



Public Consultation on the Revision of Guidelines on State aid for Climate, Environmental Protection and Energy 2022

Contribution from ENGIE¹, 16/07/2021

I. Key messages (horizontal)

ENGIE fully supports the overall approach taken in the proposal for revised Guidelines on State Aid for Climate, Environmental Protection and Energy (CEEAG), which aims at facilitating to the greatest extent possible the cost-efficient achievement of the EU's Green Deal objectives (carbon neutrality, energy and resource efficiency and circularity, pollution reduction and biodiversity).

ENGIE has set a target for its activities to become net zero carbon already by 2045 and we invest massively in renewable electricity, renewable and low-carbon gases, renewable district heating and cooling, and infrastructures enabling the transition. State aid plays an important role to achieve a positive business case for many of these investments, we therefore welcome the flexibilization of the existing framework, the possibility for new aid instruments and categories, higher aid amounts in some areas of up to 100% of the funding gap, the simplification of notification rules.

We consider it logical and necessary to **open the door to all technologies and solutions that can deliver on decarbonization and the other objectives of the Green Deal in the shorter and the longer term**. Indeed, the challenge of decarbonizing the European economy is so huge, that all levers must be activated. At the same time, it is **very important that it remains possible to promote certain technologies or categories of technologies, such as renewables, through dedicated schemes or technology-specific approaches** in order to take into account, for instance, different levels of maturity and deployment, distortions preventing a level playing field and other considerations as provided for in the draft guidelines² (see also ENGIE's response to the Inception Impact Assessment).

We would like to underline the **complementarity of different energies and technologies, the need to avoid one-sided approaches and the necessity for the guidelines to embrace a large range of solutions accelerating decarbonization**: Electrification based on renewables is a "no-brainer" in many circumstances. Renewable generation already makes an important contribution to decarbonize the power mix and this opens opportunities to reduce GHG emissions also in other sectors such as passenger and light commercial transport, part of the heating sector, certain industrial processes. Onshore wind, offshore wind and solar often have rather complementary production profiles which can help to reduce intermittency, together with back-up solutions including flexible generation and storage as well as

¹ EU Transparency Register: 90947457424-20

² Notably paragraphs (83) and (90)

demand response. There is however a need to go beyond renewable power and to promote further renewable gases and heat, in view of reaching the new targets set by the proposal revising the RED.

Renewable and low-carbon gases such as biomethane, hydrogen, e-methane, etc. are a perfect complement to electrification: they can serve as back-up and flexibility solution in the power sector, help to decarbonize heating while avoiding issues with electricity peak demand (including through combined power- and gas-based solutions such as hybrid heat pumps), they present a key decarbonization tool for “hard-to-abate sectors” where electrification is not feasible or too costly such as longer distance heavy duty transport or certain industrial processes.

Moreover, **biomethane is a true allrounder:** Not only does it provide stable and dispatchable energy and substantial GHG emission reduction, it also brings a variety of positive externalities for agriculture, waste management, circular economy, local jobs and rural development, etc. Support for biomethane should be considered under these different angles (i.e. not only under the “decarbonization” category (4.1) but also in other categories including support for circular economy (4.4), other environmental objectives (4.5), mobility (4.3), etc.).

When it comes to hydrogen, ENGIE is convinced that **both renewable and non-renewable, low-carbon hydrogen are needed to achieve Europe’s ambitious climate targets** towards a full decarbonization. **Hydrogen from renewable sources should be the ultimate solution** due to its specific benefits (its renewable/inexhaustible character, role as storage and flexibility option to integrate wind and solar, its limited environmental impact/no need for CO₂ storage, other positive externalities). It is expected to realize major cost reductions and become the cheapest technology in the future, if allowed to reach scale. **Non-renewable, low-carbon hydrogen has an important role to play as well**, as confirmed in the EU Commission’s Hydrogen Strategy: For instance, CCUS can decarbonize grey hydrogen currently used in industry and will help to kickstart the hydrogen market, paving the way for future large-scale deployment of renewable hydrogen.

The transition to a low-carbon economy will only be a success if security of energy supply is ensured and if the cost for consumers (households, industry, etc.) is kept under control. For this reason, **security of supply and affordability should also be two objectives kept under scrutiny, next to decarbonization**, while competition will enforce cost efficiency in climate change mitigation.

This triangle – decarbonization/environmental objectives, security of supply and affordability – can best be achieved through a truly integrated energy system, taking into account specificities of local communities and networks such as DHCs, building on energy efficiency and a mix of complementary technologies and energy carriers and making use of transition solutions and existing infrastructures that can become greener in the future, thus creating synergies and saving costs.

The future state aid guidelines should properly recognize the transitional role of natural gas, which contribute to all objectives of the target triangle mentioned above:

- Decarbonization: As correctly mentioned in the draft text, natural gas can help to significantly reduce GHG emissions in the short term, where it replaces more polluting fuels such as coal in power generation (-50% GHG reduction), coal or oil in heating, diesel and petrol-based fuels in transport (up to -20% GHG reduction). Renewable and low-carbon gases will become available in larger quantities to increasingly replace natural gas (together with energy efficiency and further

electrification) so that by 2050 the latest, unabated natural gas will no longer be part of the energy mix. Blended with natural gas or used purely in existing infrastructures and end-use appliances without technical constraints, these gases will substantially reduce the risk of “fossil fuel lock-in” or stranded assets.

- Security of supply: Gas-fired power plants already support renewable deployment by providing flexibility, back-up and an adequacy insurance for the power system, especially to cope with longer periods of “Dunkelflaute” when wind and solar installations are not producing. With the further uptake of renewable power, even more firm capacity will be needed and provided through flexible gas-fired plants, storage, power-to-gas units and demand response. Such needs are particularly striking in those countries where coal and/or nuclear are being phased out.
- Affordability: European gas infrastructure is well developed and can transport both, natural gas as well as greener alternatives (biomethane, e-methane, blending of hydrogen up to a certain level) or it can be repurposed – at reasonable cost – to dedicated hydrogen infrastructure. This makes gas infrastructure a perfect complement to (reinforced) power networks, while saving cost for consumers.

The draft text thus goes basically in the right direction, by treating gas differently from more polluting fuels (such as coal, lignite, oil, diesel, ...). **State aid for investments in gas, even if using natural gas today, can be justified in certain circumstances and in particular when a perspective³ for increasing deployment of renewable and low-carbon gases or the installation of CCS/CCU technology can be given.** Indeed supporting such development towards greener gas solutions should be a key focus of state aid.

In this context, we **advise against a binary link of state aid guidelines with the taxonomy regulation** which covers only one dimension of the triangle (environmental/climate change) and focusses on individual energy activities rather than taking on the perspective of an integrated energy system. Moreover, the use of the taxonomy was originally intended to be much more limited, namely as a transparency tool for private investors, and the legitimacy to use the taxonomy now more broadly in different policy and legislative contexts can be questioned. Lastly, the discussion on taxonomy remains partial and incomplete for the time being as texts that address certain activities (including complementary delegated act which would include natural gas, as announced in the Communication on sustainable finance adopted on the 6th of July 2021) have not been elaborated and approved yet.

³ See for instance the approach followed by the Belgian authorities in their proposal of a market-wide centralized capacity mechanism (<https://economie.fgov.be/sites/default/files/Files/Energy/Circulaire-engagements-dans-le-cadre-de-la-transitie-energetique.pdf>): new capacities that would like to participate to the capacity auctions have to make specific commitments in the framework of the energy transition at the prequalification stage.

II. Messages per chapter / category

[4.1 Aid for the reduction and removal of GHG emissions including support for renewable energy](#)

a) Comments on competitive bidding:

We welcome the opening to all solutions that can contribute to GHG reduction. At the same time, **we consider it very important that Member States are able to design dedicated schemes and organize technology-specific tenders** based on the justifications in paragraphs (83) and (90). A pure technology-neutral approach could actually lead to “picking winners” at a too early stage thus preventing/slowing down the development of less mature and today more costly solutions that have significant cost reduction potential in the future. One such example is renewable hydrogen which is not competitive with other forms of low-carbon hydrogen yet and therefore technology-specific approaches/separate schemes should be applied for the two types of hydrogen. The need to adopt a specific approach by technology is also justified by the fact that authorization procedures and certain cost elements (such as taxes, connection charges, etc.) may be very different between technologies. Furthermore, organizing separate tenders for wind, solar and biomethane will allow to exploit in the best way the complementarities of these technologies, facilitate system integration and to build-up decarbonization pathways in the most optimized way.

ENGIE considers that **“combined tenders” are an interesting option and should be facilitated by the state aid guidelines**. Such tenders as for instance implemented in Portugal in 2020 could **combine new and dedicated renewable electricity generation capacity with hydrogen production** and thus ensure full alignment with the additionality principle.

While we **support the principle of competitive bidding in particular for larger projects, we consider that exemptions should be possible for smaller projects. The thresholds given in paragraph (92), notably for electricity and storage projects, reflect however a change that seems too radical:** The current guidelines allow for exemption from bidding for wind installations below 6 MW and below 1 MW for other renewable power technologies. With the proposed text, these threshold would be 400 kW as of 2022 and only 200 kW as of 2026. Moreover, those new thresholds are taken from Regulation (EU) 2019/943 (Electricity Regulation) which says nothing about tendering but establishes these thresholds for balancing responsibility – which is a completely different subject.

For renewable electric projects, a threshold of 500 kW should be a minimum. For biomethane a threshold of 3 MW_{th} would be more appropriate. Such a threshold would take into account that biomethane installations are often developed by industrialists or farmers, as a side activity on their properties, with a “one-in-a-lifetime approach”. Such projects are not adapted to heavy tender processes which address rather professional developers who are able to manage tender inherent risks.

Even in case of projects above the proposed thresholds, competitive bidding might not always be appropriate, e.g. if the competitive environment among market participants is not mature enough and that situation can’t be addressed through improved tender design. **Simply reducing tender volumes/budgets is not the right way forward in this case.** Member States should rather address the root causes that might be related to issues such as slow permitting, lack of sites, etc. and as long as fair

competition can't be ensured, exemptions from competitive bidding should be possible also for larger projects.

The possibility of including in the competitive bidding process selection non-price related criteria on top of the bidding price is a good thing, as it allows to integrate, for example, other environmental criteria. However, the proposed limit of twenty-five percent of the weighting of all the selection criteria does not offer enough flexibility in the selection process, in particular for technologies which are not yet mature. **Therefore, it would be appropriate to increase this threshold to thirty percent as is the case for instance in the current support scheme design in France.**

b) Specific comments on hydrogen

Specifically on hydrogen, we would like to stress that **the deployment of renewable and low-carbon H₂ is still in its infancy** and support mechanisms have not existed in the past. At the same time, the EU and Member States have set **ambitious targets (6 GW by 2024 and 40 GW by 2030 on EU level⁴)** and it is broadly recognized that renewable and low-carbon H₂ will be a key solution in the future, notably to decarbonize hard-to-abate sectors where electrification is not cost-efficient or simply not feasible. The development of renewable and low-carbon H₂ has to be kickstarted now to gain experience and reach scale in order to bring down cost rapidly. To avoid any delays, we are convinced that **facilitated conditions are required during an initial period**. This should include:

1. The possibility to **exempt H₂ projects from competitive bidding**
2. The possibility to introduce **technology-specific approaches** (notably through separating renewable and low-carbon hydrogen) and
3. A **grace period when it comes to criteria for renewable H₂** such as additionality, temporal and geographical correlation.

On point 3.: During a transition period, H₂ projects should be able to receive financial support also when using renewable electricity for which additionality can't be proven. Indeed it will be challenging in the coming years to ensure the additionality principle and potential other criteria in terms of temporal and geographical correlation as most renewable electricity capacities will still be developed under historical aid schemes (and are therefore often not available for PPAs with electrolyzers). Moreover, the necessary H₂ storage and transport infrastructure will also need some time to be built. Such a transitional period will allow the technology and markets to get started and will help to bring down the CAPEX of electrolyzers. More stringent criteria should then be applied at a later stage to reap the full benefits of CO₂ reduction through renewable H₂. The fact that emissions are covered under the EU ETS provides a safeguard that even without additionality principle, GHG emissions will not increase (as they are capped).⁵ This grace

⁴ See EU Hydrogen Strategy

⁵ A recent study by [AGORA Energiewende and GUIDEHOUSE](#) confirms this approach: "It may not be necessary to stringently apply all of the criteria presented in section 4.1 from the very start. Instead, softer requirements could be imposed during the initial few years or until a defined minimum capacity has been reached. This would help to facilitate the technology ramp-up, particularly against the backdrop of an initially high cost gap. It would also take into account the time needed to plan and construct new renewable energy plants. Also, some H₂ technologies are new at an industrial scale (see section 2.1), and may need flexible conditions early on. Lastly, the impact of H₂ production on the overall energy system and total GHG emissions will be rather small in the early years. Softer requirements that entail "somewhat less renewable" H₂ at the outset would thus have minimal consequences for climate policy overall. The gradually tightening of requirements, differentiated by sector, should be considered."

period should be taken into account when evaluating renewable H₂ projects /schemes under paragraph (99).

c) Further comments

ENGIE is convinced that **more cooperation across Member States will be needed** to develop solutions that can help to achieve ambitious climate targets. **Joint development of offshore wind parks** is an evident example. **Joint support for hydrogen projects**, as for instance envisaged by Portugal, is another one (e.g. by supporting H₂ projects in other Member States and importing H₂ volumes, or supporting renewable electricity production abroad and import it to produce hydrogen domestically). The future state aid framework should facilitate such projects (which might also be developed under the new EU RES Financing Mechanism).

Lastly, we support the proposal to include aid for removal of GHG emissions from the environment. While this proposal seems to be targeted to technologies such as air capture, we would like to point out **that also biogas/biomethane production can lead to negative emissions** if produced from manure or other kinds of organic wastes and residues that would otherwise be composted or incinerated.⁶

Modification proposals

Text proposal EU Commission	Proposed modification (ENGIE)
49. The selection criteria in the competitive bidding process should as a general rule be based on the aid amount requested by the applicant put in direct or indirect relation to the contribution to the objective of the measure (for example in terms of unit of environmental protection or unit of energy). <i>In a few exceptional cases</i> , it may be appropriate to include other non-price selection criteria (for instance additional environmental, technological or social criteria). In such cases, such other criteria must account for not more than 25 % of the weighting of all the selection criteria. The Member State must provide reasons for the proposed approach and ensure it is appropriate to the objective pursued.	49. The selection criteria in the competitive bidding process should as a general rule be based on the aid amount requested by the applicant put in direct or indirect relation to the contribution to the objective of the measure (for example in terms of unit of environmental protection or unit of energy). <i>In duly justified cases aligned with the European Climate law</i> , it may be appropriate to include other non-price selection criteria (for instance additional environmental, technological or social criteria). In such cases, such other criteria must account for not more than 30 % of the weighting of all the selection criteria. The Member State must provide reasons for the proposed approach and ensure it is appropriate to the objective pursued.

Text proposal EU Commission	Proposed modification (ENGIE)
91. Where multiple categories of beneficiary expected to require a level of support that deviates significantly are put into a single competitive bidding process, Member States	91. Where multiple categories of beneficiary expected to require a level of support that deviates significantly are put into a single competitive bidding process, Member States

⁶ Biomass valorized into biomethane avoids anthropogenic methane emissions that have a much higher GHG footprint than the CO₂ released when biomethane is combusted.

should consider the potential for overcompensation of cheaper technologies. This will also be taken into account by the Commission in its assessment. <i>Where appropriate, bid caps may be required to limit the maximum bid from individual bidders in particular categories. Any bid caps should be justified with reference to the quantification for reference projects referred to in points 50 and 51.</i>	should consider the potential for overcompensation of cheaper technologies. This will also be taken into account by the Commission in its assessment.
Bid caps might not be sufficient to achieve the objective of avoiding overcompensation. It also depends on the auction design (e.g. pay-as-bid vs pay-as-clear, differentiated treatment between asset classes, etc.) and the competitiveness of the auction process. In addition, the issue of overcompensation is related to the revenues and to the associated costs, not the bid caps themselves. So one could argue that a discussion on a specific auction feature (like this one: bid caps) should be removed from the proposed text, but included in the assessment of the Commission on a case-by-case basis.	

Text proposal EU Commission	Proposed modification (ENGIE)
<p>92. Exceptions from the requirement to allocate aid and determine the aid level through a competitive bidding process can be justified where evidence, including that gathered in the public consultation, is provided that one of the following applies:</p> <p>(a) there is insufficient potential supply to ensure competition; in that case, the Member State must demonstrate that it is not possible to increase competition <i>by reducing the budget or expanding the eligibility of the scheme;</i></p> <p>(b) beneficiaries are small projects, defined as follows:</p> <p>(i) for electricity generation or storage projects – projects below <i>the threshold in Article 5 of Regulation (EU) 2019/943;</i></p> <p>(ii) for electricity consumption – projects with a maximum demand less than <i>400 kW;</i></p> <p>(iii) for heat generation and gas production technologies – projects below <i>400 kW</i> installed capacity.</p>	<p>92. Exceptions from the requirement to allocate aid and determine the aid level through a competitive bidding process can be justified where evidence, including that gathered in the public consultation, is provided that one of the following applies:</p> <p>(a) there is insufficient potential supply to ensure competition; in that case, the Member State must demonstrate that it is not possible to increase competition</p> <p>(b) beneficiaries are small projects, defined as follows:</p> <p>(i) for electricity generation or storage projects – projects below <i>500 kW installed capacity.</i></p> <p>(ii) for electricity consumption – projects with a maximum demand less than <i>500 kW;</i></p> <p>(iii) for heat generation and gas production technologies – projects below <i>3 MWth</i> installed capacity.</p> <p><i>(c) For technologies at the beginning of their commercial deployment and that are necessary to achieve the medium-term and long-term climate targets enshrined under the European Climate Law,</i></p>

	<i>exemptions from competitive bidding can be justified during a transition period until 2028</i>
<p>As mentioned above, criteria proposed in (b) are based on elements that are related to balance responsibility, which is not related to a potential need for support and for exemptions for small projects.</p> <p>For point (c), as mentioned above, we consider this would be applicable to hydrogen for instance.</p>	

[4.2 Aid for the improvement of the energy and environmental performance of buildings](#)

Text proposal EU Commission	Proposed modification (ENGIE)
<p>134. Measures that incentivise new investments in natural gas-fired equipment aimed at improving the energy efficiency of buildings may lead to a reduction in energy demand in the short run but aggravate negative environmental externalities in the longer run, compared to alternative investments. Moreover, aid for the installation of natural gas-fired equipment may unduly distort competition where it displaces investments into cleaner alternatives that are already available on the market, or where it locks in certain technologies, hampering the wider development of a market for and the use of cleaner technologies. <i>The Commission considers that the positive effects of measures that create such a lock-in effect are unlikely to outweigh their negative effects.</i> As part of its assessment, the Commission will consider whether the natural gas-fired equipment replaces energy equipment using the most polluting fossil fuels, such as oil and coal.</p>	<p>134. Measures that incentivize new investments in natural gas-fired equipment aimed at improving the energy efficiency of buildings may lead to a reduction in energy demand in the short run but aggravate negative environmental externalities in the longer run, compared to alternative investments. Moreover, aid for the installation of natural gas-fired equipment may unduly distort competition where it displaces investments into cleaner alternatives that are already available on the market, or where it locks in certain technologies, hampering the wider development of a market for and the use of cleaner technologies. <i>Member States should explain how they intend to avoid that risk, including by way of binding commitments to use mainly renewable or low carbon fuels.</i> As part of its assessment, the Commission will consider whether the natural gas-fired equipment replaces energy equipment using the most polluting fossil fuels, such as oil and coal.</p>

Paragraph (119) needs clarification: It would be interpreted as if state aid for energy performance contracts could only be granted to SMEs. Such a restriction is not justified since large enterprises can also provide energy improvement measures for the facilitation of energy performance contracting.

[4.3 Aid for clean mobility](#)

ENGIE welcomes that an own aid category is created for the deployment of alternative fuel vehicles and recharging and refuelling infrastructures.

We consider that **all solutions with a credible decarbonization potential will be necessary to decarbonize transport, including (renewable) electricity, (bio)CNG, (bio)LNG and (renewable) hydrogen/e-fuels**, as each of them has its benefits and limits. E-mobility **will play an important role in the segments of**

passenger cars, light commercial vehicles and progressively heavier vehicles (buses, trucks) for peri-urban uses. Electrification of long-distance trucks or coaches is however extremely challenging both for technical/operational reasons (long recharging times, weight of the battery reducing payload) and economic reasons (high CAPEX of electric trucks). Natural gas vehicles have clear advantages in this segment (comfortable driving range, fast refueling times, cost competitiveness with diesel and petrol, ...) and help to achieve “quick wins” in terms of GHG reduction. Deep decarbonization of gas vehicles can be achieved with biomethane or e-methane, which can be blended with natural gas or used “purely” in existing and new gas vehicles. Moreover, (bio)CNG and (bio)LNG vehicles use internal combustion engines which are produced in Europe and secure jobs in the European automobile sector. Vehicles powered by renewable hydrogen offer similar advantages, notably fast refueling time, greater autonomy than batterie vehicles and no CO₂ and air pollutant emissions. In the maritime and aviation sectors, (bio)LNG and e-fuels (both liquid and gaseous) are key options, next to liquid biofuels.

All these solutions need to be increasingly based on renewable and low-carbon sources and **must be able to compete on a level playing field**. This is however not the case, due to the tailpipe approach which neglects whether a vehicle is using renewable/low-carbon or fossil fuels and emissions all along the value chain, and especially those related to production of vehicles/batteries and end-of-life.

The tailpipe approach in the draft guidelines is introduced via the definition of “clean” and “zero emission vehicles”, based on existing legislation. We understand the wish for an alignment with existing legislation, however this existing framework is already incoherent (e.g. requirements to develop biofuels/biogas in the RED which is not taken into consideration in other legislation that is based on tailpipe approach, as well as the regulation on batteries aiming at ensuring that the batteries placed in the EU market are sustainable and safe throughout their entire life cycle). **For the sake of a fair comparison of different solutions based on real GHG reduction, we would like to encourage the EU Commission to take a more holistic (and not only tailpipe-oriented) view when evaluating state aid.** Indeed, footnote 63 (related to paragraph 108 in category 4.1) is exactly putting the tailpipe approach in question. Studies show that even with a life-cycle calculation, “zero tailpipe emission vehicles” would not be threatened in most cases while GHG reductions through vehicles using sustainable biogas or e-fuels are better taken into account. That’s why there is no reason to have such an unbalanced approach on mobility topics.

As mentioned above, natural gas will increasingly become greener through the deployment of renewable and low-carbon gases which can avoid “lock-in effects”. It is already possible today for transport customers to operate their vehicles on 100% renewable gases based on green contracts between gas supplier and fuel station. Therefore **paragraphs (161) and (162) on CNG and LNG vehicles as well as the corresponding paragraphs (184) and (185) on CNG and LNG refuelling infrastructure should be phrased less restrictively and aligned with the equivalent paragraphs on gas in other chapters as the reasoning is the same as in other contexts** (e.g. where gas-fired power plants are replacing coal or lignite or gas-heating replaces more polluting heating fuels). Notably it is not clear why in the case of transport a concrete percentage for the share of renewable gases is given while this is not the case elsewhere. **Also in transport, flexibility should be given to Member States to make commitment taking into account their specific circumstances in terms of green gas availability and timing.**

Modification proposal:

Text proposal EU Commission	Proposed modification (ENGIE)
<p>161. <i>The Commission considers that certain aid measures have negative effects on competition and trade that are unlikely to be offset. In particular, measures that incentivise new investments in natural gas-fuelled (including CNG and LNG) transport vehicles may lead to a reduction in greenhouse gas emissions and other pollutants in the short run but aggravate negative environmental externalities in the longer run, compared to alternative investments. In addition, aid for the acquisition of clean transport vehicles may unduly distort competition where it displaces investments into cleaner alternatives that are already available on the market, or where it locks in certain technologies, hampering the wider development of a market for and the use of cleaner technologies. Therefore, in those cases, the Commission considers that the negative effects on competition of aid for the acquisition or leasing of natural gas-fuelled clean transport vehicles such as CNG and LNG vehicles are unlikely to be offset.</i></p>	<p>161. Measures that incentivise new investments in natural gas-fuelled (including CNG and LNG) transport vehicles may lead to a reduction in greenhouse gas emissions and other pollutants in the short run but aggravate negative environmental externalities in the longer run, compared to alternative investments. <i>For investments in natural gas-fuelled transport vehicles to be seen as having positive environmental effects, Member States must explain how they will ensure that the investment contributes to achieving the Union's 2030 climate target and 2050 climate neutrality target. In particular, the Member States should explain how a lock in of natural gas will be avoided. For example, the aid may be regarded as not having lock-in effects or displacing investments into cleaner technologies where the Member State commits to ensure that those vehicles would be operated using biogas, blending of biogases or renewable gaseous transport fuels of non-biological origin.</i></p>
<p>162. <i>Aid for the acquisition or leasing of CNG and LNG vehicles may be regarded as not creating long-term lock-in effects and not displacing investments into cleaner technologies if, at the moment when the Member State notifies the Commission of its plans to implement the aid measure or when the aid measure is implemented, the Member State demonstrates that cleaner alternatives are not readily available on the market and are not expected to be available in the short term. The aid may also be regarded as not having lock-in effects or displacing investments into cleaner technologies where the Member State commits to ensure that those vehicles would be operated using blending of biogas or renewable gaseous transport fuels of non-biological origin (minimum 20%).</i></p>	<p>To be deleted, important elements from this paragraph have been merged into (161) in our proposal</p>
<p>Equivalent changes should be applied to paragraphs (184) and (185) on aid for CNG / LNG refuelling infrastructure.</p>	
<p>170. Projects may also include installations for smart charging operations and for the on-site</p>	<p>170. Projects may also include installations for smart charging operations and for the on-site</p>

production of electricity <i>or</i> hydrogen from renewable sources, connected to the recharging or refuelling infrastructure by means of a direct link, as well as on-site storage facilities for electricity <i>and</i> hydrogen to be supplied as transport fuels.	production of electricity, hydrogen <i>or gas</i> from renewable sources <i>as well as low-carbon gases</i> , connected to the recharging or refuelling infrastructure by means of a direct link, as well as on-site storage facilities for electricity, hydrogen <i>or gases</i> to be supplied as transport fuels.
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[4.4 Aid for resource efficiency and for supporting the transition towards a circular economy](#)

We would like to point out the **contribution of biomethane to the circular economy**: Waste biomass, including agricultural waste and residues like manure, biological waste from households or food industry, green wastes from parks and gardening, etc. are important sources for biogas production via anaerobic digestion. At the same time, the digestate of the anaerobic production process can be brought back onto the fields as organic fertilizer which replaces mineral fertilizer and related GHG emissions and helps to recycle the essential nutrients, thus contributing to a circular economy. Solid waste for instance from forestry but also inorganic waste such as plastics as well as sewage sludge or contaminated sludge can be used to produce 2nd generation biogas through (pyro)gasification and hydrothermal gasification, also called “syngas”. This technology displays various advantages: it is quicker than anaerobic digestion and can be scaled up more easily, meaning the economy of scale is important. All these technologies should be eligible for aid under this category. **In order to avoid ambiguity, terms and definitions used in the chapter should be reviewed to be comprehensive. References to Directive 2008/98/EC (Waste Framework Directive) might be insufficient as not all relevant substances are included in this Directive.**

[4.8 Aid for the security of electricity supply](#)

Security of electricity supply during the energy transition to a low carbon economy is key to ensure the success of this transition for all consumers. With reinforced decarbonization targets, there is a clear need to phase-out rapidly lignite/coal power plants in countries that still depend on these generation assets. In addition, some countries (like Belgium or Germany) have decided to phase-out nuclear generation in their countries. In this context, the amount of existing firm reliable capacity available to secure the electricity supply is expected to decrease in the coming years. This element reinforces the need for resource adequacy assessments, both at European and national levels. These assessments can only be state-of-the-art if including a regional perspective and some economic viability tests (e.g. to take into account the impact of the economic conditions, like the impact of increasing CO₂ prices or the change in operating modes).

As a matter of fact, if a need for additional firm capacity is identified, the Member States will have to ensure that additional investments in generation, demand response and/or storage are made. Beyond improvements in short-term electricity markets, market-wide capacity mechanisms, long-term contracts, contract for differences, etc. might be needed to provide enough visibility to the investors and help them cope with the uncertainties faced by the long-term investments needed. Gas-fired assets, which could increasingly rely on renewable and low-carbon gases or implement decarbonisation technologies such as CCS/CCU, will be instrumental regarding the availability of enough firm generation capacity.

The proposal contained in Section 4.8 and that aims at framing the additional option required by Member States to ensure security of supply at the desired level is overall in line with the provisions of the Electricity Market Regulation⁷. Nevertheless, ENGIE believes that the proposal would benefit from removing some discrepancies or clarifying some aspects – see modification proposals below.

In addition, the following comments should be made:

- *Wholesale and retail market design fit for purposes - Paragraph (299)*: ENGIE would like to point out some additional elements which might cause or exacerbate the security of electricity supply problem:
 - Presence of regulated electricity tariffs that do not incentivize the consumers to be more active on the market and to participate a.o. to demand response schemes;
 - Additional taxes targeted at some technologies or market participants (e.g. units delivering outright power);
- *Investment in network assets and security of supply - Paragraph (301)*: ENGIE would like to remind that investments in network assets could contribute to security of electricity supply, but only if enough firm capacity is available on the other side of the network element.
- *Security of electricity supply & gas-fired assets - Paragraph (326)*: Gas-fired capacity (running increasingly on renewable/low-carbon gases) could be instrumental in the short/medium term in securing electricity supply at the right level, to cope with more penetration of intermittent RES generation. This is even more important if the level of electrification is higher than today. One should therefore keep in mind in the balancing test between positive and negative effects the need to cope with three different objectives – decarbonization, security of supply and cost for consumers.

Modification proposal:

Taxonomy of aid measures aimed at increasing security of electricity supply

Text proposal EU Commission	Proposed modification (ENGIE)
285. This Section covers compatibility rules for aid measures aimed at increasing the security of electricity supply. This includes capacity mechanisms and interruptibility for dealing with long and short-term security of supply issues resulting from market failures preventing sufficient investment in electricity generation capacity, storage or demand response, as well as network reserves which aim to treat the insufficiency of electricity transmission and distribution networks.	285. This Section covers compatibility rules for aid measures aimed at increasing the security of electricity supply. This includes market-wide capacity mechanisms, strategic reserves , interruptibility schemes or dedicated targeted schemes for dealing with long and short-term security of supply issues resulting from market failures preventing sufficient investment in electricity generation capacity, storage or demand response, as well as network reserves that are not reserve capacity and aim to treat the insufficiency of electricity transmission and distribution networks.
It is important to keep some consistency with the Electricity Market Regulation, the sector inquiry on capacity	

⁷ Regulation (EU) 2019/943 on the internal market for electricity

mechanisms⁸ (see e.g. Figure 22 Taxonomy of capacity mechanism models) and earlier decisions on capacity mechanisms.

First, it should be clarified that network reserves are not referring to the provision of “reserve capacity” (see definition in Art.2(19) of the Electricity Market Regulation) and are not aimed at interfering with the provisions contained in this regulation or in related texts (a.o. the guideline on electricity balancing⁹).

Second, strategic reserves should be explicitly mentioned in the enumeration, as they are also mentioned later in e.g. Paragraph (321). Also, in the decision on the German network reserves, one can read that “(...) *the Commission considers the Network Reserve to be a capacity mechanism in the form of a strategic reserve with a particular, regional function (...)*”¹⁰. This illustrates again the importance of having an explicit mention of strategic reserves: network reserves that are not reserve capacity and aim to treat the insufficiency of electricity transmission and distribution networks could be considered as a well-identified subset of strategic reserves.

Cross-border participation

Text proposal EU Commission	Proposed modification (ENGIE)
305. Where technically feasible , measures for security of electricity supply must be open to direct cross-border participation of capacity providers located in another Member State. Member States must ensure that foreign capacity capable of providing equivalent technical performance to domestic capacities has the opportunity to participate in the same competitive process as domestic capacity. Member States may require foreign capacity to be located in a Member State that has a direct network connection with the Member State applying the measure. The relevant rules set out in Article 26 of Regulation (EU) 2019/943 must also be complied with.	305. Measures for security of electricity supply, capacity mechanisms other than strategic reserves and where technically feasible, strategic reserves must be open to direct cross-border participation of capacity providers located in another Member State. Member States must ensure that foreign capacity capable of providing equivalent technical performance to domestic capacities has the opportunity to participate in the same competitive process as domestic capacity. Member States may require foreign capacity to be located in a Member State that has a direct network connection with the Member State applying the measure. The relevant rules set out in Article 26 of Regulation (EU) 2019/943 must also be complied with.
Art.26(1) of the Electricity Market Regulation ¹¹ reads as follows: “ <i>Capacity mechanisms other than strategic reserves and where technically feasible, strategic reserves shall be open to direct cross-border participation of capacity providers located in another Member State, subject to the conditions laid down in this Article.</i> ”. The proposal is not in line with this Article as the exemption for cross-border participation is only applicable to strategic reserves where not technically feasible. All other capacity mechanisms should be open to cross-border participation. The proposed amendment aims at correcting the scope of the exemption for cross-border participation.	

⁸ Commission Staff Working Document, Final Report of the Sector Inquiry on Capacity Mechanisms, SWD(2016) 385 final

⁹ Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing

¹⁰ State aid No. SA.42955 (2016/N-2) – Germany, Network Reserve, Paragraph (48)

¹¹ Regulation (EU) 2019/943 on the internal market for electricity

Design principles for aid measures

Text proposal EU Commission	Proposed modification (ENGIE)
<p>321. For strategic reserves and any other measures where capacity is held outside the market , to ensure market price formation is not distorted the following additional cumulative requirements apply:</p> <p>(a) the resources of the measure are to be dispatched only if the transmission system operators are likely to exhaust their balancing resources to establish an equilibrium between demand and supply;</p> <p>(b) during imbalance settlement periods where resources in the measure are dispatched, imbalances in the market are to be settled at least at the value of lost load¹¹² or at a higher value than the intraday technical price limit¹¹³, whichever is higher;</p> <p>(c) the output of the measure following dispatch is to be attributed to balance responsible parties through the imbalance settlement mechanism;</p> <p>(d) the resources in the measure are to be held outside the energy markets for at least the duration of the contractual period.</p>	<p>321. For strategic reserves, network reserves and any other measures where capacity is held outside the market , to ensure market price formation is not distorted the following additional cumulative requirements apply:</p> <p>(a) the resources of the measure are to be dispatched only if the transmission system operators are likely to exhaust their balancing resources to establish an equilibrium between demand and supply or, in the case of network reserves, only if all market-based options for addressing the insufficiency in the electricity transmission or distribution network have been exhausted by system operators;</p> <p>(b) during imbalance settlement periods where resources in the measure are dispatched, imbalances in the market are to be settled at least at the value of lost load or at a higher value than the intraday technical price limit, whichever is higher;</p> <p>(c) the output of the measure following dispatch is to be attributed to balance responsible parties through the imbalance settlement mechanism;</p> <p>(d) the resources taking part in the measure are not to receive remuneration from the wholesale electricity markets or from the balancing markets;</p> <p>(e) the resources in the measure are to be held outside the energy markets for at least the duration of the contractual period.</p> <p>The requirement referred to in point (a) shall be without prejudice to the activation of resources before actual dispatch in order to respect the ramping constraints and operating requirements of the resources. The output of the measure during activation shall not be attributed to balance groups through wholesale markets and shall not change their imbalances.</p>
The proposed amendment aims at covering explicitly network reserves and at ensuring consistency with Art.22(2)	

of the Electricity Market Regulation¹², which is more prescriptive than the proposal (see item (d)).

[4.9 Aid for energy infrastructure](#)

Modification proposal

Text proposal EU Commission	Proposed modification (ENGIE)
<p>337. The granting of State aid is a way to overcome market failures which cannot be addressed by means of compulsory user tariffs. Therefore, to demonstrate the need for State aid, the following principles apply:</p> <p>(a) the Commission considers that for projects of common interest as defined by Article 4 of Regulation (EC) No 347/2013 which are fully subjected to internal energy market legislation, the market failures in terms of coordination problems are such that financing by means of tariffs may not be sufficient and State aid may be granted;</p> <p>(b) for Projects of Common Interest which are partially or fully exempted from internal energy market legislation, and for other infrastructure categories, the Commission will carry out a case-by-case assessment of the need for State aid. In its assessment, the Commission will consider the following factors:</p> <ul style="list-style-type: none">(i) the extent to which a market failure leads to a sub-optimal provision of the necessary infrastructure;(ii) the extent to which the infrastructure is open to third party access and subject to tariff regulation; and(iii) the extent to which the project contributes to the security of energy supply in the Union.	<p>337. The granting of State aid is a way to overcome market failures which cannot be addressed by means of compulsory user tariffs. Therefore, to demonstrate the need for State aid, the following principles apply:</p> <p>(a) the Commission considers that for projects of common interest as defined by Article 4 of Regulation (EC) No 347/2013 which are fully subjected to internal energy market legislation, the market failures in terms of coordination problems are such that financing by means of tariffs may not be sufficient and State aid may be granted;</p> <p>(b) for Projects of Common Interest which are partially or fully exempted from internal energy market legislation, and for other infrastructure categories, the Commission will carry out a case-by-case assessment of the need for State aid. In its assessment, the Commission will consider the following factors:</p> <ul style="list-style-type: none">(i) the extent to which a market failure leads to a sub-optimal provision of the necessary infrastructure;(ii) the extent to which the infrastructure is open to third party access and subject to tariff regulation; or(iii) the extent to which the project contributes to the security of energy supply in the Union.
The criteria should not be cumulative. In order to avoid any ambiguity we propose to replace “and” by “or”.	

[4.10 Aid for district heating and cooling](#)

First of all, ENGIE welcomes the approach on District Heating & Cooling (DHC) under Section 4.10 that will allow Member States to develop dynamic policies to transform the heating and cooling markets, and

¹² Regulation (EU) 2019/943 on the internal market for electricity

support the implementation of relevant legislation. Easing of some conditions (in particular point 344 that specifies that general sections 3.2.1.1. (Necessity of the aid) and 3.2.1.2 (Appropriateness) do not apply to aid to DHC, as well as confirmation of the funding gap approach, and the introduction of the notion of DHC systems comprising generation and networks) will make it easier for Member States to develop schemes to decarbonize the heating & cooling markets.

As a general concern, the provisions on DHC in these guidelines will need to be carefully coordinated with the upcoming General Block Exemption Rules, in particular the upward revision of DHC threshold values for aid that do not require notification. Member States should benefit from increased flexibility to design fit for purpose support schemes and this could be achieved thanks to higher notification thresholds.

Moreover, recent periods have seen fossil fuel prices drop brutally whilst CO₂ prices are not at the appropriate level to ensure competitiveness of renewable energies, affecting the development of virtuous DHC. The new guidelines should allow Member States to support the proportion of renewable and waste heat of efficient DHC systems by implementing operating support schemes that take into account a number of positive externalities that are not usually included in the delivered heat or cold's prices.

This new proposal introduces in section 4.10 a new notion of “**energy-efficient** district heating and cooling systems” (*see §(33) of definitions and section 4.10*) and also refers to a “standard of energy efficiency” applicable to DHC (§343). According to definitions, “energy-efficient district heating and cooling systems” refers to the well-known notion of “efficient district heating and cooling” used in Directive 2012/27/EU which is not based on energy efficiency principles but on the use of specific energies. Therefore, to prevent any ambiguity which may rise from the use of a different and new expression, we strongly recommend harmonizing the proposal with Directive 2012/27/EU and suppress any reference to energy-efficiency :

Text proposal EU Commission	Proposed modification (ENGIE)
(33) ‘ energy -efficient district heating and cooling’ means district heating and cooling as defined in Article 2, point (41) of Directive 2012/27/EU of the European Parliament and of the Council, as referred to by Article 2 (20) of Directive 2018/2001/EU of the European Parliament and of the Council ³⁰ ;	(33) ‘efficient district heating and cooling’ means district heating and cooling as defined in Article 2, point (41) of Directive 2012/27/EU of the European Parliament and of the Council, as referred to by Article 2 (20) of Directive 2018/2001/EU of the European Parliament and of the Council ³⁰ ;
341. This Section applies to support for the construction or upgrade of energy efficient district heating and cooling systems. Supported investments can concern heating or cooling generation and storage plants or the distribution network or both.	341. This Section applies to support for the construction or upgrade of efficient district heating and cooling systems. Supported investments can concern heating or cooling generation and storage plants or the distribution network or both.
343. Where a Member State invests in the upgrade of a district heating and cooling system without meeting the standard of energy efficiency , it needs to commit to start the works to reach that standard within three years following the upgrade works.	343. Where a Member State invests in the upgrade of a district heating and cooling system without meeting the requirements set in Article 2, point (41) of Directive 2012/27/EU , it needs to commit to start the works to reach these

	requirements within three years following the upgrade works.
344. Sections 3.2.1.1. and 3.2.1.2. do not apply to aid to district heating or cooling. The Commission considers that State aid can contribute to addressing market failures by triggering the investment needed for the creation of energy efficient district heating and cooling systems. In addition, State aid for energy efficient district heating and cooling systems using waste, including waste heat, as input fuel can make a positive contribution to environmental protection, provided that they do not circumvent the waste hierarchy principle ¹¹⁵ .	344. Sections 3.2.1.1. and 3.2.1.2. do not apply to aid to district heating or cooling. The Commission considers that State aid can contribute to addressing market failures by triggering the investment needed for the creation of efficient district heating and cooling systems. In addition, State aid for efficient district heating and cooling systems using waste, including waste heat, as input fuel can make a positive contribution to environmental protection, provided that they do not circumvent the waste hierarchy principle ¹¹⁵ .

Furthermore, to reach RED II objectives set for the heating and cooling sector, DHC will need to get greener, to decarbonize and to expand. The scope proposal set in paragraph 341 is however not clear as regards the extension of efficient DHC. Engie suggests that such investments be clearly addressed:

Text proposal EU Commission	Proposed modification (ENGIE)
341. This Section applies to support for the construction or upgrade of energy efficient district heating and cooling systems. Supported investments can concern heating or cooling generation and storage plants or the distribution network or both.	341. This Section applies to support for the construction, extension or upgrade of efficient district heating and cooling systems. Supported investments can concern heating or cooling generation and storage plants or the distribution network or both.

With regard to point (347) on DHC that rely on most polluting fossil fuels such as coal, lignite, oil and diesel:

- considering that investments on the distribution network of such DHC are subject to specific conditions, it is necessary to determine on which grounds a DHC is considered to be “relying on” the most polluting fossil fuels (is it a % of use in the energy mix?...);
- moreover,, investments in greening such systems should be promoted through state aid, e.g. by replacing fossil fuel-based heat production through renewables-based heat production as part of a such a system. It is not clear how such cases are addressed in the draft guidelines (which aid category: 4.1 aid to GHG reduction or 4.10 aid for DHC? If 4.10 is applicable, the greening of such networks does not seem to be addressed explicitly).

Text proposal EU Commission	Proposed modification (ENGIE)
347. Section 3.2.2. does not apply to aid for district heating or cooling. The Commission considers that the upgrade or construction of district heating and cooling systems which rely on the most polluting	347. Section 3.2.2. does not apply to aid for district heating or cooling. The Commission considers that the upgrade of the distribution network of district heating and cooling systems which rely on the

<p>fossil fuels such as coal, lignite, oil and diesel, have negative consequences on competition and trade which are unlikely to be offset unless the following cumulative conditions are fulfilled:</p> <p>(a) the support is limited to the upgrade of the distribution network;</p> <p>(b) the distribution network is or becomes fit for the transport of heat or cooling generated from renewable energy sources;</p> <p>(c) the investment does not result in increased generation of energy from the most polluting fossil fuels (for example, by connecting additional customers);</p> <p>(d) there is a clear timeline involving firm commitments for transitioning away from the most polluting fossil fuels, compatible with the Union's 2030 climate target and the 2050 climate neutrality target.</p>	<p>most polluting fossil fuels such as coal, lignite, oil and diesel (<i>i.e. when such fuels account for more than 50% of the energy mix</i>), have negative consequences on competition and trade which are unlikely to be offset unless the following cumulative conditions are fulfilled:</p> <p>(a) the support is limited to the upgrade of the distribution network;</p> <p>(b) the distribution network is or becomes fit for the transport of heat or cooling generated from renewable and low-carbon energy sources;</p> <p>(c) the investment does not result in increased generation of energy from the most polluting fossil fuels (for example, by connecting additional customers);</p> <p>(d) there is a clear timeline involving firm commitments for transitioning away from the most polluting fossil fuels, compatible with the Union's 2030 climate target and the 2050 climate neutrality target.</p> <p><i>The upgrade of the production of such district heating and cooling systems may be addressed under paragraphs 342 or 343.</i></p>
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7. Applicability

By allowing the Commission to challenge existing aid schemes through the obligation for Member States to amend their existing regimes and/or agree to appropriate measures, Paragraph (414) infringes the principles of non-retroactivity of the law, legal certainty and legitimate expectations. Indeed, aid schemes are scrutinized in the light of the applicable guidelines when aids are notified, authorized and implemented. An a posteriori re-examination of the aid schemes and an application of new requirements laid down in the new guidelines would create real uncertainty for either Member States, beneficiaries or investors and may prevent some environmental protection projects.

Text proposal EU Commission	Proposed modification (ENGIE)
<p>414. The Commission proposes the following appropriate measures to Member States under Article 108, point (1), of the Treaty:</p> <p>(a) Member States must amend, where necessary, their existing environmental protection and energy aid schemes in order to bring them into line with these guidelines no later than 31 December 2023;</p>	<p>(Paragraph deleted)</p>

(b) Member States should give their explicit unconditional agreement to the appropriate measures proposed in point 414(a) within two months from the date of publication of these guidelines in the Official Journal of the European Union. In the absence of any reply, the Commission will assume that the Member State in question does not agree with the proposed measures.	
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Miscellaneous

The words “consumer” and “customer” are used across this proposed CEEAG text, which covers a broad range of topics related to climate, environmental protection and energy, without a clear definition in this text. A legitimate question could therefore be whether their meaning should be related to the definitions contained in other pieces of legislation or in a more generic and broad sense.

For instance,

- Directive (EU) 2019/944 on common rules for the internal market for electricity (Art.2 (1)-(3)) : *“‘customer’ means a wholesale or final customer of electricity”, “‘wholesale customer’ means a natural or legal person who purchases electricity for the purpose of resale inside or outside the system where that person is established”, “‘final customer’ means a customer who purchases electricity for own use”*
- Directive 2011/83/EU on consumer rights (Art.2 (1)): *“‘consumer’ means any natural person who, in contracts covered by this Directive, is acting for purposes which are outside his trade, business, craft or profession;”*.

So, in the latter case, the definition of “consumer” is limited to natural persons while this might not have been the intended purpose in the proposed CEEAG text. To avoid any ambiguity, we would therefore suggest to clarify how the words “consumer” and “customer” should be understood. Alternatively, other wording could also be considered (like “energy user”).

This clarification could also be important given the range of industrial sectors that the proposed CEEAG text could cover. One should ensure that the concepts used throughout the document are clearly understood in various contexts, not only specific ones (e.g. electricity sector, consumer rights, etc.)