

CAN Europe response to the consultation on the review of the European state-aid environmental guidelines

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Climate Action Network (CAN) Europe is Europe's largest coalition working on climate and energy issues. With over 120 member organisations in 27 European countries, CAN-Europe works to prevent dangerous climate change and promote sustainable energy and environment policy in Europe.

The Climate Action Network (CAN) is a worldwide network of more than 700 Non-Governmental Organizations (NGOs) working to promote government, private sector and individual action to limit human-induced climate change to ecologically sustainable levels. CAN is based on trust, openness and democracy.

Main Messages of this response

\checkmark	Feed-in-tariffs for renewable energy sources should continue to be one of the main
	instruments to support emerging and existing technologies, small and large in size.
\checkmark	Flexibility should be given to Member states to decide the most adequate type of
	instrument that should be used, depending on the technology, size and national
	market conditions.
\checkmark	The tendering and bidding process should be considered as an option for providing
	aid, but not the only one. The guidelines should not force such an approach.
\checkmark	Support schemes should be technology and market-specific. Technology neutral
	support schemes shouldn't be mandatory.
\checkmark	Co-firing installations should be excluded from state-aid eligibility.
\checkmark	Maximum allowed aid to energy efficiency projects should increase considerably.
\checkmark	Demand response should be recognized and allowed for aid in case of resource
	adequacy interventions.
\checkmark	An emissions performance standard should be included into capacity payments, as
	well as provisions to ensure the flexibility of market operators that receive the aid.
\checkmark	Oil and gas projects as part of the project of common interest list should not be

- entitled to state-aid.
 ✓ Smart grids at low voltage level and storage should be clearly identified and eligible
- Smart grids at low voltage level and storage should be clearly identified and engible for support.
 Common European ship times on his dimension of a storage should be clearly identified and engible
- ✓ Common European objectives on biodiversity and nature protection, in combination with green house gas emissions reduction goals should be recognised as the aim for which environmental and energy state-aid is granted.



As part of the consultation process, CAN Europe had already participated in the first round of consultation that took part in October 2012. CAN Europe's response can be found on our website¹. The responses to this consultation are based on two public CAN Europe position papers on support schemes, with one focused mainly on the reform process², published in September 2013. The second one is focused on the design of support schemes ³.

1. Introduction

Climate change is already having serious economic, social and environmental consequences across the globe, with hunger and communicable diseases being greatly aggravated. In 2009, the European Union acknowledged the urgency of acting through its 2020 climate and energy package, demonstrating the importance of effective policies and incentives in triggering the transition to a low-carbon economy.

The EU's 2020 targets have spurred Europe's renewable energy investments and thus helped create a global move towards renewable energy investments, outstripping investments into fossil fuel-based sources of energy. The European target for renewables and complementary policies, in particular, have in fact shaped policies worldwide by providing political leadership, by helping new technologies go down the price learning curve faster, and by helping other (developing) countries capture their technical abatement potential more rapidly and efficiently thanks to the EU's capacity to develop and administer sophisticated carbon policies abroad.

There are three key pillars that are contributing to the success of renewable energies in Europe. The first is the 2020 national binding targets, which give long-term investment predictability. The second one is the Renewable Energy Directive, which helps to remove administrative and market barriers. The third key pillar is the existing *guidelines on state-aid for environmental protection*⁴ (2008-2014), which allow renewable energy producers to overcome existing market failures and economic barriers.

The liberalisation of the EU energy market, together with a roll-out of support schemes that allow private consumers and citizens to participate in the energy market, has led to new realities in Europe. New market players on the supply as well as the demand side has led to increased decentralisation of energy production. EU citizens are at the core of this energy transition, becoming not just consumers but also producers of their own renewable and sustainable energy. At the same time, in most cases, it's the citizens who are mainly paying for the transition, since many industries have been exempted from paying for the full price of energy. At a time when the upcoming European elections are predicted to demonstrate ever increasing EU scepticism, it would be foolish of the EU institutions to act against the will of their citizens, in particular as the energy transition is one of the main engines for growth and jobs creation in the EU.

Unfortunately for the climate and for the future economy of Europe, the European Commission is stepping back on its ambition to lead the energy transformation that would deliver the necessary emission reductions to reach Europe's 2050 climate goals. The recently published proposal for a 2030 climate and energy policy framework, with its lack of ambition, it is clear proof of this fact.

¹ <u>http://caneurope.org/resources/doc_download/2210-eu-commission-consulation-on-state-aid-for-environmental-protection-oct-2012</u>

² <u>http://caneurope.org/resources/doc_download/2218-support-schemes-for-renewable-energy-sources-sep-2013</u>

³ <u>http://caneurope.org/policywork/issues/renewables</u>

⁴ <u>http://ec.europa.eu/competition/sectors/energy/legislation_en.html</u>



The current draft *Guidelines on Environmental and Energy State Aid for 2014-2020 (EEAG)*⁵ is the second piece of evidence of a strategy to stop the growth of renewables in the EU, take the power back from consumers and return to a centralized and monopolized energy model.

The existing guidelines have proved very useful as they provide sufficient flexibility to Member States to decide which type of support (e.g. Feed-in-tariffs) can be better used for each of the technologies and how the level of support is calculated. The draft EEAG shows that the EC is trying to set very concrete criteria for future support, prescribing the most suitable schemes (based on market penetration levels), imposing strict rules on how to participate (bidding process) and how to calculate the level of support. This approach would lead to inefficiencies in the way the support is distributed, introduce huge market penetration barriers for small investors and contradict the Directive on Renewable energy sources 2009/28/EC.

2. Aid to energy from renewable energy sources

Like the existing guidelines, the draft EEAG contains general provisions and compatibility criteria for notifiable state aid to energy from renewable energy sources. Both the existing and the draft guidelines are aimed at supporting member states in achieving the EU's 2020 strategy goals.

However, the approach of the draft EEAG to the development of renewables is significantly different from the one of the guidelines in force, notwithstanding the fact that 1) the legal framework to which the guidelines refer is still applicable and its objectives are yet to be achieved and 2) there is no evidence that the condition of competition in the electricity markets allow a radical overhaul of state aid rules for renewables, without hindering their development and putting at risk the achievement of the 2020 targets.

As noted above, the existing guidelines grant Member States the necessary degree of flexibility in deciding the appropriate form of support for renewables. The EC is now submitting a set of very prescriptive rules that constraint the possibility, for Member States, to design the state aid schemes that they consider necessary for the deployment of renewables at national level.

The *rationale* for this change in approach is unclear and there are serious concerns that the EC is modifying an essential element of the 2020 framework without considering the consequences that will ensue from this change:

- First, the EC does not provide any objective analysis in support of the claim that the state aid regimes currently in place are producing negative effects on competition and the internal market. Therefore, the EC does justify whether the introduction of restrictions is necessary. The proposed changes in the guidelines, not being supported by a clear indication of the factual background and a thorough impact assessment, risk becoming a "solution without a problem";
- Second, the EC does not present evidence that such a thorough revision, restricting the compatibility criteria for state aid to renewables will still make it possible, for Member states, to achieve the 2020 objectives; the principle that renewables should be increasingly exposed to competition, as the market develops (and a level playing field with conventional sources is achieved) is not here called into question. What raises fundamental doubts is the timing that the EC has chosen to call for a change in the applicable rules, which risks undermining the medium and long term policy goals of both the EU and its Member States;

⁵ <u>http://ec.europa.eu/competition/consultations/2013_state_aid_environment/index_en.html</u>



Third, the draft EEAG goes beyond the current Commission policy, as outlined in the EC's guidance for the design of renewable support schemes⁶: (i) the EC recognizes, on the one hand, that technological differentiation may be necessary in particular to promote technologies at an early stage of their development as well as form small and micro installation.⁷ On the other hand, the EEAG introduce an untested distinction between deployed and less deployed technologies, which de facto exclude the possibility for Member states to provide technology specific support to technologies for which a level playing field is far from being achieved, in the light of an arbitrary criterion (ii) where, on the one hand, the Commission recommends the phase out of feed in tariffs "as the renewables sector and technologies mature and grow and as costs decline"⁸. The draft EEAG, as a matter of fact, rule out their use in most cases, including for "less deployed technologies"; (iii) the EC recognizes that the implementation of tendering process presents problems (particularly for small scale, infant technologies and in the light of administrative burden excluding small scale producers) and is well aware of cases where, following auctions, winning projects have not been followed up or completed. Yet, the draft EEAG make competitive bidding process mandatory for deployed technologies. These points are examined in details in the following paragraphs

2.1. Distinction between deployed/less deployed technologies

The deployed/less deployed approach, as presented by the European Commission in their draft EEAG, is unhelpful in the debate as it sets a wrong differentiation. Each market and technology needs a differentiated approach. A specific technology cannot be considered mature simply because a specific penetration level is achieved (in this case 1-3%). There are other aspects that need to be considered, such as industry establishment, accessibility to equipment suppliers, local/national awareness of technologies and support instruments, competition, etc. In fact, the market penetration achieved by a new technology is usually the result of the supporting framework in place and not an outcome of it is intrinsic competitiveness.

Furthermore, in many cases, the definition of a type of "technology", for instance "concentrated solar power," as deployed or less deployed, will not be sufficient. Within this type of technology, there are many products and classes that present different economic and technological aspects, for instance, parabolic dishes, Parabolic Troughs and Linear Fresnel Reflectors are all different technology types.

In the light of the consequences that the draft EEAG attach to the level of maturity of a technology, it is of paramount importance that the Commission identifies criteria to qualify a RES as deployed or non deployed, which takes into account all the relevant technical and economic aspects, rather than relying on quantitative parameter set in an unjustified, if not arbitrary, way.

Finally, there are other aspects that member states should be allowed to take into account when they chose instruments in support of RES technologies, for instance, different conditions could be applied to variable and non-variable RES rather than between deployed and less deployed. This could be especially interesting for the allocation of balancing responsibilities.

Member states should be given flexibility to choose which type of support scheme they prefer to apply to each technology. The level of maturity is a factor that could be taken into account. However, the current distinction between deployed and less deployed technologies is

⁶ SWD (2013) 439 final

⁷ SWD (2013) 439 final, page 5

⁸ C(2013) 7243 final, page 15



arbitrary and does not adequately reflect the market conditions for RES in the EU (and in individual national markets).

CAN Europe suggests that Para 119 (and all related provisions in Paragraph 120 and 129) should be deleted.

2.2. Technology neutrality

Technology neutrality will not benefit the renewable energy sector in general and will induce both overcompensation of certain technologies (biomass) and underinvestment in others that are less competitive.

Support schemes, and the specific level of support, should be well defined and differentiated, not only per technology, but also based on the size and type of the plant. For instance, a large PV-roof installation may result in slightly higher costs than a ground-based plant of the same size, due to higher installation, operation and leasing costs. In the other hand, the ground-based plant creates more pressure on land availability and may incur larger system integration costs (if installed far from consumption centres).

Member states should maintain the right to take the above factors into account, as well as other interests, such as providing users, cooperatives and small and medium enterprises with access to generation. Public acceptance should also be considered as an element guiding public administrations' choice of technology.

Additionally, a technology neutral approach will result in the deployment of a single type or less balanced mix of technologies, which may hinder a smooth transition to a renewable energy system. A more balanced portfolio of technologies will provide system-wide benefits (e.g. the correlation between wind and solar resources is quite low and thus both technologies are very complementary).

From a legal perspective, a technology-neutral selection process is contrary to Article 194 of the Lisbon Treaty which states that measures to achieve the Union Policy on energy shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply. In particular Article 194 (1) (c) estates that " [...Union policy on energy shall aim, in a spirit of solidarity between Member States, to promote energy efficiency and energy saving and the development of new and renewable forms of energy...]. The current EEAG would indeed prevent Member States from supporting technologies that are not necessarily the cheapest ones. The guidelines cannot recommend to Member States to either favour or exclude certain types of technologies. In particular in countries with an already high share of RES electricity, the priority should be to secure continuous expansion of renewables, which requires technological choices.

Paragraphs 120 a), 120 b) and 129 a) introduce the concept of technology neutrality, outlining that Member States cannot pre-define the technologies that should receive support and that support will be given on the basis of nondiscriminatory criteria. CAN Europe suggests deleting paragraphs 120 a), 120 b) and 129 a)



2.3. Type of support scheme

CAN Europe upholds the idea that support schemes for renewable energy need to adapt to changing environments and cost structures, becoming as cost effective as possible but allowing renewable energy producers to enter the market with an adequate level of support.

Feed-in-tariffs are proving to be a successful market-pull instrument to bring non-deployed technologies close to maturity in a relative short time, ensuring a fast cost decrease through economies of scale and optimization of the value chain for the involved sectors.

Feed-in-tariffs, due to their openness, long-term certainty and isolation from market dynamics (thanks in part to the Renewable Energy Directive), are allowing consumers and citizens to invest in their own energy systems, changing the ownership structure of the energy system and reducing power control from the incumbent. As long as large-scale fossil fuel subsidies still distort the energy market and we don't enjoy from a playing level field, it is premature to put an end to the well-trusted and well-understood *Feed-in-tariff* scheme. **Feed-in-tariffs are the best instrument to deploy renewable energy sources.**

However, there seems to be agreement that floating feed-in-premiums could be an acceptable support mechanism within certain (technology) sectors and markets (country and segment). In markets where the technology has a significant impact and its industry is mature, feed-in-premiums could thus be acceptable as long as they are floating, ensuring return of investment and decreasing investors' uncertainty.

Fixed feed-in-premium, on the contrary, cannot be accepted at any rate. They do not provide investment security, thus increasing the cost of capital for investors, and in many cases make the project unviable without adding efficiency.

The current arrangements of the electricity market, based on marginal operating costs and the nature of a very inflexible market with little liquidity, favour less capital-intensive technologies and non-variable sources of electricity. This generally favours fossil fuels-based technologies in comparison to capital intensive and variable sources of energy, such as wind and solar power. The energy-only market needs to adjust to ensure return of investment in renewable energy producers. As long as those market conditions do not change, support schemes will be necessary even if a certain technology can produce at costs below market prices.

- Paragraphs 121 a) and b) imply that less deployed technologies (a definition that CAN Europe does not support- see section 2.1) would not be eligible for feed-in-tariffs. Thus Paragraph 121 a) should be deleted. Paragraph 121 b) should allow for feed-in-tariffs, in addition to feed-in-premiums.
- Paragraph 123 limits the range of projects that can be eligible for feed-in-tariff to those below 1MW, except for wind power (up to 5MW). CAN Europe recommends deleting such size limitations, in line with section 2.1 and 2.3, and allow Member States to decide for each project the most adequate support scheme.

2.4. Bidding process

The limited experience with tendering/bidding by renewable energy producers has proven ineffective and in some cases problematic. Tendering tends to facilitate market control of large companies (incumbents) with higher capacity to deal with administration and to bear risk. The tendering system, if not very well designed, can lead to overcompensation, or to lack of project implementation due to strategic bidding (investors bid too low to get the project but then they



do not implement it, or they all bid too high to ensure high returns as part of a pre-agreement). It also leads to lack of competition as many investors may find the process too risky⁹.

In principle, the bidding process (tenders) could help to set the most competitive level of support based on the market for large-scale projects. The main benefit would be avoiding exante calculations, which would ensure no overcompensation (based on wrong, outdated or misinformed calculations). However, as the European Commission itself warns in their guidance document on support scheme design (see footnote 4), a floor and ceiling price should be introduced to avoid strategic bidding. This can only be done with ex-ante calculations.

Bidding systems can also create an unhelpful race between developers trying to get consent for projects in order to be eligible to enter a specific bidding round. This can lead to developers cutting corners with procedures such as public engagement or environmental assessments, or to undue pressure being placed on authorities to make consent decisions quickly. This may reduce the quality of specific proposals and may also be counterproductive in terms of the strategic build up of renewables industries. Under a feed in tariff system or supplier obligation, revenue is available to a developer at the time their proposal is mature. In this context it makes sense to plan for the long term, and to find good projects that maximize energy output while minimizing additional environmental impact. In contrast, under auctioning rules, developers may look to secure available support ahead of competitors by targeting sites where consent can be secured most quickly, rather than supporting authorities in planning for rational, strategic development of a national industry.

Furthermore, across Europe hundreds of projects exist where communities and citizens are actively involved in owning and running renewable energy production. A tendering process would exclude these type of projects from being able to access RES support as they simply won't have the ability to be involved in an onerous bidding process, even more so if the tendering process is applied across all Member States (EU-wide tendering). Many benefits flow from having communities engaged in renewable energy, such as increased public support and mobilisation of private investment, which would risk being lost.

In summary, the bidding process do not provide any significant benefits versus existing support allocation methodologies (based on LCOE¹⁰ calculation), but would have a large number of problems and uncertainties associated with it.

As with any other instruments, it would need time to be understood and could lead to failures, bad experience and other regrets.

CAN Europe suggests deleting paragraph 120 a), thus giving flexibility to Member States to decide in which projects, cases and conditions they provide aid through a bidding process or other approach.

2.5. Bioenergy

In order to limit the effects on raw material markets, support to bioenergy should only be granted when resource efficiency and cascading use of biomass, biofuel and bioliquid feedstock is ensured. Any aid should also respect the waste hierarchy principle in line with the targets of the Europe 2020 strategy. This includes use of waste in cogeneration and waste management in biomass, biofuel or bioliquid installations.

⁹ If a bidder does not rank first for support, but rather second, it may have to remain on the waiting list for at least 6 months, which would create a lot of uncertainty and put investments and infrastructure on hold.

 $^{^{10}}$ LCOE stands for levelized cost of energy, a methodology used to calculate the average energy generating cost for the lifetime of a project (expressed in \notin /kWh)



In principle, any support scheme for bioenergy (biomass, biofuels and bioliquids) should undergo an environmental impact assessment that specifically addresses resource efficiency and cascading use of biomass, biofuel and bioliquids feedstocks, including resource procurement plan demonstrating how the project will source its feedstocks in compliance with those objectives. As indicated by the European Commission's 2010 report on *Sustainability Requirements for the Use of Solid and Gaseous Biomass Sources in Electricity, Heating and Cooling,* aid should require proof of sustainable production of the biomass used in biomass power plants.

Furthermore, to ensure minimum efficiency standards for the use of biomass in heating and cooling applications, the EEAG should consider **incompatible any aid to residential**, **commercial and industrial applications using biomass/bioliquids that do not meet minimum efficiency standards** set out in the Renewable Energy Directive¹¹.

The European Union has repeatedly highlighted the urgent need to phase out environmentally harmful subsidies for fossil fuels or subsidies used to carry out activities that interfere with the requirements from other EU legislation (e.g. Directive on Industrial Emissions (2010/75/EU). Providing state aid to coal-fired power plants is squarely against environmental protection, against sustainability and goes against long-term European climate goals. Provision of aid to co-firing producers (coal + biomass) serves to prolong reliance on coal-based infrastructure. It also reduces finite financial resources that would otherwise be used to promote other truly sustainable energy sources, such as solar and wind power. The *Guidelines* should therefore consider **any operating aid to co-firing plants as incompatible**.

Paragraph 124 allows operators using fossil fuels (e.g. coal) to receive aid when co-firing it with biomass. CAN Europe recommends deleting such provisions from the text, and allowing solely biomass-only plants to be eligible. In addition paragraph 124 should consider as incompatible any aid to large-scale power plants that do not capture useful heat – i.e. installations not providing cogeneration.

Regarding biofuel and bioliquids, the European Parliament and Council are currently considering a legislative proposal to amend the Renewable Energy Directive and Fuel Quality Directive¹² – the result of a mandate to the Commission to review the indirect land-use change (ILUC) impact of biofuels and bioliquids. The broad scientific consensus is that ILUC is unavoidable for land-based crops, i.e. it is not a question of whether ILUC occurs but only the degree of its significant impact.¹³ Indirect deforestation and conversion of grasslands and wetlands, in addition to peatland drainage, resulting from biofuels and bioliquids derived from land-based crops undermines their climate performance and, in many instances, can make them worse than the fossils they are replacing.

In addition, it impacts ecosystems, biodiversity and water quality, among other things. Public funding should therefore only be made available to biofuels and bioliquids that do not contribute to ILUC, and hence **the EEAG should consider as incompatible any aid, including operating aid, to biofuels and bioliquids derived from land-based crops,** i.e. biofuels and bioliquids produced from cereal and other starch rich crops, sugars, oil crops and other energy crops grown on land.

 ¹¹ In the case of biomass, Member States shall promote technologies that achieve a conversion efficiency of at least 85% for residential and commercial applications and at least 70% for industrial applications.
 ¹² COM(2012) 595.

¹³ See International Scientists and Economists Statement on Biofuels and Land Use, available at http://www.ucsusa.org/assets/documents/global_warming/International-Scientists-and-Economists-Statement-on-Biofuels-and-Land-Use.pdf



3. Aid to energy efficiency and cogeneration

The current draft EEAG solely present energy efficiency as an environmental measure, without considering its potential benefits on security, affordability and competitiveness. The multiple benefits of energy savings and the need to address a variety of market and non-economic barriers should be taken into account, justifying broader and higher support as well as priority status.

3.1. Distinction between energy savings and energy efficiency

The distinction between energy savings and energy efficiency in the EEAG should be clearer. In the paragraph 18b, "energy efficiency" is incorrectly described, using the same definition used in the Energy Efficiency Directive 2012/27/EE for the term 'energy savings" (definition 5 of the Directive). Energy savings should be the aim the measures on energy efficiency. The terms used throughout European legislation should be consistent.

3.2. Aid intensity to energy efficiency measures

None of the societal and macroeconomic objectives described in paragraph 142 have taken into account the calculation of eligible costs. The calculation also disregards all the positive impacts energy efficiency can bring to competition by reducing the market share of incumbents in the energy sector.

The proposed levels for aid intensity to energy efficiency are the lowest of all environmental and energy aid intensities (Annex 1 of EEAG defined possible aid from 20 to 40%). This poorly reflects the fact that energy efficiency is the EU's most effective lever to strengthen the block's energy security and economic resilience while reducing greenhouse gas emissions.

Aid intensity to energy efficiency measures should be increased to 100% of eligible costs.

3.3. Efficient individual heating and cooling

The EEAG appropriately consider as incompatible any aid to district heating and cooling unless it is "efficient district heating and cooling" as defined in Directive 2012/27/EU.¹⁴ The EEAG should, however, also consider as incompatible any aid to individual heating and cooling unless it is an efficient individual heating and cooling as defined in Directive 2012/27/EU.¹⁵

Paragraph 139 should explicitly exclude individual heating and cooling for aid, unless it is efficient heating and cooling.

3.4. Bidding process

The energy efficiency sector is very heterogeneous and many energy efficiency technologies are still under development. This makes the energy efficiency sector a poor candidate for

¹⁴ See Directive 2012/27/EU, Article 2(41) (efficient district heating and cooling means a district heating or cooling system using at least 50% renewable energy, 50% waste heat, 75% cogenerated heat or 50% of a combination of such energy and heat).

¹⁵ See Directive 2012/27/EU, Article 2(42) (efficient individual heating and cooling means an individual heating and cooling supply option that, compared to efficient district heating and cooling, measurably reduces the input of non-renewable primary energy needed to supply one unit of delivered energy within a relevant system boundary or requires the same input of non-renewable primary energy but at a lower cost, taking into account the energy required for extraction, conversion, transport and distribution).



competitive bidding procedures. As in the renewable energy sector, competitive bidding procedures are in essence discriminatory to smaller players given the burden of participation (resource and time intensive process to prepare a project proposal) without any guarantee that the proposed projects will be successful in the auction (see section 2.4 for further explanation)

4. Aid to generation adequacy

We welcome the European Commission's efforts in managing Member States' interventions and attempts to secure a level playing field and overcome market failures. In particular, we fully support the explicit mention of interconnections and demand response in paragraphs 205 and 209, and paragraph 212 stressing the fact that any measure should not in principle reward investments in generation from fossil fuel plants. We however think that a few amendments to the rest of the document could help in ensuring the demand side of electricity markets actually do compete on a level playing field with the supply side.

4.1. More appropriate terminology to reflect demand side participation

Despite a few mentions of demand response and interconnections, the document is very much written to assess aid to generators, leaving little room for alternatives. Simple changes could allow a real level playing field, mainly through the removal of all mentions of "generation adequacy" throughout the document.

- We propose "generation adequacy" is renamed "resource adequacy¹⁶" throughout the text, including in Paragraph 18 (ii), 18 (kk), 201, 203, 204, etc.
- We propose to replace "generation operator" by "market operator¹⁷" in paragraph 18 (jj).

4.2. Flexibility should be the aim of resource adequacy

As outline by the EEAG in paragraph 204, the aim of any intervention for resource adequacy should address potential concerns on lack of flexibility in the energy system due to high levels of variable energy sources. CAN Europe believes efforts should focus on providing system flexibility, from both supply and demand, rather than on incentivizing new generating capacity using mature technologies. Energy savings and demand management must be the priority elements of a strategy to secure system adequacy, helping to reduce the need for overall generation capacity, particularly during peak loads, and to reduce the EU's fossil fuel import bills.

Aid for resource adequacy should be clearly justified as an intervention to increase system flexibility. Only market operators able to provide supply or demand response in a relatively short time frame should be eligible for aid.

¹⁶ Resource adequacy means there are sufficient capacity resources that are planned for the power system to ensure that a prescribed reliability standard is met. A reliability standard is a probabilistic measure of the likelihood that sufficient capacity resources will be available in real time to balance supply and demand without enforced disconnection or voltage reduction, defined by organizations such as ENTSO-E.

¹⁷ A market operator is an undertaking that can produce, consume or deliver electrical power.



4.3. An emissions performance standard as a condition for aid for resource adequacy

As highlighted in the draft, there is a risk that measures addressing adequacy concerns may end up supporting the use of fossil fuels, which goes against the European objective of phasing out environmentally harmful subsidies. The most effective way to minimise this risk is to include an emissions performance standard in the EEAG. The provisions for the Emissions Performance Standard (EPS) could be included in section 5.9.3 on appropriateness of aid to adequacy measures. The threshold shall reflect existing EU and national commitments to limit carbon emissions; it must be reviewed on a regular basis to remain in line with future climate commitments.

Paragraph 212 should be amended to reflect the conditions identified above. It could read as follows: "The measure should in principle not reward new investments in or extensions from fossil fuel plants unless it can be shown that a less harmful alternative to achieve generation adequacy does not exist (e.g. demand-side management, stronger interconnected markets). For this purpose, the aid should solely remunerate operators whose:

(a) Carbon emissions fall below a set threshold;

(b) Carbon emissions threshold reflects existing EU and national commitments to limit carbon emissions; and

(c) Threshold is reviewed every three years to remain in line with new commitments."

5. Aid to energy infrastructure projects

We welcome the recognition of the importance of energy infrastructure in the transition to a low carbon energy system with a high renewable energy contribution. However, we are concerned that insufficient safeguards are in place to ensure that Projects of Common Interest (PCI)¹⁸ and other energy infrastructure projects receiving state aid are compatible with (i) the EU environmental aquis, (ii) EU 2020 and 2030 greenhouse gas emission targets and (iii) the EU's commitment to phase out support for fossil fuels.

5.1. Excluding gas and oil projects from state-aid eligibility

The definition of 'energy infrastructure' in the guidelines includes gas and oil pipelines. Enabling support for these infrastructure types directly contradicts the EU's commitment to phasing out support to fossil fuels. Gas will continue to be needed for electricity generation as a transitional balancing technology as the share of variable renewables increases. However, greater electricity interconnection and energy storage are the long-term solutions here, not more gas imports and dependence on gas-fired generation.

We are concerned that the draft EEAG in Section 5.8 is too generous in stating that projects defined as 'energy infrastructure' meet the eligibility tests. In particular we urge the Commission to ensure support is ruled out for projects that are incompatible with the Union's climate objectives. For example, in the 2013 selection of 'Projects of Common Interest' (PCI) for gas, the Commission's Regional Groups assumed very high levels of demand for gas in Europe to 2020, based on a commissioned study from Booz and Company¹⁹. Those demand expectations greatly

¹⁸ <u>http://ec.europa.eu/energy/infrastructure/pci/pci_en.htm</u>

¹⁹ Booz and Company "Market analysis and priorities for future development of the gas markets and infrastructure under the north south gas interconnections in western Europe, south eastern Europe and the Baltic sea region", April 2013.



exceed the level of demand assumed by the Commission itself²⁰ and are not compatible with the EU's climate objectives. We therefore assume that certain projects may not be necessary to satisfy Europe's gas demand and thus cannot be considered "of common interest". Yet all PCIs are automatically eligible for aid under paragraph 191.

Paragraph 191 should define as eligible only Projects of Common Interest that cover electricity infrastructure, smart grids and storage. It should explicitly exclude oil and gas projects.

5.2. Sustainability of energy infrastructure projects

Additional safeguards are also needed to ensure that aid to energy infrastructure is compatible with sustainable growth, as defined in "Resource Efficient Europe," one of the seven flagship initiatives contained in the Europe 2020 strategy. It has a commitment to economic growth that helps to "limit the environmental impacts of resource use." Projects of Common Interest and other eligible energy infrastructure projects may have significant environmental impacts so it is vital that EU policies do not inadvertently damage biodiversity and associated public goods in seeking to address other market failures. Additional safeguards are needed to ensure projects qualifying as PCIs, or as eligible energy infrastructure, are deliverable within existing environmental safeguards for habitats and species. The proposals for definitions of environmental protection and externalities (in Section 6) are essential here.

5.3. Ensuring eligibility of smart grids and storage projects for state-aid

While the definition of energy infrastructure in article 18 (ff) does include electricity storage and equipment or installation aiming at two-way digital communication at different voltage levels, the text of section 5.8 seems to mainly address interconnection, transmission or distribution projects. For instance, statements such as *"competition is generally limited as [such] infrastructure often constitutes a natural monopoly"* (189) or *"the Commission considers that tariffs are the appropriate primary means to fund energy infrastructure"* (194) would not necessarily apply to storage or smart grid projects, which offer wider opportunities for financing and competition.

Furthermore, the scope of state-aid is mainly reduced to Projects of Common Interest. In the regulation on trans-European energy infrastructures, 347/2013, while allowing smart grids projects to be eligible, the definition only refers to medium voltage and those at transmission level²¹. This means that smart grid projects at the low voltage distribution level, while being fundamental for a transition to a low-carbon economy, would be excluded from state-aid eligibility.

Since smart grids and electricity storage development at all voltage levels will be needed in Europe this decade, it would be beneficial to further clarify in section 5.8 what aid could be considered acceptable and ensure that smart grids at all voltage levels are eligible for state-aid.

²⁰ EU Energy, transport and GHG emissions trends to 2050m, reference scenario 2013, <u>http://ec.europa.eu/energy/observatory/trends 2030/index en.htm</u>

²¹ Regulation 347/2013, Annex II, Point 1 e) Any equipment or installation, both at transmission and medium voltage distribution level, aiming at two-way digital communication, real-time or close to real-time, interactive and intelligent monitoring and management of electricity generation, transmission, distribution and consumption within an electricity network in view of developing a network efficiently integrating the behaviour and actions of all users connected to it — generators, consumers and those that do both — in order to ensure an economically efficient, sustainable electricity system with low losses and high quality and security of supply and safety.



6. Damage to biodiversity and the natural environment

The guidelines must recognize that reducing greenhouse gas 'pollution' is not the only environmental consideration to be taken into account in energy aid. Energy investments can also lead to damage to the physical and natural environment, or measures can be taken to minimize these harms, which are not internalized in market prices.

In line with the intention in Paragraph 7 to ensure compliance with the EU environmental law, the definitions of pollution and environmental protection must be amended to include damage to and protection of the natural environment.

This is in line with sustainable growth as defined in the Europe 2020 strategy. "Resource efficient Europe", aims to create an economy that helps to, inter alia, "fight against climate change and limit the environmental impacts of resource use." It is important that in the move to include energy and energy infrastructure in the environmental state guidelines, efforts to correct a market failure (carbon emissions) do not inadvertently exacerbate another market failure (environmental impacts of resource use).

- In Paragraph 18, "damage to the natural environment and biodiversity" should explicitly be mentioned in the definitions which are determining the overall goal of environmental and energy aid.
- Paragraph 41 a) should be amended to reflect the failure of market prices to capture "direct damage to biodiversity and the environment" (not only damage via 'pollution').

The Guidelines should also encourage innovation in technologies that have significant potential to enable low carbon generation without negative impacts on biodiversity and the natural environment.

Paragraph 119 states "specific aid measures may be needed to bring forward less deployed renewable technologies that can contribute to the decarbonisation of the energy sector in the longer term." A footnote here states "*Considerations could be given to environmental and technical performance criteria that characterise the long-term prospects of innovative technologies*." We welcome this recognition of the importance of innovation to reduce environmental impacts, but it should be clearer that reducing impacts on nature (not just reducing greenhouse gas emission) is an important consideration.

Contact Information Daniel Fraile +32 2 894 46 72 Daniel@caneurope.org

Climate Action Network (CAN) Europe is Europe's largest coalition working on climate and energy issues. With over 120 member organisations in 27 European countries, CAN-Europe works to prevent dangerous climate change and promote sustainable energy and environment policy in Europe.