The shift away from power generation based on coal, peat and oil shale is one of the most important drivers of decarbonisation in the power sector in the Union. This shift is largely driven by market forces such as the effects of carbon prices and competition from renewables with low marginal costs"*. The proposal in the Fit for 55 package to strengthen the ETS Directive notably, and the revision of the Industrial Emissions Directive, are expected to greatly contribute to this shift. We expect the Commission to carefully analyse the effects of market forces and of current or expected regulations and policies, when assessing whether aid for closing coal activities has an incentive effect on the beneficiaries (point 373).
2. In the same vein, point 382 providing that *"Measures [for closing uncompetitive activities] can facilitate the social, environmental and safety transition of the area concerned"* is a welcome stance. Even more, they **must** facilitate this transition. This statement should also apply to aid for closing profitable activities. As part of their aid notification, Member States should be required to submit a **closure plan for the activity that distinguishes how the aid will meet those aims**.
3. Point 373 attempts to include in the counterfactual scenario *"assumptions in line with projected developments and reflect the projected revenues and costs of the installations in question."* This is the baseline and those projections must obviously include market projections guided by the **evolution of Union and national policies and regulations, as well as carbon price evolution**. They must of course factor in the Union's climate targets for 2030, that implies a total phase out of coal-based energy by 2030. The CEEAG should require that the counterfactual scenario and the

¹⁶⁵ See ClientEarth's observations on the Commission's opening decision in case SA.53625 Deutschland Kohleausstieg, June 2021, para. 10-13

closure plan of the operator should be drawn by independent experts.¹⁶⁶ The same goes for the **economic lifetime** and **profitability** of the activity: these notions are not defined and the CEEAG do not indicate how the Commission would assess them.

4. Point 374 clarifies when the Commission would consider that a closure measure is a State aid or not. We assume that when a compensation is awarded by an arbitral tribunal, the Commission is also likely to consider it as State aid since arbitral tribunals are often not bound by, nor relying on “rules of domestic law applicable to any litigant in a similar situation”. However, point 374 does not really address the necessity and appropriateness of closure aid, despite its title. We develop this point further below.

Conversely, we believe that the draft should be strengthened or fundamentally revised in the following respects:

5. **Only those activities that started prior to the adoption of the 2020 legislative package should be eligible to closure aid** (point 370). As soon as the Union’s climate targets for 2020 were decided upon, operators could not have any legitimate expectations in the continuation and profitability of coal activities in the Union; and must have anticipated this adequately in their business plans.
6. **Point 370 should limit the authorisation of aid to activities closing by 2030, not beyond.** It is well-established that coal must be phased out by 2030 if the Union is to meet the Paris Agreement and its own climate targets. The absence of an end date in the CEEAG can lead to the unacceptable situation where a Member State grants aid for a coal plant to close well beyond that date (subject to the CEEAG still being in force by then), if that plant is still operating, notably thanks to operating or restructuring aid. This risk is not prevented by the requirement that “*The closure of the coal, peat and oil shale activities should occur no later than one year from the award of the compensation*” under point 373 since a Member State could arrange to grant aid a year prior to a closure date, the latter not being limited in time; and derogations seem easily possible if correction mechanisms are put in place.
7. Undertakings who received **rescue or restructuring** aid in the past 10 years should also not be eligible to closure aid, regardless of whether the aid effectively restored their profitability or not. An undertaking should not be able to enjoy a cumulated benefit of having been restructured by State intervention and then benefitting from closure aid on the basis of that artificially-prompted profitability. At the very least, any amount of rescue or restructuring aid received in the past ten years should be deducted from the amount of closure aid the undertaking is eligible to (proposal for a new point 379bis).
8. If the purpose of the closure aid, and its permissive regime under section 4.12, is to effectively incentivise an earlier closure of coal activities, **a digressive aid intensity would help**. We reiterate our earlier proposal to cap, for example, the aid intensity at 90% for closure of the plant before 2024,

¹⁶⁶ A lesson learned from the German lignite closure aid case is that information provided only by the operators themselves is neither complete nor reliable, as it is obviously biased. See Commission’s opening decision of 2 March 2021 in case SA.53625, para.122-132

70% for closure of the plant before 2027 and 50% for closure of the plant before 31 December 2029. When the aid is to be allocated pursuant to a competitive bidding process in several rounds, Member States should introduce digressive caps in order to incentivise operators to bid in the rounds associated with the earliest closure dates.

9. Point 374 does not clearly address the necessity and appropriateness of closure aid; rather if a closure measure constitutes State aid or not. In our opinion, the proper counterfactual scenario is whether the grant of aid is necessary to facilitate the ordered closure of an activity despite a mandatory closure by a certain date and the possibility to claim damages before national courts, if any.
10. Point 377 calls for several comments;
 - a. **It does not define what “additional costs due to early closure” cover**, apart from excluding dismantling costs. The distinction between profitable activities and uncompetitive ones (for which eligible “exceptional costs” are listed in Annex II) is not justified in the draft CEEAG and we fail to see what specific costs would differ between the two. If the Commission’s intent is to analyse case by case whether some costs can and thus, should, be covered by the operators themselves (since they are profitable), we are fine with this so long as the approach is strict enough so as not to allow aid for additional costs that the operator can in fact cover. Nevertheless, we believe that this stricter approach should also be followed for uncompetitive coal activities.
 - b. The relationship between aid for additional costs and the **polluter pays principle** is not explained. Points 386 to 390 should equally apply to profitable activities.
 - c. **When certain costs can be covered from the operators’ own budget, they must be.** The Commission should carefully assess what costs are truly “additional” or “exceptional”. The counterfactual scenario should include all legal obligations on the operators to cover certain costs, and the provisions or financial guarantees they should have made pursuant to Union or national law; when provisions or financial guarantees that have actually been made are higher, they should be used to pay for those costs; when they are lower than what the law required, State aid should not cover the difference as per the requirement that the activity complies with the law (point 32) including the polluter pays principle.
 - d. In any case, the Commission should be particularly attentive to the operators **covering costs related to workers** such as those listed in Annex II, either from their own pocket or via aid. **It is crucial for ensuring that the closures happen in a socially acceptable and just manner for workers who will be affected.** Some of this aid could stem from Member States’ allocation from the Just Transition Fund, pursuant to their Territorial Just Transition Plan; although the funds available in Just Transition allocations are not expected to cover all relevant costs. It is desirable that the aid intensity of this type of aid reaches 100% and that the aid beneficiary demonstrates in its closure plan and aid application that those costs would be covered in priority.

- e. The requirement to “introduce a mechanism to update the calculation based on the most recent assumptions” should not suffer derogations.
11. The quantification of the expected environmental benefit of the measure must be quantified systematically in terms of subsidy per tonne of CO₂ equivalent emissions avoided, not only “where possible” (point 378). Such quantification is required for greenhouse gas reductions measures (point 98); the emissions of a coal plant are quantifiable¹⁶⁷; and Member States have quantified those emissions in the past.¹⁶⁸ Hence, there is no justification why this quantification would not be systematically performed for closure aid. It must also be published, for transparency: Member States are accountable to deliver on the Union’s greenhouse gas reductions targets and on the use of aid. Again, there is no reason why this information should be made public for greenhouse gas reductions measures and not for closure aid whereas they should be contributing to the same objectives. The Commission should also closely monitor that the expected reductions levels are achieved and request corrective actions when that is not the case, contrary to the current practice.¹⁶⁹
 12. Still related to transparency: Member States shall report to the Commission on all details of the aid measure and its implementation. Besides the usual data on the beneficiary, amount of aid, date of granting etc., it is relevant that Member States report and publish on a website at least the following:
 - a. The estimate of greenhouse gas emissions to be reduced pursuant to the definitive closure of the coal-fired power plant and the contribution of the closure to the Member State’s National Energy and Climate Plan: this would help the Commission to assess whether the aid is actually meeting the objective of common interest and monitor its implementation;
 - b. The detailed closure plan, including the independent experts’ reports, to monitor the closure schedule and the proper use of the aid;
 - c. The number of workers directly affected by the closure of the activity and when relevant, the trainings or outplacement programmes covered by the undertaking to re-adapt the workers to other industries, in accordance with the Member State’s Territorial Just

¹⁶⁷ Various methodologies exist. See e.g. Kühne, “[Big numbers for bold activists: A quick method for estimating potential emissions of fossil fuel projects - ScienceDirect](#)”, Energy Research & Social Science Volume 79, September 2021, 102172 (link valid until September 7th, 2021)

¹⁶⁸ Commission decision of 27 May 2016 in SA.42536 – Germany Closure of German lignite-fired power plants, para. 4: “*The measure aims to realise emission savings of 12.5 million tonnes of CO₂ per annum as of the year 2020 when all eight lignite blocks will be mothballed.*” ClientEarth signalled in January 2019 to the Commission that this target was unfortunately not achieved. See also: Commission decision of 12 May 2020 in SA.54537 (2020/NN) – Netherlands Prohibition of coal for the production of electricity in the Netherlands, para. 22: “*In 2018, [Hemweg 8] emitted 3.61 megatons of CO₂.*”; Commission decision of 25 November 2020 in SA.58181 (2020/N) – Germany Tender mechanism for the phase-out of hard coal in Germany, para. 5-6: “*The CO₂ emissions from the energy sector will have to be reduced from approximately 254 million tonnes CO₂ in 20192 to 175 - 183 million tonnes CO₂ eq. by 2030.(...) Hard coal installations and small lignite installations that were operational at the beginning of 2020 accounted for 86.6 million tonnes CO₂ emissions in 2017.*” Commission decision of 2 March 2021 in SA.53625 (2020/N) – Germany – Lignite phase-out, para. 4: “*Lignite emitted 130.74 million tonnes of CO₂ in 2018. This represents approximately 40% of the CO₂ emissions of the energy sector in that year.*”

¹⁶⁹ See Commission’s letter to ClientEarth of 18 February 2019, relating to the German lignite reserve (ref. COMP.B3/AS/mz*/Ares(2019)/ comp.r.1(2019)1181623), considering that it is sufficient that “*the measure has led to a significant reduction of CO₂ emissions*” even though the reductions levels anticipated by Germany in the notification of aid and in the decision were not reached.

Transition Plan¹⁷⁰ when applicable. Not all closure aid will stem from Member States' allocation from the Just Transition Fund, nor will the Territorial Just Transition Plan be applicable in all regions where coal and lignite plants are closing. Nevertheless, knowing the numbers of workers affected by the closure, made redundant and subject to reskilling programmes, amongst other, would help monitoring the grant of aid. When Territorial Just Transition Plans and their relevant operational programmes apply, a direct link to them would help, like for NECPs, verify the consistency of Member States' actions and spending towards their broader obligations and commitments.

13. Point 392 is very welcome (if monitored closely), but it should apply to both profitable and uncompetitive activities. Moreover, we stress that the mere principle of granting aid to an activity for closing relieves it from costs it would have incurred should it close without aid (that is, the proper counterfactual scenario); those savings give them a competitive advantage to start afresh or develop other activities; including in other polluting sectors. In this respect, the CEEAG should stress that the advantage granted by the aid should not be used to develop new activities that are not in line with the Union's climate targets for 2030 and 2050, and that the Commission would review whether the use of that advantage risk circumventing the compatibility assessment rules for support to the relevant economic activity (e.g. the rules in the CEEAG for support to decarbonisation measures, or gas, or biomass).
14. Lastly, section 4.12 fails to exclude cumulation of closure aid with other aid that contradict its very purpose (even though the eligible costs would be different).

Cumulation of closure aid with capacity mechanisms payments of whatever form (strategic reserve, market-wide mechanism) shall be prohibited since the purpose of closure aid is the full cessation of all combustion activities of the plant by the closure date and not merely its energy marketing activities. Consequently, when a closure law and/or a compensation agreement is entered into awarding closure aid, the beneficiary shall renounce to the revenues it may perceive under capacity remuneration schemes. Member States shall adapt their capacity mechanisms to functioning without the relevant coal-fired power plants accordingly. Nevertheless, revenues perceived from capacity mechanisms until the date of closure of the plant shall be taken into account as revenues of the undertaking to assess the proportionate amount of closure aid.

¹⁷⁰ Article 11 of Regulation (EU) 2021/1056 of the European Parliament and of the Council of 24 June 2021 establishing the Just Transition Fund

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