

Contribution to the Public Consultation on Renewable energy

NGVA Europe (Natural Gas Vehicle Association Europe) is a NGO professional association. NGVA Europe is the only association representing the interests of the European NGV (natural gas vehicles) industry with relation to the use of natural gas (both gaseous and liquid) and biomethane in transport. Information on our organization and its activities can be found at www.ngvaeurope.eu

We are registered in the Register of interest representatives with the number: 1119946481-54

Section A: General policy approach

In light of the results of recent communications on a Roadmap to a low carbon economy and transport white paper as well as the Energy 2050 Roadmap:

1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?

Yes, a combination of EU and sectorial level targets is appropriate

Those targets are necessary to stimulate the industry towards a more sustainable future. This scheme promotes investments and R&D programs specially in certain sectors with a great improvement margin. Nevertheless, setting closed long-term targets can be quite challenging and not so feasible for sector which changes so quickly. There are certain sectors, like the road transport, in which there is a great gap to be filled by new renewable options, and this would be the case for upgraded biogas (biomethane). Nevertheless, if the EU wants to be coherent with the objectives set for the long term, it should provide the proper legislative mechanisms to do so: refueling infrastructure build-up, favourable taxation schemes with a long-term perspective, etc. On the other hand it is also missing a European regulation allowing the biomethane producer to inject the gas in the network, similar to the one in place for electricity.

2. Are other policy elements necessary to promote renewable energy post-2020, such as:

- Enhanced focus on R&D to bring down the costs of renewables technologies - Yes
- Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) -Yes
- Abolition of support mechanism or subsidies to other energy sources -No
- Public procurement obligations in support of renewables -Yes
- Better financing possibilities - Yes
- Continue to ensure sustainability and scalability – Yes

- Other (please specify)

Specific tax treatment for the renewable percentages on the natural gas grid, for the gas used in vehicles.

Section B: Financial support

Member States at present rely on various forms of national support mechanisms to fulfill their national renewable targets for 2020. This section refers to the further development of support mechanisms post-2020.

1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?

For selected technologies/circumstances/markets (please specify)

This has to be done on a case by case approach and transparent basis. The EU can't spend so much money in certain technologies when they do not prove to be 'paying back' all that financing effort. This means that every time the EU establish certain financial support mechanism to a given technology, clear targets and outcomes must be fixed and pursued. An equilibrium must be found when supporting different existing technologies, but always taking into account their potential. For more information on NG/biomethane production potential in the EU, please contact info@ngvaeurope.eu

2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?

Making support schemes more market-oriented (please specify how)
Please see answer to the last question

3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?

Yes, with benchmark values for support level per technology per Member State

4. Should the structure of financial support be gradually aligned EU-wide?

Yes

5. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?

- Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes. ☑ Yes
- Member States need to open their support schemes to renewable generation from other Member States (if so, please explain how this could be achieved, e.g. through convergence of national schemes, compensation mechanisms or other) -Complicate!
- Member States should open their support schemes to renewable generation from third countries (as above, please explain how this could be achieved) -Possible, but complicate!

6. Do national support schemes and differences between such schemes distort competition?

- No, support schemes do not have a significant distorting impact on international competition. On top of that, good national schemes should be the benchmark for others.
- Yes, all support schemes distort competition to a similar extent - No
- Yes, some support schemes are more distorting than others (please specify which you consider most distorting) -No

Section C: Administrative procedures

Articles 13 and 14 of the Directive lay down rules on administrative procedures, information and training.

1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive? Please provide explanations and specific examples where available.

- Lack of commonly agreed technical specifications -Yes (to some extent i.e. when it comes to the use of biogas and its injection into the existing NG grids)
- Lack of information on support schemes or other
- The fact that in most cases NG grid responsibility has nothing to do with biomethane producers.

2. Which policy response to the problems identified above do you consider appropriate?

Push for more standardisation and harmonisation on EU level or mutual recognition - Yes

Section D: Grid integration of electricity from renewable energy sources

Article 16 of the Directive lays down a number of binding rules related to network development, access and operation in order to ensure that electricity from renewable energy sources may access the electricity network freely.

1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020? If so please specify which obstacles and the nature and degree of them for each of the following:

No opinion, as it refers to the electric grid. It's NGVA Europe's general view that raw biogas and upgraded biogas (biomethane) should not be used as renewable energy sources for the production of electricity. Instead it should be kept for sectors in which it can provide much greater benefits, like the transport sector, using it either compressed or liquefied as a transport fuel.

A very important aspect, always forgotten, is that the engines using NG to produce electricity have to comply with much easier and permissible (higher values) emission levels than those of the road vehicles. This takes to the abnormal situation that biomethane is used to produce electricity emitting much more pollutants than when used in vehicles.

2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective? (please explain why)

A clear, European standard to allow Biomethane producers of any source, to be able to inject in the grid, under the same gas quality rules.

3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:

See previous answers. On the other hand the possibility of using the NG grid also as a reserve for the hydrogen produced by wind during the night, has to be considered.

Section E: Market integration

Current national support schemes expose renewable energies to market signals to various degrees. In many cases, these support schemes nevertheless result in parallel "systems" for conventional and for renewable generation which are largely unresponsive to each other. The following questions ask in which way this could be addressed in a post-2020 perspective where renewables will represent a significant share of the market.

1. In which of the following ways could renewable energy be made responsive to market signals?

Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)

All existing renewable options can't be treated the same way as each one will find its proper difficulties and barriers. A balancing risk depending on market penetration seems a good way forward

2. How can it be ensured that market arrangements reward flexibility?

- Favourable regulatory treatment of storage operators -Yes
- Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand) -Yes

Though this issue has different impact depending on the energy vector dealt with, flexibility is always a desirable aspect. This aspect has a lesser impact for the NG sector than for the Electricity one.

3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables

- The current wholesale market model based on short-run marginal cost pricing is appropriate -No
- The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in

generation capacities with a high capex/opex ratio (please specify which)- Yes, but with objectives on the use of renewables.

- Wholesale markets would have to move to reflecting full costs - Yes
- Electricity markets should evolve into energy services markets, earning revenues from more than just electricity ☑ Yes, but a clear objective of social responsibility

Section F: Renewables in Heating and Cooling

The challenges for renewable energy in the heating and cooling market are sometimes considered to be different in that its use is in many cases already cost-competitive but impeded by other barriers. Many of the barriers should be addressed when the Directive is implemented.

1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?

No opinion

2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?

All of them should play a role, but we certainly think that the EU is not taking the advantage that Biomass of different sources can have on this regard.

3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?

Both aspects are totally compatible

Section G: Renewables in transport

Transport is almost entirely dependent on oil consumption. There is a growing recognition that major efforts are needed to reduce GHG emissions and fossil fuel dependency in this sector. The Directive requires that 10% of transport fuel should come from renewable energy sources but more efforts to reduce oil dependency and GHG emissions are needed post-2020.

1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?

- Costs and sustainability of liquid biofuels
- Pace of technology development -No
- Lack of standards -Yes
- Lack of infrastructure -Yes
- Lack of awareness -No
- Lack of suitable information -Yes, to counteract on the negative experiences of some years ago with biodiesel
- Limits of availability of sustainably produced biofuels -Yes
- Other (please specify)

-The huge power of the oil industry and the refinery production balance, more oriented to petrol, when demand is now superior in diesel.

Biogas/Biomethane potential is not being used as it should. Its GHG saving potential is completely outstanding when compared to other automotive fuels, as shown in the JEC WTW report. Development of proper legislation to allow its injection into the NG grid is necessary, as most of the Natural Gas Refuelling stations are currently connected to the NG grid.

This fuel can be used for all automotive applications, from light to heavy duty transportation (as it can be used compressed or liquefied). For more information on this regard, please take a look at the report prepared by the Expert Group on Future Transport Fuels on the White Paper for Transport

2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?

- Road for passengers - Yes
- Road for goods - Yes
- Rail -No
- Water -Yes
- Air- No

Section H: Sustainability

Currently biofuels have to comply with sustainability criteria in order to benefit from support or to be counted towards renewable energy targets. This is in order to avoid negative side effects from an increasing use of biofuels. In addition, the Commission is currently considering introducing additional requirements related to indirect land use change and criteria for solid and gaseous biomass for energy.

1. Do you think that additional sustainability criteria are necessary in the post 2020 period?

Yes, sustainability criteria should apply to both all biomass and fossil fuels

And this discussion and different weights given to different fuel alternatives should be open to all stakeholders in order to provide sufficient background

Section I: Regional and international dimensions

The cooperation mechanisms of the current Directive offer a framework for cooperation between Member States and with third countries. A number of initiatives are currently under consideration for putting regional coordination in practice, both within the EU as well as with neighbouring regions.

1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realization of cost-efficient renewable potential in the EU?

- Yes.

- No. (Please specify how they should be amended or which elements added)

No opinion

2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?

- No, the EU should first focus on developing its own renewable potential ☐ Agree
- Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?

- Yes (explain in which way and to which degree). Agree, because of the potential for renewables
- No (explain why)

4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?

- Bilateral agreements between Member States and third countries
- Agreements between the EU and third countries
- Other measures (please specify)

5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders"⁷, the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities? Achieving a better balance for renewables

6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere? - Yes

Section J: Technology development

The SET plan presents the strategic framework to accelerate the development and deployment of cost-effective low carbon technologies in the perspective until 2020. For a limited number of technologies industrial initiatives were set up according to two criteria, their large-scale availability by 2020 and the willingness of industry to engage in public private partnerships.

1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of

these technologies to be addressed by research and innovation in view of the 2050 objectives?

- Other (please specify)

Allow the EU-wide injection of biogas into the NG grid should be one of the top priorities, especially if we're willing to fulfill the targets for the transport sector. The possibility of using upgraded biogas into Natural Gas Vehicles should be fostered via the creation of a fuel quality standard for this new automotive fuel

2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?

Favorable taxation with clear and stable long term signals is needed. Proper acknowledgment of the GHG saving potential of this fuel on a WTW basis is also required.

3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?

Natural Gas (in liquefied form) has proven to be the only feasible and already existing technology when reducing oil dependence or substituting diesel as the only current fuel being used for long distance heavy duty applications. More investments and support are needed to promote its uptake.

4. How successful do you consider the existing measures have been and which have been the main drawbacks? Explain why.

- Successful but some drawbacks (please specify which)

At least in the automotive sector, it has only served to promote the uptake of liquid biofuels, and not of gaseous biofuels for example. This is a non-sense as reaching a 10% share of renewables when depending in a so limited renewable option like ethanol or biodiesel is nearly impossible. The biogas can be produced from much more different sources (not only energy crops), due to its chemical composition it can be blended with fossil NG with no limitation, and its GHG saving potential is the best by far when compared to the one of bio-liquids.

5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Yes, this is absolutely necessary.