EREF – a call for constructive improvements of the European Commission's proposal for the amendment of the current Renewable Energy Directive and Related acts

Introductory remarks

EREF certainly and foremost welcomes the draft proposal for the amendment of the current Directive for the promotion of renewable energies (Directive (EU) 2018/2001 of the European Parliament and of the Council, as well as 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.

The objective for this Commission proposal is to assist fulfilling the priorities under the European Green Deal and the currently established framework under our European Climate law, all aiming to reach an almost complete Greenhouse-gas (GHG)- free society and economy in the European Union by 2050, as we are obliged to reach in the eyes of the world.

Call for stronger and binding targets

The most prominent change in this Commission proposal is under Article 3 and its new, reformulated paragraph a), calling now, that the EU Member States "shall collectively ensure the share of energy from renewable sources in the Unions gross final consumption of energy in 2030 is at least 40 %." This is by far not enough and since there are still no binding targets for Member States set in this amended Directive, EREF cannot see any chance to reach the common and obliging goal by 2050 neither the midterm goals in less than 8 years, which are the focus of this exercise.

Quite some Member States have lowered their ambition during the last years and without binding targets there is a risk that the gap will broaden between frontrunners and the rest.

According to data from Ember/Agora, some Member States have a renewable energy penetration rate lower than 10 %. Without being obliged, EREF cannot see how the overall targets could be reached at all? Ember and Agora Energiewende's fifth annual report tracking Europe's electricity transition (25 January 2021) outlines that EU countries need to step up their 2030 ambition considerably. "At the moment, national energy and climate plans only add up

to about 72 TWh new wind and solar per year, not the 100 TWh/year that are needed." EREF is convinced it is a myth, that this could be reached without binding Member States targets.

Planning and permitting – renewables first

EREF introduces quite substantial amendments for helping to improve the permitting and planning mechanism in the EU Member States and to put climate urgency at the forefront of public duty and consideration.

Joint Renewable Projects

EREF welcomes the proposal to have Member states cooperate on joint renewable energy projects. Yet, this requirement should be designed in more ambitious terms and oblige Member states and their competent authorities to issue assessments that demonstrate a country's potential transnational cooperation on renewable energy project.

Better monitoring on national achievements

Considered to be among the hardest barriers to remove, EREF advises that better monitoring and reporting mechanisms need to be put in place. In many Member States, Articles 15 and 16 have not been effectively transposed into national law – which is why first and foremost, further efforts to improve the cooperation among the EU and its Member states are required, to bring forward a consequent transposition of RED II. In this context and in addition, further clarification and robust definitions, e.g., "proportionate and necessary" (in terms of national rules applied to renewables), might be useful to be added to RED III.

No auctioning needs for small projects

The RED II established a pioneering enabling framework for self-consumption installations. However, it does not tackle the need to remove barriers and facilitate mid-sized self-consumption installations, which are typically covering consumer-driven Commercial and Industrial (C&I) projects segment. Specifically, EREF proposes that the RED III should allow that aid can be granted without prior auctioning for installations up to a capacity of 10 MW (wind

turbines with an installed electricity capacity of up to 6 MW or 6 generation units to be exempted from auctioning). PV-installations in the building sector should generally be exempt from the mandatory auctioning. Member states should not be allowed to forbid self-consumption in tenders.

Better linking – the story of buildings and heating and cooling

EREF proposes a further integration by linking this provision of the RED with the framework established in the Energy Performance of Buildings Directive (EPBD). For ensuring an effective deployment of renewables in the building sector, it is key to reduce their energy demand in line with the energy efficiency first principle. Hence, adequate planning consistent with the full decarbonisation of the building stock is needed, linking the new article 15a with the provisions of article 2a in the EPBD (upcoming EPBD revision to look at strengthening provisions on Long Term Renovation Strategies).

EREF welcomes that this provision of the RED III is strengthening the use of minimum levels of energy from renewable sources in buildings (and no longer restricted to new buildings and buildings undergoing major renovations) in line with the provisions of the EPBD. However, we urge the EU to include binding provisions for deployment of rooftop solar on public and private building stock with suitable roofs in the RED (and/or EPBD), following the energy efficiency first principle.

EREF welcomes the requirement for all public buildings to fulfil an exemplary role as regards renewable energy use. Furthermore, EREF would recommend reinforcing the provision with language promoting cooperation between local authorities and Renewable Energy Communities (RECs), particularly by using public procurement. Local authorities and RECs are natural partners in the energy transition at the local level.

While EREF supports to change the wording and specify to promote of heating and cooling from renewable energy sources, it might be useful, for the sake of effectively decarbonising the EU's heating sector, to put stronger requirements on Member states for assessing the potential and feasibility of renewables-based district heating and cooling infrastructure.

Brussels, 4 February 2021

Introductory remarks/Recitals	RED II	EC draft proposal REDIII as of 14 July 2021	EREF proposal for amendments	Background and reasoning for EREF proposals
Recital (10)		(10) Overly complex and excessively long administrative procedures constitute a major barrier for the deployment of renewable energy. On the basis of the measures to improve administrative procedures for renewable energy installations that Member States are to report on by 15 March 2023 in their first integrated national energy and climate progress reports pursuant to Regulation (EU) 2018/1999 of the European Parliament and of the Council15, the Commission should assess whether the provisions included in this Directive to streamline these procedures have resulted in smooth and proportionate procedures. If that assessment reveals significant scope for improvement, the Commission should take appropriate measures to ensure Member States have streamlined and efficient administrative procedures in place.	New (10) 2nd sentence: "Acknowledging the climate urgency, the obligation of Europe under the Paris agreement, the knowledge that foremost a massive roll-out of renewable energy technologies needs to be accomplished EU-wide and as rapidly as possible, Member States need to establish and guarantee swift planning and permitting procedures for renewable energy projects and related infrastructure. For the foreseeable future and under the Green Deal it needs to be further recognised that Renewable Energy projects and related infrastructure with their established quality to increase biodiversity and to decrease GHG emission, to rapidly foster system change towards sustainability are of utmost importance. These climate healing enhancing projects may need to be approved - even in NATURA 2000 regions- for imperative climate reasons of overriding public interest (social or economic reasons) For these cases the respective EU Member State takes compensatory measures to ensure that the global coherence is protected."	The world and the European Union face increasingly climate emergencies.IT is undisputed that first and foremost renewable energy technologies and related infrastructure (e.g., grid and other connection/transformation installations) need a much more forceful roll out in order to enable the EU to reach its binding international Paris targets by 2050. It is recognised in this Directive proposal, that planning and permitting procedures are way too long. Moreover, the RED III Directive needs to underline the established evaluation principle under the Natura 2000 legislation, that even in Natura 2000 areas and in case of potential for a significant impact, renewable energy projects may be approved for

				imperative climate reasons of overriding public interest.
Recital (31)		(31) The Union's renewable energy policy aims to contribute to achieving the climate change mitigation objectives of the European Union in terms of the reduction of greenhouse gas emissions. In the pursuit of this goal, it is essential to also contribute to wider environmental objectives, and in particular the prevention of biodiversity loss, which is negatively impacted by the indirect land use change associated to the production of certain biofuels, bioliquids and biomass fuels. Contributing to these climate and environmental objectives constitutes a deep and longstanding intergenerational concern for Union citizens and the Union legislator. As a consequence, the changes in the way the transport target is calculated should not affect the limits established on how to account toward that target certain fuels produced from food and feed crops on the one hand and high indirect land-use change-risk fuels on the other hand. In addition, in order not to create an incentive to use biofuels and biogas produced from food and feed crops in transport, Member States should continue to be able to choose whether count them or not towards the transport target. If they do not count them, they may reduce the greenhouse gas intensity reduction target accordingly, assuming that food and feed crop-based biofuels save 50% greenhouse gas emissions, which corresponds to the typical	The Union's renewable energy policy aims to contribute to achieving the climate change mitigation objectives of the European Union in terms of the reduction of greenhouse gas emissions. In the pursuit of this goal, it is essential to also contribute to wider environmental objectives, and in particular the prevention of biodiversity loss, which is negatively impacted by the indirect land use change associated to the production of certain biofuels, bioliquids and biomass fuels. Contributing to these climate and environmental objectives constitutes a deep and longstanding intergenerational concern for Union citizens and the Union legislator. As a consequence, the changes in the way the transport target is calculated should not affect the limits established on how to account toward that target ~~*certain fuels produced from food and feed crops on the one hand and*~~ high indirect land-use change-risk fuels ~~*on the other hand. In addition, in order not to create an incentive to use biofuels and biogas produced from food and feed crops in transport, Member States should continue to be able to choose whether count them or not towards the transport target. If they do not count them, they may reduce the greenhouse gas intensity*~~	Crop-based biofuels are an immediate and cost-effective tool to reduce emissions of existing and future light and heavy-duty vehicles, considering their number and lifespan, and their use should not be limited to transport modes that cannot be electrified. ILUC concerns were fully addressed in 2018 in the RED II delegated act on high ILUC-risk biofuels, which singled out problematic feedstocks and confirmed that European crop-based ethanol does not drive deforestation. Only high ILUC-risk biofuels must be progressively phased out.

		values set out in an annex to this Directive for the greenhouse gas emission savings of the most relevant production pathways of food and feed crop-based biofuels as well as the minimum savings threshold applying to most installations producing such biofuels.	~~*reduction target accordingly, assuming that food and feed crop-based biofuels save 50% greenhouse gas emissions, which corresponds to the typical values set out in an annex to this Directive for the greenhouse gas emission savings of the most relevant production pathways of food and feed crop-based biofuels as well as the minimum savings threshold applying to most installations producing such biofuels.*~~	
Recital (32)		(32) In calculating the contribution of hydropower and wind power for the purposes of this Directive, the effects of climatic variation should be smoothed through the use of a normalisation rule. Further, electricity produced in pumped storage units from water that has previously been pumped uphill should not be considered to be renewable electricity	(32) In calculating the contribution of hydropower and wind power for the purposes of this Directive, the effects of climatic variation should be smoothed through the use of a normalisation rule. Further, electricity produced in pumped storage units from water that has previously been pumped uphill **with renewable electricity** should ~~not~~ be considered to be renewable electricity	Pumped storage is the most efficient and already at present a very economical way to store electricity. To exclude this technology up front from the list of renewable energy sources is of major disadvantage for the energy transition. There are a considerable number of installations in a good shape but not in use, which would help to increase the access of volatile wind and solar energy to the grid. If pumped storage uses only renewable electricity, there is no reason, why this should not be considered as a storage

				and source for renewable energy. Furthermore, water retention and storage are of major interest in water management, adaptation to climate change and sustainable use of water resources
Article	**RED II**	**EC draft proposal RED III as of 14 July 2021**	**EREF proposal for amendments**	**Background and reasoning for EREF proposals**
2.42	'non-food cellulosic material' means feedstock mainly composed of cellulose and hemicellulose, and having a lower lignin content than ligno-cellulosic material, including food and feed crop residues, such as straw, stover, husks and shells; grassy energy crops with a low starch content,		'non-food cellulosic material' means feedstock mainly composed of cellulose and hemicellulose, and having a lower lignin content than ligno-cellulosic material, including food and feed crop residues, such as straw, stover, husks and shells; grassy energy crops with a low starch content (**e.g.** ryegrass, switchgrass, miscanthus, **silphium, wild plant mixtures, sida, energy grasses**, giant cane); cover crops before and after main crops; ley crops; industrial residues, including from food and feed crops after vegetal oils, sugars, starches and protein have been extracted; and material from biowaste.	EREF proposes that the RED should recognize sequential cropping as implemented in the *Biogas Done Right system* developed in Italy for the production of advanced biofuels. Sequential crops are a form of intermediate crops where two or more variety are grown on the same field in the same year with a time horizon of minimum five years. Alternating the crops over the five years allows the farmers to grow at the same time a dedicated crop for the production of renewable energy and a crop for the food or feed

	such as ryegrass, switchgrass, miscanthus, giant cane; cover crops before and after main crops; ley crops; industrial residues, including from food and feed crops after vegetal oils, sugars, starches and protein have been extracted; and material from biowaste, where ley and cover crops are understood to be temporary, short-term sown pastures comprising grass-legume mixture with a low starch content to obtain fodder for livestock and improve soil fertility for obtaining higher			markets. The sequential crops are sustainable because they avoid any indirect change on land use. Biomethane from sequential crop is not a 1st generation biofuel. Sustainability and greenhouse emission reductions of the biogas done right system can be calculated by using the life cycle methodology included the annex. Acknowledging the possibility to produce advanced biomethane through the crops grown in sequential crops agricultural systems is crucial to ensure development of rural areas and upscale the agronomic knowledge developed in the last 6 years. The same approach is adopted in France under the label of "Intermediate Crops with Energy Vocation" (independently translated from *culture intermédiaire à vocation énergétique* (CIVE)) and there is interest from

	yields of arable main crops;			many other EU countries to replicate the successful scheme. Since it is 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. But if they comply with the greenhouse gas emission savings criteria, they are meant to deliver sustainable advanced biomethane. The RED II revision should recognize environmentally advantageous crops that provide ecosystem

				services and provide incentives to grow such feedstock. There are several possibilities: There are crops grown for biodiversity that increase crop rotation, there are catch crops and sequential crops which are a form of intermediate crops where two or more variety are grown on the same field in the same year with a time horizon of minimum five years. Whole year cover and the growing of flowering plants for insects as well as low fertilizing provide advantages while simultaneously energy can be provided.
2030 EU renewable energy target				
3.1, amended	Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 32 %.	Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 40%.';	Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least **45%**. **Member States shall take the necessary measures to achieve the following targets:** **a) by 2024, the gas supplied in the EU through the integrated gas grid should**	Set an EU-wide renewable energy target of at least 45% by 2030, required to reduce GHG emissions faster and further. We can do a lot better than just doubling the renewables' share in Europe's energy mix by the end of the decade and go far beyond the 38-40% which the

			include a quota of renewable gas of at least 2% **b) by 2027, the gas supplied in the EU through the integrated gas grid should include a quota of renewable gas of at least 5.5%** **c) by 2030, the gas supplied in the EU through the integrated gas grid should include a quota of renewable gas of at least 11%**	Commission has assessed. An earlier and more ambitious greenhouse gas reduction is desirable not only from the perspective of climate protection but also more effective and less costly. Furthermore, EREF proposes to include binding targets renewable gas. That is because we believe that the RED III is the most appropriate instrument to encourage EU Member States to decarbonise the gas supply. The RED includes 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 network. 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.
3.2. amended			**New sentence:** Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2040 is a minimum of 90%. Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2050 is 100%.	In light of the long-term goal of climate neutrality by 2050, EREF urges to set early expansion targets beyond 2030. This is necessary to ensure investment security for the planning of new investments in the European energy market. Moreover, this helps us to address the bottleneck of the development of all renewable energy technologies in the EU. Therefore, EREF calls for a mid-term target of minimum 90% by 2040 in order to ensure that the last ten years until 2050 are not overburdened with backlogs which will only lead to very expensive investment needs.

3.3.		Member States shall take measures to ensure that energy from biomass is produced in a way that minimizes undue distortive effects on the biomass raw material market and harmful impacts on biodiversity. To that end, they shall take into account the waste hierarchy as set out in Article 4 of Directive 2008/98/EC and the cascading principle referred to in the third subparagraph. As part of the measures referred to in the first subparagraph: (a) Member States shall grant no support for: (i) the use of saw logs, veneer logs, stumps and roots to produce energy. (ii) the production of renewable energy produced from the incineration of waste if the separate collection obligations laid down in Directive 2008/98/EC have not been complied with. (iii) practices which are not in line with the delegated act referred to in the third subparagraph. (b) From 31 December 2026, and without prejudice to the obligations in the first sub-paragraph, Member States shall grant no support to the production of electricity from forest biomass in electricity-only installations, unless such electricity meets at least one of the following conditions: (i) it is produced in a region identified in a territorial just transition plan approved by the European Commission, in accordance with Regulation (EU) 2021/... of the European Parliament and the Council establishing the Just Transition Fund due to its reliance on solid fossil	"3. Member States shall take measures to ensure that energy from biomass is produced in a way that minimises undue distortive effects on the biomass raw material market and harmful impacts on biodiversity. ~~To that end, they shall take into account the waste hierarchy as set out in Article 4 of Directive 2008/98/EC and the cascading principle referred to in the third subparagraph.~~ As part of the measures referred to in the first subparagraph: (a) Member States shall grant no support for: (i~~) the use of saw logs, veneer logs, stumps and roots to produce energy.~~ ~~(ii)~~(i) the production of renewable energy produced from the incineration of waste if the separate collection obligations laid down in Directive 2008/98/EC have not been complied with. ~~(iii)~~(ii) practices which are not in line with the delegated act referred to in the third subparagraph. b) From 31 December 2026, and without prejudice to the obligations in the first sub-paragraph, Member States shall grant no support to the production of electricity from forest biomass in electricity-only installations, unless such electricity meets at least one of the following conditions: (i) it is produced in a region identified in a territorial just transition plan approved by the European Commission, in accordance with Regulation (EU) 2021/... of the European Parliament and the Council establishing the	The principle on cascading use is already implemented in practice through the markets of different wood uses. If embedded into EU legislation in a strict way, it would hamper the market functions and the substitution of fossil materials and energy. The highest quality wood material is being used in timber production to create long lasting products whereas the lowest quality wood material is used for purposes such as bioenergy because there is no other market for this material. The Commission published a guidance on cascading in 2019. This should be first evaluated and possibly updated rather than setting new legislative requirements. The report on biomass use planned for 2026 already represents a pre-determination of future

		fuels, and meets the relevant requirements set in Article 29(11); (ii) it is produced applying Biomass CO_2 Capture and Storage and meets the requirements set in Article 29(11), second subparagraph. No later than one year after [the entry into force of this amending Directive], the Commission shall adopt a delegated act in accordance with Article 35 on how to apply the cascading principle for biomass, in particular on how to minimise the use of quality roundwood for energy production, with a focus on support schemes and with due regard to national specificities. By 2026 the Commission shall present a report on the impact of the Member States' support schemes for biomass, including on biodiversity and possible market distortions, and will assess the possibility for further limitations regarding support schemes to forest biomass	Just Transition Fund due to its reliance on solid fossil fuels, and meets the relevant requirements set in Article 29(11); (ii) it is produced applying Biomass CO_2 Capture and Storage and meets the requirements set in Article 29(11), second subparagraph. New last sentence for this para: Member States shall take measures to ensure that energy from biomass is produced in a way that minimises undue distortive effects on the biomass raw material market. ~~No later than one year after [the entry into force of this amending Directive], the Commission shall adopt a delegated act in accordance with Article 35 on how to apply the cascading principle for biomass, in particular on how to minimise the use of quality roundwood for energy production, with a focus on support schemes and with due regard to national specificities.~~ ~~By 2026 the Commission shall present a report on the impact of the Member States' support schemes for biomass, including on biodiversity and possible market distortions, and will assess the possibility for further limitations regarding support schemes to forest biomass.~~	restrictions on the use of biomass for energy. In order to achieve the expansion targets for renewable energies in a cost-efficient manner, a sustainable increase of bioenergy is necessary and, in addition, sustainability requirements already apply to biomass use for energy, so that the Commission should focus on improving the sustainability of other renewable energies.

Joint projects between Member States				
9.1a		By 31 December 2025, each Member State shall agree to establish at least one joint project with one or more other Member States for the production of renewable energy. The Commission shall be notified of such an agreement, including the date on which the project is expected to become operational. Projects financed by national contributions under the Union renewable energy financing mechanism established by Commission Implementing Regulation (EU) 2020/129425 shall be deemed to satisfy this obligation for the Member States involved.';	New second sentence under 9.1a: **"Before agreeing on at least one project the respective MS via their competent authorities issues latest in first half of 2024 assessments that demonstrate a country's potential transnational cooperation on renewable energy projects."**	EREF welcomes this proposal to have MS cooperate on joint renewable energy projects. Yet, this requirement should be designed in more ambitious terms and oblige MS and their competent authorities to issue assessments that demonstrate a country's potential transnational cooperation on renewable energy project. Therefore, instead of establishing "at least one project", and, where applicable, studies on feasibility and benefits for additional joint projects (where applicable" which MS would be required to assess, in close cooperation with the European Commission. Such projects should underlie the EU's governance regime and be reflected in the National Energy and Climate Plans.

9.7a, new		Member States bordering a sea basin shall cooperate to jointly define the amount of offshore renewable energy they plan to produce in that sea basin by 2050, with intermediate steps in 2030 and 2040. They shall take into account the specificities and development in each region, the offshore renewable potential of the sea basin and the importance of ensuring the associated integrated grid planning. Member States shall notify that amount in the updated integrated national energy and climate plans submitted pursuant to Article 14 of Regulation (EU) 2018/1999.	Member States bordering a sea basin shall cooperate to jointly define the amount of offshore renewable energy they plan to produce in that sea basin by 2050, with intermediate steps in 2030 and 2040. They shall take into account the specificities and development in each region, the offshore renewable potential of the sea basin~~, the~~ importance of ensuring the associated integrated grid planning**, and the need to include renewable energy communities in joint cooperation projects on offshore wind.** Member States shall notify that amount in the updated integrated national energy and climate plans submitted pursuant to Article 14 of Regulation (EU) 2018/1999.	EREF agrees on the need to strengthen MS cooperation on offshore renewables. Where adequate, MS should be required to jointly explore the benefits of integrated planning, incl. on holistic infrastructure planning and system integration. MS should be further required to justify where such cooperation is assessed negative. Furthermore, EREF encourages the EU to promote participation by Renewable Energy Communities (RECs) in offshore wind projects by specifically referring in this provision to the need to include RECs in joint cooperation projects on offshore wind. The cooperative movement can contribute to offshore wind deployment and social acceptance of such projects. As a matter of fact, there are already

				some initiatives active in this field. National legislation should support citizen participation in offshore wind tenders, while there should be also a specific financing mechanism established for offshore projects that allow the participation and involvement of energy cooperatives and citizens.
Administrative procedures				
15.8, amended	Member States shall assess the regulatory and administrative barriers to long-term renewables power purchase agreements, and shall remove unjustified barriers to, and facilitate the uptake of, such agreements. Member States shall ensure that those agreements are not subject to	Member States shall assess the regulatory and administrative barriers to long-term renewables power purchase agreements, and shall remove unjustified barriers to, and promote the uptake of, such agreements, including by exploring how to reduce the financial risks associated with them, in particular by using credit guarantees. Member States shall ensure that those agreements are not subject to disproportionate or discriminatory procedures or charges, and that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable power purchase agreement. Member States shall describe their policies and measures promoting the uptake of renewables power purchase agreements in their integrated national energy and climate plans referred to in Articles 3 and 14 of Regulation (EU) 2018/1999 and progress reports submitted pursuant to	Member States shall assess the regulatory and administrative barriers to long-term renewables power purchase agreements **for both renewable electricity and renewable gas,** and shall remove unjustified barriers to, and promote the uptake of, such agreements including by exploring how to reduce the financial risks associated with them, in particular by using credit guarantees. Member States shall ensure that those agreements are not subject to disproportionate or discriminatory procedures or charges, and that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable power purchase agreement. Member States shall describe policies and measures facilitating promoting the uptake of renewables power purchase agreements in their integrated national energy	There must be a removal of persisting regulatory and administrative barriers – in terms of permitting procedures, auctions and tenders, as well as grid access. This forms a key requirement for renewable energy developers, as well as a large-scale deployment of energy sharing and community energy models. EREF hence much welcomes the Commission's proposal to amend Art 15 (8) and to reinforce its provisions by including additional measures, including the

	disproportionate or discriminatory procedures or charges. Member States shall describe policies and measures facilitating the uptake of renewables power purchase agreements in their integrated national energy and climate plans and progress reports pursuant to Regulation (EU) 2018/1999.	Article 17 of that Regulation. They shall also provide, in those reports, an indication of the volume of renewable power generation supported by renewables power purchase agreements.'; 	and climate plans referred to in Articles 3 and 14 of Regulation (EU) 2018/1999 and progress reports pursuant to Article 17 of that Regulation (EU) 2018/1999. They shall also provide, in those reports, an indication of the volume of renewable power generation supported by renewables power purchase agreements	transfer of GOs to the buyer of the renewable energy under PPAs. However, EREF wants to stress the importance of including the explicit reference to both, electricity and renewable gas, in order to create a level playing field on the European energy market. Furthermore, EREF strongly proposes to consider the particular leveraging potential from investment, especially from small and medium sized companies and Energy Communities in this context as well. Additionally, we urge to adjust the general framework for the financing of non-subsidized green PPAs. The implementation of a carbon price floor in the European Emission Trading Scheme (ETS) is from our point of view a crucial driver for more

				investment in non-subsidized green PPAs since it guarantees long-term planning security.
15.9, new		By one year after the entry into force of this amending Directive, the Commission shall review, and where appropriate, propose modifications to, the rules on administrative procedures set out in Articles 15, 16 and 17 and their application, and may take additional measures to support Member States in their implementation.';	9. ~~**By one year**~~ **Within six months** after the entry into force of this amending Directive, the Commission shall review~~**, and where appropriate,**~~ propose modifications to **strengthe**n the rules on administrative procedures set out in Articles 15, 16 and 17 and their application, and may take additional measures to support Member States in their implementation.	EREF welcomes this proposal. It is important to clear rules on administrative procedures from barriers to RES development as early as possible in the implementation period. However, EREF would urge for an earlier possibility for the revision of articles 15, 15, and 17 to ensure that modifications can still be considered into the National Energy and Climate Plans (NECPS). That is because MS need to update their draft and final NECPs by mid-2023 and mid-2024 respectively. Thus, it is likely that any modifications proposed cannot be taken into account anymore during the drafting of the NECPs if the timing proposed in the new article will be kept as it is (see art 14, update

				of the integrated national energy and climate plan, of the EU Regulation 2018/1999 on the Governance of the Energy Union and Climate Action). Furthermore, EREF would urge the Commission to make clear overarching rules to remove national barriers in order to ensure the opportunity for citizens and communities to engage in the energy transition, e.g. in the upcoming EC guidelines on permitting.
Mainstreaming renewable energy in buildings				
15a3, rearranged + amended (in REDII, this was article 15.5	Member States shall ensure that new public buildings, and existing public buildings that are subject to major renovation, at national, regional and local level, fulfil	Member States shall ensure that public buildings at national, regional and local level, fulfil an exemplary role as regards the share of renewable energy used, in accordance with the provisions of Article 9 of Directive 2010/31/EU and Article 5 of Directive 2012/27/EU. Member States may, among others, allow that obligation to be fulfilled by providing for the roofs of public or mixed private-public buildings to be used by third parties for installations that produce energy from renewable sources.	Member States shall ensure that public buildings at national, regional and local level, fulfil an exemplary role as regards the share of renewable energy used, in accordance with the provisions of Article 9 of Directive 2010/31/EU and Article 5 of Directive 2012/27/EU. Member States may, among others, allow that obligation to be fulfilled by providing for the roofs of public or mixed private-public buildings to be used by third parties for installations that produce energy from renewable sources. **Member States shall**	As local authorities and RECs are natural partners in the energy transition at the local level, this provision should be reinforced with language promoting cooperation between local authorities and RECs, particularly through the use of public procurement. These proposed changes should

	an exemplary role in the context of this Directive from 1 January 2012. Member States may, inter alia, allow that obligation to be fulfilled by complying with nearly zero-energy building provisions as required in Directive 2010/31/EU, or by providing for the roofs of public or mixed private-public buildings to be used by third parties for installations that produce energy from renewable sources		**promote and support cooperation between local authorities and renewable energy communities in the building sector, particularly through the use of public procurement. Such support shall be indicated in Member States' National Building Renovation Plans under Article 3 of Directive [xxxx]**	be part of a holistic approach for the building sector, through a strong coordination of the RED II, the EPBD and the EED. In order to ensure an effective penetration of renewables in the building sector, it is key to reduce energy demand in line with the energy efficiency first principle. RECs, for example through their citizen-led renovation programs, are well positioned to assist households in taking art(collective) heating and cooling in their homes. To ensure this potential can be realised, the RED II needs to acknowledge the role of RECs and citizen-led renovation programs in Article 15a and ensure Member States develop adequate planning for renewable energy in the building sector consistent with the milestones of the national Long-Term Renovation Strategies (LTRS). This would establish a link between

				the new Article 15a in the RED II with Article 3 of the recast EPBD.
Organisation and duration of the permit-granting process				
16.4 amended		Without prejudice to paragraph 7, the permit-granting process referred to in paragraph 1 shall not exceed two years for power plants, including all relevant procedures of competent authorities. Where duly justified on the grounds of extraordinary circumstances, that two-year period may be extended by up to one year.	**New Art. 16 para 4 2nd sentence**: Member States should respect the following guiding principles for permitting processes: The start of the deadline should be based on the completeness of the application documents submitted by the applicant, which must be confirmed to the applicant within a period of six weeks. Completeness of the application documents is deemed to exist if no permissible additional requirements are made by the competent authority within these six weeks after submission of the application. Subsequent demands by the authority should only be permissible once, insofar as the applicant's existing documents do not permit the legal evaluation of the project due to justified circumstances. After confirmation of the completeness of the application, there should be no more subsequent demands for documents. After the expiration of the time limit, the determination or approval is considered to have been granted, insofar as no public participation is required. If public participation is required for the requested decision, the authority is obliged to carry out public participation once the application documents are complete.	In line with the setting under this Commission proposal to ensure faster permitting processes and in view to non-discriminatory overall principles for good permitting and planning in this context, project planners should have homogenous rules in all Member States. This also ensures a more disciplined approach of the respective authorities and avoids unnecessary loops in the permitting process and gives security to planning projects. The RED III does not foresee fundamental improvements to existing articles in RED II on the permit-granting process (article 16) and on grid connection (article 17). There are still too many complex

			The Member States should outline the reformed structure of their permitting process in their National Energy and Climate Plans. The European Commission will issue by the end of 2022 a **Guidance on good practices for permitting**. This guidance will cover e.g. the following areas: Effective single contact points (staff growth as well as professional trainings) - Court proceedings - Military and civil aviation constraints - Civil resolution and mediation - Factoring technology development in the permitting process - Spatial planning - effective guidance on climate mitigation through renewable roll-out - Guidance on best planning and permitting for renewable energy projects in NATURA 2000 regions and other protected areas- for imperative climate reasons of overriding public interest (social or economic reasons)	and long administrative procedures that remain a barrier for increased and faster deployment of renewable energy. Therefore, EREF would urge the EU to support the further implementation of simpler and faster permitting rules and procedures with a **Guidance setting out good practises on permitting on areas**. These should cover good permitting practices in following areas: • Effective single contact points (staff growth as well as professional trainings) • Court proceedings • Military and civil aviation constraints • Civil resolution and mediation • Factoring technology development in the permitting process • Spatial planning

				Furthermore, EREF would propose a properly designed regulation on species protection on EU level. That is because Art. 16 RED requires MS to permit new renewable energy installations within 3 years and repowered ones within 2 years. Additionally, the Governance regulation requires MS to outline concrete measures. However, MS like Germany have not implemented such measures in their National energy and Climate plan. Therefore, the EU should set guidelines to support and encourage the national implementation.
16.6 amended		Member States shall facilitate the repowering of existing renewable energy plants by ensuring a simplified and swift permit-granting process. The length of that process shall not exceed one year.	**New Art. 16 para 6 2nd sentence**: **While integrating accompanying ecological measures in the permitting process of repowering, these permitting procedures shall not exceed the period of up to two years.**	Small-scale installations can be of great benefit to increase public acceptance and to ensure the rollout of renewable energy projects, in particular at local level, often combined with participation of citizens and small business in the neighbourhood.

				Moreover, smaller installations play an increasingly important role in balancing the systems. If the permission period ends, these installations will have to be repowered based on actual technical standards and relevant mitigation measures. At present, as has been outlined by the Commission in its introduction to the proposal for an amended directive, consultation has shown that we face a widespread problem with permitting processes especially also for repowering - taking up to severely years before permit. This effectively blocks the much-needed repowering of existing plants. Ecological aspects are one of the main reasons why permitting procedures take so long.

Guarantees of Origin for energy from renewable energy sources				
19.14 new			**For the purposes of demonstrating to final customers the compliance of renewable fuels with sustainability and greenhouse gas savings criteria set in article 29, paragraphs 2 to 7 and 10, Member States shall ensure that the Guarantees of Origin are upgraded to include such information.**	Multiple proposed amendments (19.14; 31.1a; 31.1b; 30.3; 30.6) with the purpose for more practical certification and traceability schemes of renewable gases; reasoning provided in 30.6
Access to and operation of grids				
20.3, amended	Subject to their assessment included in the integrated national energy and climate plans in accordance with Annex I to Regulation (EU) 2018/1999 on the necessity to build new infrastructure for district heating and cooling from renewable sources in order to achieve the Union target set	Subject to their assessment included in the integrated national energy and climate plans in accordance with Annex I to Regulation (EU) 2018/1999 on the necessity to build new infrastructure for district heating and cooling from renewable sources in order to achieve the Union target set in Article 3(1) of this Directive, Member States shall, where relevant, take the necessary steps with a view to developing efficient district heating and cooling infrastructure to promote heating and cooling from renewable energy sources, including solar energy, ambient energy, geothermal energy, biomass, biogas, bioliquids and waste heat and cold, in combination with thermal energy storage.';	Subject to their assessment included in the integrated national energy and climate plans in accordance with Annex I to Regulation (EU) 2018/1999 on the necessity to build new infrastructure for district heating and cooling from renewable sources in order to achieve the Union target set in Article 3(1) of this Directive, **Member States shall undertake thorough assessments about potentials and feasibility of developing efficient district heating and cooling infrastructure** to promote heating and cooling from renewable energy sources, including solar energy, ambient energy, geothermal energy, biomass, biogas, bioliquids and waste heat and cold, in combination with thermal energy storage.';	While EREF supports to change the wording and specify to promote of heating and cooling from renewable energy sources, it might be useful, for the sake of effectively decarbonising the EU's heating sector, to put stronger requirements on MS for assessing the potential and feasibility of renewables-based district heating and cooling infrastructure.

	in Article 3(1) of this Directive, Member States shall, where relevant, take the necessary steps with a view to developing a district heating and cooling infrastructure to accommodate the development of heating and cooling from large biomass, solar energy, ambient energy and geothermal energy facilities and from waste heat and cold.			
Facilitating system integration of renewable electricity				
20a.1 new		Member States shall require transmission system operators and distribution system operators in their territory to make available information on the share of renewable electricity and the greenhouse gas emissions content of the electricity supplied in each bidding zone, as accurately as possible and as close to real time as possible but in time intervals of no more than one	In addition to the requirements in [the proposal for a Regulation concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020], Member States shall ensure that manufacturers of domestic and industrial batteries enable real-time access to basic battery management system information,	EREF much welcomes the Commission proposal that requires system actors to disclose the renewable electricity share they transmit and distribute. This will provide market actors, incl. consumers,

		hour, with forecasting where available. This information shall be made available digitally in a manner that ensures it can be used by electricity market participants, aggregators, consumers and end-users, and that it can be read by electronic communication devices such as smart metering systems, electric vehicle recharging points, heating and cooling systems and building energy management systems.	including battery capacity, state of health, state of charge and power set point, to battery owners and users as well as to third parties acting on their behalf, such as building energy management companies and electricity market participants, under non-discriminatory terms and at no cost. Member States shall ensure that vehicle manufacturers make available, in real-time, in-vehicle data related to the battery state of health, battery state of charge, battery power setpoint, battery capacity, as well as the location of electric vehicles to electric vehicle owners and users, as well as to third parties acting on the owners' and users' behalf, such as electricity market participants and electromobility service providers, under non-discriminatory terms and at no cost, in addition to further requirements in the type approval and market surveillance regulation. 4. Member States shall ensure that the national regulatory framework does not discriminate against participation in the electricity markets, including congestion management and the provision of flexibility and balancing services **of district heating and cooling networks**, small or mobile systems such as domestic batteries, and electric vehicles, both directly and through aggregation. **Member States shall also provide a level playing for smaller market actors, in particular renewable energy communities, so that they are able to participate in the market without facing**	with higher transparency and give access to information that is valuable for awareness raising and reducing carbon footprints. However, EREF would support strengthening the language in this provision to ensure that system operators are able to measure what is going on in real-time. However, EREF would support to introduce measures which also foster the direct use of renewable electricity in heating and cooling and in the industry. That is because most of the measures contained in this article focus on the interaction between residential and industrial batteries and electric vehicles and the electricity grid respectively. This neglects a general approach to foster interaction between renewable electricity in

			disproportionate administrative or regulatory burden.	heating and cooling and in industry. Such links need to be addressed in order to make Article 20a a more meaningful tool to promote energy system integration and renewables based on electrification, particularly at the local level. We regret that most of the measures contained in this article focus on the interaction between electric vehicles and the electricity grid. This neglects a general approach to foster interaction between renewable electricity in heating and cooling and in industry. Such links need to be addressed in order to make Article 20a a more meaningful tool to promote system integration, particularly at the local level. Furthermore, paragraph 4 of Article 20a should mention the need to ensure national regulatory frameworks provide a level

				playing field for smaller market actors such as RECs.
20a.4 amended		Member States shall ensure that the national regulatory framework does not discriminate against participation in the electricity markets, including congestion management and the provision of flexibility and balancing services, of small or mobile systems such as domestic batteries and electric vehicles, both directly and through aggregation.'; 	Member States shall ensure that the national regulatory framework does not discriminate against participation in the electricity markets, including congestion management and the provision of flexibility and balancing services, of small or mobile systems such as domestic batteries and electric vehicles, both directly and through aggregation.' **Member States should put a special focus to provide a level-playing field for small market actors such as Renewable Energy Communities (RECs).**	EREF supports introducing this Commission proposal, which is in line with the Electricity Market Directive. However, this paragraph needs mentioning the importance of a level-playing field for small market actors.
Mainstreaming renewable energy in industry				
22a.1 amended		Member States shall **endeavour** to increase the share of renewable sources in the amount of energy sources used for final energy and non-energy purposes in the industry sector by an indicative average minimum annual increase of 1.1 percentage points by 2030. Member States shall include the measures planned and taken to achieve such indicative increase in their integrated national energy and climate plans and progress reports submitted pursuant to Articles 3, 14 and 17 of Regulation (EU) 2018/1999. Member States shall ensure that the contribution of renewable fuels of non-biological origin used for final energy and non-energy purposes shall be 50 % of the hydrogen used for final energy and	Member States shall **endeavour** to increase the share of renewable sources in the amount of energy sources used for final energy and non-energy purposes in the industry sector by an ~~indicative~~ binding average minimum annual increase of 1.1 percentage points by 2030. Member States shall include the measures planned and taken to achieve such ~~indicative~~ binding increase in their integrated national energy and climate plans and progress reports submitted pursuant to Articles 3, 14 and 17 of Regulation (EU) 2018/1999. Member States shall ensure that the contribution of renewable fuels of non-biological origin used for final energy and non-energy purposes shall be 50 % of the hydrogen	Only renewable hydrogen should be included, no allowances for hydrogen from other sources as this will allow nuclear and fossil fuels to gain a foothold in the REDIII. That is because- if not explicitly excluded-, the RED would also include the promotion of non-renewable hydrogen. This would lead to the perpetuation and promotion of nuclear and fossil hydrogen while

		non-energy purposes in industry by 2030. For the calculation of that percentage, the following rules shall apply: (a) For the calculation of the denominator, the energy content of hydrogen for final energy and non-energy purposes shall be taken into account, excluding hydrogen used as intermediate products for the production of conventional transport fuels. (b) For the calculation of the numerator, the energy content of the renewable fuels of non-biological origin consumed in the industry sector for final energy and non-energy purposes shall be taken into account, excluding renewable fuels of non-biological origin used as intermediate products for the production of conventional transport fuels.	**from renewable sources** used for final energy and non-energy purposes in industry by 2030. For the calculation of that percentage, the following rules shall apply: (a) For the calculation of the denominator, the energy content of hydrogen **from renewable sources** for final energy and non-energy purposes shall be taken into account, excluding hydrogen **from renewable sources** used as intermediate products for the production of conventional transport fuels. (b) For the calculation of the numerator, the energy content of the renewable fuels consumed in the industry sector for final energy and non-energy purposes shall be taken into account, excluding renewable fuels used as intermediate products for the production of conventional transport fuels	hindering investment in renewable technologies. The current availability of in the European electricity mix limits hydrogen production to small quantities and specific times; production of larger quantities would foster electricity generated from fossil fuels. Thus, support must focus initially on the production benefitting the system which is in line with energy transition. Furthermore, this would allow plants that are no longer eligible for subsidies to develop new business models that they can rely on, and, by that, help develop the European renewable hydrogen market. Moreover, EREF urges to include other renewable gases as well, in order to ensure a level playing field on the European energy market. Furthermore, EREF would urge to establish binding

				targets for the expansion of renewable energies for the industrial sector. Taking national, regional and local circumstances into account, such targets should be set in agreement among the European Commission and the MS' competent authorities, with the MS informing in their NECPs how they plan to achieve these.
22a.3 new			**Member States shall collectively ensure that the contribution of renewable gases both gaseous and liquified - is at least 35 % of the gases used for final energy and non-energy purposes in industry by 2030.**	Renewable gas will play a decisive role in the decarbonisation efforts of every sector, including buildings, industry, power and mobility as well as agriculture. To deliver on this potential, the European biogas industry requires an EU policy framework that promotes the production, market uptake and system integration of renewable gas in order to develop of a sustainable decarbonised gas sector. EREF supports the introduction in European

				legislation (e.g. revision of the Renewable Energy Directive) of a binding 2030 target set for the industry as critical step to overcome the chicken and egg situation. Observation: the current gas proposal combines renewable and fossil gas under term "natural gas". The RED III should avoid this terminology and only speak about renewable gas.
Mainstreaming renewable energy in heating and cooling				
23.1 amended	In order to promote the use of renewable energy in the heating and cooling sector, each Member State shall endeavour to increase the share of renewable energy in that sector by an indicative 1,3 percentage	In order to promote the use of renewable energy in the heating and cooling sector, each Member State shall, increase the share of renewable energy in that sector by at least 1.1 percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030, starting from the share of renewable energy in the heating and cooling sector in 2020, expressed in terms of national share of gross final energy consumption and calculated in accordance with the methodology set out in Article 7. That increase shall be of 1.5 percentage points for Member States where waste heat and cold is used. In that case, Member States may count waste heat and cold from renewable energies up to 40 % of the average annual increase. In	In order to promote the use of renewable energy in the heating and cooling sector, each Member State shall, increase the share of renewable energy in that sector by at least **1.3 percentage** points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030, starting from the share of renewable energy in the heating and cooling sector in 2020, expressed in terms of national share of gross final energy consumption and calculated in accordance with the methodology set out in Article 7. That increase shall be of 1.5 percentage points for Member States **where renewable** waste heat and cold is used. In that case, Member States may count waste heat and cold from renewable energies	Set a 1.3% target of annual increase for renewables used in heating and cooling, with a new binding target of 1.5 percentage point annual increase and ban on fossil fuels in district heating and cooling. This includes disallowing any form of direct or indirect support to fossil fuels. A **crediting of waste heat from fossil energy plants to the target for the expansion of renewable**

	points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030, starting from the share of renewable energy in the heating and cooling sector in 2020, expressed in terms of national share of final energy consumption and calculated in accordance with the methodology set out in Article 7, without prejudice to paragraph 2 of this Article. That increase shall be limited to an indicative 1,1 percentage points for Member States where waste heat and cold is	addition to the minimum 1.1 percentage points annual increase referred to in the first subparagraph, each Member State shall endeavour to increase the share of renewable energy in their heating and cooling sector by the amount set out in Annex 1a.';	up to 40 % of the average annual increase. In addition to the minimum **1.5 percentage** points annual increase referred to in the first subparagraph, each Member State shall endeavour to increase the share of renewable energy in their heating and cooling sector by the amount set out in Annex 1a.';	**energy must be avoided.** The consequence would be windfall gains, which would reduce the target and, with a maximum creditability of 40 %, only an increase in the share of renewable energies of 0.9 instead of 1.1 percentage points would remain, which is detrimental to the necessary climate protection efforts. Furthermore, EREF calls for the strengthening of the cross compliance between RED and Energy performance of Building Directive (EPBD). This could be achieved for example by an integration of heating and cooling targets into the long-term renovation strategies of the EPBD (Art. 2a). This helps to ensure a consistent approach and a holistic planning towards the full decarbonisation of the buildings sector.

	not used. Member States shall, where appropriate, prioritise the best available technologies.			
23.4 amended	Member States may implement the average annual increase referred to in paragraph 1 by means, inter alia, of one or more of the following options: (a) physical incorporation of renewable energy or waste heat and cold in the energy and energy fuel supplied for heating and cooling; (b) direct mitigation measures such as the installation of highly efficient	To achieve the average annual increase referred to in paragraph 1, first subparagraph, Member States may implement **one or more** of the following measures: (a) physical incorporation of renewable energy or waste heat and cold in the energy sources and fuels supplied for heating and cooling; (b) installation of highly efficient renewable heating and cooling systems in buildings, or use of renewable energy or waste heat and cold in industrial heating and cooling processes; (c) measures covered by tradable certificates proving compliance with the obligation laid down in paragraph 1, first subparagraph, through support to installation measures under point (b) of this paragraph, carried out by another economic operator such as an independent renewable technology installer or an energy service company providing renewable installation services; (d) capacity building for national and local authorities to plan and implement renewable projects and infrastructures; (e) creation of risk mitigation frameworks to reduce the cost of capital for renewable heat and cooling projects;	To achieve the average annual increase referred to in paragraph 1, first subparagraph, Member States may implement **one or more** of the following measures: (a) physical incorporation of renewable energy or **renewable** waste heat and cold in the energy sources and fuels supplied for heating and cooling; **New (j) promotion of consumer-owned DHC networks, including through regulatory measures and financing arrangements'**	*A **crediting of waste heat from fossil energy plants** to the target for the expansion of renewable energy must be avoided. The consequence would be windfall gains, which would reduce the target and, with a maximum creditability of 40 %, only an increase in the share of renewable energies of 0.9 instead of 1.1 percentage points would remain, which is detrimental to the necessary climate protection efforts.* EREF proposes to add a new measure as point J on 'promotion of consumer-owned DHC networks,

	renewable heating and cooling systems in buildings, or the use of renewable energy or waste heat and cold in industrial heating and cooling processes; (c) indirect mitigation measures covered by tradable certificates proving compliance with the obligation laid down in paragraph 1 through support to indirect mitigation measures, carried out by another economic operator such as an independent renewable technology	(f) promotion of heat purchase agreements for corporate and collective small consumers; (g) planned replacement schemes of fossil heating systems or fossil phase-out schemes with milestones; (h) renewable heat planning, encompassing cooling, requirements at local and regional level; (i) other policy measures, with an equivalent effect, including fiscal measures, support schemes or other financial incentives. When adopting and implementing those measures, Member States shall ensure their accessibility to all consumers, in particular those in low-income or vulnerable households, who would not otherwise possess sufficient up-front capital to benefit.';		including through regulatory measures and financing arrangements' to the list of implementing measures. That is because Renewable Energy Communities (RECs) can contribute to the achievement of these ambitious objectives and ensure the inclusion of vulnerable households. An explicit mentioning in this paragraph would be a specific support to reinforce their work.

	installer or energy service company providing renewable installation services; (d) other policy measures, with an equivalent effect, to reach the average annual increase referred to in paragraph 1, including fiscal measures or other financial incentives. When adopting and implementing the measures referred to in the first subparagraph, Member States shall aim to ensure the accessibility of measures to all consumers, in particular those in low-income or			

	vulnerable households, who would not otherwise possess sufficient up-front capital to benefit.			
District heating and cooling				
24.4 amended	Member States shall lay down the necessary measures to ensure that district heating and cooling systems contribute to the increase referred to in Article 23(1) of this Directive by implementing at least one of the two following options: (a) Endeavour to increase the share of energy from renewable sources and from waste heat	Member States shall endeavour to increase the share of energy from renewable sources and from waste heat and cold in district heating and cooling by at least 2.1 percentage points as an annual average calculated for the period 2021 to 2025 and for the period 2026 to 2030, starting from the share of energy from renewable sources and from waste heat and cold in district heating and cooling in 2020, and shall lay down the measures necessary to that end. The share of renewable energy shall be expressed in terms of share of gross final energy consumption in district heating and cooling adjusted to normal average climatic conditions. Member States with a share of energy from renewable sources and from waste heat and cold in district heating and cooling above 60 % may count any such share as fulfilling the average annual increase referred to in the first subparagraph. Member States shall lay down the necessary measures to implement the average annual increase referred to in the first subparagraph in their integrated national energy	Member States shall ~~**endeavour to**~~ increase the share of energy from renewable sources and from waste heat and cold in district heating and cooling by at least 2.1 percentage points as an annual average calculated for the period 2021 to 2025 and for the period 2026 to 2030, starting from the share of energy from renewable sources and from waste heat and cold in district heating and cooling in 2020, and shall lay down the measures necessary to that end. The share of renewable energy shall be expressed in terms of share of gross final energy consumption in district heating and cooling adjusted to normal average climatic conditions. Member States with a share of energy from renewable sources and from waste heat and cold **from renewable sources** in district heating and cooling above 60 % may count any such share as fulfilling the average annual increase referred to in the first subparagraph. Member States shall lay down the necessary measures to implement the average annual increase referred to in the first	EREF welcomes the increase of the target for the share of renewable energies in district heating from 1 to 2.1 percentage points per year. Nevertheless, EREF criticises that the member states are only required to make efforts to achieve such increase. A more binding target would be more effective in achieving the climate and energy goals. In addition, EREF strongly suggests that waste heat from fossil fuels cannot be counted towards the target to avoid false incentives that result in lock-in effects for fossil

	and cold in district heating and cooling by at least one percentage point as an annual average calculated for the period 2021 to 2025 and for the period 2026 to 2030, starting from the share of energy from renewable sources and from waste heat and cold in district heating and cooling in 2020, expressed in terms of share of final energy consumption in district heating and cooling, by implementing measures that can be expected to trigger that average annual increase in years with normal climatic	and climate plans pursuant to Annex I to Regulation (EU) 2018/1999.'; 	subparagraph in their integrated national energy and climate plans pursuant to Annex I to Regulation (EU) 2018/1999.'; 	fuels in the heating infrastructure.

	conditions. Member States with a share of energy from renewable sources and from waste heat and cold in district heating and cooling above 60 % may count any such share as fulfilling the average annual increase referred to in the first subparagraph of this point. Member States shall lay down the necessary measures to implement the average annual increase referred to in the first subparagraph of this point in their integrated national energy and climate plans pursuant to Annex I to			

	Regulation (EU) 2018/1999. (b) Ensure that operators of district heating or cooling systems are obliged to connect suppliers of energy from renewable sources and from waste heat and cold or are obliged to offer to connect and purchase heat or cold from renewable sources and from waste heat and cold from third-party suppliers based on non-discriminatory criteria set by the competent authority of the Member State concerned, where they need to do one or			

	more of the following: (i) meet demand from new customers; (ii) replace existing heat or cold generation capacity; (iii) expand existing heat or cold generation capacity.			
24.8 amended	Member States shall require electricity distribution system operators to assess at least every four years, in cooperation with the operators of district heating or cooling systems in their respective area, the potential for district heating or cooling systems to provide	Member States shall establish a framework under which electricity distribution system operators will assess, at least every four years, in cooperation with the operators of district heating and cooling systems in their respective areas, the potential for district heating and cooling systems to provide balancing and other system services, including demand response and thermal storage of excess electricity from renewable sources, and whether the use of the identified potential would be more resource- and cost-efficient than alternative solutions. Member States shall ensure that electricity transmission and distribution system operators take due account of the results of the assessment required under the first subparagraph in grid planning, grid investment and infrastructure development in their respective territories. Member States shall facilitate coordination between operators of district heating and cooling systems and	Member States shall establish a framework under which electricity distribution system operators will assess, at least every four years, in cooperation with the operators of district heating and cooling systems in their respective areas, the potential for district heating and cooling systems to provide balancing and other system services, including demand response and thermal storage of excess electricity from renewable sources, and whether the use of the identified potential would be more resource- and cost-efficient than alternative solutions. Member States shall ensure that electricity transmission and distribution system operators take due account of the results of the assessment required under the first subparagraph in grid planning, grid investment and infrastructure development in their respective territories. Member States shall facilitate coordination	Only renewable hydrogen should be included, no allowances for hydrogen from other sources as this will allow nuclear and fossil fuels to gain a foothold in the REDIII. Furthermore, EREF suggests introducing provisions for grid operators to prepare energy infrastructure for a stronger interaction of the sectors. That is because this would strengthen flexibility options that will be key to help balancing demand and supply. The current text obliges

	balancing and other system services, including demand response and storing of excess electricity from renewable sources, and whether the use of the identified potential would be more resource- and cost-efficient than alternative solutions.	electricity transmission and distribution system operators to ensure that balancing, storage and other flexibility services, such as demand response, provided by district heating and district cooling system operators, can participate in their electricity markets. Member States may extend the assessment and coordination requirements under the first and third subparagraphs to gas transmission and distribution system operators, including hydrogen networks and other energy networks.	between operators of district heating and cooling systems and electricity transmission and distribution system operators to ensure that balancing, storage and other flexibility services, such as demand response, provided by district heating and district cooling system operators, can participate in their electricity markets. Member States may extend the assessment and coordination requirements under the first and third subparagraphs to gas transmission and distribution system operators, including hydrogen **from renewable sources** networks and other energy networks.	electricity grid operators to assess how they could use district heating & cooling networks as a source of flexibility. District heating & cooling networks actually could help to better balance demand and supply of energy. However, the proposal remains vague. It just stipulates that electricity grid operators should take account of such an assessment in view of all their grid planning and grid investments. Besides that, the gas grid operators are not obliged to run any assessment, despite the important role of fossil gas in heating and district heat
Mainstreaming renewable energy in transport sector - title amended into GHG intensity reduction in the transport sector from the use of renewable energy				
25.1 amended	In order to mainstream the use of renewable energy in the transport sector, each Member State shall set an	Each Member State shall set an obligation on fuel suppliers to ensure that: (a) the amount of renewable fuels and renewable electricity supplied to the transport sector leads to a greenhouse gas intensity reduction of at least 13 % by 2030, compared to the baseline set out in Article 27(1), point (b), in accordance with	Each Member State shall set an obligation on fuel suppliers to ensure that: a) the amount of renewable fuels and renewable electricity supplied to the transport sector leads to a greenhouse gas intensity reduction of at least ~~13~~ **16%** by 2030, compared to the baseline set out in Article 27	The current RED II target for renewable energy in transport was insufficient to achieve the decarbonisation objectives set out in the European Green Deal and the 2030

	obligation on fuel suppliers to ensure that the share of renewable energy within the final consumption of energy in the transport sector is at least 14 % by 2030 (minimum share) in accordance with an indicative trajectory set by the Member State and calculated in accordance with the methodology set out in this Article and in Articles 26 and 27. The Commission shall assess that obligation, with a view to submitting, by 2023, a legislative	an indicative trajectory set by the Member State; (b) the share of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX in the energy supplied to the transport sector is at least 0,2 % in 2022, 0,5 % in 2025 and 2,2 % in 2030, and the share of renewable fuels of non-biological origin is at least 2,6 % in 2030. For the calculation of the reduction referred to in point (a) and the share referred to in point (b), Member States shall take into account renewable fuels of non-biological origin also when they are used as intermediate products for the production of conventional fuels. For the calculation of the reduction referred to in point (a), Member States may take into account recycled carbon fuels. When setting the obligation on fuel suppliers, Member States may exempt fuel suppliers supplying electricity or renewable liquid and gaseous transport fuels of non-biological origin from the requirement to comply with the minimum share of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX with respect to those fuels.	(1), point (b). **Member States shall require suppliers, for this reduction, to comply with the following intermediate targets:** • **6 % by 31 December 2021,** • **9% by 31 December 2024,** • **10 % by 31 December 2025,** • **11 % by December 2026** • **12 % by December 2027,** • **13,5 % by December 2028,** • **15 % by December 2029,** **16 % by December 2030.** b) the share of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX in the energy supplied to the transport sector is at least 0,2 % in 2022, **1 %** in 2025 and **2.6** % in 2030, and the share of renewable fuels of nonbiological origin is at least 2,6 % in 2030. **The share of renewable gas should be 23% of the gas supplied to transport in 2030.**	Climate Law, even more so as Member States could do away with it through reduced crop-based biofuels caps and the use of artificial multipliers that are counterproductive to climate change mitigation and only perpetuate fossil fuel dependence. Including in the RED an obligation to decrease the carbon intensity of transport fuels is a sensible move forward. However, the suggested obligation on suppliers to decrease the GHG intensity of fuels at least 13% by 2030 is still low and should be raised to at least 16%. Such obligation should be gradually increased following a mandatory trajectory, starting from 6% in 2021 as set in the existing Fuel Quality Directive, to 11% in 2025 and 16% by 2030, to ensure Member States' continuous decarbonisation efforts. EREF urges to substantially increase the renewables target for

	proposal to increase it in the event of further substantial costs reductions in the production of renewable energy, where necessary to meet the Union's international commitments for decarbonisation, or where justified on the grounds of a significant decrease in energy consumption in the Union. Member States may exempt, or distinguish between, different fuel suppliers and different energy carriers when setting the obligation on the fuel			transport, from 14% to at least 28%. Furthermore, EREF urges to make the renewable targets binding and increase them annually in equal steps. This ensures that consumers and economic operators can adjust to the gradual increase. To achieve the European climate targets, it is essential to couple the transport and energy sectors. This requires combining the necessary and effective direct electrification of vehicles with the climate-friendly transformation of existing transport (decarbonisation of fuels) and offer solutions for transport that is difficult to electrify (air, sea and heavy goods transport). The use of sustainable biofuels is also a key element in reducing emission from existing transport.

	suppliers, ensuring that the varying degrees of maturity and the cost of different technologies are taken into account. For the calculation of the minimum share referred to in the first subparagraph, Member States: (a) shall take into account renewable liquid and gaseous transport fuels of non-biological origin also when they are used as intermediate products for the production of conventional fuels; and (b) may take into account recycled carbon fuels. Within the minimum share referred to in the			In this regard, EREF 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. But any administrative tool to change accounting of renewable energy reduces credibility and legal clarity for operators, investors manufacturers and buyers. On the contrary, the targets have a stronger political value for the whole value chain and give long term perspective to the economy. Moreover, 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. And it is not yet known what the life cycle greenhouse

	first subparagraph, the contribution of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX as a share of final consumption of energy in the transport sector shall be at least 0,2 % in 2022, at least 1 % in 2025 and at least 3,5 % in 2030. Member States may exempt fuel suppliers supplying fuel in the form of electricity or renewable liquid and gaseous transport fuels of non-biological origin from the requirement to comply with the minimum share of advanced			gas emissions savings of all RFNBOs are. The Commission had to adopt the methodology for the calculation with a methodology before the end of 2021, but the document is still missing as by end of January 2022. It is crucial to encourage the solutions that are already known more than what is not available yet. Many heavy-duty and vessels manufacturers are ready to reach ambitious decarbonisation goals with renewable biomethane engines, for instance bio-LNG. EREF strongly encourages the RED II to raise the production target. Current biomethane production is around 18 billion cubic meters and several independent studies has found that by 2030 production can easily reach 40 billion cubic meters. More than double the current capacity in just 10 years.

	biofuels and biogas produced from the feedstock listed in Part A of Annex IX with respect to those fuels. When setting the obligation referred to in the first and fourth subparagraphs to ensure the achievement of the share set out therein, Member States may do so, inter alia, by means of measures targeting volumes, energy content or greenhouse gas emissions, provided that it is demonstrated that the minimum shares referred to in the first and fourth subparagraphs are achieved.			The same impact assessment of the European Commission and other many independent studies acknowledge that RFNBOs quantities will become relevant only after 2030.

25.2 amended	The greenhouse gas emissions savings from the use of renewable liquid and gaseous transport fuels of non-biological origin shall be at least 70 % from 1 January 2021. By 1 January 2021, the Commission shall adopt a delegated act in accordance with Article 35 to supplement this Directive by establishing appropriate minimum thresholds for greenhouse gas emissions savings of recycled carbon fuels through a life-cycle assessment that takes into account the	Member States shall establish a mechanism allowing fuel suppliers in their territory to exchange credits for supplying renewable energy to the transport sector. Economic operators that supply renewable electricity to electric vehicles through public recharging stations shall receive credits, irrespectively of whether the economic operators are subject to the obligation set by the Member State on fuel suppliers, and may sell those credits to fuel suppliers, which shall be allowed to use the credits to fulfil the obligation set out in paragraph 1, first subparagraph.';	Member States shall establish a mechanism allowing fuel suppliers in their territory to exchange credits for supplying renewable energy to the transport sector. Economic operators that **supply i)** renewable electricity to electric vehicles through public recharging stations or **ii) renewable gases to gas-fuelled vehicles through public fuelling stations** shall receive credits, irrespectively of whether the economic operators are subject to the obligation set by the Member State on fuel suppliers, and may sell those credits to fuel suppliers, which shall be allowed to use the credits to fulfil the obligation set out in paragraph 1, first subparagraph.	Biomethane is a renewable, storable and non-variable energy. It has a key role to play in the decarbonisation of the transport sector alongside electrification, especially for heavy duty transport vehicles. Including biomethane in this mechanism would confirm the European commitment to carbon neutrality within the principle of technological neutrality. The proposed mechanism will contribute to structure the European biomethane sector that needs to scale-up in order to reach ambitious EU GHG reduction targets and cost-efficiency. Biomethane is a sustainable energy with a lot of positive externalities: an industry made in Europe, reliable and becoming increasingly competitive, creating jobs in European territories that cannot be relocated.

	specificities of each fuel			
26.1. subpara 1 amended		For the calculation of a Member State's gross final consumption of energy from renewable sources referred to in Article 7 and of the greenhouse gas intensity reduction target referred to in Article 25(1), first subparagraph, point (a), the share of biofuels and bioliquids, as well as of biomass fuels consumed in transport, where produced from food and feed crops, shall be no more than ***one percentage point higher than the share of such fuels in the final consumption of energy in the transport sector in 2020 in that Member State, with a maximum of*** 7% of final consumption of energy in the transport sector in that Member State.	For the calculation of a Member State's gross final consumption of energy from renewable sources referred to in Article 7 and of the greenhouse gas intensity reduction target referred to in Article 25(1), first subparagraph, point (a), the share of biofuels and bioliquids, as well as of biomass fuels consumed in transport, where produced from food and feed crops **other than high ILUC-risk feedstock,** shall be no more than ~~*one percentage point higher than the share of such fuels in the final consumption of energy in the transport sector in 2020 in that Member State, with a maximum of*~~ 7% of final consumption of energy in the transport sector in that Member State.	*Crop-based biofuels are an immediate and cost-effective tool to reduce emissions of existing and future light and heavy-duty vehicles, considering their number and lifespan, and their use should not be limited to transport modes that cannot be electrified. ILUC concerns were fully addressed in 2018 in the RED II delegated act on high ILUC-risk biofuels, which singled out problematic feedstocks and confirmed that European crop-based ethanol does not drive deforestation. Only high ILUC-risk biofuels must be progressively phased out*
26.1.subpara2		Where that share is below 1 % in a Member State, it may be increased to a maximum of 2 % of the final consumption of energy in the road and rail transport sectors	~~*Where that share is below 1 % in a Member State, it may be increased to a maximum of 2 % of the final consumption of energy in the road and rail transport sectors.*~~	*The provision is rendered obsolete by the amendment in Article 26 para1 subpara 1*

Specific rules for biofuels, bioliquids and biomass fuels produced from food and feed crops				
27.1 amended	For the calculation of the minimum shares referred to in the first and fourth subparagraphs of Article 25(1), the following provisions shall apply: (a) for the calculation of the denominator, that is the energy content of road- and rail-transport fuels supplied for consumption or use on the market, petrol, diesel, natural gas, biofuels, biogas, renewable liquid and gaseous transport fuels of non-biological origin, recycled carbon fuels and electricity	For the calculation of the greenhouse gas intensity reduction referred to in Article 25(1), first subparagraph, point (a), the following rules shall apply: (a) the greenhouse gas emissions savings shall be calculated as follows: (i) for biofuel and biogas, by multiplying the amount of these fuels supplied to all transport modes by their emissions savings determined in accordance with Article 31; (ii) for renewable fuels of non-biological origin and recycled carbon fuels, by multiplying the amount of these fuels that is supplied to all transport modes by their emissions savings determined in accordance with delegated acts adopted pursuant to Article 29a(3); (iii) for renewable electricity, by multiplying the amount of renewable electricity that is supplied to all transport modes by the fossil fuel comparator ECF(e) set out in in Annex V; (b) the baseline referred to in Article 25(1) shall be calculated by multiplying the amount of energy supplied to the transport sector by the fossil fuel comparator EF(t) set out in Annex V; (c) for the calculation of the relevant amounts of energy, the following rules shall apply: (i) in order to determine the amount of energy supplied to the transport sector, the values regarding the energy content of transport fuels set out in Annex III shall be used; (ii) in order to determine the energy content of transport fuels not included in Annex III, the	For the calculation of the greenhouse gas intensity reduction referred to in Article 25(1), first subparagraph, point (a), the following rules shall apply: (a) the greenhouse gas emissions savings shall be calculated as follows: (i) for biofuel and biogas, by multiplying the amount of these fuels supplied to all transport modes by their emissions savings determined in accordance with Article 31; (ii) for renewable fuels of non-biological origin and recycled carbon fuels, by multiplying the amount of these fuels that is supplied to all transport modes by their emissions savings determined in accordance with delegated acts adopted pursuant to Article 29a(3); (iii) for renewable electricity, by multiplying the amount of renewable electricity that is supplied to all transport modes by the fossil fuel comparator **$EC_{F(t)}$** set out in in Annex V; **New last sentence in 27.1.:** **By 202X, the Commission shall assess the level of this limit and revise it upwards in light of new Annex IX-B feedstocks**	Renewable electricity used in transport displaces fossil transport fuels, hence its savings should be compared against the same fossil comparator used to for biomass fuels used as transport fuel. Applying the fossil fuel comparator EC_{FI}, i.e., the comparator for biomass fuels used for the production of electricity, would result in a massive overestimation of GHG emission reductions. In fact, by applying an inappropriate reference value, the GHG reduction from the use of renewable electricity would be accounted almost twice as high as the GHG emissions caused using fossil fuels in the first place. While the limits set on Annex IX-B remain justified as those feedstocks are used in mature production process, the European

	supplied to the road and rail transport sectors, shall be taken into account; (b) for the calculation of the numerator, that is the amount of energy from renewable sources consumed in the transport sector for the purposes of the first subparagraph of Article 25(1), the energy content of all types of energy from renewable sources supplied to all transport sectors, including renewable electricity supplied to the road and rail transport sectors, shall be taken into	Member States shall use the relevant European standards for the determination of the calorific values of fuels. Where no European standard has been adopted for that purpose, the relevant ISO standards shall be used; (iii) the amount of renewable electricity supplied to the transport sector is determined by multiplying the amount of electricity supplied to that sector by the average share of renewable electricity supplied in the territory of the Member State in the two previous years. By way of exception, where electricity is obtained from a direct connection to an installation generating renewable electricity and supplied to the transport sector, that electricity shall be fully counted as renewable; (iv) the share of biofuels and biogas produced from the feedstock listed in Part B of Annex IX in the energy content of fuels and electricity supplied to the transport sector shall, except in Cyprus and Malta, be limited to 1,7 %; (d) the greenhouse gas intensity reduction from the use of renewable energy is determined by dividing the greenhouse gas emissions saving from the use of biofuels, biogas and renewable electricity supplied to all transport modes by the baseline. The Commission is empowered to adopt delegated acts in accordance with Article 35 to supplement this Directive by adapting the energy content of transport fuels, as set out in Annex III, in accordance with scientific and technical progress;'		Commission should consider adapting the limit. As new feedstock is planned to enter the list of the Annex IX part-B, the cap should be assessed and potentially revised upwards. One suggestion would be to introduce a new category in Annex IX for such crops that specifically are not covered by the cap.

	account. Member States may also take into account recycled carbon fuels. For the calculation of the numerator, the share of biofuels and biogas produced from the feedstock listed in Part B of Annex IX shall, except for in Cyprus and Malta, be limited to 1,7 % of the energy content of transport fuels supplied for consumption or use on the market. Member States may, where justified, modify that limit, taking into account the availability of feedstock. Any such modification			

	shall be subject to approval by the Commission; (c) for the calculation of both numerator and denominator, the values regarding the energy content of transport fuels set out in Annex III shall be used. For the determination of the energy content of transport fuels not included in Annex III, the Member States shall use the relevant ESO standards for the determination of the calorific values of fuels. Where no ESO standard has been adopted for that purpose, the relevant ISO			

	standards shall be used. The Commission is empowered to adopt delegated acts in accordance with Article 35 to amend this Directive by adapting the energy content of transport fuels, as set out in Annex III, in accordance with scientific and technical progress.			
(New) Art. 27 para 1 a		1a. For the calculation of the targets referred to in Article 25(1), first subparagraph, point (b), the following rules shall apply: (a) for the calculation of the denominator, that is the amount of energy consumed in the transport sector, all fuels and electricity supplied to the transport sector shall be taken into account; (b) for the calculation of the numerator, the energy content of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX and renewable fuels of non-biological	1a. For the calculation of the targets referred to in Article 25(1), first subparagraph, point (b), the following rules shall apply: (a) for the calculation of the denominator, that is the amount of energy consumed in the transport sector, all fuels and electricity supplied to the transport sector shall be taken into account; (b) for the calculation of the numerator, the energy content of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX and renewable fuels of non-	Multipliers for renewable energy used in aviation and maritime modes have not delivered tangible results. These have now become obsolete since specific measures to support the use of renewable energy in these sectors have been proposed in ReFuelEU Aviation and FuelEU

		origin supplied to all transport modes in the territory of the Union shall be taken into account; **I the shares of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX and of renewable fuels of non-biological origin supplied in the aviation and maritime modes shall be considered to be 1,2 times their energy content.'**;	biological origin supplied to all transport modes in the territory of the Union shall be taken into account; ~~*I the shares of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX and of renewable fuels of non-biological origin supplied in the aviation and maritime modes shall be considered to be 1,2 times their energy content.'*~~;	Maritime proposed Regulations. Artificial multipliers are counterproductive to climate change mitigation as they only feign GHG savings and perpetuate fossil fuel dependence. Their use should be eliminated, allowing reporting towards renewable energy and decarbonisation targets to be based on real uptake and not be artificially inflated.
27.3 subpara 4 amended	For the purposes of this paragraph, where electricity is used for the production of renewable liquid and gaseous transport fuels of non-biological origin, either directly or for the production of intermediate products, the	Where electricity is used for the production of renewable fuels of non-biological origin, either directly or for the production of intermediate products, the average share of electricity from renewable sources in the country of production, as measured two years before the year in question, shall be used to determine the share of renewable energy.';	Where electricity is used for the production of renewable fuels ~~**of non-biological origin**~~, either directly or for the production of intermediate products, the average share of electricity from renewable sources in the country of production, as measured two years before the year in question, shall be used to determine the share of renewable energy.';	EREF strongly suggests deleting the restriction of this provision to RFNBOs. That is because a level playing field for all renewable fuels is needed in order to facilitate an efficient transition to renewable forms of energy in this sector.

	average share of electricity from renewable sources in the country of production, as measured two years before the year in question, shall be used to determine the share of renewable energy.			
27.3 subpara 5, amended	However, electricity obtained from direct connection to an installation generating renewable electricity may be fully counted as renewable electricity where it is used for the production of renewable liquid and gaseous transport fuels of non-biological origin, provided	However, electricity obtained from direct connection to an installation generating renewable electricity may be fully counted as renewable electricity where it is used for the production of renewable fuels of non-biological origin, provided that the installation:	However, electricity obtained from direct connection to an installation generating renewable electricity may be fully counted as renewable electricity where it is used for the production of renewable fuels ~~**of non-biological origin**~~, provided that the installation:	EREF also here suggests the removal of restriction of this provision to RFNBOs for the sake of ensuring a level playing field.

	that the installation:			
Other provisions on renewable energy in the transport sector				
28.6	By 25 June 2019 and every two years thereafter, the Commission shall review the list of feedstock set out in Parts A and B of Annex IX with a view to adding	Article 28 is amended as follows: (a) paragraphs 2, 3 and 4 are deleted. (b) paragraph 5 is replaced by the following: 'By 31 December 2024, the Commission shall adopt delegated acts in accordance with Article 35 to supplement this Directive by specifying the methodology to determine the share of biofuel, and biogas for transport, resulting from biomass being processed with fossil fuels in a common process.'; (c) in paragraph 7, 'laid down in the fourth subparagraph of Article 25(1)' is replaced by 'laid down in Article 25(1), first subparagraph, point (b)'; **(Unchanged so far Para 6 of REDII**:) By 25 June 2019 and every two years thereafter, the Commission shall review the list of feedstock set out in Parts A and B of Annex IX with a view to adding feedstock in accordance with the principles set out in the third subparagraph. 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	By 25 June 2019 and every two years thereafter, the Commission shall review the list of feedstock set out in Parts A and B of Annex IX with a view to adding feedstock in accordance with the principles set out in the third subparagraph. The Commission is empowered to adopt delegated acts in accordance with Article 35 to	EREF urges to remove the sentence prescribing that 'feedstock that can be processed into biofuels, or biogas for transport, with mature technologies shall be added to Part B of Annex IX' with the consequence of being limited at 1.7%. The background to this is that the RED II itself specifies after the above-mentioned recital that *"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 in accordance with the principles set out in the third subparagraph. 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	processed into biofuels, or biogas for transport, with mature technologies shall be added to Part B of Annex IX.	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 following sub-para is added:** ***Any addition to the list of feedstocks set out in Part A of Annex IX shall be accompanied by an increase of the targets set out in point b) of Article 25 (1), corresponding to the sustainable potential of these feedstock.***	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 usage 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, would they be added to part B of ANNEX IX and thus be limited at 1,7 %. However, this does not make any sense since the progressivity of the newly added feedstock has nothing to do with the technology which is used to process the feedstock. 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

	shall be added to Part B of Annex IX. 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:			classifies as "advanced" and "mature" technology. The inclusion of additional feedstocks on the Annex IXa list requires a corresponding increase in the targets for advanced biofuels. Additional feedstocks may jeopardize existing investments, as they increase the supply side and thus massively influence pricing. It is therefore necessary to adjust the demand side as well by increasing the sub-quota for advanced biofuels by the share corresponding to the sustainable potential of the newly included feedstocks
Sustainability and GHG emissions saving criteria for biofuels, bioliquids & biomass fuels				
29.1.4 amended	Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria laid down in paragraphs 2 to 7 and 10 if used	'Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria laid down in paragraphs 2 to 7 and 10 if used, – (a) in the case of solid biomass fuels, in installations producing electricity, heating and cooling with a total rated thermal input equal to or exceeding 5 MW, – (b) in the case of gaseous biomass fuels, in installations producing electricity, heating and	'Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria laid down in paragraphs 2 to 7 and 10 if used, – (a) in the case of solid biomass fuels, in installations producing electricity, heating and cooling with a total rated thermal input equal to or exceeding **5 20 MW**, ~~– (b) in the case of gaseous biomass fuels, in installations producing electricity, heating and~~	EREF welcomes the newly introduced threshold of 200 m3 methane equivalent/h measured at standard conditions of temperature and pressure in Art. 29 (a(ii)c(i)). However, we think that it would be enough to have

	in installations producing electricity, heating and cooling or fuels with a total rated thermal input equal to or exceeding 20 MW in the case of solid biomass fuels, and with a total rated thermal input equal to or exceeding 2 MW in the case of gaseous biomass fuels. Member States may apply the sustainability and greenhouse gas emissions saving criteria to installations with lower total rated thermal input	cooling with a total rated thermal input equal to or exceeding 2 MW, – (c) in the case of installations producing gaseous biomass fuels with the following average biomethane flow rate: (i) above 200 m3 methane equivalent/h measured at standard conditions of temperature and pressure (i.e. 0ºC and 1 bar atmospheric pressure); (ii) if biogas is composed of a mixture of methane and non-combustible other gases, for the methane flow rate, the threshold set out in point (i), recalculated proportionally to the volumetric share of methane in the mixture; (iii) the following subparagraph is inserted after the fourth subparagraph: 'Member States may apply the sustainability and greenhouse gas emissions saving criteria to installations with lower total rated thermal input or biomethane flow rate.'	~~cooling with a total rated thermal input equal to or exceeding 2 MW,~~ – (c) in the case of installations producing gaseous biomass fuels with the following average biomethane flow rate: (i) above 200 m3 methane equivalent/h measured at standard conditions of temperature and pressure (i.e. 0ºC and 1 bar atmospheric pressure); (ii) if biogas is composed of a mixture of methane and non-combustible other gases, for the methane flow rate, the threshold set out in point (i), recalculated proportionally to the volumetric share of methane in the mixture; (iii) the following subparagraph is inserted after the fourth subparagraph: 'Member States may apply the sustainability and greenhouse gas emissions saving criteria to installations with lower total rated thermal input or biomethane flow rate.'	only the 200 m³ as threshold and would urge for a deletion of the 2 MW threshold. The so far established threshold is interpreted differently in the member states. The reference to the energy input in the form of biomethane equivalent fits better to the different utilisation paths. In general, the total rated thermal input of 2MW is not suitable to properly reflect flexible power generation from biogas plants. In recent years, MS' governments, like the German one, have encouraged a flexibilization of biogas plants via for, in the German case, the Renewable Energy Sources Act (EEG). In recent years, bio-gas plant operators have installed additional electricity generation capacities in the form of additional combined heat and power plants. The total rated thermal capacity has been

				increased accordingly without increasing the fuel input. ***Comment for legislators: For gaseous biomass fuels it would suffice to maintain the threshold of 200 m³ methane equivalent/h measured at standard conditions of temperature and pressure (i.e. 0°C and 1 bar atmospheric pressure); deletion of the 2 MW and replacing by above unit*** ***If this is not possible, it is vital to change the unit of the 2 MW to "average installed capacity" instead of "total rated thermal input capacity".*** Furthermore, EREF opposes the lowering of the threshold for the sustainability criteria from 20 to 5 MW total rated thermal input. For a large number of decentralized electricity and heat suppliers, this would introduce additional barriers, with the

				consequence of increasing direct and indirect costs due to certification and related bureaucracy and administration. This would entail a disproportionate cost and administrative burden to the sector and would contradict efficient and proportionate legislation as well as renewable energy expansion. The use of a unit for gaseous biomass fuels that is independent from the installed capacity is very important for German biogas plants. In Germany, it is obligatory to install double to five times the capacity that is used in order to produce electricity more flexibly. However, that means that the installed capacity does not reflect the real production of electricity of biogas plants. By using the methane equivalent this problem is solved automatically. If this is not possible, as an alternative

				the unit of the 2 MW could be renamed in "average installed capacity" instead of "total rated thermal input capacity" in order to address the problem.
29.1.subpara 6 **(new)**			The Commission will implement, at the latest by 2025, the legal framework for applying EU health, environmental, waste management standards or equivalent standards, including processes and production methods, to imported renewable fuels, and identify concrete initiatives to ensure better consistency in their application, in conformity with WTO rules	All sustainable renewable low carbon fuels should be able to contribute towards EU's climate and renewable objectives under stricter sustainability criteria, including European standards for agricultural production, waste prevention and management standards, and strict traceability requirements
29.3 amended		This paragraph, with the exception of the first subparagraph, point (c), also applies to biofuels, bioliquids and biomass fuels produced from forest biomass.	This paragraph, with the exception of the first subparagraph, point (c), also applies to biofuels, bioliquids and biomass fuels produced from forest biomass. **This does not apply to Member States that already effectively provide protection for listed land categories.**	EREF considers the general introduction of prohibitions on the use of forest biomass from primary forests (para. 3), wetlands (para. 4) or drained peat soils (para 5) to be not expedient, as is the restriction on use in highly biodiverse forests

				and protected areas (para 3). That is because it would not only contradict, the intention of the directive but also deeply interfere with (national) forest law and protected area policies through European energy law. Listed land categories are already effectively protected under MS law such as the German one, so there in no general need for EU action here. Furthermore, using energy law for usage bans and restriction would threaten bureaucratic proof and control obligations as well as legal uncertainties, without any recognizable. Therefore, we ask for an exemption for MS that already added value effectively provide protection. Another negative impact of the current wording is its effect on the material use of woods: harvesting wood for material purposes results in wood

				assortments that cannot be used for other purposes, which are therefore utilized for energy and would thus no longer be usable as residual and by-products of material utilization.
29.3.b amended		highly biodiverse forest and other wooded land, which is species rich and not degraded, or has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes;	highly biodiverse forest and other wooded land, which is species rich and not degraded, or has been identified as being highly biodiverse by the relevant competent authority, unless ~~*evidence is provided that*~~ ***the removal of the harvested material is not prohibited in the protected area statutes and thus*** the production of that raw material did not interfere with those nature protection purposes	The current wording requires proof that the extraction of the raw material does not impair these nature conservation purposes. However, the wording leaves open in which form this proof is to be provided. For nature conservation reasons, it is often necessary to remove biomass from areas in protected areas in order to protect habitats and species. For this reason, some protected area designations even explicitly require the removal of biomass. In others, however, agricultural use is restricted but allowed in principle. While this

				usually includes the use of the biomass, there are no specific provisions on this. This creates legal uncertainty for the affected landowners and land users because it is unclear whether the authorities responsible for the protected areas provide such proof in individual cases or whether an expert opinion is even required. Instead of requiring proof that the use of biomass does not impair the objectives of the protected areas, it makes more sense to consider the sustainability of biomass as not given only if the protected area regulations explicitly prohibit the use of biomass. This regulation would not endanger biodiversity, as the designation of a protected area is always accompanied by extensification of production. On the other

				hand, it would be an important step towards more legal certainty and reduction of bureaucracy.
29.3.c amended		areas designated: (i) by law or by the relevant competent authority for nature protection purposes; or (ii) for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the International Union for the Conservation of Nature, subject to their recognition in accordance with the first subparagraph of Article 30(4), unless evidence is provided that the production of the raw material did not interfere with those nature protection purposes;	areas designated: (i) by law or by the relevant competent authority for nature protection purposes; or (ii) for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the International Union for the Conservation of Nature, subject to their recognition in accordance with the first subparagraph of Article 30(4), unless ~~*evidence is provided that*~~ ***the removal of the harvested material is not prohibited in the protected area statutes and thus*** the production of that raw material did not interfere with those nature protection purposes;	The current wording requires proof that the extraction of the raw material does not impair these nature conservation purposes. However, the wording leaves open in which form this proof is to be provided. For nature conservation reasons, it is often necessary to remove biomass from areas in protected areas in order to protect habitats and species. For this reason, some protected area designations even explicitly require the removal of biomass. In others, however, agricultural use is restricted but allowed in principle. While this usually includes the use of the biomass, there are no specific provisions on this. This creates legal uncertainty for the

				affected landowners and land users because it is unclear whether the authorities responsible for the protected areas provide such proof in individual cases or whether an expert opinion is even required. Instead of requiring proof that the use of biomass does not impair the objectives of the protected areas, it makes more sense to consider the sustainability of biomass as not given only if the protected area regulations explicitly prohibit the use of biomass. This regulation would not endanger biodiversity, as the designation of a protected area is always accompanied by extensification of production. On the other hand, it would be an important step towards more legal certainty and reduction of bureaucracy

29.10.d amended	at least 70 % for electricity, heating and cooling production from biomass fuels used in installations starting operation from 1 January 2021 until 31 December 2025, and 80 % for installations starting operation from 1 January 2026.	at least 70 % for electricity, heating and cooling production from biomass fuels used in installations until 31 December 2025, and at least 80 % from 1 January 2026.'; 	at least 70 % for electricity, heating and cooling production from biomass fuels used in installations **starting operation from 1 January** until 31 December 2025, and at least 80 % **for installations running** from 1 January 2026.'; Maintain RED II formulation	EREF urges to maintain the formulation in Art. 29 (10d) of the existing RED II. That is because the proposed amendment would apply the GHG threshold not only new installations but also existing biomass plants. This would constitute a retroactive intervention that violates the protection of legitimate expectations, goes against the principle of grandfathering and calls into question the reliability of the policy. Consequently, investment security for future bioenergy plants would be questioned and existing plants that cannot meet the retroactively introduced rule would have to close. 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. We highlight that planning and approval of biogas and biomethane projects is a

				lengthy process. Plants and facilities are not built without consultations between the bidder, buyer, 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 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 technical 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 risks to seriously damage operators in the sector because it is too vague. A longer time horizon is needed. When the RED II was adopted in 2018, it was granted an extension to 2026 which should be maintained to ensure clarity and certainty to everyone. EREF furthermore strongly suggests the addition of further standard values for the GHG calculation. Currently, there are missing default values for many important biogas substrates (e.g., grain silage, flowering plants), but also for solid biogas

				fuels. As a consequence, plant operators have to carry out the complex and time-consuming GHG calculations themselves. This is problematic considering that GHG calculations are required in RED II for plants commissioned as of 01.01.2021. Thus, further standard values for the greenhouse gas calculation should be added to Annex VI Part A.
GHG emissions saving criteria for renewable fuels of non-biological origin and recycled carbon fuels				
29a.2 new		Energy from recycled carbon fuels may be counted towards the greenhouse gas emissions reduction target referred to in Article 25(1), first subparagraph, point (a), only if the greenhouse gas emissions savings from the use of those fuels are at least 70%.	Energy from recycled carbon fuels may be counted towards the greenhouse gas emissions reduction target referred to in Article 25(1), first subparagraph, point (a), only if the greenhouse gas emissions savings from the use of those fuels are at least **80%**.	With a threshold of 70 % the overall target calculation on GHG reduction and phase out (2030/250) is at risk.
Verification of compliance with the sustainability and GHG emissions saving criteria				
30.1a new			**Where biogas is to be counted towards the targets referred to in Articles 3(1), 15a(1), 22a(1), 23(1), 24(4) and 25(1), Member States shall require economic operators to show that the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2) for**	Multiple proposed amendments (19.14; 31.1a; 31.1b; 30.3; 30.6) with the purpose for more practical certification and traceability schemes of

			renewable fuels and recycled-carbon fuels biogas have been fulfilled. For that purpose, they may require economic operators to use a book and claim system through the means of Guarantees of Origin combined with a mass balance system.	renewable gases ; reasoning provided in 30.6
30.1b new			**Where biogas is to be counted towards the targets referred to in Articles 3(1), 15a(1), 22a(1), 23(1), 24(4) and 25(1), Member States shall require economic operators to show that the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2) for renewable fuels and recycled-carbon fuels biogas have been fulfilled. For that purpose, they may require economic operators to use a book and claim system through the means of Guarantees of Origin combined with a mass balance system.**	Multiple proposed amendments (19.14; 31.1a; 31.1b; 30.3; 30.6) with the purpose for more practical certification and traceability schemes of renewable gases; reasoning provided in 30.6
30.3 subpara 1 and 2 amended	Member States shall take measures to ensure that economic operators submit reliable information regarding the compliance with the greenhouse gas emissions savings	Member States shall take measures to ensure that economic operators submit reliable information regarding the compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2), and that economic operators make available to the relevant Member State, upon request, the data used to develop that information. The obligations laid down in this paragraph shall apply regardless of whether renewable fuels and recycled carbon fuels are produced within the Union or are imported. Information about the	3. Member States shall take measures to ensure that economic operators submit reliable information regarding the compliance with the greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2), and that economic operators make available to the relevant Member State, upon request, the data used to develop that information. **Member State shall not require economic operators supplying energy through the European interconnected system for gas to provide further evidence of compliance with the**	Multiple proposed amendments (19.14; 31.1a; 31.1b; 30.3; 30.6) with the purpose for more practical certification and traceability schemes of renewable gases; reasoning provided in 30.6

	thresholds set in, and adopted pursuant to, Article 25(2), and with the sustainability and greenhouse gas emissions saving criteria laid down in Article 29(2) to (7) and (10), and that economic operators make available to the relevant Member State, upon request, the data that were used to develop the information. Member States shall require economic operators to arrange for an adequate standard of independent auditing of the information submitted, and to provide	geographic origin and feedstock type of biofuels, bioliquids and biomass fuels per fuel supplier shall be made available to consumers on the websites of operators, suppliers or the relevant competent authorities and shall be updated on an annual basis.';	**sustainability and greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2), where the compliance verification was carried out at the site of the energy production and documented on the guarantees of origin.**	

	evidence that this has been done. In order to comply with point (a) of Article 29(6) and point (a) of Article 29(7), the first- or second-party auditing may be used up to the first gathering point of the forest biomass. The auditing shall verify that the systems used by economic operators are accurate, reliable and protected against fraud, including verification ensuring that materials are not intentionally modified or discarded so that the consignment or part thereof			

	could become a waste or residue. It shall evaluate the frequency and methodology of sampling and the robustness of the data. The obligations laid down in this paragraph shall apply regardless of whether the biofuels, bioliquids, biomass fuels, renewable liquid and gaseous transport fuels of non-biological origin, or recycled carbon fuels are produced within the Union or are imported. Information about the geographic origin and feedstock type of biofuels, bioliquids and			

	biomass fuels per fuel supplier shall be made available to consumers on the websites of operators, suppliers or the relevant competent authorities and shall be updated on an annual basis.			
30.6 subpara 1 and 2 amended	Member States may set up national schemes where compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Article 29(2) to (7) and (10) and with the greenhouse gas emissions savings thresholds for renewable liquid	Member States may set up national schemes where compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2), in accordance with the methodology developed under Article 29a(3), is verified throughout the entire chain of custody involving competent national authorities. Those schemes may also be used to verify the accuracy and completeness of the information included by economic operators in the Union database, to demonstrate compliance with Article 27(3) and for the certification of biofuels, bioliquids and biomass fuels with low indirect land-use change-risk. Member State may notify such a national scheme to the Commission. The Commission shall give priority to the assessment of such a scheme in order to facilitate mutual bilateral and multilateral recognition of those schemes. The	Member States may set up national schemes where compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29(2) to (7) and (10) and 29a(1) and (2), in accordance with the methodology developed under Article 29a(3), is verified throughout the entire chain of custody involving competent national authorities**, except for the European interconnected system for gas, where compliance with sustainability and greenhouse gas emissions saving criteria is verified by the moment of the physical entry of gases into this system**. Those schemes may also be used to verify the accuracy and completeness of the information included by economic operators in the Union database, to demonstrate compliance with Article 27(3) and for the certification of	Multiple proposed amendments (19.14; 31.1a; 31.1b; 30.3; 30.6) with the purpose for more practical certification and traceability schemes of renewable gases. 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

	and gaseous transport fuels of non-biological origin and recycled carbon fuels set in, and adopted pursuant to, Article 25(2) and in accordance with Article 28(5) is verified throughout the entire chain of custody involving competent national authorities. A Member State may notify such a national scheme to the Commission. The Commission shall give priority to the assessment of such a scheme in order to facilitate mutual bilateral and multilateral recognition of	Commission may decide, by means of implementing acts, whether such a notified national scheme complies with the conditions laid down in this Directive. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 34(3). Where the decision is positive, other schemes recognised by the Commission in accordance with this Article shall not refuse mutual recognition with that Member State's national scheme as regards verification of compliance with the criteria for which it has been recognised by the Commission. For installations producing electricity heating and cooling with a total rated thermal input between 5 and 10 MW, Member States shall establish simplified national verification schemes to ensure the fulfilment of the sustainability and greenhouse gas emissions criteria set out in paragraphs (2) to (7) and (10) of Article 29.';	biofuels, bioliquids and biomass fuels with low indirect land-use change-risk.	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. EREF considers that different schemes for certification and traceability of renewable gases such as biomethane 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. The revision of GOs should facilitate cross-border trade of biomethane, their

	schemes for verification of compliance with the sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels and with the greenhouse gas emissions savings thresholds for other fuels that are eligible for counting towards the numerator referred to in point (b) of Article 27(1). The Commission may decide, by means of implementing acts, whether such a notified national scheme complies with the conditions laid down in this			recognition under different policy instruments, thereby avoiding double counting. 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

	Directive. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 34(3). Where the decision is positive, schemes established in accordance with this Article shall not refuse mutual recognition with that Member State's scheme, as regards verification of compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Article 29(2) to (7) and (10) and the greenhouse gas emissions			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".

	savings thresholds set in, and adopted pursuant to, Article 25(2).			
Calculation of the GHG impact of biofuels, bioliquids and biomass fuels				
31.2 deleted	Member States may submit to the Commission reports including information on 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) or as a more disaggregated NUTS level in accordance with Regulation (EC) No 1059/2003 of the European Parliament and	deleted	Maintain Art. 31.2 from RED II	EREF urges to maintain provisions 31.2, 31.3 and 31.4 and its wording of Annex VI, Part B(5) from the RED II. These provisions established the current regime where (i) MS 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.

	of the Council (1). Those reports shall be accompanied by a description of the method and data sources used to calculate the level of emissions. That method shall take into account soil characteristics, climate and expected raw material yields.			Defining NUTS2 values which specify regional values for certain biomass production is crucial they are values that can be used for the disaggregated default value cultivation. Since many default values for feedstock used for biogas production are still missing, it is vital to have these values in order to facilitate GHG emission calculations. For biogas many different feedstocks are mixed and stem from different fields. A calculation of cultivation of each containment would involve many costs and much effort. Here, NUTS2 values allowed GHG calculations which were a lot easier for the average biofuel producer. Without these values it is a very labour- and cost intensive process which not everyone can manage. Thus, as long as there is no default value for every usable feedstock, it is vital that the use of NUTS2 values is allowed. We

				therefore ask to maintain Art. 31(2). The European Commission's reason against the use of NUTS2 when calculating GHG emissions for the cultivation of raw materials is provided on pages 104 and 105 on their impact assessment (IA): it is argued that 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). However, the Commission just showed that, in for example Germany, imports of feedstocks for biofuels grew from 2016 to 2018, notably from Asia, Australia and Ukraine. However, there is not any modelling nor analysis of the related GHG savings related to the biofuels

				consumed from the imported feedstock.
31.3 deleted	In the case of territories outside the Union, reports equivalent to those referred to in paragraph 2 and drawn up by competent bodies may be submitted to the Commission.	deleted	Maintain Art. 31.3 from RED II	See 31.2
31.4 deleted	The Commission may, by means of implementing acts, decide that the reports referred to in paragraphs 2 and 3 of this Article contain accurate data for the purposes of measuring the greenhouse gas emissions associated with the cultivation of agriculture biomass feedstock produced in the	deleted	Maintain Art. 31.4 from RED II	See 31.2

	areas included in such reports for the purposes of Article 29(10). Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 34(3). Those data may, pursuant to such decisions, be used instead of the disaggregated default values for cultivation laid down in Part D or E of Annex V for biofuels and bioliquids and in Part C of Annex VI for biomass fuels.			

Union database				
31a.1 new		The Commission shall ensure that a Union database is set up to enable the tracing of liquid and gaseous renewable fuels and recycled carbon fuels.	The Commission shall ensure that a Union database is set up to enable the tracing of liquid **[and gaseous]** renewable fuels and recycled carbon fuels **for the purpose of** [...].	EREF urges the co-legislators to **reassess the added value of using the Union database for gaseous fuels and consider excluding such fuels from its scope.** If the co-legislators find it overwhelmingly necessary to use 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 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. To prevent such risks and at the same time ensure proper traceability of renewable and so-called "low carbon" energy in the gas market, certification tools such as the upgraded GOs (or so-called 'GO+') are needed. On the one hand, this tool can record and prove sustainability characteristics of gases needed for the target compliance. On the other, it can attribute these sustainability characteristics to

				corresponding volumes of gases physically injected and withdrawn from the European gas infrastructure with no risk of double-counting (since all the climate related information will be recorded on a single document – 'GO+').
31a.2 new		Member States shall require the relevant economic operators to enter in a timely manner accurate information into that database on the transactions made and the sustainability characteristics of the fuels subject to those transactions, including their life-cycle greenhouse gas emissions, starting from their point of production to the moment it is consumed in the Union. Information on whether support has been provided for the production of a specific consignment of fuel, and if so, on the type of support scheme, shall also be included in the database. Where appropriate to improve traceability of data along the entire supply chain, the Commission is empowered to adopt delegated acts in accordance with Article 35 to further extend the scope of the information to be included in the Union database to cover relevant data from the point of production or collection of the raw material used for the fuel production. Member States shall require fuel suppliers to enter the information necessary to verify compliance with the requirements laid down in	Member States shall require the relevant economic operators to enter in a timely manner accurate information into that database on the transactions made and the sustainability characteristics of the fuels subject to those transactions, including their life-cycle greenhouse gas emissions, starting from their point of production to the moment it is consumed in the Union. Information on whether support has been provided for the production of a specific consignment of fuels, and if so, on the type of support scheme, shall also be included in the database. ***For the gaseous fuels injected into the European interconnected system for gas within the meaning of Directive 2009/73/EC:*** ***a) only the physical entry to and physical exit from the system based on respective transactions shall be registered;*** ***b) sustainability information, recorded on the guarantee of origin according to Article 19(7)(h), shall be registered***	See 31.a1

		Article 25(1), first subparagraph, into the Union database.	***independently of the individual physical flows and the underlying transactions.*** Where appropriate to improve traceability of data along the entire supply chain, the Commission is empowered to adopt delegated acts in accordance with Article 35 to further extend the scope of the information to be included in the Union database to cover relevant data from the point of production or collection of the raw material used for the fuel production. Member States shall require fuel suppliers to enter the information necessary to verify compliance with the requirements laid down in Article 25(1), first subparagraph, into the Union database.	
31a.3		Member States shall have access to the Union database for the purposes of monitoring and data verification.	deleted	See 31.a1
31a.4 amended		If guarantees of origin have been issued for the production of a consignment of renewable gases, Member States shall ensure that those guarantees of origin are cancelled before the consignment of renewable gases can be registered in the database.	***When ~~If~~*** guarantees of origin have been issued for the production of a consignment of renewable gases, Member States shall ensure that ***such ~~those~~*** guarantees of origin are ***registered in the database as a proof of sustainability for related consignment and*** cancelled ***~~before~~ after*** the consignment ***~~of renewable gases can be registered in the database~~ is withdrawn from the European interconnected system for gas.***	See 31.a1

31a.5 amended		Member States shall ensure that the accuracy and completeness of the information included by economic operators in the database is verified, for instance by using voluntary or national schemes. For data verification, voluntary or national schemes recognised by the Commission pursuant to Article 30(4), (5) and (6) may use third party information systems as intermediaries to collect the data, provided that such use has been notified to the Commission.	Member States shall ensure that the accuracy and completeness of the information included by economic operators in the database is verified, for instance by using voluntary or national schemes ***or system of guarantees of origin.*** For data verification, voluntary or national schemes recognised by the Commission pursuant to Article 30(4), (5) and (6) may use third party information systems as intermediaries to collect the data, provided that such use has been notified to the Commission.	See 31.a1
Annex Part				
General Remark Appendix II: The normalization rule for electricity generated from hydropower and biomass must be supplemented with a measure that reflects the contribution to grid stability. Both annual operating times and the contributions in transmission and distribution grids for control energy and grid stabilization must be included in the overall assessment of this electricity. A mere assessment of the total amount of electricity generated is not sufficient here. In addition to the annual operating time, the integration into network management is decisive.				
Annex VI.B.5	Emissions from the extraction, **harvesting** or cultivation of raw materials, e_{ec}, shall include emissions from the extraction, **harvesting** or cultivation process itself;	Emissions from the extraction or cultivation of raw materials, e_{ec}, shall, include emissions from the extraction or cultivation process itself; from the collection, drying and storage of raw materials; from waste and leakages; and from the production of chemicals or products used in extraction or cultivation. Capture of CO_2 in the cultivation of raw materials shall be excluded. If available, the disaggregated default values for soil N_2O emissions set out in Part D shall be applied in the calculation. It is allowed to	Maintain RED II Annex VI, Part B(5)	See 31.2 → Several provisions of RED II regarding the regime of calculation ghg using NUTS2 (article 31 (2), (3), and (4); and Annex VI, Part B (5)) are changed or deleted in the proposal and EREF is very concerned about that.

	from the collection, drying and storage of raw materials; from waste and leakages; and from the production of chemicals or products used in extraction or cultivation. Capture of CO_2 in the cultivation of raw materials shall be included ~~excluded.~~ **Estimates of emissions from agriculture biomass cultivation may be derived from the regional averages for cultivation emissions included in the reports referred to in Article 31(4) of this Directive or the information on**	calculate averages based on local farming practises based on data of a group of farms, as an alternative to using actual values.'		

	the disaggregated default values for cultivation emissions included in this Annex, as an alternative to using actual values. In the absence of relevant information in those reports it is allowed to calculate averages based on local farming practises based for instance on data of a group of farms, as an alternative to using actual values.			
Annex VI.B.18	For the purposes of the calculations referred to in point 17, the emissions to be divided shall be eec + el + esca +	For the purposes of the calculations referred to in point 17, the emissions to be divided shall be eec + el + esca + those fractions of ep, etd, eccs and eccr that take place up to and including the process step at which a co-product is produced. If any allocation to co-products has taken place at an earlier process step in the life-cycle, the fraction of those emissions assigned in the last	For the purposes of the calculations referred to in point 17, the emissions to be divided shall be $e_{ec} + e_{l} + e_{sca}$ + those fractions of ep, e_{td}, e_{ccs} and e_{ccr} that take place up to and including the process step at which a co-product is produced. If any allocation to co-products has taken place at an earlier process step in the life-cycle, the fraction of those emissions	EREF urges the EU to not raise barriers to make the energy recovery and nutrient recycling uses of the residues that are not included in Annex IX more expensive. Instead it should ensure legal clarity

	those fractions of ep, etd, eccs and eccr that take place up to and including the process step at which a co-product is produced. If any allocation to co-products has taken place at an earlier process step in the life-cycle, the fraction of those emissions assigned in the last such process step to the intermediate fuel product shall be used for those purposes instead of the total of those emissions. In the case of biogas and biomethane, all co-products that do not fall under the scope of point 7 shall be	such process step to the intermediate fuel product shall be used for those purposes instead of the total of those emissions. In the case of biogas and biomethane, all co-products that do not fall under the scope of point 7 shall be taken into account for the purposes of that calculation. No emissions shall be allocated to wastes and residues. Co-products that have a negative energy content shall be considered to have an energy content of zero for the purposes of the calculation. Wastes and residues, ~~including treetops and branches, straw, husks, cobs and nut shells, and residues from processing, including crude glycerine (glycerine that is not refined) and bagasse,~~ **including all wastes and residues included in Annex IX** shall be considered to have zero life-cycle greenhouse gas emissions up to the process of collection of those materials irrespectively of whether they are processed to interim products before being transformed into the final product. **Residues that are not included in Annex IX and fit for use in the food or feed market shall be considered to have the same amount of emissions from the extraction, harvesting or cultivation of raw materials, eec as their closest substitute in the food and feed market that is included in the table in part D of Annex V.** In the case of biomass fuels produced in refineries, other than the combination of processing plants with boilers or cogeneration units providing heat and/or electricity to the processing plant, the unit of analysis for the	assigned in the last such process step to the intermediate fuel product shall be used for those purposes instead of the total of those emissions. In the case of biogas and biomethane, all co-products that do not fall under the scope of point 7 shall be taken into account for the purposes of that calculation. No emissions shall be allocated to wastes and residues. Co-products that have a negative energy content shall be considered to have an energy content of zero for the purposes of the calculation. Wastes and residues including all wastes and residues ***~~included in Annex IX~~*** shall be considered to have zero life-cycle greenhouse gas emissions up to the process of collection of those materials irrespectively of whether they are processed to interim products before being transformed into the final product. ***~~Residues that are not included in Annex IX and fit for use in the food or feed market shall be considered to have the same amount of emissions from the extraction, harvesting or cultivation of raw materials, e_{ec} as their closest substitute in the food and feed market that is included in the table in part D of Annex V.~~*** In the case of biomass fuels produced in refineries, other than the combination of processing plants with boilers or cogeneration units providing heat and/or electricity to the processing plant, the unit of analysis for the purposes of the calculation referred to in point 17 shall be the refinery	and a level playing field to avoid distortion of the competition. Residues are not produced intentionally for the sake of selling them to the manufacturers of the renewable fuels (or to any other manufacturer). Residues are involuntary outputs of normal production practices. Biomethane from residues is not a 1st generation biofuel and it does not lead to indirect land use changes. On the contrary, it is and should be considered as an advanced biofuel that can strongly contribute to decarbonisation goals through high direct greenhouse gas emission savings and zero indirect greenhouse gas emissions. Thus, EREF urges to revise the proposed amendments to Annex VI Part B(18) of the RED and not limit the recycling uses of resides that are not listed in Annex IX.

	taken into account for the purposes of that calculation. No emissions shall be allocated to wastes and residues. Co-products that have a negative energy content shall be considered to have an energy content of zero for the purposes of the calculation. Wastes and residues, including treetops and branches, straw, husks, cobs and nut shells, and residues from processing, including crude glycerine (glycerine that is not refined) and bagasse, shall be considered to have zero life-	purposes of the calculation referred to in point 17 shall be the refinery		

	cycle greenhouse gas emissions up to the process of collection of those materials irrespectively of whether they are processed to interim products before being transformed into the final product. In the case of biomass fuels produced in refineries, other than the combination of processing plants with boilers or cogeneration units providing heat and/or electricity to the processing plant, the unit of analysis for the purposes of the calculation referred to in point 17 shall be the refinery.			

Annex V part C point 5		Emissions from the extraction or cultivation of raw materials, e_{ec}, shall include emissions from the extraction or cultivation process itself; from the collection, drying and storage of raw materials; from waste and leakages; and from the production of chemicals or products used in extraction or cultivation. Capture of CO_2 in the cultivation of raw materials shall be excluded. If available, the disaggregated default values for soil N_2O emissions set out in Part D shall be applied in the calculation. It is allowed to calculate averages based on local farming practices based on data of a group of farms, as an alternative to using actual values.	Emissions from the extraction or cultivation of raw materials, e_{ec}, shall include emissions from the extraction or cultivation process itself; from the collection, drying and storage of raw materials; from waste and leakages; and from the production of chemicals or products used in extraction or cultivation. Capture of CO_2 in the cultivation of raw materials shall be excluded. **Estimates of emissions from agriculture biomass cultivation may be derived from the use of regional averages for cultivation emissions included in the reports referred to in Article 31(2-4), or,** if available, the disaggregated default values for soil N_2O emissions set out in Part D shall be applied in the calculation. It is allowed to calculate averages based on local farming practices based on data of a group of farms, as an alternative to using actual values	*The use of default values for N2O emissions should be considered as a very general to different crop production conditions (primarily influenced by soil properties and climate conditions). As the application of very detailed approach at farm level is not always manageable, the use of national averages for cultivation emissions included in the reports referred to in Article 31(4) is suggested as an alternative. In terms of calculation accuracy, the latest IPCC methodology (IPCC 2019) offers more objective results than the previous IPCC methodology (IPCC 2016) as many emission factors are disaggregated with regard to the type of the climate (wet and dry).*
Annex V part C point 15	Emission savings from CO2 capture and replacement,	EC proposal: to be deleted	Emission savings from CO2 capture and replacement, e_{ccr}, shall be related directly to the production of biofuel or bioliquid they are attributed to, and shall be limited to emissions	CO2 capture, storage and use, e.g. in the beverage industry, reduces CO2

	e_{ccr} , shall be related directly to the production of biofuel or bioliquid they are attributed to, and shall be limited to emissions avoided through the capture of CO_2 of which the carbon originates from biomass and which is used to replace fossil derived CO_2 in production of commercial products and services.		avoided through the capture of CO_2 of which the carbon originates from biomass and which is used to replace fossil derived CO_2 in production of commercial products and services.	emissions in the production of biofuels. The deletion of point 15 would make such use of CO_2 impossible. As a substitute, CO_2 extracted from natural mineral water or natural gas other industrial processes would have to be used, which would cause additional emissions because the CO_2 in such waters or from industrial processes using fossil fuels was stored a long time ago and is now being released again
Annex V part C point 18		18. For the purposes of the calculations referred to in point 17, the emissions to be divided shall be $e_{ec} + e_l + e_{sca}$ + those fractions of e_p, e_{td}, e_{ccs} and e_{ccr} that take place up to and including the process step at which a co-product is produced. If any allocation to co-products has taken place at an earlier process step in the life-cycle, the fraction of those emissions assigned in the last such process step to the intermediate fuel	18. For the purposes of the calculations referred to in point 17, the emissions to be divided shall be $e_{ec} + e_l + e_{sca}$ + those fractions of e_p, e_{td}, e_{ccs} and e_{ccr} that take place up to and including the process step at which a co-product is produced. ***In the case of e_{ccr} CO_2 from fermentation that is captured and re-used for replacing fossil-based CO_2 shall be considered an emission saving that is entirely***	It is clarified that biogenic CO_2, which originates from fermentation processes for the production of biofuels or bioliquids, shall also be fully attributed to the respective biofuel or bioliquid. Furthermore,

		product shall be used for those purposes instead of the total of those emissions. In the case of biogas and biomethane, all co-products that do not fall under the scope of point 7 shall be taken into account for the purposes of that calculation. No emissions shall be allocated to wastes and residues. Co-products that have a negative energy content shall be considered to have an energy content of zero for the purposes of the calculation. Wastes and residues including all wastes and residues included in Annex IX shall be considered to have zero life-cycle greenhouse gas emissions up to the process of collection of those materials irrespectively of whether they are processed to interim products before being transformed into the final product. Residues that are not included in Annex IX and fit for use in the food or feed market shall be considered to have the same amount of emissions from the extraction, harvesting or cultivation of raw materials, e_{ec} as their closest substitute in the food and feed market that is included in the table in part D. In the case of biomass fuels produced in refineries, other than the combination of processing plants with boilers or cogeneration units providing heat and/or electricity to the processing plant, the unit of analysis for the purposes of the calculation referred to in point 17 shall be the refinery.	***allocated to the biofuel and bioliquids resulting from fermentation.*** If any allocation to co-products has taken place at an earlier process step in the life-cycle, the fraction of those emissions assigned in the last such process step to the intermediate fuel product shall be used for those purposes instead of the total of those emissions. In the case of biofuels and bioliquids, all co-products that do not fall under the scope of point 7 shall be taken into account for the purposes of that calculation. No emissions shall be allocated to wastes and residues. Co-products that have a negative energy content shall be considered to have an energy content of zero for the purposes of the calculation. Wastes and residues ~~*including all wastes and residues included in Annex IX*~~ shall be considered to have zero life-cycle greenhouse gas emissions up to the process of collection of those materials irrespectively of whether they are processed to interim products before being transformed into the final product. ~~*Residues that are not included in Annex IX and fit for use in the food or feed market shall be considered to have the same amount of emissions from the extraction, harvesting or cultivation of raw materials, eec as their closest substitute in the food and feed market that is included in the table in part D of Annex V.*~~ In the case of biomass fuels produced in refineries, other	the RED must support and protect low-carbon investments in bioenergy by guaranteeing the stability of the regulatory framework under which first-move decarbonisation investments were made. For instance, ethanol biorefineries should remain entitled to claim and allocate savings to ethanol for the carbon captured from the fermentation process that replaces fossil CO_2. Residues are not produced intentionally for the sake of selling them to the manufacturers of the renewable fuels (or to any other manufacturer). Residues are involuntary outputs of production processes. Biomethane from residues is not a 1st generation biofuel and it does not lead to indirect land use changes. On the contrary, it is and should

			than the combination of processing plants with boilers or cogeneration units providing heat and/or electricity to the processing plant, the unit of analysis for the purposes of the calculation referred to in point 17 shall be the refinery.	be considered as an advanced biofuel that can strongly contribute to decarbonisation goals through high direct greenhouse gas emission savings and zero indirect greenhouse gas emissions. The EU should not raise barriers to make the energy recovery and nutrient recycling uses of the residues that are not included in Annex IX more expensive, but it should ensure legal clarity and a level playing field to avoid distortion of the competition.
Amendments to Regulation (EU) 2018/1999				
4 (a), para 1, (2), subpara 3 (new)			Member States shall collectively ensure that the sum of their contribution of biofuels produced from food and feed crops other than high ILUC-risk feedstocks to the greenhouse gas intensity reduction in the transport sector does not exceed the level set in Article 26.1 of Directive 2018/2001/EC.	The current crop cap should be revised to provide each Member State with flexibility, taking into consideration the higher renewable and decarbonisation targets, the right of Member States to exploit their own

				energy resources enshrined in the Treaty and the current crop-based biofuels market uptake (in 2019 the EU 27 average was 4%, ranging from 0% to 6.8% across individual Member States). Each Member State should be entitled to set its own contribution of crop-based biofuels towards the renewable energy and GHG intensity reduction targets provided the combined share of cop-based biofuels at EU level does not exceed 7% of the final consumption of energy in the transport sector.
Amendments to Directive 98/70/EC				
3. para (3)		Member States shall require suppliers to ensure the placing on the market of petrol with a maximum oxygen content of 2,7 % and a maximum ethanol content of 5 % until 2013 and may require the placing on the market of such petrol for a longer period if they consider it necessary. They shall ensure the provision of	Member States shall require suppliers to ensure the placing on the market of petrol with a maximum oxygen content of ~~**2,7 %**~~ **3,7%** and a maximum ethanol content of ~~**5 %**~~ **10**% ~~*until 2013 and may require the placing on the market of such petrol for a longer period if they consider it necessary.*~~ They shall ensure the provision of	To harness the GHG reduction and air quality benefits of ethanol blended in petrol, E10 should urgently be rolled out across the EU and higher ethanol blends incentivised.

		appropriate information to consumers concerning the biofuel content of petrol and, in particular, on the appropriate use of different blends of petrol.	appropriate information to consumers concerning the biofuel content of petrol and, in particular, on the appropriate use of different blends of petrol	E10 should become the standard petrol protection grade, by effectively rolling-out E10 across the EU27 and paving the way for the introduction of higher-octane petrol (HOP) such as E20, with an octane rating aiming towards 102 and an oxygen/ethanol content of maximum 8/20% respectively.
4 para (1) subpara 4(new)			Member States shall require suppliers to ensure the placing on the market of diesel with a maximum biodiesel content of 10%.	To take advantage of the GHG reduction and air quality issues (reduction of CO, hydrocarbons and particulates/particulate matter) of biodiesel blended in diesel, B10 should urgently be introduced across the EU. Higher Biodiesel content will decrease the dependency on fossil fuel imports and support security of supply. Furthermore, B10 is urgently needed to keep Biodiesel volumes on the same level when fuel

<table>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>demand decreases through the market ramp up of electric cars in order to decarbonise the existing (ICE based) vehicle fleet. Beyond that, with B10 obligated parties have more options to achieve the GHG mandate in cost effective fashion rather than being heavily depended on HVO.</td>
</tr>
<tr>
<td>Directive 98/70/EC Annex I</td>
<td></td>
<td>
<table>
<tr><th>Parameter (1)</th><th>Unit</th><th>Limits (2)</th><th></th></tr>
<tr><th></th><th></th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Research octane number</td><td></td><td>95 (3)</td><td>—</td></tr>
<tr><td>Motor octane number</td><td></td><td>85</td><td>—</td></tr>
<tr><td>Vapour pressure, summer period (4)</td><td>kPa</td><td>—</td><td>60,0 (5)</td></tr>
<tr><td>Distillation:</td><td></td><td></td><td></td></tr>
<tr><td>— percentage evaporated at 100 °C</td><td>% v/v</td><td>46,0</td><td>—</td></tr>
<tr><td>— percentage evaporated at 150 °C</td><td>% v/v</td><td>75,0</td><td>—</td></tr>
</table>
</td>
<td>
<table>
<tr><th>Parameter (1)</th><th>Unit</th><th>Limits (2)</th><th></th></tr>
<tr><th></th><th></th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Research octane number</td><td></td><td>95 (3)</td><td>—</td></tr>
<tr><td>Motor octane number</td><td></td><td>85</td><td>—</td></tr>
<tr><td>Vapour pressure, summer period (4)</td><td>kPa</td><td>—</td><td>60,0 (5)</td></tr>
<tr><td>Distillation:</td><td></td><td></td><td></td></tr>
<tr><td>— percentage evaporated at 100 °C</td><td>% v/v</td><td>46,0</td><td>—</td></tr>
<tr><td>— percentage evaporated at 150 °C</td><td>% v/v</td><td>75,0</td><td>—</td></tr>
</table>
</td>
<td>To harness the GHG reduction and air quality benefits of ethanol blended in petrol, E10 should urgently be rolled out across the EU and higher ethanol blends incentivised.
E10 should become the standard petrol protection grade, by effectively rolling-out E10 across the EU27 and paving the way for the introduction of higher-octane petrol (HOP) such as E20, with an octane rating aiming towards 102 and an oxygen/ethanol content of</td>
</tr>
</table>

		Hydrocarbon analysis:				Hydrocarbon analysis:				maximum 8/20% respectively.
		— olefins	% v/v	—	18,0	— olefins	% v/v	—	18,0	
		— aromatics	% v/v	—	35,0	— aromatics	% v/v	—	35,0	
		— benzene	% v/v	—	1,0	— benzene	% v/v	—	1,0	
		Oxygen content	% m/m		3,7	Oxygen content	% m/m		~~3,7~~ ***8,0***	
		Oxygenates				Oxygenates				
		— Methanol	% v/v		3,0	— Methanol	% v/v		3,0	
		— Ethanol (stabilising agents may be necessary)	% v/v		10,0	— Ethanol (stabilising agents may be necessary)	% v/v		10,0	
		— Iso-propyl alcohol	% v/v	—	12,0	— Iso-propyl alcohol	% v/v	—	12,0	
		— Tert-butyl alcohol	% v/v	—	15,0	— Tert-butyl alcohol	% v/v	—	15,0	
		— Iso-butyl alcohol	% v/v	—	15,0	— Iso-butyl alcohol	% v/v	—	15,0	
		— Ethers containing five or more carbon atoms per molecule	% v/v	—	22,0	— Ethers containing five or more carbon atoms per molecule	% v/v	—	22,0	
		— Other oxygenates (6)	% v/v	—	15,0	— Other oxygenates (6)	% v/v	—	15,0	
		Sulphur content	mg/kg	—	10,0					

		Lead content	g/l	—	0,005	Sulphur content	mg/kg — 10,0 Lead content g/l — 0,005

(1) Test methods shall be those specified in EN 228:2004. Member States may adopt the analytical method specified in replacement EN 228:2004 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces.

(2) The values quoted in the specification are 'true values'. In the establishment of their limit values, the terms of EN ISO 4259:2006 'Petroleum products — Determination and application of precision data in relation to methods of test' have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account (R = reproducibility). The results of individual measurements shall be interpreted on the basis of the criteria described in EN ISO 4259:2006.

(3) Member States may decide to continue to permit the placing on the market of unleaded regular grade petrol with a minimum motor octane number (MON) of 81 and a minimum research octane number (RON) of 91.

(4) The summer period shall begin no later than 1 May and shall not end before 30 September. For Member States with low ambient summer temperatures the summer period shall begin no later than 1 June and shall not end before 31

(1) Test methods shall be those specified in EN 228:2004. Member States may adopt the analytical method specified in replacement EN 228:2004 standard if it can be shown to give at least the same accuracy and at least the same level of precision as the analytical method it replaces.

(2) The values quoted in the specification are 'true values'. In the establishment of their limit values, the terms of EN ISO 4259:2006 'Petroleum products — Determination and application of precision data in relation to methods of test' have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account (R = reproducibility). The results of individual measurements shall be interpreted on the basis of the criteria described in EN ISO 4259:2006.

~~*(3) Member States may decide to continue to permit the placing on the market of unleaded regular grade petrol with a minimum motor octane number (MON) of 81 and a minimum research octane number (RON) of 91.*~~

~~*(4)*~~ (3)The summer period shall begin no later than 1 May and shall not end before 30 September. For Member States with low

		August. ([5]) In the case of Member States with low ambient summer temperatures and for which a derogation is in effect in accordance with Article 3(4) and (5), the maximum vapour pressure shall be 70 kPa. In the case of Member States for which a derogation is in effect in accordance with Article 3(4) and (5) for petrol containing ethanol, the maximum vapour pressure shall be 60 kPa plus the vapour pressure waiver specified in Annex III. ([6]) Other mono-alcohols and ethers with a final boiling point no higher than that stated in EN 228:2004.	ambient summer temperatures the summer period shall begin no later than 1 June and shall not end before 31 August. ~~([5])~~ ([4]) In the case of Member States with low ambient summer temperatures and for which a derogation is in effect in accordance with Article 3(4) and (5), the maximum vapour pressure shall be 70 kPa. In the case of Member States for which a derogation is in effect in accordance with Article 3(4) and (5) for petrol containing ethanol, the maximum vapour pressure shall be 60 kPa plus the vapour pressure waiver specified in Annex III. ~~([6])~~ ([5])Other mono-alcohols and ethers with a final boiling point no higher than that stated in EN 228:2004.	