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RECOMMENDATIONS

Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652

COM/2021/557 final

Building the internal market for biomethane to enable EU Green Deal decarbonisation goals for 2050

The European Biogas Association (EBA) welcomes the proposal of the European Commission to raise the ambition for renewable energy by 2030 which is a cornerstone of the net-zero emissions agenda.

Europe is world leader in biogas technology for production, upgrading and uses. According to our latest report[1], the biogas and biomethane "made in Europe" are more than half of the global biogas capacity (18 billion cubic meters out of the 35 calculated by the International Energy Agency (IEA)[2]).

The European Commission's proposal to revise the Renewable Energy Directive (RED II) should build a functioning internal market for biomethane to enable the sector to deliver on its potential of 42 bcm[3].

The EBA's main recommendations to the proposal to amend the RED II:

1. Decarbonising the EU gas supply;
2. Streamlining cohesion, modernisation and just transition principles in the legislation;
3. Encouraging the use of the most sustainable and circular feedstock to protect biodiversity;
4. Scaling up zero emission and negative emission biomethane in the transport sector;
5. Achieving energy security through an integrated energy market;

[1] EBA Statistical Report 2021 https://www.europeanbiogas.eu/eba-statistical-report-2021/

[2] IEA 2020, Outlook for biogas and biomethane: Prospects for organic growth https://www.iea.org/reports/outlook-for-biogas-and-biomethane-prospects-for-organic-growth

[3] Equivalent to 467 TWh and representing 58 GW of production capacity.

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1. Decarbonising the EU gas supply

The EU needs renewable gas in the next 10 years and beyond to face (even reduced) local energy demand. Biomethane is the primary available renewable gas to decarbonise the supply.

Two specific targets are needed to pull gas decarbonisation:

- **A target on consumption of renewable gas of at least 11%** in terms of energy content by 2030.
- **A greenhouse intensity reduction target on the gas consumption by at least 20%** compared to 2018 levels by 2030.

The EBA believes that **the RED II is the most appropriate instrument to encourage EU Member States to decarbonise the gas supply**. The RED II has specific sub-targets for heating and cooling and the transport sector and the current proposal includes a sub-target for hydrogen used for final energy and non-energy purposes in industry by 2030.

Biomethane is currently available in Europe in the level of 18 bcm and can help many Member States to achieve considerable decarbonisation of their industrial base. A biomethane target in parallel to the hydrogen target will ensure a trusted path for instance for paper and sugar production and for treatment of waste waters in the food industry. Encouraging industries to generate renewable gas and reutilize it in internal processes, including excess heating, will increase energy efficiency considerably and is a virtuous example of industrial symbiosis.

Moreover, diverging industrial wastewater from public sewerage by providing industries with autonomous solutions will reduce the costs of the water services for all households living in industrialized area basins. Also, it will make public wastewater treatment easier with a considerable reduction of the contaminants loading in public waste waters. Through anaerobic digestion it is possible to decrease excess sludge production by up to 70-80% in most cases, meaning thus reduced cost for sludge processing as well.

2. Streamlining cohesion, modernisation and just transition principles in the legislation

Besides encouraging a decarbonised natural gas supply through an appropriate legislative framework, production of biomethane must be sustainable and must not lead to indirect negative effects for the climate and environment. **The EBA strongly supports sustainability and greenhouse gas savings criteria for biogas and biomethane that give certainty to producers, consumers and investors**.

Moreover, from a technical point of view it is appropriate to amend the scope of article 29 to provide flexibility to small operators. The majority of the small-scale biogas plants in rural areas have the size of 1 MW nominal electricity, which equals to > 2 MW thermal. These plants operate in a flexible way, with an effective power ranging between 0.5 and 1 MW of electricity, the average of which is just about 0.8 MW and therefore < 2 MW. Compliance with the sustainability criteria would undoubtedly be a considerable burden for small scale plants. National implementing decrees will establish on which time basis the average must be calculated (the best case would be on an annual basis).

The usual lifetime of biogas plants is 15 to 20 years and it is important to safeguard the weakest for reason of cohesion and solidarity. Facilities that were built more than 5 years ago, were planned even longer ago. It is unfair and unrealistic to tighten the rules for such plants or to require their enhanced performance without providing them with a tailor-made support or a flexible mechanism to enable the transition. Many operators could simply not bear the costs of innovation and will be forced to borrow new resources or even to sell or close their activity.

Tightening the rules will not result exclusively in loss of renewable energy. There are serious social consequences, especially for the rural areas. Without **a strong vision on the role of anaerobic digestion in the rural areas** translated in the current policy proposals, the worrying demographic gap between urban and rural areas will get worse.

The EBA highlights that planning and permitting of biogas and biomethane projects is a lengthy process. Plants and facilities are not built without consultations between the bidder, buyer, the general public, and any interested party. One year is usually spent just to exchange views and tailor a proposal to respect the concerns of everyone affected in the community and achieve a compromise. We should never forget that

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behind renewable energy there are people, engineers, entrepreneurs and families that invested in something that they believed contributed to bring a positive change in the world. **It is not only an economic surplus**.

Environmental performance and sustainability of the projects is assessed beforehand by experts and is monitored yearly through the mechanisms and procedures established in the Industrial Emission Directive and the Medium Combustion Plant Directive. Both instruments include processes to prevent and/or rectify pollution.

It is inconsistent with existing legislation to require old plants to uphold additional requirements retroactively and ignore their investments to comply with previous standards and best practices. Moreover, it creates a considerable and quantifiable burden that could be bearded only with tailor made solidarity and modernization support. Without allocation of such resources, it is unthinkable to tighten existing criteria.

Sourcing feedstock for anaerobic digestion requires to spend a lot of time on business planning and negotiations between the suppliers and the buyers to agree on the supplies be means of contracts. Contracts that were already signed with timeline exceeding the entry into force of the newly amended REDII will have to be cancelled, if new GHG emission savings cannot be achieved with old feedstocks. Withdrawing from a contract is not easy and it is very likely that one party will sue the other for negligence.

The European Commission's proposal to amend article 29 (10) risks to seriously damage operators in the sector because it is too vague.

3. Encouraging the use of the most sustainable and circular feedstock to protect biodiversity

3.1 Life Cycle greenhouse gas emissions methodology

Several provisions of RED II (article 31 (2), (3), and (4); and Annex VI, Part B (5)) are changed or deleted in the proposal and the EBA is very concerned about that. The current regime where (i) Member States can calculate the typical greenhouse gas emissions from the cultivation of agricultural raw materials of the areas on their territory classified as level 2 in the nomenclature of territorial units for statistics (NUTS); and (ii) biogas and biomethane operators can use them to calculate their actual values according to the LCA methodology to comply with the GHG savings criteria of article 29 (10) is replaced with a system that switches the burden entirely on operators.

The European Commission wrote at pages 104 and 105 of its Impact Assessment (IA) that operators should not use regional values when calculating GHG emissions for the cultivation of raw materials. Regional values may favour imports of feedstock from regions with better climatic conditions to grow them and the overall effect for the climate may be negative (reallocation effect of greenhouse gas emissions), according to the IA. However, the European Commission just showed that, in Germany, imports of feedstocks for biofuels grew from 2016 to 2018, notably from Asia, Australia and Ukraine. There is not any modelling nor analysis of the related GHG savings from the biofuels consumed from the imported feedstock. By reading the IA, the EBA wonders if the Commission analysed the existence and the extent of the reallocation effect that it highlighted.

3.2 Cover crops & wild flowering plants to restore soil fertility and biodiversity, and prevent greenhouse gas emissions from Indirect Land use Change

There is often confusion about cover crops, intermediate crops, catch crops and sequential crops. All the names identify the same practice: rotating two or more crops in the same field in the same year to avoid land use change, increase nutrient uptake by plants and improve soil health. Areas with cover crops were recognised as ecological focus areas according to article 45 of Delegated Regulation (EU) 639/2014[4]. The ecological focus areas (green payments) were the main instrument of the former CAP (2013-2020) to achieve environment and biodiversity objectives.

[4] The Regulation in English mentions catch crops but it can be read as cover crops as intended in the RED.

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The RED 3 definition of "non-food cellulosic material" should change to give more flexibility to the Member States to implement cover crops. Cover crops are defined in RED 2 as "temporary, short-term sown pastures comprising grass-legume mixture with a low starch content". This definition is too technical and narrow. It fits specific climatic conditions of Continental and Mediterranean Europe but prevents replication in the Atlantic and Boreal parts. Since cover crops are not simply an agricultural intensification but an agroecological intensification, where knowledge of climate conditions, conservative agriculture, crop rotations, organic fertilization and soil health are combined, farmers need time and advice to adopt the tailor-made system that fit their geographical and climatic condition.

As climate varies across regions and countries, so does the soil. It is not possible to establish a list of effects and outcomes for sequential crops to be eligible and some degree of flexibility is needed for the Member States in the implementation.

Cover crops are successfully implemented in Italy in the Biogas Done Right[5] and in France under the label of "Intermediate Crops with Energy Vocation" ("culture intermédiaire à vocation énergétique" (CIVE))[6] and there is interest from many other EU countries to replicate them.

The definition of non-food cellulosic material should be revised accordingly.

Moreover, its scope should be expanded to the crops that are grown to attract more pollinators on the fields (e.g. wild flowering plants).

A very good ecological evaluation is given in various studies to so-called wild plant mixtures, i.e. annual or perennial mixed cultures with a large number of different species. As a rule, plant protection measures should not be necessary for perennial mixed cultures.

Sustainability and greenhouse emission reductions of the Biogas Done Right system can be calculated by using the life cycle methodology included the Annex VI.

3.3 Residues and waste for sustainable biogas and biomethane

Residues and waste do not have emissions from harvesting or cultivation regardless that they are included in or not in the list of the feedstock for advanced biofuels as they are involuntary outputs of normal production practices.

Enabling the use of such feedstocks for production of renewable energy with objectively low life cycle emissions it crucial to achieve the decarbonisation goals of the European Green Deal. An encouraging and flexible framework is always preferable to a heavy, rigid and bureaucratic system.

The use of the waste and residues in anaerobic digestion as feedstock for biogas production cannot be considered only and exclusively as a risk of distortion of competition in the markets of waste, residues and by-products. On the contrary, renewable energy outlets enhance the economic value of the residues and offer innovative and secure pathways for the circular economy.

Unnecessarily restriction of sustainable feedstocks could even lead to greater use of food and feed crops and/or of feedstock with high land use change: a grater risk for biodiversity and the natural ecosystems.

The EBA strongly supports the development of sustainable biomethane linked to separate collection of bio-waste. Anaerobic digestion for treatment of bio-waste and residues is one of the best solutions for municipal solid waste management. It is in line with separate collection and the high recycling targets for 2035. Many municipalities invested and are planning to upscale or build from scratches their anaerobic digestion capacity to improve waste management and achieve the objective of zero landfilling. When anaerobic digestion plants are combined with composting capacity, the output is even more circular thanks to the energy efficient process and the production of high-quality soil improvers. It will also contribute to lower the prices that citizens pay for waste management. When anaerobic digestion facilities are built in already developed areas and can provide the local community with reliable outlet for their residues, the climate benefits are even increased because the supply chain is shortened. It is expected

[5] Italian Biogas Association, Biogas Done Right https://www.consorziobiogas.it/wp-content/uploads/2017/05/Biogasdoneright-No-VEC-Web.pdf & https://farmingforfuture.it/the-project/?lang=en

[6] WWF 2020 https://www.wwf.fr/qui-sommes-nous/entreprises-partenaires/grdf

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that anaerobic digestion does not create distortions in international markets and actually gives flexibility to local enterprises.

3.4 Rules for adding new materials to Annex IX

In Article 28 (6) it is written "*The Commission is empowered to adopt delegated acts in accordance with Article 35 to amend the list of feedstock set out in Parts A and B of Annex IX by adding, but not removing, feedstock. Feedstock that can be processed only with advanced technologies shall be added to Part A of Annex IX. Feedstock that can be processed into biofuels, or biogas for transport, with mature technologies shall be added to Part B of Annex IX.*" The EBA thinks that the second paragraph should be removed from the text.

The RED II itself specifies in a recital "*Such delegated acts shall be based on an analysis of the potential of the raw material as feedstock for the production of biofuels and biogas for transport, taking into account all of the following*". The decisive point whether a feedstock is listed in ANNEX IX, part A, is therefore the potential of a raw material as feedstock. This means the feedstock must be classified as residues or waste or have any other significant advantage for the environment (permanent soil cover, biodiversity promotion, humus formation etc). Important is that the use of that feedstock is beneficial and will thus be promoted in a special way. As it is now, should new feedstocks be added, for example melliferous plants for biogas use and processed with mature technology, they could be added to part B of ANNEX IX and thus be limited at 1,7 %. However, the sustainability of the newly added feedstock has nothing to do with the technology which is used to process them. It does not matter at all whether it is handled by mature or "advanced" technology. On the worse, it is not even defined within RED II what classifies as "advanced" and "mature" technology.

4. Scaling up zero emission and negative emission biomethane in the transport sector

Any framework encouraging decarbonisation of transport should acknowledge the achievements of biomethane and directly promote its supply to all transport modes, from passenger vehicles, trucks, busses and ships.

In this regards the EBA highlights that **the targets for advanced biofuels (ABs) and renewable fuels of non-biological origin (RFNBOs) should not be different**. It is true that the multipliers for biomethane apply only for aviation and maritime while multipliers for RFNBOs apply to all transport modes. Yet, biogas and biomethane are the best performing renewable fuels and they achieve better greenhouse gas savings than all other advanced biofuels and low-carbon, synthetic or recycled carbon fuels.

Moreover, "advanced biofuels" is a broad and sometimes vague definition. The new label of low carbon also simply adds complexities. Member States and investors are often lost with all solutions and possibilities.

At the same time, **the EBA suggests raising the ambition of the target on GHG intensity reduction to reflect the ambition of decarbonised transport**.

In future, the EBA hopes that the default values in annex VI will be extended to more scenarios than the available limited options currently available which oblige thousands of operators to calculate actual life cycle greenhouse gas emission savings on their own. **A dedicated pathway on bioLPG pathway standard and default values will be crucial.**

5. Achieving energy security through an integrated renewable energy market

5.1 Guarantees of Origins enabling trading of sustainable biomethane

One of the key elements of an enabling policy framework is creating a European market for all renewables.

One of the key elements of an enabling policy framework is creating a European market for all renewables. The EU has already created well-functional trading conditions for renewable electricity. The gas sector needs similar easiness to trade volumes and guarantees origin (GOs) of renewable gases across borders.

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The RED II made the introduction of GOs (article 19) for renewable gases mandatory but it leaves great uncertainties for market players with regard to the implementation and content of the GOs, and the acknowledgement of a GO as a proof of biomethane purchase in other regulations, such as EU ETS or support schemes and quotas.

Moreover, the RED II has expanded the sustainability and GHG reduction criteria for biogas/biomethane and other biomass fuels from transport to all energy uses (Art. 29 and 30). To show compliance with these criteria, the RED II provides two options: follow a national scheme or certification by so-called "voluntary certification schemes" which must be recognized by the European Commission. Certification of compliance with sustainability criteria has to be based on the principle of mass balancing, which implies a certain degree of "physical tracking". GOs on the other hand can be transferred separately or together with the physical transfer of energy, which is often referred to as "book & claim" principle.

EBA considers that different schemes for certification and traceability of renewable gases such as biomethane (focus of this position) have to be made more practical. Notably the instrument of **GOs should be enhanced** and its role should evolve beyond its current, limited function foreseen in RED II. This might require some legislative changes on EU level, notably articles 19, 29 and 30 of RED II. The revision of GOs should facilitate (cross-border) trade of biomethane, their recognition under different policy instruments, thereby avoiding double counting.

Current provisions in RED II allowing Member States may not necessarily issue GOs to installations that benefit from financial support (such as FIT, CfD, investment aid, tax advantages, ...) should be modified in favour of a harmonized solution: All installations should be able to benefit from GOs. If installations are financially supported (the information on whether financial support was granted is mentioned in the GO which is mandatory according to RED II and the draft standard), the monetary value of the GOs should be taken into account in the support mechanism according to the options provided in the RED2. The GOs must be transparent and should encompass all information on support mechanisms or other promotions that were already granted.

From the single market perspective, it is evident that the format and the contents of GOs should be the same across all Member States. European coordination should ensure that registration schemes are interoperable.

The creation of a European market for biomethane should go along with efforts to foster compatibility of regulatory frameworks in different countries in order to avoid market distortions, ensure a cost-effective deployment and create a level-playing field for trade.

The validity period of GOs should be extended beyond the 12/18 months foreseen in art 19 (3) of RED II. This would contribute to the development of a liquid market sending relevant price signals for market actors decisions.

Enhanced role of GOs and interplay with "sustainability certificates"

The current framework in RED II should be simplified by merging/combining as far as possible different types of certificates in one which can be easily traded and can be used for different purposes, with GOs as an instrument to carry also sustainability information. This would mean a "basic GO" with option fields to upgrade it into a sustainability certificate. At a minimum, GO and sustainability certificates should be compatible and complementary, meaning that they must be possible to use together in a complementary manner to prove biomethane purchase for various uses. Different uses include for instance:

- Current application, as foreseen in RED II, mainly by suppliers or (large) final customers to proof the source/origin of the energy. (**disclosure**)
- Use by obliged parties to show compliance in the context of the **14% RES in transport obligation** (including 3,5% sub-target for advanced biofuels/biogas)
- Use by **ETS operators** to benefit from an emission factor of zero and exemption to surrender allowances for purchased green gas volumes

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- Use of GOs for compliance with **CO2 emission standards for vehicles** (recognizing the GHG reduction through bioCNG/bioLNG used in gas vehicles)

For most of these uses biomethane must show compliance with the sustainability criteria, therefore it is crucial that GOs and sustainability schemes can work together in the cases where this is suitable meaning that sustainability criteria (physical) are met.

One option of combining GOs and sustainability certificates could be to use the mass balancing-based sustainability certification process defined by RED II only for the upstream part of the value chain, i.e. "physical tracking" of the feedstock up to the point of production. Once the renewable gas is produced and injected in the grid or transported by other means, GOs should become the main instrument to carry information. Mass balancing would not be necessary and thus not apply any more. The same approach could ideally be used for a company´s all logistic sites for off grid gas, which would greatly increase the efficiency of renewable gas distribution and trade, where tracking and allocation of renewable volumes could be based on GOs rather than mass balancing in the distribution part. The "sustainability certificate" could be attached to the GO and/or information on compliance with sustainability criteria should be included in the GO based on the "sustainability certificate".

The guarantees of origin should also be extended to liquified renewable gas in order to facilitate decarbonization of sectors such as maritime, heavy-duty transport or various industries. Production of biomethane that is liquified at production site is growing fast in Europe, allowing notably to valorize the potential located far from gas grids. This development of liquified biomethane should be further incentivized to be able to serve in particular mobility needs through a proper regulatory framework (GOs, sustainability certification schemes adapted to liquified gas logistics, support mechanisms ...); however, as volumes of liquified biomethane are still limited, in order to kickstart the market for using renewable gaseous fuels in transport, the use of GOs from injected biomethane for liquified gas end users should be possible. Although a few countries allow it already, for instance in Finland, others do not have the same incentivising legislative framework, for instance in France. This use should be reassessed regularly, taking into account the evolution of the market.

5.2 The Union Database

Likewise, application of the provisions on the EU database to enable the tracing of liquid and gaseous renewable fuels and recycled carbon fuels should be postponed to the approval of common rules to prove sustainability of gaseous fuels. The co-legislators should reassess the added value of using the Union database for gaseous fuels and consider excluding such fuels from its scope.

If co-legislators see the overwhelming necessity in using such database for gases, the proposed Article 31a should be further clarified and adapted to the functioning of the internal EU gas market following the recommendations below.

First, it is not clear if the Union database should be used for the target compliance, monitoring of the EU ETS carbon offset obligations, consumer disclosure or all. The purpose of the Union database and scope of its application should be clearly indicated. Moreover, the date when such Union database should become operational is not defined which creates uncertainty for the market players and requires changes.

In addition, it should be pointed out that the scope of the Union database is limited to the liquid and gaseous energy carriers and does not include, for example, electricity, heating and cooling. Therefore, it is not clear how the Union database could help improve traceability of energy carriers and allow market operators and policy makers to take the right decisions for their energy mix, as intended and declared in the Impact Assessment Report. The legislator should consider if the Union database is the right policy tool for achieving this goal and if its scope should be extended to other energy carriers in line with the sector coupling principles.

Second, it does not take into account existing certification tools such as GOs. EU Member States are already obliged by RED II to extend the scope of their GO schemes to renewable gases and have started

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working on it and making necessary investments in the development of their GO registries (databases) and auditing procedures. The legislator should recognise the efforts made at the national level and allow to register GOs as a proof of renewable origin of energy and its sustainability in the Union Database (see also our proposals to Articles 19 and 30 above).

Third, the proposed measure is not adapted to the internal gas market design. According to Article 31a economic operators will be required to register transactions together with the sustainability characteristics of the underlying commodities (gas fuels). This requirement does not take into account specificities of the gas market functioning.

In particular, it does not recognise that the European gas infrastructure represent a single logistical facility where individual physical flows do not match individual trades, for the purpose of network use optimisation. Moreover, in the internal market, gases are traded as standardised products (commodities) with no indication of their origin or other characteristics. This design ensures market liquidity, security of gas supply and the best pricing for the energy commodity.

Linking the sustainability information to the individual trades or physical flow of commodities (that are meant to be interchangeable when transported inside of the single logistical facility) would ruin the current effective set-up of the internal gas market. It will create unnecessary costs for all market agents, un-optimal infrastructure use which means fragmentation of the gas market at the wholesale level, further emissions (due to redundant molecule hauls) and be likely followed by price fluctuations and negative implications for the security of supply.

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About the EBA

The **European Biogas Association** is the voice of renewable gas in Europe since 2009. EBA advocates the recognition of biomethane and other renewable gases as sustainable, on demand and flexible energy sources that provide multiple knock-on socio-economic and environmental benefits. Supported by its members, EBA is committed to work with European institutions, industry, agricultural partners, NGOs and academia to develop policies which can enable the large-scale deployment of renewable gases and organic fertilisers throughout Europe, supported by transparent, well-established sustainability certification bodies to ensure that sustainability remains at the core of the industry. The association counts today on a well-established network of over 200 national organisations, scientific institutes, and companies from Europe and beyond.