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Subject:	Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the promotion of the use of energy from renewable sources (recast)

Delegations will find attached the text of the draft Directive, amended in light of the discussions in the Energy Working Party and the written comments received.

Changes compared to the Commission proposal are indicated in **bold underlined blue highlighted text**; deletions are marked with **[ ], and/or strikethrough blue highlighted text**.

2016/0382 (COD)

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on the promotion of the use of energy from renewable sources (recast)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty ~~establishing the European Community~~ ⌦ on the Functioning of the European Union ⌫, and in particular Article ~~175(1)~~ ⇨ 194(2) ⇦ thereof~~, and Article 95 thereof in relation to Articles 17, 18 and 19 of this Directive~~,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee[1],

Having regard to the opinion of the Committee of the Regions[2],

Acting in accordance with the ⌦ ordinary legislative ⌫ procedure ~~laid down in Article 251 of the Treaty~~[3]~~,~~

Whereas:

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1 ~~Opinion of 17 September 2008 (OJ C 77, 31.3.2009, p. 43).~~

2 ~~OJ C 325, 19.12.2008, p. 12.~~

3 ~~Opinion of the European Parliament of 17 December 2008 (not yet published in the Official Journal) and Council Decision of 6 April 2009.~~

⇩ new

(1) Directive 2009/28/EC of the European Parliament and of the Council[1] has been substantially amended several times[2]. Since further amendments are to be made, that Directive should be recast in the interests of clarity.

🡻 2009/28/EC Recital 1 (adapted)
⇨ new

(2) ⇨ Promoting renewable forms of energy is one of the goals of the Union energy policy. ⇦ ~~The control of European energy consumption and the~~ The increased use of energy from renewable sources, together with energy savings and increased energy efficiency, ~~constitute~~ ⌦ constitutes an ⌫ important part~~s~~ of the package of measures needed to reduce greenhouse gas emissions and comply with ~~the Kyoto Protocol to the United Nations Framework Convention~~ ⌦ the 2015 Paris Agreement ⌫ on Climate Change, and ~~with further Community and international greenhouse gas emission reduction commitments beyond 2012~~ ⌦ the Union 2030 energy and climate framework, including the binding target to cut emissions in the Union by at least 40% below 1990 levels by 2030 ⌫ . ~~Those factors also have~~ ⌦ It also has ⌫ an important part to play in promoting the security of energy supply, ~~promoting~~ technological development and innovation and providing opportunities for employment and regional development, especially in rural and isolated areas ⇨ or regions with low population density ⇦ .

[1] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).

[2] See Annex XI, Part A.

↓ 2009/28/EC Recital 2 (adapted)
⇨ new

(3) In particular, increasing technological improvements, incentives for the use and expansion of public transport, the use of energy efficiency technologies and ⌦ the promotion of ⌫ the use of energy from renewable sources ⇨ in the electricity, heating and cooling sectors as well as ⇦ in ⌦ the ⌫ transport ⌦ sector ⌫ are ~~some of the most~~ ⌦ very ⌫ effective tools ⇨ , together with energy efficiency measures ⇦, ⌦ for reducing ⌫ ~~by which the Community can reduce its~~ ⇨ greenhouse gas emissions in the Union and ⇦ ~~its~~ ⌦ the Union's ⌫ dependence on imported ⇨ gas and ⇦ oil ~~in the transport sector, in which the security of energy supply problem is most acute, and influence the fuel market for transport~~.

⇩ new

(4) Directive 2009/28/EC established a regulatory framework for the promotion of the use of energy from renewable sources which set binding national targets on the share of renewable energy sources in energy consumption and transport to be met by 2020. Commission Communication of 22 January 2014[1] established a framework for future Union energy and climate policies and promoted a common understanding of how to develop those policies after 2020. The Commission proposed that the Union 2030 target for the share of renewable energy consumed in the Union should be at least 27%.

(5) The European Council of October 2014 endorsed that target, indicating that Member States may set their own more ambitious national targets.

[1] "A policy framework for climate and energy in the period from 2020 to 2030" (COM/2014/015 final).

(6) The European Parliament, in its Resolutions on "A policy framework for climate and energy in the period from 2020 to 2030" and on "the Renewable energy progress report", has favoured a binding Union 2030 target of at least 30% of total final energy consumption from renewable energy sources, stressing that that target should be implemented by means of individual national targets taking into account the individual situation and potential of each Member State.

(7) It is thus appropriate to establish a Union binding target of at least 27% share of renewable energy. Member States should define their contribution to the achievement of this target as part of their Integrated National Energy and Climate Plans through the governance process set out in Regulation [Governance].

(8) The establishment of a Union binding renewable energy target for 2030 would continue to encourage the development of technologies which generate renewable energy and provide certainty for investors. A target defined at the Union level would leave greater flexibility for Member States to meet their greenhouse gas reduction targets in the most cost-effective manner in accordance with their specific circumstances, energy mixes and capacities to produce renewable energy.

(9) The national targets set for 2020 should constitute Member States' minimum contribution to the new 2030 framework. Under no circumstances the national share of renewables should fall below such contribution and, in case this happens, the relevant Member States should take the appropriate measures to ensure that this baseline is maintained as well as contribute to the financial instrument referred to in Regulation [Governance].

(10) Member States should take additional measures in the event that the share of renewables at the Union level does not meet the Union trajectory towards the at least 27% renewable energy target. As set out in Regulation [Governance], if an ambition gap is identified by the Commission during the assessment of the Integrated National Energy and Climate Plans, the Commission may take measures at Union level in order to ensure the achievement of the target. If a delivery gap is identified by the Commission during the assessment of the Integrated National Energy and Climate Progress Reports, Member States should apply the measures set out in Regulation [Governance], which are giving them enough flexibility to choose.

(11) In order to support Member States' ambitious contributions to the Union target, a financial framework aiming to facilitate investments in renewable energy projects in those Member States should be established, also through the use of financial instruments.

(12) The Commission should focus the allocation of funds on the reduction of the cost of capital of renewables projects, which has a material impact on the cost of renewable energy projects and on their competitiveness.

(13) The Commission should facilitate the exchange of best practices between the competent national or regional authorities or bodies, for instance through regular meetings to find a common approach to promote a higher uptake of cost-efficient renewable energy projects, encourage investments in new, flexible and clean technologies, and set out an adequate strategy to manage the retirement of technologies which do not contribute to the reduction of emissions or deliver sufficient flexibility, based on transparent criteria and reliable market price signals.

↓ 2009/28/EC Recital 7 (adapted)
⇨ new

(14) Directive 2001/77/EC of the European Parliament and of the Council ~~of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market~~[1] and, Directive 2003/30/EC of the European Parliament and of the Council ~~of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport~~[2], ⇨ and Regulation (EC) 1099/2008 of the European Parliament and of the Council [3]⇦ established definitions for different types of energy from renewable sources. Directive ~~2003/54/EC~~ XXXX/XX/EU of the European Parliament and of the Council of ~~26 June 2003XX concerning common rules for the internal market in electricity~~ ⌦ [4] ⌫ established definitions for the electricity sector in general. In the interests of legal certainty and clarity it is appropriate to use ⌦ those ⌫ ~~the same or similar~~ definitions in this Directive.

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1 Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market (OJ L 283, 27.10.2001, p. 33).

2 Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport (OJ L 123, 17.5.2003, p. 42).

3 Regulation (EC) 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics (OJ L 304, 14.11.2008, p. 1)

4 ⌦ Directive XXXX/XX/EU of the European Parliament and of the Council of … concerning common rules for the internal market in electricity (OJ L…) ⌫

⇩ new

(15) Support schemes for electricity generated from renewable sources have proved to be an effective way of fostering deployment of renewable electricity. If and when Member States decide to implement support schemes, such support should be provided in a form that is as non-distortive as possible for the functioning of electricity markets. To this end, an increasing number of Member States allocate support in a form where support is granted in addition to market revenues **and introduce market-based systems to determine the necessary level of support. Together with steps to make the market fit for rising shares of renewables this is a key element of increasing the market integration of renewables**.

(16) Electricity generation from renewable sources should be deployed at the lowest possible cost for consumers and taxpayers. When designing support schemes and when allocating support, Member States should seek to minimise the overall system cost of deployment, taking full account of grid and system development needs, the resulting energy mix, and the long term potential of technologies.

(17) The opening of support schemes to cross-border participation limits negative impacts on the internal energy market and can, under certain conditions, help Member States achieve the Union target more cost-efficiently. Cross-border participation is also the natural corollary to the development of the Union renewables policy, with a Union-level binding target replacing national binding targets. It is therefore appropriate to require Member States to progressively and partially open support to projects located in other Member States, and define several ways in which such progressive opening may be implemented, ensuring compliance with the provisions of the Treaty on the Functioning of the European Union, including Articles 30, 34 and 110.

(18) Without prejudice to **Articles 107 and 108 of the Treaty on the Functioning of the European Union** ~~adaptations of support schemes to bring them in line with State aid rules~~, renewables support policies should be stable and avoid frequent changes. Such changes have a direct impact on capital financing costs, the costs of project development and therefore on the overall cost of deploying renewables in the Union. Member States should prevent the revision of any support granted to renewable energy projects from having a negative impact on their economic viability**, unless such a revision had been already envisaged in the original design of the support scheme**. In this context, Member States should promote cost-effective support policies and ensure their financial sustainability.

(19) Member States' obligations to draft renewable energy action plans and progress reports and the Commission's obligation to report on Member States' progress are essential in order to increase transparency, provide clarity to investors and consumers and allow for effective monitoring. Regulation [Governance] integrates those obligations in the Energy Union governance system, where planning, reporting and monitoring obligations in the energy and climate fields are streamlined. The transparency platform on renewable energy is also integrated in the broader e-platform established in Regulation [Governance].

↓ 2009/28/EC Recital 11 (adapted)

(20) It is necessary to set transparent and unambiguous rules for calculating the share of energy from renewable sources and for defining those sources. ~~In this context, the energy present in oceans and other water bodies in the form of waves, marine currents, tides, ocean thermal energy gradients or salinity gradients should be included.~~

↓ 2009/28/EC Recital 5

~~In order to reduce greenhouse gas emissions within the Community and reduce its dependence on energy imports, the development of energy from renewable sources should be closely linked to increased energy efficiency.~~

↓ 2009/28/EC Recital 8

~~The Commission communication of 10 January 2007 entitled 'Renewable Energy Roadmap — Renewable energies in the 21st century: building a more sustainable future' demonstrated that a 20 % target for the overall share of energy from renewable sources and a 10 % target for energy from renewable sources in transport would be appropriate and achievable objectives, and that a framework that includes mandatory targets should provide the business community with the long-term stability it needs to make rational, sustainable investments in the renewable energy sector which are capable of reducing dependence on imported fossil fuels and boosting the use of new energy technologies. Those targets exist in the context of the 20 % improvement in energy efficiency by 2020 set out in the Commission communication of 19 October 2006 entitled 'Action Plan for Energy Efficiency: Realising the Potential', which was endorsed by the European Council of March 2007, and by the European Parliament in its resolution of 31 January 2008 on that Action Plan.~~

2009/28/EC Recital 9

The European Council of March 2007 reaffirmed the Community's commitment to the Community-wide development of energy from renewable sources beyond 2010. It endorsed a mandatory target of a 20 % share of energy from renewable sources in overall Community energy consumption by 2020 and a mandatory 10 % minimum target to be achieved by all Member States for the share of biofuels in transport petrol and diesel consumption by 2020, to be introduced in a cost-effective way. It stated that the binding character of the biofuel target is appropriate, subject to production being sustainable, second-generation biofuels becoming commercially available and Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels[1] being amended to allow for adequate levels of blending. The European Council of March 2008 repeated that it is essential to develop and fulfil effective sustainability criteria for biofuels and ensure the commercial availability of second-generation biofuels. The European Council of June 2008 referred again to the sustainability criteria and the development of second-generation biofuels, and underlined the need to assess the possible impacts of biofuel production on agricultural food products and to take action, if necessary, to address shortcomings. It also stated that further assessment should be made of the environmental and social consequences of the production and consumption of biofuels.

2009/28/EC Recital 10

In its resolution of 25 September 2007 on the Road Map for Renewable Energy in Europe[2], the European Parliament called on the Commission to present, by the end of 2007, a proposal for a legislative framework for energy from renewable sources, referring to the importance of setting targets for the shares of energy from renewable sources at Community and Member State level.

[1] OJ L 350, 28.12.1998, p. 58.
[2] OJ C 219 E, 28.8.2008, p. 82.

↓ 2009/28/EC Recital 12

~~The use of agricultural material such as manure, slurry and other animal and organic waste for biogas production has, in view of the high greenhouse gas emission saving potential, significant environmental advantages in terms of heat and power production and its use as biofuel. Biogas installations can, as a result of their decentralised nature and the regional investment structure, contribute significantly to sustainable development in rural areas and offer farmers new income opportunities.~~

↓ 2009/28/EC Recital 13

~~In the light of the positions taken by the European Parliament, the Council and the Commission, it is appropriate to establish mandatory national targets consistent with a 20 % share of energy from renewable sources and a 10 % share of energy from renewable sources in transport in Community energy consumption by 2020.~~

↓ 2009/28/EC Recital 14

~~The main purpose of mandatory national targets is to provide certainty for investors and to encourage continuous development of technologies which generate energy from all types of renewable sources. Deferring a decision about whether a target is mandatory until a future event takes place is thus not appropriate.~~

↓ 2009/28/EC Recital 15

~~The starting point, the renewable energy potential and the energy mix of each Member State vary. It is therefore necessary to translate the Community 20 % target into individual targets for each Member State, with due regard to a fair and adequate allocation taking account of Member States' different starting points and potentials, including the existing level of energy from renewable sources and the energy mix. It is appropriate to do this by sharing the required total increase in the use of energy from renewable sources between Member States on the basis of an equal increase in each Member State's share weighted by their GDP, modulated to reflect their starting points, and by accounting in terms of gross final consumption of energy, with account being taken of Member States' past efforts with regard to the use of energy from renewable sources.~~

↓ 2009/28/EC Recital 16

~~By contrast, it is appropriate for the 10 % target for energy from renewable sources in transport to be set at the same level for each Member State in order to ensure consistency in transport fuel specifications and availability. Because transport fuels are traded easily, Member States with low endowments of the relevant resources will easily be able to obtain biofuels from elsewhere. While it would technically be possible for the Community to meet its target for the use of energy from renewable sources in transport solely from domestic production, it is both likely and desirable that the target will in fact be met through a combination of domestic production and imports. To this end, the Commission should monitor the supply of the Community market for biofuels, and should, as appropriate, propose relevant measures to achieve a balanced approach between domestic production and imports, taking into account, inter alia, the development of multilateral and bilateral trade negotiations, environmental, social and economic considerations, and the security of energy supply.~~

↓ 2009/28/EC Recital 17

The improvement of energy efficiency is a key objective of the Community, and the aim is to achieve a 20 % improvement in energy efficiency by 2020. That aim, together with existing and future legislation including Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings[1], Directive 2005/32/EC of the European Parliament and of the Council of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products[2], and Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services[3], has a critical role to play in ensuring that the climate and energy objectives are being achieved at least cost, and can also provide new opportunities for the European Union's economy. Energy efficiency and energy saving policies are some of the most effective methods by which Member States can increase the percentage share of energy from renewable sources, and Member States will thus more easily achieve the overall national and transport targets for energy from renewable sources laid down by this Directive.

↓ 2009/28/EC Recital 18

It will be incumbent upon Member States to make significant improvements in energy efficiency in all sectors in order more easily to achieve their targets for energy from renewable sources, which are expressed as a percentage of gross final consumption of energy. The need for energy efficiency in the transport sector is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise. The mandatory 10 % target for transport to be achieved by all Member States should therefore be defined as that share of final energy consumed in transport which is to be achieved from renewable sources as a whole, and not from biofuels alone.

1 OJ L 1, 4.1.2003, p. 65.
2 OJ L 191, 22.7.2005, p. 29.
3 OJ L 114, 27.4.2006, p. 64.

↓ 2009/28/EC Recital 19

~~To ensure that the mandatory national overall targets are achieved, Member States should work towards an indicative trajectory tracing a path towards the achievement of their final mandatory targets. They should establish a national renewable energy action plan including information on sectoral targets, while having in mind that there are different uses of biomass and therefore it is essential to mobilise new biomass resources. In addition, Member States should set out measures to achieve those targets. Each Member State should assess, when evaluating its expected gross final consumption of energy in its national renewable energy action plan, the contribution which energy efficiency and energy saving measures can make to achieving its national targets. Member States should take into account the optimal combination of energy efficiency technologies with energy from renewable sources.~~

↓ 2009/28/EC Recital 20

~~To permit the benefits of technological progress and economies of scale to be reaped, the indicative trajectory should take into account the possibility of a more rapid growth in the use of energy from renewable sources in the future. Thus special attention can be given to sectors that suffer disproportionately from the absence of technological progress and economies of scale and therefore remain under-developed, but which, in future, could significantly contribute to reaching the targets for 2020.~~

↓ 2009/28/EC Recital 21

~~The indicative trajectory should take 2005 as its starting point because that is the latest year for which reliable data on national shares of energy from renewable sources are available.~~

~~🡻 2009/28/EC Recital 23~~

~~Member States may encourage local and regional authorities to set targets in excess of national targets and to involve local and regional authorities in drawing up national renewable energy action plans and in raising awareness of the benefits of energy from renewable sources.~~

~~🡻 2009/28/EC Recital 24~~

~~In order to exploit the full potential of biomass, the Community and the Member States should promote greater mobilisation of existing timber reserves and the development of new forestry systems.~~

~~🡻 2009/28/EC Recital 25~~

~~Member States have different renewable energy potentials and operate different schemes of support for energy from renewable sources at the national level. The majority of Member States apply support schemes that grant benefits solely to energy from renewable sources that is produced on their territory. For the proper functioning of national support schemes it is vital that Member States can control the effect and costs of their national support schemes according to their different potentials. One important means to achieve the aim of this Directive is to guarantee the proper functioning of national support schemes, as under Directive 2001/77/EC, in order to maintain investor confidence and allow Member States to design effective national measures for target compliance. This Directive aims at facilitating cross-border support of energy from renewable sources without affecting national support schemes. It introduces optional cooperation mechanisms between Member States which allow them to agree on the extent to which one Member State supports the energy production in another and on the extent to which the energy production from renewable sources should count towards the national overall target of one or the other. In order to ensure the effectiveness of both measures of target compliance, i.e. national support schemes and cooperation mechanisms, it is essential that Member States are able to determine if and to what extent their national support schemes apply to energy from renewable sources produced in other Member States and to agree on this by applying the cooperation mechanisms provided for in this Directive.~~

↓ 2009/28/EC Recital 26

~~It is desirable that energy prices reflect external costs of energy production and consumption, including, as appropriate, environmental, social and healthcare costs.~~

↓ 2009/28/EC Recital 27

~~Public support is necessary to reach the Community's objectives with regard to the expansion of electricity produced from renewable energy sources, in particular for as long as electricity prices in the internal market do not reflect the full environmental and social costs and benefits of energy sources used.~~

↓ 2009/28/EC Recital 28

~~The Community and the Member States should strive to reduce total consumption of energy in transport and increase energy efficiency in transport. The principal means of reducing consumption of energy in transport include transport planning, support for public transport, increasing the share of electric cars in production and producing cars which are more energy efficient and smaller both in size and in engine capacity.~~

↓ 2009/28/EC Recital 29

~~Member States should aim to diversify the mix of energy from renewable sources in all transport sectors. The Commission should present a report to the European Parliament and the Council by 1 June 2015 outlining the potential for increasing the use of energy from renewable sources in each transport sector.~~

↓ 2009/28/EC Recital 30

(21) 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 electricity produced from renewable energy sources.

↓ 2009/28/EC Recital 31

(22) Heat pumps enabling the use of aerothermal, geothermal or hydrothermal heat at a useful temperature level need electricity or other auxiliary energy to function. The energy used to drive heat pumps should therefore be deducted from the total usable heat. Only heat pumps with an output that significantly exceeds the primary energy needed to drive it should be taken into account.

↓ 2009/28/EC Recital 32

(23) Passive energy systems use building design to harness energy. This is considered to be saved energy. To avoid double counting, energy harnessed in this way should not be taken into account for the purposes of this Directive.

↓ 2009/28/EC Recital 33 (adapted)

(24) Some Member States have a large share of aviation in their gross final consumption of energy. In view of the current technological and regulatory constraints that prevent the commercial use of biofuels in aviation, it is appropriate to provide a partial exemption for such Member States, by excluding from the calculation of their gross final consumption of energy in national air transport, the amount by which they exceed one-and-a-half times the ~~Community~~ ⌦ Union ⌫ average gross final consumption of energy in aviation in 2005, as assessed by Eurostat, i.e. 6,18 %. Cyprus and Malta, due to their insular and peripheral character, rely on aviation as a mode of transport, which is essential for their citizens and their economy. As a result, Cyprus and Malta have a gross final consumption of energy in national air transport which is disproportionally high, i.e. more than three times the ~~Community~~ ⌦ Union ⌫ average in 2005, and are thus disproportionately affected by the current technological and regulatory constraints. For those Member States it is therefore appropriate to provide that the exemption should cover the amount by which they exceed the ~~Community~~ ⌦ Union ⌫ average gross final consumption of energy in aviation in 2005 as assessed by Eurostat, i.e. 4,12 %.

⇩ new

(25) In order to ensure that Annex IX takes into account the principles of the waste hierarchy established in Directive 2008/98/EC of the European Parliament and of the Council[1], the Union sustainability criteria, and the need to ensure that the Annex does not create additional demand for land while promoting the use of wastes and residues, the Commission, when regularly evaluating the Annex, should consider the inclusion of additional feedstocks that do not cause significant distortive effects on markets for (by-)products, wastes or residues.

[1] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

↓ 2009/28/EC Recital 34

~~To obtain an energy model that supports energy from renewable sources there is a need to encourage strategic cooperation between Member States, involving, as appropriate, regions and local authorities.~~

↓ 2009/28/EC Recital 35

~~Whilst having due regard to the provisions of this Directive, Member States should be encouraged to pursue all appropriate forms of cooperation in relation to the objectives set out in this Directive. Such cooperation can take place at all levels, bilaterally or multilaterally. Apart from the mechanisms with effect on target calculation and target compliance, which are exclusively provided for in this Directive, namely statistical transfers between Member States, joint projects and joint support schemes, cooperation can also take the form of, for example, exchanges of information and best practices, as provided for, in particular, in the transparency platform established by this Directive, and other voluntary coordination between all types of support schemes.~~

↓ 2009/28/EC Recital 36 (adapted)
⇨ new

(26) To create opportunities for reducing the cost of ~~achieving~~ ⌦ meeting ⌫ the ⌦ Union ⌫ target~~s~~ laid down in this Directive ⇨ and to give flexibility to Member States to comply with their obligation not to go below their 2020 national targets after 2020 ⇦ , it is appropriate both to facilitate the consumption in Member States of energy produced from renewable sources in other Member States, and to enable Member States to count energy from renewable sources consumed in other Member States towards their own ⇨ renewable energy share ⇦ ~~national targets~~. For this reason, ~~flexibility measures~~ ⇨ cooperation mechanisms ⇦ are required~~, but they remain under Member States' control in order not to affect their ability to reach their national targets~~ ⇨ to complement the obligations to open up support to projects located in other Member States ⇦ . Those ~~flexibility measures~~ ⇨ mechanisms ⇦ ⌦ include ⌫ ~~take the form of~~ statistical transfers, joint projects between Member States or joint support schemes.

↓ 2009/28/EC Recital 35 (adapted)
⇨ new

(27) ~~Whilst having due regard to the provisions of this Directive,~~ Member States should be encouraged to pursue all appropriate forms of cooperation in relation to the objectives set out in this Directive. Such cooperation can take place at all levels, bilaterally or multilaterally. Apart from the mechanisms with effect on target ⇨ renewable energy share ⇦ calculation and target compliance, which are exclusively provided for in this Directive, namely statistical transfers between Member States, joint projects and joint support schemes, cooperation can also take the form of, for example, exchanges of information and best practices, as provided for, in particular, in the ~~transparency platform~~ ⌦ e-platform ⌫ established by ~~this Directive,~~ ⇨ Regulation [Governance], ⇦ and other voluntary coordination between all types of support schemes.

↓ 2009/28/EC Recital 37 (adapted)
⇨ new

(28) It should be possible for imported electricity, produced from renewable energy sources outside the ⊠ Union ◻ ~~Community,~~ to count towards Member States'~~-~~ ⇨ renewable energy shares ⇦ ~~targets. However, to avoid a net increase in greenhouse gas emissions through the diversion of existing renewable sources and their complete or partial replacement by conventional energy sources, only electricity produced by renewable energy installations that become operational after the entry into force of this Directive or by the increased capacity of an installation that was refurbished after that date should be eligible to be counted.~~ In order to guarantee an adequate effect of energy from renewable sources replacing conventional energy in the ~~Community~~ ⊠ Union ◻ as well as in third countries it is appropriate to ensure that such imports can be tracked and accounted for in a reliable way. Agreements with third countries concerning the organisation of such trade in electricity from renewable energy sources will be considered. If, by virtue of a decision taken under the Energy Community Treaty[1] to that effect, the contracting parties to that ~~t~~Treaty ~~become~~ ⊠ are ◻ bound by the relevant provisions of this Directive, the measures of cooperation between Member States provided for in this Directive ~~will~~ ⊠ should ◻ be applicable to them.

↓ 2009/28/EC Recital 38

~~When Member States undertake joint projects with one or more third countries regarding the production of electricity from renewable energy sources, it is appropriate that those joint projects relate only to newly constructed installations or to installations with newly increased capacity. This will help ensure that the proportion of energy from renewable sources in the third country's total energy consumption is not reduced due to the importation of energy from renewable sources into the Community. In addition, the Member States concerned should facilitate the domestic use by the third country concerned of part of the production of electricity by the installations covered by the joint project. Furthermore, the third country concerned should be encouraged by the Commission and Member States to develop a renewable energy policy, including ambitious targets.~~

1 OJ L 198, 20.7.2006, p. 18.

↓ 2009/28/EC Recital 39

~~Noting that projects of high European interest in third countries, such as the Mediterranean Solar Plan, may need a long lead-time before being fully interconnected to the territory of the Community, it is appropriate to facilitate their development by allowing Member States to take into account in their national targets a limited amount of electricity produced by such projects during the construction of the interconnection.~~

↓ 2009/28/EC Recital 40 (adapted)

(29) The procedure used ~~by the administration responsible~~ for ~~supervising~~ the authorisation, certification and licensing of renewable energy plants should be objective, transparent, non-discriminatory and proportionate when applying the rules to specific projects. In particular, it is appropriate to avoid any unnecessary burden that could arise by classifying renewable energy projects under installations which represent a high health risk.

↓ 2009/28/EC Recital 42

(30) For the benefit of rapid deployment of energy from renewable sources and in view of their overall high sustainable and environmental beneficial quality, Member States should, when applying administrative rules, planning structures and legislation which are designed for licensing installations with respect to pollution reduction and control for industrial plants, for combating air pollution and for the prevention or minimisation of the discharge of dangerous substances in the environment, take into account the contribution of renewable energy sources towards meeting environmental and climate change objectives, in particular when compared to non-renewable energy installations.

↓ 2009/28/EC Recital 43

~~In order to stimulate the contribution by individual citizens to the objectives set out in this Directive, the relevant authorities should consider the possibility of replacing authorisations by simple notifications to the competent body when installing small decentralised devices for producing energy from renewable sources.~~

↓ 2009/28/EC Recital 44 (adapted)

(31) The coherence between the objectives of this Directive and the ~~Community's~~ ⌦ Union's ⌫ other environmental legislation should be ensured. In particular, during the assessment, planning or licensing procedures for renewable energy installations, Member States should take account of all ~~Community~~ ⌦ Union ⌫ environmental legislation and the contribution made by renewable energy sources towards meeting environmental and climate change objectives, in particular when compared to non-renewable energy installations.

↓ 2009/28/EC Recital 45 (adapted)

(32) National technical specifications and other requirements falling within the scope of Directive ~~98/34/EC~~ (EU) 2015/1535 of the European Parliament and of the Council ⌦ [1] ⌫ ~~of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and rules on Information Society services[2]~~ relating for example to levels of quality, testing methods or conditions of use, should not create barriers for trade in renewable energy equipment and systems. Therefore, support schemes for energy from renewable sources should not prescribe national technical specifications which deviate from existing ~~Community~~ ⌦ Union ⌫ standards or require the supported equipment or systems to be certified or tested in a specified location or by a specified entity.

↓ 2009/28/EC Recital 46

~~It is appropriate for Member States to consider mechanisms for the promotion of district heating and cooling from energy from renewable sources.~~

[1] Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17.9.2015, p. 1)

[2] ~~OJ L 204, 21.7.1998, p. 37.~~

↓ 2009/28/EC Recital 47 (adapted)

(33) At national and regional level, rules and obligations for minimum requirements for the use of energy from renewable sources in new and renovated buildings have led to considerable increases in the use of energy from renewable sources. Those measures should be encouraged in a wider ~~Community~~ ⌦ Union ⌫ context, while promoting the use of more energy-efficient applications of energy from renewable sources through building regulations and codes.

↓ 2009/28/EC Recital 48 (adapted)
⇨ new

(34) ~~It may be appropriate for Member States, i~~In order to facilitate and accelerate the setting of minimum levels for the use of energy from renewable sources in buildings, ~~to provide that such levels are achieved by incorporating a factor for energy from renewable sources in meeting minimum energy performance requirements under Directive 2002/91/EC, relating to a cost-optimal reduction of carbon emissions per building.~~ ⇨ the calculation of those minimum levels in new and existing buildings subject to major renovation should be consistent with the methodology set out in Directive 2010/31/EU of the European Parliament and of the Council[1]. ⇦

[1] Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (OJ L 153, 18.6.2010, p. 13).

⇩ new

(35) To ensure that national measures for developing renewable heating and cooling are based on comprehensive mapping and analysis of the national renewable and waste energy potential and provide for increased integration of renewable energy and waste heat and cold sources, it is appropriate to require that Member States carry out an assessment of their national potential of renewable energy sources and the use of waste heat and cold for heating and cooling, in particular to facilitate mainstreaming renewable energy in heating and cooling installations and promote efficient and competitive district heating and cooling as defined by Article 2(41) of Directive 2012/27/EU of the European Parliament and of the Council[1]. To ensure consistency with energy efficiency requirements for heating and cooling and reduce administrative burden this assessment should be included in the comprehensive assessments carried out and notified in accordance with Article 14 of that Directive.

[1] Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

↓ 2009/28/EC Recital 41
⇨ new

(36) The lack of transparent rules and coordination between the different authorisation bodies has been shown to hinder the deployment of energy from renewable sources. ⇨ The establishment of a single administrative contact point integrating or coordinating all permit-granting processes should reduce complexity and increase efficiency and transparency. ⇦ ~~Therefore the specific structure of the renewable energy sector should be taken into account when national, regional and local authorities review their administrative procedures for giving permission to construct and operate plants and associated transmission and distribution network infrastructures for the production of electricity, heating and cooling or transport fuels from renewable energy sources.~~ Administrative approval procedures should be streamlined with transparent timetables for installations using energy from renewable sources. Planning rules and guidelines should be adapted to take into consideration cost-effective and environmentally beneficial renewable heating and cooling and electricity equipment. ⇨ This Directive, in particular the provisions on the organisation and duration of the permit granting process, should apply without prejudice to international and Union law, including provisions to protect the environment and human health. ⇦

⇩ new

(37) Lengthy administrative procedures constitute a major administrative barrier and are costly. The simplification of permit-granting processes, associated with a clear time-limit for the decision to be taken by the respective authorities regarding the construction of the project should stimulate a more efficient handling of procedures thus reducing administrative costs.

(38) Another barrier to the cost-effective deployment of renewables is the lack of predictability by investors over the expected deployment of support by Member States. In particular, Member States should ensure that investors have sufficient predictability on the planned use of support by Member States. This allows industry to plan and develop a supply chain, leading to lower overall cost of deployment.

↓ 2009/28/EC Recital 43 (adapted)
⇨ new

(39) In order to ~~stimulate~~ ⌦ facilitate ⌫ the contribution by ⇨ micro, small and medium-sized enterprises (SMEs) and ⇦ individual citizens to the objectives set out in this Directive, ~~the relevant authorities should consider the possibility of replacing~~ authorisations ⇨ should be replaced ⇦ by simple notifications to the competent body ~~when installing small~~ ⇨ for small renewable energy projects, including ⇦ decentralised ⇨ ones such as rooftop solar installations. Given the increasing need for the repowering of existing renewables plants, accelerated permit granting procedures should be set out ⇦ ~~devices for producing energy from renewable sources~~.

↓ 2009/28/EC Recital 49

(40) Information and training gaps, especially in the heating and cooling sector, should be removed in order to encourage the deployment of energy from renewable sources.

↓ 2009/28/EC Recital 50

(41) In so far as the access or pursuit of the profession of installer is a regulated profession, the preconditions for the recognition of professional qualifications are laid down in Directive 2005/36/EC of the European Parliament and of the Council ~~of 7 September 2005 on the recognition of professional qualifications~~[1] This Directive therefore applies without prejudice to Directive 2005/36/EC.

[1] Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications (OJ L 255, 30.9.2005, p. 22).

↓ 2009/28/EC Recital 51

(42) While Directive 2005/36/EC lays down requirements for the mutual recognition of professional qualifications, including for architects, there is a further need to ensure that architects and planners properly consider an optimal combination of renewable energy sources and high-efficiency technologies in their plans and designs. Member States should therefore provide clear guidance in this regard. This should be done without prejudice to the provisions of Directive 2005/36/EC and in particular Articles 46 and 49 thereof.

↓ 2009/28/EC Recital 52 (adapted)

(43) Guarantees of origin issued for the purpose of this Directive have the sole function of ~~proving~~ ⌦ showing ⌫ to a final customer that a given share or quantity of energy was produced from renewable sources. A guarantee of origin can be transferred, independently of the energy to which it relates, from one holder to another. However, with a view to ensuring that a unit of ~~electricity from~~ renewable energy ~~sources~~ is disclosed to a customer only once, double counting and double disclosure of guarantees of origin should be avoided. Energy from renewable sources in relation to which the accompanying guarantee of origin has been sold separately by the producer should not be disclosed or sold to the final customer as energy from renewable sources. ~~It is important to distinguish between green certificates used for support schemes and guarantees of origin.~~

↓ 2009/28/EC Recital 53 (adapted)
⇨ new

(44) It is appropriate to allow the ~~emerging~~ consumer market for electricity from renewable energy sources to contribute to the ~~construction~~ ⇨ development ⇦ of ~~new installations for~~ energy from renewable sources. Member States should therefore ~~be able to~~ require electricity suppliers who disclose their energy mix to final customers in accordance with Article X ~~3(6)~~ of Directive [Market Design]~~2003/54/EC~~, ⇨ or who market energy ⇦ to ~~include~~ ⇨ consumers with ⇦ a ~~minimum percentage~~ ⇨ reference to the consumption of energy from renewable sources, to use ⇦ ~~of~~ guarantees of origin from ~~recently constructed~~ installations producing energy from renewable sources~~, provided that such a requirement is in conformity with Community law~~.

↓ 2009/28/EC Recital 54 (adapted)
⇨ new

(45) It is important to provide information on how the supported electricity is allocated to final customers ~~in accordance with Article 3(6) of Directive~~ ~~2003/54/EC~~. In order to improve the quality of that information to consumers, ~~in particular as regards the amount of energy from renewable sources produced by new installations, the Commission should assess the effectiveness of the measures taken by Member States~~ ⇨ Member States should ensure that guarantees of origin are issued for all units of renewable energy produced. In addition, with a view to avoiding double compensation, renewable energy producers already receiving financial support should not receive guarantees of origin. However, those guarantees of origin should be used for disclosure so that final consumers can receive clear, reliable and adequate evidence on the renewable origin of the relevant units of energy. Moreover, for electricity that received support, the guarantees of origin should be auctioned to the market and the revenues should be used to reduce public subsidies for renewable energy. ⇦

🡻 2009/28/EC Recital 55
⇨ new

(46) Directive ~~2004/8/EC~~ 2012/27/EU ~~of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market~~[1] provides for guarantees of origin for proving the origin of electricity produced from high-efficiency cogeneration plants. ⇨ However, no use is specified for ⇦ ~~S~~such guarantees of origin ~~cannot~~ ⇨ , so they should also ⇦ be used when disclosing the use of energy from ~~renewable sources in accordance with Article 3(6) of Directive 2003/54/EC as this might result in double counting and double disclosure. 2012/27/EC on energy efficiency provides for guarantees of origin for proving the origin of electricity produced from high-efficiency cogeneration plants. However no use is specified for such guarantees of origin cannot, so they should also be used when disclosing the use of energy from renewable sources in accordance with Article 3(6) of Directive 2003/54/EC as this might result in double counting and double disclosure~~ ⇨ high efficiency CHP ⇦.

🡻 2009/28/EC Recital 56 (adapted)

~~Guarantees of origin do not by themselves confer a right to benefit from national support schemes.~~

⇩ new

(47) Guarantees of origin, which are currently in place for renewable electricity and renewable heating and cooling, should be extended to cover renewable gas. This would provide a consistent means of proving to final customers the origin of renewable gases such as biomethane and would facilitate greater cross-border trade in such gases. It would also enable the creation of guarantees of origin for other renewable gases such as hydrogen.

[1] ~~OJ L 52, 21.2.2004, p. 50.~~

🡻 2009/28/EC Recital 57 (adapted)
⇨ new

(48) There is a need to support the integration of energy from renewable sources into the transmission and distribution grid and the use of energy storage systems for integrated ~~intermittent~~ ⇨ variable ⇦ production of energy from renewable sources, ⇨ in particular as regards the rules regulating dispatch and access to the grid. Directive [Electricity Market Design] lays down the framework for the integration of electricity from renewable energy sources. However, this framework does not include provisions on the integration of gas from renewable energy sources into the gas grid. It is therefore necessary to keep them in this Directive . ⇦

🡻 2009/28/EC Recital 58

~~The development of renewable energy projects, including renewable energy projects of European interest under the Trans-European Network for Energy (TEN-E) programme should be accelerated. To that end, the Commission should also analyse how the financing of such projects can be improved. Particular attention should be paid to renewable energy projects that will contribute to a significant increase in security of energy supply in the Community and neighbouring countries.~~

🡻 2009/28/EC Recital 3 (adapted)

(49) The opportunities for establishing economic growth through innovation and a sustainable competitive energy policy have been recognised. Production of energy from renewable sources often depends on local or regional ~~small and medium-sized enterprises (~~SMEs~~)~~. The opportunities for growth and employment that investments in regional and local production of energy from renewable sources bring about in the Member States and their regions are important. The Commission and the Member States should therefore support national and regional development measures in those areas, encourage the exchange of best practices in production of energy from renewable sources between local and regional development initiatives and promote the use of ~~structural~~ cohesion policy funding in this area.

🡻 2009/28/EC Recital 4

(50) When favouring the development of the market for renewable energy sources, it is necessary to take into account the positive impact on regional and local development opportunities, export prospects, social cohesion and employment opportunities, in particular as concerns SMEs and independent energy producers.

⇩ new

(51) The specific situation of the outermost regions is recognised in Article 349 of the Treaty on the Functioning of the European Union. The energy sector in the outermost regions is often characterised by isolation, limited supply and dependence on fossil fuels while these regions benefit from important local renewable sources of energy. The outermost regions could thus serve as examples of the application of innovative energy technologies for the Union. It is therefore necessary to promote the uptake of renewable energy in order to achieve a higher degree of energy autonomy for those regions and recognise their specific situation in terms of renewable energy potential and public support needs.

🡻 2009/28/EC Recital 6 (adapted)
⇨ new

(52) It is appropriate to ~~support the demonstration and commercialisation phase~~ ⇨ allow for the development ⇦ of decentralised renewable energy technologies ⇨ under non-discriminatory conditions and without hampering the financing of infrastructure investments ⇦ .The move towards decentralised energy production has many benefits, including the utilisation of local energy sources, increased local security of energy supply, shorter transport distances and reduced energy transmission losses. Such decentralisation also fosters community development and cohesion by providing income sources and creating jobs locally.

⇩ new

(53) With the growing importance of self-consumption of renewable electricity, there is a need for a definition of renewable self-consumers and a regulatory framework which would empower self-consumers to generate, store, consume and sell electricity without facing disproportionate burdens. C**~~ollective self-consumption should be allowed in certain cases so that c~~** **C**itizens living in apartments for example **should be able to ~~can~~** benefit from consumer empowerment to the same extent as households in single family homes. **Renewable self-consumers should not face disproportionate burdens and costs. Their contribution to the achievement of the climate and energy target and the costs and benefits they induce in the wider energy system should be taken into account. However, at the same time Member States should ensure that all consumers contribute in a balanced and adequate way to the overall cost-sharing system of producing, distributing and consuming electricity through charges, levies and taxes, including costs related to support granted to renewable electricity.**

(54) Local citizen participation in renewable energy projects through renewable energy communities has resulted in substantial added value in terms of local acceptance of renewable energy and access to additional private capital. This local involvement will be all the more crucial in a context of increasing renewable energy capacity in the future.

(55) The specific characteristics of local renewable energy communities in terms of size, ownership structure and the number of projects can hamper their competition on equal footing with large-scale players, namely competitors with larger projects or portfolios. Measures to offset those disadvantages include enabling energy communities to operate in the energy system and easing their market integration.

(56) Representing around half of the final energy consumption of the Union, heating and cooling is considered to be a key sector in accelerating the decarbonisation of the energy system. Moreover, it is also a strategic sector in terms of energy security, as it is projected that around 40% of the renewable energy consumption by 2030 should come from renewable heating and cooling. The absence of a harmonised strategy at Union level, the lack of internalisation of external costs and the fragmentation of heating and cooling markets have led to relatively slow progress in this sector so far.

(57) Several Member States have implemented measures in the heating and cooling sector to reach their 2020 renewable energy target. However, in the absence of binding national targets post-2020, the remaining national incentives may not be sufficient to reach the long-term decarbonisation goals for 2030 and 2050. In order to be in line with such goals, reinforce investor certainty and foster the development of a Union-wide renewable heating and cooling market, while respecting the energy efficiency first principle, it is appropriate to encourage the effort of Member States in the supply of renewable heating and cooling to contribute to the progressive increase of the share of renewable energy. Given the fragmented nature of some heating and cooling markets, it is of utmost importance to ensure flexibility in designing such an effort. It is also important to ensure that a potential uptake of renewable heating and cooling does not have detrimental environmental side-effects **or lead to disproportionate overall costs. In order to minimise this risk, the increase of the share of renewable energy in heating and cooling should take into account the situation of those Member States where this share is already very high**.

(58) District heating and cooling currently represents around 10% of the heat demand across the Union, with large discrepancies between Member States. The Commission's heating and cooling strategy has recognised the potential for decarbonisation of district heating through increased energy efficiency and renewable energy deployment.

(59) The Energy Union strategy also recognised the role of the citizen in the energy transition, where citizens take ownership of the energy transition, benefit from new technologies to reduce their bills, and participate actively in the market.

(60) The potential synergies between an effort to increase the uptake of renewable heating and cooling and the existing schemes under Directives 2010/31/EU and 2012/27/EU should be emphasised. Member States should, to the extent possible, have the possibility to use existing administrative structures to implement such effort, in order to mitigate the administrative burden.

(61) In the area of district heating, it is therefore crucial to enable the fuel-switching to renewables and prevent regulatory and technology lock-in and technology lock-out through reinforced rights for renewable energy producers and final consumers, and bring the tools to end-consumers to facilitate their choice between the highest energy performance solution that take into account future heating and cooling needs in line with expected building performance criteria.

(62) The European Strategy for a low-carbon mobility of July 2016 pointed out that food-based biofuels have a limited role in decarbonising the transport sector and should be gradually phased out and replaced by advanced biofuels. To prepare for the transition towards advanced biofuels and minimise the overall indirect land-use change impacts, it is appropriate to reduce the amount of biofuels and bioliquids produced from food and feed crops that can be counted towards the Union target set out in this Directive.

(63) Directive (EU) 2015/1513 of the European Parliament and of the Council[1] called on the Commission to present without delay a comprehensive proposal for a cost-effective and technology-neutral post-2020 policy in order to create a long-term perspective for investment in sustainable biofuels with a low risk of causing indirect land-use change and in other means of decarbonising the transport sector. An incorporation obligation on fuel suppliers can provide certainty for investors and encourage the continuous development of alternative renewable transport fuels including advanced biofuels, renewable liquid and gaseous transport fuels of non-biological origin, and renewable electricity in transport. It is appropriate to set the obligation on fuel suppliers at the same level in each Member State in order to ensure consistency in transport fuel specifications and availability. As transport fuels are traded easily, fuel suppliers in Member States with low endowments of the relevant resources should be able to easily obtain renewable fuels from elsewhere.

[1] Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources (OJ L 239, 15.9.2015, p. 1).

(64) Advanced biofuels and other biofuels and biogas produced from feedstock listed in Annex IX, renewable liquid and gaseous transport fuels of non-biological origin, and renewable electricity in transport can contribute to low carbon emissions, stimulating the decarbonisation of the Union transport sector in a cost-effective manner, and improving inter alia energy diversification in the transport sector while promoting innovation, growth and jobs in the Union economy and reducing reliance on energy imports. The incorporation obligation on fuels suppliers should encourage continuous development of advanced fuels, including biofuels, and it is important to ensure that the incorporation obligation also incentivises improvements in the greenhouse gas performance of the fuels supplied to meet it. The Commission should assess the greenhouse gas performance, technical innovation and sustainability of those fuels.

(65) The promotion of low carbon fossil fuels that are produced from fossil waste streams can also contribute towards the policy objectives of energy diversification and transport decarbonisation. It is therefore appropriate to include those fuels in the incorporation obligation on fuel suppliers.

(66) Feedstocks which have low indirect land use change impacts when used for biofuels, should be promoted for their contribution to the decarbonisation of the economy. Especially feedstocks for advanced biofuels, for which technology is more innovative and less mature and therefore needs a higher level of support, should be included in an annex to this Directive. In order to ensure that this annex is up to date with the latest technological developments while avoiding unintended negative effects, an evaluation should take place after the adoption of the Directive in order to assess the possibility to extend the annex to new feedstocks.

↓ 2009/28/EC Recital 94

~~Since the measures provided for in Articles 17 to 19 also have an effect on the functioning of the internal market by harmonising the sustainability and greenhouse gas emissions criteria for biofuels and bioliquids for the target accounting purposes under this Directive, and thus facilitate, in accordance with Article 17(8), trade between Member States in biofuels and bioliquids which comply with those conditions, they are based on Article 95 of the Treaty.~~

↓ 2009/28/EC Recital 59

~~Interconnection among countries facilitates integration of electricity from renewable energy sources. Besides smoothing out variability, interconnection can reduce balancing costs, encourage true competition bringing about lower prices, and support the development of networks. Also, the sharing and optimal use of transmission capacity could help avoid excessive need for newly built capacity.~~

↓ 2009/28/EC Recital 60

~~Priority access and guaranteed access for electricity from renewable energy sources are important for integrating renewable energy sources into the internal market in electricity, in line with Article 11(2) and developing further Article 11(3) of Directive 2003/54/EC. Requirements relating to the maintenance of the reliability and safety of the grid and to the dispatching may differ according to the characteristics of the national grid and its secure operation. Priority access to the grid provides an assurance given to connected generators of electricity from renewable energy sources that they will be able to sell and transmit the electricity from renewable energy sources in accordance with connection rules at all times, whenever the source becomes available. In the event that the electricity from renewable energy sources is integrated into the spot market, guaranteed access ensures that all electricity sold and supported obtains access to the grid, allowing the use of a maximum amount of electricity from renewable energy sources from installations connected to the grid. However, this does not imply any obligation on the part of Member States to support or introduce purchase obligations for energy from renewable sources. In other systems, a fixed price is defined for electricity from renewable energy sources, usually in combination with a purchase obligation for the system operator. In such a case, priority access has already been given.~~

↓ 2009/28/EC Recital 61

~~In certain circumstances it is not possible fully to ensure transmission and distribution of electricity produced from renewable energy sources without affecting the reliability or safety of the grid system. In such circumstances it may be appropriate for financial compensation to be given to those producers. Nevertheless, the objectives of this Directive require a sustained increase in the transmission and distribution of electricity produced from renewable energy sources without affecting the reliability or safety of the grid system. To this end, Member States should take appropriate measures in order to allow a higher penetration of electricity from renewable energy sources, inter alia, by taking into account the specificities of variable resources and resources which are not yet storable. To the extent required by the objectives set out in this Directive, the connection of new renewable energy installations should be allowed as soon as possible. In order to accelerate grid connection procedures, Member States may provide for priority connection or reserved connection capacities for new installations producing electricity from renewable energy sources.~~

↓ 2009/28/EC Recital 62 (adapted)

(67) The costs of connecting new producers of ~~electricity and~~ gas from renewable energy sources to the ~~electricity and~~ gas grids should be ⌦ based on ⌫ objective, transparent and non-discriminatory ⌦ criteria ⌫ and due account should be taken of the benefit that embedded ~~producers of electricity from renewable energy sources and~~ local producers of gas from renewable sources bring to the ~~electricity and~~ gas grids.

↓ 2009/28/EC Recital 63

~~Electricity producers who want to exploit the potential of energy from renewable sources in the peripheral regions of the Community, in particular in island regions and regions of low population density, should, whenever feasible, benefit from reasonable connection costs in order to ensure that they are not unfairly disadvantaged in comparison with producers situated in more central, more industrialised and more densely populated areas.~~

↓ 2009/28/EC Recital 64

~~Directive 2001/77/EC lays down the framework for the integration into the grid of electricity from renewable energy sources. However, there is a significant variation between Member States in the degree of integration actually achieved. For this reason it is necessary to strengthen the framework and to review its application periodically at national level~~.

↓ 2009/28/EC Recital 24 (adapted)
⇨ new

(68) In order to exploit the full potential of biomass ⇨ to contribute to the decarbonisation of the economy through its uses for materials and energy ⇦ , the ~~Community~~ ⌦ Union ⌫ and the Member States should promote greater ⇨ sustainable ⇦ mobilisation of existing timber ~~reserves~~ ⇨ and agricultural resources ⇦ and the development of new forestry ⇨ and agriculture production ⇦ systems.

↓ 2009/28/EC Recital 65 (adapted)
⇨ new

(69) ~~Biofuel production should be sustainable.~~ Biofuels ⇨ , bioliquids and biomass fuels should always be produced in a sustainable manner. Biofuels, bioliquids and biomass fuels ⇦ used for compliance with the ⌦ Union ⌫ target~~s~~ laid down in this Directive, and those ~~that~~ ⌦ which ⌫ benefit from ~~national~~ support schemes, should therefore be required to fulfil sustainability ⇨ and greenhouse gas emissions savings ⇦ criteria.

↓ 2009/28/EC Recital 66 (adapted)
⇨ new

(70) The ~~Community~~ ⌦ Union ⌫ should take appropriate steps in the context of this Directive, including the promotion of sustainability ⇨ and greenhouse gas emissions savings ⇦ criteria for biofuels ⇨ , and for bioliquids and biomass fuels used for heating or cooling and electricity generation ⇦ ~~and the development of second and third-generation biofuels in the Community and worldwide, and to strengthen agricultural research and knowledge creation in those areas~~.

↓ 2009/28/EC Recital 67

~~The introduction of sustainability criteria for biofuels will not achieve its objective if those products that do not fulfil the criteria and would otherwise have been used as biofuels are used, instead, as bioliquids in the heating or electricity sectors. For this reason, the sustainability criteria should also apply to bioliquids in general.~~

↓ 2009/28/EC Recital 68 (adapted)

~~(68) The European Council of March 2007 invited the Commission to propose a comprehensive Directive on the use of all renewable energy sources, which could contain criteria and provisions to ensure sustainable provision and use of bioenergy. Such sustainability criteria should form a coherent part of a wider scheme covering all bioliquids and not biofuels alone. Such sustainability criteria should therefore be included in this Directive. In order to ensure a coherent approach between energy and environment policies, and to avoid the additional costs to business and the environmental incoherence that would be associated with an inconsistent approach, it is essential to provide the same sustainability criteria for the use of biofuels for the purposes of this Directive on the one hand, and Directive 98/70/EC on the other. For the same reasons, double reporting should be avoided in this context. Furthermore, the Commission and the competent national authorities should coordinate their activities in the framework of a committee specifically responsible for sustainability aspects. The Commission should, in addition, in 2009, review the possible inclusion of other biomass applications and the modalities relating thereto.~~

↓ 2009/28/EC Recital 69 (adapted)
⇨ new

(71) The ~~increasing worldwide demand~~ ⇨ production of agricultural raw material ⇦ for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ , and the incentives for their use provided for in this Directive, should not have the effect of encouraging the destruction of biodiverse lands. ~~Those~~ ⌦ Such ⌫ finite resources, recognised in various international instruments to be of value to all mankind, should be preserved. ~~Consumers in the Community would, in addition, find it morally unacceptable that their increased use of biofuels and bioliquids could have the effect of destroying biodiverse lands.~~ ~~For these reasons, i~~It is ⌦ therefore ⌫ necessary to provide sustainability ⇨ and greenhouse gas emissions savings ⇦ criteria ensuring that biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ ~~can~~ qualify for the incentives only when it ⌦ is ⌫ ~~can be~~ guaranteed that ~~they~~ ⇨ the agricultural raw material ⇦ ~~do~~ ⌦ does ⌫ not originate in biodiverse areas or, in the case of areas designated for nature protection purposes or for the protection of rare, threatened or endangered ecosystems or species, the relevant competent authority demonstrates that the production of the ⇨ agricultural ⇦ raw material does not interfere with ~~those~~ ⌦ such ⌫ purposes. ~~The sustainability criteria should consider forest~~ ⌦ Forests should be considered ⌫ as biodiverse ⌦ according to the sustainibility criteria, ⌫ where ⌦ they are ⌫ ~~it is a~~ primary ⌦ forests ⌫ ~~forest~~ in accordance with the definition used by the Food and Agriculture Organisation of the United Nations (FAO) in its Global Forest Resource Assessment, ~~which countries use worldwide to report on the extent of primary forest~~ or where ~~it is~~ ⌦ they are ⌫ protected by national nature protection law. Areas where ⌦ the ⌫ collection of non-wood forest products occurs should be ⌦ considered to be biodiverse forests ⌫ ~~included~~, provided the human impact is small. Other types of forests as defined by the FAO, such as modified natural forests, semi-natural forests and plantations, should not be considered as primary forests. Having regard, furthermore, to the highly biodiverse nature of certain grasslands, both temperate and tropical, including highly biodiverse savannahs, steppes, scrublands and prairies, biofuels ⇨ , bioliquids and biomass fuels ⇦ made from ⇨ agricultural ⇦ raw materials originating in such lands should not qualify for the incentives provided for by this Directive. The Commission should establish appropriate criteria ~~and geographical ranges~~ to define such highly biodiverse grasslands in accordance with the best available scientific evidence and relevant international standards.

↓ 2009/28/EC Recital 70

~~If land with high stocks of carbon in its soil or vegetation is converted for the cultivation of raw materials for biofuels or bioliquids, some of the stored carbon will generally be released into the atmosphere, leading to the formation of carbon dioxide. The resulting negative greenhouse gas impact can offset the positive greenhouse gas impact of the biofuels or bioliquids, in some cases by a wide margin. The full carbon effects of such conversion should therefore be accounted for in calculating the greenhouse gas emission saving of particular biofuels and bioliquids. This is necessary to ensure that the greenhouse gas emission saving calculation takes into account the totality of the carbon effects of the use of biofuels and bioliquids.~~

↓ 2009/28/EC Recital 71

~~In calculating the greenhouse gas impact of land conversion, economic operators should be able to use actual values for the carbon stocks associated with the reference land use and the land use after conversion. They should also be able to use standard values. The work of the Intergovernmental Panel on Climate Change is the appropriate basis for such standard values. That work is not currently expressed in a form that is immediately applicable by economic operators. The Commission should therefore produce guidance drawing on that work to serve as the basis for the calculation of carbon stock changes for the purposes of this Directive, including such changes to forested areas with a canopy cover of between 10 to 30 %, savannahs, scrublands and prairies.~~

↓ 2009/28/EC Recital 72

~~It is appropriate for the Commission to develop methodologies with a view to assessing the impact of the drainage of peatlands on greenhouse gas emissions.~~

🡻 2009/28/EC Recital 73 (adapted)
⇨ new

(72) Land should not be converted for the production of ⇨ agricultural raw material for ⇦ biofuels ⇨ , bioliquids and biomass fuels ⇦ if its carbon stock loss upon conversion could not, within a reasonable period, taking into account the urgency of tackling climate change, be compensated by the greenhouse gas emission saving resulting from the production ⇨ and use ⇦ of biofuels, ~~or~~ bioliquids ⇨ and biomass fuels ⇦. This would prevent unnecessary, burdensome research by economic operators and the conversion of high-carbon-stock land that would prove to be ineligible for producing ⇨ agricultural ⇦ raw materials for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦. Inventories of worldwide carbon stocks indicate that wetlands and continuously forested areas with a canopy cover of more than 30 % should be included in that category. ~~Forested areas with a canopy cover of between 10 and 30 % should also be included, unless there is evidence demonstrating that their carbon stock is sufficiently low to justify their conversion in accordance with the rules laid down in this Directive. The reference to wetlands should take into account the definition laid down in the Convention on Wetlands of International Importance, especially as Waterfowl Habitat, adopted on 2 February 1971 in Ramsar.~~

⇩ new

(73) Agricultural feedstock for the production of biofuels, bioliquids and biomass fuels should not be produced on peatland as the cultivation of feedstock on peatland would result in significant carbon stock loss if the land was further drained for that purpose while the absence of such drainage cannot be easily verified.

(74) In the framework of the Common Agricultural Policy Union, farmers should comply with a comprehensive set of environmental requirements in order to receive direct support. Compliance with those requirements can be most effectively verified in the context of agricultural policy. Including those requirements in the sustainability scheme is not appropriate as the sustainability criteria for bioenergy should set out rules that are objective and apply globally. Verification of compliance under this Directive would also risk causing unnecessary administrative burden.

(75) It is appropriate to introduce Union-wide sustainability and greenhouse gas emission saving criteria for biomass fuels used in the electricity and heating and cooling generation, in order to continue to ensure high greenhouse gas savings compared to fossil fuel alternatives, to avoid unintended sustainability impacts, and to promote the internal market.

(76) To ensure that, despite the growing demand for forest biomass, harvesting is carried out in a sustainable manner in forests where regeneration is ensured, that special attention is given to areas explicitly designated for the protection of biodiversity, landscapes and specific natural elements, that biodiversity resources are preserved and that carbon stocks are tracked, woody raw material should come only from forests that are harvested in accordance with the principles of sustainable forest management developed under international forest processes such as Forest Europe and are implemented through national laws or the best management practices at the forest holding level. Operators should take the appropriate steps in order to minimise the risk of using unsustainable forest biomass for the production of bioenergy. To that end, operators should put in place a risk-based approach. In this context, it is apporpriate for the Commission to develop operational guidance on the verification of compliance with the risk based approach, following the consultation of the Energy Union Governance Committee, and the Standing Forestry Committee established by Council Decision 89/367/EEC[1].

(77) In order to minimise the administrative burden, the Union sustainability and greenhouse gas saving criteria should apply only to electricity and heating from biomass fuels produced in installations with a fuel capacity equal or above to 20 MW.

[1] Council Decision 89/367/EEC of 29 May 1989 setting up a Standing Forestry Committee (OJ L 165, 15.6.1989, p. 14).

(78) Biomass fuels should be converted into electricity and heat in an efficient way in order to maximise energy security and greenhouse gas savings, as well as to limit emissions of air pollutants and minimise the pressure on limited biomass resources. For this reason, public support to installations with a fuel capacity equal to or exceeding 20 MW, if needed, should only be given to highly efficient combined power and heat installations as defined Article 2(34) of Directive 2012/27/EU. Existing support schemes for biomass-based electricity should however be allowed until their due end date for all biomass installations. In addition electricity produced from biomass in new installations with a fuel capacity equal to or exceeding 20 MW should only count towards renewable energy targets and obligations in the case of highly efficient combined power and heat installations. In accordance with State aid rules, Member States should however be allowed to grant public support for the production of renewables to installations, and count the electricity they produce towards renewable energy targets and obligations, in order to avoid an increased reliance on fossil fuels with higher climate and environmental impacts where, after exhausting all technical and economic possibilities to install highly efficient combined heat and power biomass installations, Member States would face a substantiated risk to security of supply of electricity.

(79) The minimum greenhouse gas emission savings threshold for biofuels and bioliquids produced in new installations should be increased in order to improve their overall greenhouse gas balance as well as to discourage further investments in installations with a low greenhouse gas emission savings performance. This increase provides investment safeguards for biofuels and bioliquids production capacities.

(80) Based on experience in the practical implementation of the Union sustainability criteria, it is appropriate to strengthen the role of voluntary international and national certification schemes for verification of compliance with the sustainability criteria in a harmonised manner.

↓ 2009/28/EC Recital 74

~~The incentives provided for in this Directive will encourage increased production of biofuels and bioliquids worldwide. Where biofuels and bioliquids are made from raw material produced within the Community, they should also comply with Community environmental requirements for agriculture, including those concerning the protection of groundwater and surface water quality, and with social requirements. However, there is a concern that production of biofuels and bioliquids in certain third countries might not respect minimum environmental or social requirements. It is therefore appropriate to encourage the development of multilateral and bilateral agreements and voluntary international or national schemes that cover key environmental and social considerations, in order to promote the production of biofuels and bioliquids worldwide in a sustainable manner. In the absence of such agreements or schemes, Member States should require economic operators to report on those issues.~~

↓ 2009/28/EC Recital 75

~~The requirements for a sustainability scheme for energy uses of biomass, other than bioliquids and biofuels, should be analysed by the Commission in 2009, taking into account the need for biomass resources to be managed in a sustainable manner.~~

↓ 2009/28/EC Recital 76

~~Sustainability criteria will be effective only if they lead to changes in the behaviour of market actors. Those changes will occur only if biofuels and bioliquids meeting those criteria command a price premium compared to those that do not. According to the mass balance method of verifying compliance, there is a physical link between the production of biofuels and bioliquids meeting the sustainability criteria and the consumption of biofuels and bioliquids in the Community, providing an appropriate balance between supply and demand and ensuring a price premium that is greater than in systems where there is no such link. To ensure that biofuels and bioliquids meeting the sustainability criteria can be sold at a higher price, the mass balance method should therefore be used to verify compliance. This should maintain the integrity of the system while at the same time avoiding the imposition of an unreasonable burden on industry. Other verification methods should, however, be reviewed.~~

↓ 2009/28/EC Recital 77

~~Where appropriate, the Commission should take due account of the Millennium Ecosystem Assessment which contains useful data for the conservation of at least those areas that provide basic ecosystem services in critical situations such as watershed protection and erosion control.~~

↓ 2009/28/EC Recital 78

~~It is appropriate to monitor the impact of biomass cultivation, such as through land use changes, including displacement, the introduction of invasive alien species and other effects on biodiversity, and effects on food production and local prosperity. The Commission should consider all relevant sources of information, including the FAO hunger map. Biofuels should be promoted in a manner that encourages greater agricultural productivity and the use of degraded land.~~

↓ 2009/28/EC Recital 79 (adapted)
⇨ new

(81) It is in the interests of the ~~Community~~ ⌦ Union ⌫ to encourage the development of ~~multilateral and bilateral agreements and~~ voluntary international or national schemes that set standards for the production of sustainable biofuels, ~~and~~ bioliquids ⇨ , and biomass fuels ⇦ and that certify that the production of biofuels, ~~and~~ bioliquids ⇨ , and biomass fuels ⇦ meets those standards. For that reason, provision should be made for ~~such agreements or~~ schemes ⌦ should ⌫ ~~to~~ be recognised as providing reliable evidence and data, ⌦ where ⌫ ~~provided that~~ they meet adequate standards of reliability, transparency and independent auditing. ⇨ In order to ensure that the compliance with the sustainability and greenhouse gas emissions savings criteria is verified in a robust and harmonised manner and in particular to prevent fraud, the Commission should be empowered to set out detailed implementing rules, including adequate standards of reliability, transparency and independent auditing to be applied by the voluntary schemes. ⇦

⇩ new

(82) Voluntary schemes play an increasingly important role in providing evidence of compliance with the sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels. It is therefore appropriate for the Commission to require voluntary schemes, including those already recognised by the Commission, to report regularly on their activity. Such reports should be made public in order to increase transparency and to improve supervision by the Commission. Furthermore, such reporting would provide the necessary information for the Commission to report on the operation of the voluntary schemes with a view to identifying best practice and submitting, if appropriate, a proposal to further promote such best practice.

(83) To facilitate the functioning of the internal market, evidence regarding the sustainability and greenhouse gas emissions criteria for biomass for energy that has been obtained in accordance with a scheme that has been recognised by the Commission should be accepted in all Member States. Member States should contribute towards ensuring the correct implementation of the certification principles of voluntary schemes by supervising the operation of certification bodies that are accredited by the national accreditation body and by informing the voluntary schemes about relevant observations.

🡻 2009/28/EC Recital 80

~~It is necessary to lay down clear rules for the calculation of greenhouse gas emissions from biofuels and bioliquids and their fossil fuel comparators.~~

🡻 2009/28/EC Recital 81

~~Co-products from the production and use of fuels should be taken into account in the calculation of greenhouse gas emissions. The substitution method is appropriate for the purposes of policy analysis, but not for the regulation of individual economic operators and individual consignments of transport fuels. In those cases the energy allocation method is the most appropriate method, as it is easy to apply, is predictable over time, minimises counter-productive incentives and produces results that are generally comparable with those produced by the substitution method. For the purposes of policy analysis the Commission should also, in its reporting, present results using the substitution method.~~

🡻 2009/28/EC Recital 82 (adapted)
⇨ new

(84) In order to avoid a disproportionate administrative burden, a list of default values should be laid down for common biofuel ⇨, bioliquid and biomass fuel ⇦ production pathways and that list should be updated and expanded when further reliable data is available. Economic operators should always be entitled to claim the level of greenhouse gas emission saving for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ established by that list. Where the default value for greenhouse gas emission saving from a production pathway lies below the required minimum level of greenhouse gas emission saving, producers wishing to demonstrate their compliance with this minimum level should be required to show that actual emissions from their production process are lower than those that were assumed in the calculation of the default values.

⇩ new

(85) It is necessary to lay down clear rules for the calculation of greenhouse gas emission savings from biofuels, bioliquids and biomass fuels and their fossil fuel comparators.

(86) In accordance with the current technical and scientific knowledge, the greenhouse gas accounting methodology should take into account the transformation of the solid and gaseous biomass fuels into final energy in order to be consistent with the calculation of renewable energy for the purposes of counting towards the Union target laid down in this Directive. The allocation of emissions to co-products, as distinct from wastes and residues, should also be reviewed in cases where electricity and/or heating and cooling are produced in co-generation or multi-generation plants.

(87) To ensure consistency and comparability of greenhouse gas savings of biomass fuels for heating and cooling, and electricity generation in different Member States, it is appropriate to apply a fossil fuel comparator based on average Union emissions in the heating and electricity sectors.

(88) If land with high stocks of carbon in its soil or vegetation is converted for the cultivation of raw materials for biofuels, bioliquids and biomass fuels, some of the stored carbon will generally be released into the atmosphere, leading to the formation of carbon dioxide. The resulting negative greenhouse gas impact can offset the positive greenhouse gas impact of the biofuels, bioliquids or biomass fuels, in some cases by a wide margin. The full carbon effects of such conversion should therefore be taken into account in calculating the greenhouse gas emission saving of particular biofuels, bioliquids and biomass fuels. This is necessary to ensure that the greenhouse gas emission saving calculation takes into account the totality of the carbon effects of the use of biofuels, bioliquids and biomass fuels.

(89) In calculating the greenhouse gas impact of land conversion, economic operators should be able to use actual values for the carbon stocks associated with the reference land use and the land use after conversion. They should also be able to use standard values. The methodology of the Intergovernmental Panel on Climate Change is the appropriate basis for such standard values. That work is not currently expressed in a form that is immediately applicable by economic operators. The Commission should therefore revise the guidelines of 10 June 2010 for the calculation of land carbon stocks for the purpose of Annex V to this Directive, while ensuring coherence with Regulation (EU) No 525/2013 of the European Parliament and of the Council[1].

[1] Regulation No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other

(90) Co-products from the production and use of fuels should be taken into account in the calculation of greenhouse gas emissions. The substitution method is appropriate for the purposes of policy analysis, but not for the regulation of individual economic operators and individual consignments of transport fuels. In those cases the energy allocation method is the most appropriate method, as it is easy to apply, is predictable over time, minimises counter-productive incentives and produces results that are generally comparable with those produced by the substitution method. For the purposes of policy analysis the Commission should also, in its reporting, present results using the substitution method.

(91) Co-products are different from residues and agricultural residues, as they are the primary aim of the production process. It is therefore appropriate to clarify that agricultural crop residues are residues and not co-products. This has no implications on the existing methodology but clarifies the existing provisions.

(92) The established method of using energy allocation as a rule for dividing greenhouse gas emissions between co-products has worked well and should be continued. It is appropriate to align the methodology for calculating greenhouse gas emissions coming from the use of cogeneration of heat and electricity (CHP) when the CHP is used in processing biofuels, bioliquids and biomass fuels to the methodology applied to a CHP being the end use.

(93) The methodology takes into account the reduced greenhouse gas emissions arising from the use of CHP, compared to the use of electricity- and heat-only plants, by taking into account the utility of heat compared to electricity, and the utility of heat at different temperatures. It follows that higher temperature should bear a larger part of the total greenhouse gas emissions, than heat at low temperature, when the heat is co-produced with electricity. The methodology takes into account the whole pathway to final energy, including conversion to heat or electricity.

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information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC (OJ L 165, 18.6.2013, p. 13)

↓ 2009/28/EC Recital 84

~~In order to avoid encouraging the cultivation of raw materials for biofuels and bioliquids in places where this would lead to high greenhouse gas emissions, the use of default values for cultivation should be limited to regions where such an effect can reliably be ruled out. However, to avoid a disproportionate administrative burden, it is appropriate for Member States to establish national or regional averages for emissions from cultivation, including from fertiliser use.~~

↓ 2009/28/EC Recital 83 (adapted)

(94) It is appropriate for the data used in the calculation of the default values to be obtained from independent, scientifically expert sources and to be updated as appropriate as those sources progress their work. The Commission should encourage those sources to address, when they update their work, emissions from cultivation, the effect of regional and climatological conditions, the effects of cultivation using sustainable agricultural and organic farming methods, and the scientific contribution of producers, within the ~~Community~~ ⌦ Union ⌫ and in third countries, and civil society.

🡻 2009/28/EC Recital 85 (adapted)
⇨ new

(95) Global demand for agricultural commodities is growing. Part of that increased demand will be met through an increase in the amount of land devoted to agriculture. The restoration of land that has been severely degraded ~~or heavily contaminated~~ and therefore cannot be used, in its present state, for agricultural purposes is a way of increasing the amount of land available for cultivation. The sustainability scheme should promote the use of restored degraded land because the promotion of biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ will contribute to the growth in demand for agricultural commodities. ~~Even if biofuels themselves are made using raw materials from land already in arable use, the net increase in demand for crops caused by the promotion of biofuels could lead to a net increase in the cropped area. This could affect high carbon stock land, which would result in damaging carbon stock losses. To alleviate that risk, it is appropriate to introduce accompanying measures to encourage an increased rate of productivity on land already used for crops, the use of degraded land, and the adoption of sustainability requirements, comparable to those laid down in this Directive for Community biofuel consumption, in other biofuel-consuming countries. The Commission should develop a concrete methodology to minimise greenhouse gas emissions caused by indirect land-use changes. To this end, the Commission should analyse, on the basis of best available scientific evidence, in particular, the inclusion of a factor for indirect land-use changes in the calculation of greenhouse gas emissions and the need to incentivise sustainable biofuels which minimise the impacts of land-use change and improve biofuel sustainability with respect to indirect land-use change. In developing that methodology, the Commission should address, inter alia, the potential indirect land-use changes resulting from biofuels produced from non-food cellulosic material and from ligno-cellulosic material.~~

🡻 2009/28/EC Recital 86

~~In order to permit the achievement of an adequate market share of biofuels, it is necessary to ensure the placing on the market of higher blends of biodiesel in diesel than those envisaged by standard EN590/2004.~~

↓ 2009/28/EC Recital 87

~~In order to ensure that biofuels that diversify the range of feedstocks used become commercially viable, those biofuels should receive an extra weighting under national biofuel obligations.~~

↓ 2009/28/EC Recital 88

~~Regular reporting is needed to ensure a continuing focus on progress in the development of energy from renewable sources at national and Community level. It is appropriate to require the use of a harmonised template for national renewable energy action plans which Member States should submit. Such plans could include estimated costs and benefits of the measures envisaged, measures relating to the necessary extension or reinforcement of the existing grid infrastructure, estimated costs and benefits to develop energy from renewable sources in excess of the level required by the indicative trajectory, information on national support schemes and information on their use of energy from renewable sources in new or renovated buildings.~~

↓ 2009/28/EC Recital 89

~~When designing their support systems, Member States may encourage the use of biofuels which give additional benefits, including the benefits of diversification offered by biofuels made from waste, residues, non-food cellulosic material, ligno-cellulosic material and algae, as well as non-irrigated plants grown in arid areas to fight desertification, by taking due account of the different costs of producing energy from traditional biofuels on the one hand and of those biofuels that give additional benefits on the other. Member States may encourage investment in research and development in relation to those and other renewable energy technologies that need time to become competitive.~~

⇩ new

(96) In order to ensure a harmonised implementation of the greenhouse gas emissions calculation methodology and to align to the latest scientific evidence the Commission should be empowered to adapt the methodological principles and values necessary for assessing whether greenhouse gas emissions savings criteria have been fulfilled and to decide that reports submitted by Member States and third countries contain accurate data on cultivation emissions of feedstock.

🡻 2009/28/EC Recital 22 (adapted)

(97) The achievement of the objectives of this Directive requires that the ~~Community~~ ⌦ Union ⌫ and Member States dedicate a significant amount of financial resources to research and development in relation to renewable energy technologies. In particular, the European Institute of Innovation and Technology should give high priority to the research and development of renewable energy technologies.

🡻 2009/28/EC Recital 90

(98) The implementation of this Directive should reflect, where relevant, the provisions of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, in particular as implemented through Directive 2003/4/EC of the European Parliament and of the Council ~~of 28 January 2003 on public access to environmental information~~[1].

[1] Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information (OJ L 41, 14.2.2003, p. 26).

⇩ new

(99) In order to amend or supplement non-essential elements of the provisions of this Directive, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of the list of feedstocks for the production of advanced biofuels, the contribution of which towards the fuel suppliers' obligation in transport is limited; the adaptation of the energy content of transport fuels to scientific and technical progress; the methodology to determine the share of biofuel resulting from biomass being processed with fossil fuels in a common process; the implementation of agreements on mutual recognition of guarantees of origin; the establishment of rules to monitor the functioning of the system of guarantees of origin; and the rules for calculating the greenhouse gas impact of biofuels, bioliquids and their fossil fuel comparators. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

🡻 2009/28/EC Recital 91 (adapted)
⇨ new

(100) The measures necessary for the implementation of this Directive should be adopted in accordance with ~~Council Decision 1999/468/EC of 28 June 1999~~ ⇨ Regulation (EU) No 182/2011 of the European Parliament and of the Council[1] ⇦ ~~laying down the procedures for the exercise of implementing powers .conferred on the Commission~~[2]

[1] Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p.13).

[2] ~~OJ L 184, 17.7.1999, p. 23.~~

↓ 2009/28/EC Recital 92

~~In particular, the Commission should be empowered to adapt the methodological principles and values necessary for assessing whether sustainability criteria have been fulfilled in relation to biofuels and bioliquids, to adapt the energy content of transport fuels to technical and scientific progress, to establish criteria and geographic ranges for determining highly biodiverse grassland, and to establish detailed definitions for severely degraded or contaminated land. Since those measures are of general scope and are designed to amend non-essential elements of this Directive, inter alia, by supplementing it with new non-essential elements, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC.~~

↓ 2009/28/EC Recital 93

~~Those provisions of Directive 2001/77/EC and Directive 2003/30/EC that overlap with the provisions of this Directive should be deleted from the latest possible moment for transposition of this Directive. Those that deal with targets and reporting for 2010 should remain in force until the end of 2011. It is therefore necessary to amend Directive 2001/77/EC and Directive 2003/30/EC accordingly.~~

↓ 2009/28/EC Recital 95

~~The sustainability scheme should not prevent Member States from taking into account, in their national support schemes, the higher production cost of biofuels and bioliquids that deliver benefits that exceed the minima laid down in the sustainability scheme.~~

↓ 2009/28/EC Recital 96 (adapted)
⇨ new

(101) Since the ~~general~~ objectives of this Directive, namely to achieve ~~a 20 %~~ ⇨ at least 27% ⇦ share of energy from renewable sources in the ~~Community's~~ ⌦ Union's ⌫ gross final consumption of energy ~~and a 10 % share of energy from renewable sources in each Member State's transport energy consumption~~ by ~~2020~~ ⇨ 2030 ⇦ , cannot be sufficiently achieved by the Member States ~~and~~ ⌦ but ⌫ can ~~therefore~~ ⌦ rather ⌫ , by reason of the scale of the action, be better achieved at ~~Community~~ ⌦ Union ⌫ level, the ~~Community~~ ⌦ Union ⌫ may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty ⌦ on European Union ⌫ . In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

↓ 2009/28/EC Recital 97

~~In accordance with point 34 of the Interinstitutional agreement on better law-making[1], Member States are encouraged to draw up, for themselves and in the interest of the Community, their own tables illustrating, as far as possible, the correlation between this Directive and the transposition measures and to make them public,~~

⇩ new

(102) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive amendment as compared to the earlier Directive. The obligation to transpose provisions which are unchanged arises under the earlier Directive.

[1] ~~OJ C 321, 31.12.2003, p. 1.~~

(103) In accordance with the Joint Political Declaration of Member States and the Commission on explanatory documents of 28 September 2011 ⇨ [1] ⇦ , Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments.

(104) This Directive should be without prejudice to the obligations of the Member States relating to the time-limit for the transposition into national law of the Directives set out in part B of Annex XI.

↓ 2009/28/EC (adapted)
⇨ new

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Subject-matter ~~and scope~~

This Directive establishes a common framework for the promotion of energy from renewable sources. It sets ⌦ a binding ⌫ ~~mandatory~~ ~~national~~ ⇨ Union ⇦ target~~s~~ for the overall share of energy from renewable sources in gross final consumption of energy ⇨ in 2030 ⇦ ~~and for the share of energy from renewable sources in transport~~. It ⌦ also ⌫ lays down rules ⌦ on ⌫ ~~relating to statistical transfers between Member States, joint projects~~ ⇨ financial support to electricity produced from renewable sources, self-consumption of renewable electricity, and renewable energy use in the heating and cooling and transport sectors, regional cooperation ⇦ between Member States and with third countries, guarantees of origin, administrative procedures, ⌦ and ⌫ information and training~~, and access to the electricity grid for energy from renewable sources~~. It establishes sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ .

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[1] OJ C 369, 17.12.2011, p. 14.

↓ 2009/28/EC Article 2 (adapted)
⇨ new

Article 2

Definitions

For the purposes of this Directive, the definitions in Directive ~~2003/54/EC~~ 2009/72/EC of the European Parliament and of the Council[1] apply.

The following definitions also apply:

(a)‘energy from renewable sources’ means energy from renewable non-fossil sources, namely wind, solar ⇨ (solar thermal and solar photovoltaic) and ⇦ , ~~aerothermal,~~ geothermal~~,~~ ⇨ energy ⇦ ~~hydrothermal and~~ ⇨ , ambient **energy ~~heat~~**, tide, wave and other ⇦ ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases;

⇩ new

(b)‘ambient **energy ~~heat~~’** means **~~heat~~ thermal** energy at a useful temperature level which **~~is extracted or captured by means of heat pumps that need electricity or other auxiliary energy to function, and which~~** can be stored in the ambient air, beneath the surface of solid earth or in surface water. The reported values shall be established **~~on the basis of the same methodology~~ in Annex VII[2] ~~used~~** for the **~~reporting of heat~~** energy extracted or captured by heat pumps **and for the energy extracted or captured by district heating and cooling**;

[1] Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (OJ L 211, 14.8.2009, p. 55).

[2] **Note: The new section will become available after the adoption of the delegated acts as set out in Article 7(3).**

↓ 2009/28/EC Article 2 (adapted)
⇨ new

~~(b)'aerothermal energy' means energy stored in the form of heat in the ambient air;~~

~~(c)'geothermal energy' means energy stored in the form of heat beneath the surface of solid earth;~~

~~(d)'hydrothermal energy' means energy stored in the form of heat in surface water;~~

(~~e~~c)'biomass' means the biodegradable fraction of products, waste and residues from biological origin from agriculture, ~~(~~including vegetal and animal substances~~)~~, forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of ⇨ waste, including ⇦ industrial and municipal waste ⇨ of biological origin ⇦ ;

(~~f~~d)'gross final consumption of energy' means the energy commodities delivered for energy purposes to industry, transport, households, services including public services, agriculture, forestry and fisheries, including the consumption of electricity and heat by the energy branch for electricity and heat production and including losses of electricity and heat in distribution and transmission;

(~~g~~e)'district heating' or 'district cooling' means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from a central source of production through a network to multiple buildings or sites, for the use of space or process heating or cooling;

(~~h~~f)'bioliquids' means liquid fuel for energy purposes other than for transport, including electricity and heating and cooling, produced from biomass;

(~~i~~g)'biofuels' means liquid ~~or gaseous~~ fuel for transport produced from biomass;

(~~j~~h)'guarantee of origin' means an electronic document which has the sole function of providing proof to a final customer that a given share or quantity of energy was produced from renewable sources ~~as required by Article 3(6) of Directive~~ ~~2003/54/EC~~;

(~~k~~i)‘support scheme’ means any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased. This includes, but is not restricted to, investment aid, tax exemptions or reductions, tax refunds, renewable energy obligation support schemes including those using green certificates, and direct price support schemes including feed-in tariffs and premium payments;

(~~l~~j)‘renewable energy obligation’ means a ~~national~~ support scheme requiring energy producers to include a given proportion of energy from renewable sources in their production, requiring energy suppliers to include a given proportion of energy from renewable sources in their supply, or requiring energy consumers to include a given proportion of energy from renewable sources in their consumption. This includes schemes under which such requirements may be fulfilled by using green certificates;

(~~m~~k)‘actual value’ means the greenhouse gas emission saving for some or all of the steps of a specific biofuel production process calculated in accordance with the methodology laid down in part C of Annex V;

(~~n~~l)‘typical value’ means an estimate of the ~~representative~~ greenhouse gas ⌦ emissions and ⌫ emission saving for a particular biofuel ⇨ , bioliquid or biomass fuel ⇦ production pathway ⌦ , which is representative of the Union consumption ⌫ ;

(~~o~~m)‘default value’ means a value derived from a typical value by the application of pre-determined factors and that may, in circumstances specified in this Directive, be used in place of an actual value;

(~~p~~n)‘waste’ shall be defined as in Article 3(1) of Directive 2008/98/EC ~~of the European Parliament and of the Council~~[1]; substances that have been intentionally modified or contaminated to meet that definition are not covered by this definition;

[1] ~~Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).~~

(~~ep~~o)‘starch-rich crops’ means crops comprising mainly cereals (regardless of whether only the grains are used, or the whole plant, such as in the case of green maize, is used), tubers and root crops (such as potatoes, Jerusalem artichokes, sweet potatoes, cassava and yams), and corm crops (such as taro and cocoyam);

(~~eq~~p)‘ligno-cellulosic material’ means material composed of lignin, cellulose and hemicellulose such as biomass sourced from forests, woody energy crops and forest-based industries' residues and wastes;

(~~er~~q)‘non-food cellulosic material’ means feedstocks mainly composed of cellulose and hemicellulose, and having a lower lignin content than ligno-cellulosic material; it includes food and feed crop residues (such as straw, stover, husks and shells), grassy energy crops with a low starch content (such as ryegrass, switchgrass, miscanthus, giant cane and cover crops before and after main crops), industrial residues (including from food and feed crops after vegetal oils, sugars, starches and protein have been extracted), and material from biowaste;

(~~es~~)‘~~processing~~ residue’ means a substance that is not the end product(s) that a production process directly seeks to produce; it is not a primary aim of the production process and the process has not been deliberately modified to produce it;

(~~et~~s)‘renewable liquid and gaseous transport fuels of non-biological origin’ means liquid or gaseous fuels other than biofuels whose energy content comes from renewable energy sources other than biomass, and which are used in transport;

(~~eu~~t)‘agricultural, aquaculture, fisheries and forestry residues’ means residues that are directly generated by agriculture, aquaculture, fisheries and forestry; they do not include residues from related industries or processing;

(~~ev~~u)‘low indirect land-use change-risk biofuels and bioliquids’ means biofuels and bioliquids, the feedstocks of which were produced within schemes which reduce the displacement of production for purposes other than for making biofuels and bioliquids and which were produced in accordance with the sustainability criteria for biofuels and bioliquids set out in Article ~~17~~ 26;.

⇩ new

(x) 'distribution system operator' means an operator as defined in Article 2(6) of Directive 2009/72/EC;

(y) 'waste heat or cold' means heat or cold which is generated as by-product in industrial**, tertiary sector** or power generation installations and which would be dissipated unused in air or water without access to a district heating or cooling system;

(z) ‘repowering’ means renewing power plants producing renewable energy, including the full or partial replacement of installations or operation systems and equipment, in order to replace capacity or increase efficiency **or capacity of the installation**;

(aa) ‘renewable self-consumer’ means an active customer as defined in Directive [MDI Directive] who consumes and may store and sell renewable electricity which is generated within **the same site where it is consumed or sold ~~his or its premises~~**, including a multi-apartment block, a commercial or shared services site or a closed distribution system, provided that, for non-household renewable self-consumers, those activities do not constitute their primary commercial or professional activity;

(bb) ‘renewable self-consumption’ means the generation and consumption, and, where applicable, storage, of renewable electricity by renewable self-consumers;

(cc) ‘power purchase agreement’ means a contract under which a legal person agrees to purchase renewable electricity directly from an energy generator;

(dd) ‘food and feed crops’ means starch-rich crops, sugars and oil crops produced on agricultural land as a main crop excluding residues, waste or ligno-cellulosic material**. Intermediate crops such as catch crops and cover crops are not considered main crops**;

(ee) ‘advanced biofuels’ means biofuels that are produced from feedstocks listed in part A of Annex IX;

~~(ff) ‘waste-based fossil fuels’ means liquid and gaseous fuels produced from waste streams of non-renewable origin, including waste processing gases and exhaust gases;~~

(gg) ‘fuel supplier’ means the entity supplying fuel to the market responsible for passing fuel or energy through an excise duty point or, where no excise is due, any other relevant entity designated by a Member State;

(hh) 'agricultural biomass' means biomass produced from agriculture;

(ii) 'forest biomass' means biomass produced from forestry;

(jj) 'harvesting permit' means an official document giving the right to harvest the forest biomass;

(kk) 'SME' means a micro, small or medium sized enterprise as defined in Commission Recommendation 2003/361/EC[1];

(ll) 'forest regeneration' means the re-establishment of a forest stand by natural or artificial means following the removal of the previous stand by felling or as a result of natural causes, including fire or storm;

(mm) 'forest holding' means one or more parcels of forest and other wooded land which constitute a single unit from the point of view of management or utilisation;

(nn) 'biowaste' means biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from the food processing industry;

(oo) 'residual energy mix' means the total annual energy mix for a Member State, excluding the share covered by the cancelled guarantees of origin;

(pp) 'biomass fuels' means gaseous and solid fuels produced from biomass;

(qq) 'biogas' means gaseous fuels produced from biomass;

(rr) 'opened tender' means a tender procedure for the installation of renewable energy plants organised by a Member State and opened for bids from projects located in one or several other Member States;

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[1] Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36).

(ss) 'joint tender' means a tender procedure for the installation of renewable energy plants jointly designed and organised by two or more Member States, that is open to projects located in all Member States involved;

(tt) 'opened certificate scheme' means a certificate scheme implemented by a Member State, that is open to installations located in one or several other Member States;

(uu) 'financial instruments' means financial instruments as defined in Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council[1].

(vv) 'sourcing area' means the geographically defined area from which the forest biomass is sourced and processed for the use of the economic operator, from which reliable and independent information is available and where conditions are sufficiently homogeneous to evaluate the risk of the sustainability and legality characteristics of the forest biomass.

↓ 2009/28/EC

~~*Article 3*~~

~~Mandatory national overall targets and measures for the use of energy from renewable sources~~

~~1. Each Member State shall ensure that the share of energy from renewable sources, calculated in accordance with Articles 5 to 11, in gross final consumption of energy in 2020 is at least its national overall target for the share of energy from renewable sources in that year, as set out in the third column of the table in part A of Annex I. Such mandatory national overall targets are consistent with a target of at least a 20 % share of energy from renewable sources in the Community's gross final consumption of energy in 2020. In order to achieve the targets laid down in this Article more easily, each Member State shall promote and encourage energy efficiency and energy saving.~~

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[1] Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298, 26.10.2012, p. 1).

↓ 2015/1513 Art. 2.2(a)

~~For the purpose of compliance with the targets referred to in the first subparagraph of this paragraph, the maximum joint contribution from biofuels and bioliquids produced from cereal and other starch-rich crops, sugars and oil crops and from crops grown as main crops primarily for energy purposes on agricultural land shall be no more than the energy quantity corresponding to the maximum contribution as set out in paragraph 4(d).~~

↓ 2009/28/EC

~~2. Member States shall introduce measures effectively designed to ensure that the share of energy from renewable sources equals or exceeds that shown in the indicative trajectory set out in part B of Annex I.~~

~~3. In order to reach the targets set in paragraphs 1 and 2 of this Article Member States may, inter alia, apply the following measures:~~

~~(a) support schemes;~~

~~(b) measures of cooperation between different Member States and with third countries for achieving their national overall targets in accordance with Articles 5 to 11.~~

~~Without prejudice to Articles 87 and 88 of the Treaty, Member States shall have the right to decide, in accordance with Articles 5 to 11 of this Directive, to which extent they support energy from renewable sources which is produced in a different Member State.~~

~~4. Each Member State shall ensure that the share of energy from renewable sources in all forms of transport in 2020 is at least 10 % of the final consumption of energy in transport in that Member State.~~

~~For the purposes of this paragraph, the following provisions shall apply:~~

↓ 2015/1513 Art. 2.2(b)

~~(a) for the calculation of the denominator, that is the total amount of energy consumed in transport for the purposes of the first subparagraph, only petrol, diesel, biofuels consumed in road and rail transport, and electricity, including electricity used for the production of renewable liquid and gaseous transport fuels of non-biological origin, shall be taken into account;~~

↓ 2009/28/EC

→1 2015/1513 Art. 2.2(b)

~~(b) for the calculation of the numerator, that is the amount of energy from renewable sources consumed in transport for the purposes of the first subparagraph, all types of energy from renewable sources consumed in all forms of transport shall be taken into account.~~ →1 ~~This point shall be without prejudice to point (d) of this paragraph and Article 17(1)(a);~~ ←

↓ 2015/1513 Art. 2.2(b)

~~(c) for the calculation of the contribution from electricity produced from renewable sources and consumed in all types of electric vehicles and for the production of renewable liquid and gaseous transport fuels of non-biological origin for the purpose of points (a) and (b), Member States may choose to use either the average share of electricity from renewable energy sources in the Union or the share of electricity from renewable energy sources in their own country as measured two years before the year in question. Furthermore, for the calculation of the electricity from renewable energy sources consumed by electrified rail transport, that consumption shall be considered to be 2,5 times the energy content of the input of electricity from renewable energy sources. For the calculation of the electricity from renewable energy sources consumed by electric road vehicles in point (b), that consumption shall be considered to be five times the energy content of the input of electricity from renewable energy sources;~~

↓ 2015/1513 Art. 2.2(b)

~~(d) for the calculation of biofuels in the numerator, the share of energy from biofuels produced from cereal and other starch-rich crops, sugars and oil crops and from crops grown as main crops primarily for energy purposes on agricultural land shall be no more than 7 % of the final consumption of energy in transport in the Member States in 2020.~~

~~Biofuels produced from feedstocks listed in Annex IX shall not count towards the limit set out in the first subparagraph of this point.~~

~~Member States may decide that the share of energy from biofuels produced from crops grown as main crops primarily for energy purposes on agricultural land, other than cereal and other starch-rich crops, sugars and oil crops, does not count towards the limit set out in the first subparagraph of this point, provided that:~~

~~(i) verification of compliance with the sustainability criteria set out in Article 17(2) to (5) was carried out in accordance with Article 18; and~~

~~(ii) those crops were grown on land that falls under point 8 of part C of Annex V and the corresponding bonus 'e_B' set out in point 7 of part C of Annex V was included in the calculation of greenhouse gas emissions, for the purposes of showing compliance with Article 17(2).~~

(e) each Member State shall seek to achieve the objective of there being a minimum level of consumption on their territory of biofuels produced from feedstocks and of other fuels, listed in part A of Annex IX. To that effect, by 6 April 2017, each Member State shall set a national target, which it shall endeavour to achieve. A reference value for this target is 0,5 percentage points in energy content of the share of energy from renewable sources in all forms of transport in 2020 referred to in the first subparagraph, to be met with biofuels produced from feedstocks and with other fuels, listed in part A of Annex IX. In addition, biofuels made from feedstocks not listed in Annex IX that were determined to be wastes, residues, non-food cellulosic material or ligno-cellulosic material by the competent national authorities and are used in existing installations prior to the adoption of Directive (EU) 2015/1513 of the European Parliament and of the Council[1], may be counted towards the national target.

Member States may set a national target lower than the reference value of 0,5 percentage points, based on one or more of the following grounds:

(i) objective factors such as the limited potential for the sustainable production of biofuels produced from feedstocks and of other fuels, listed in part A of Annex IX, or the limited availability of such biofuels at cost-efficient prices on the market;

(ii) the specific technical or climatic characteristics of the national market for transport fuels, such as the composition and condition of the road vehicle fleet; or

(iii) national policies allocating commensurate financial resources to incentivising energy efficiency and the use of electricity from renewable energy sources in transport.

When setting their national targets, Member States shall provide available information on the quantities of biofuels consumed from feedstocks and other fuels, listed in part A of Annex IX.

[1] Directive (EU) 2015/1513 of the European Parliament and of the Council of 9 September 2015 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources (OJ L 239, 15.9.2015, p. 1).

When setting policies for the promotion of the production of fuels from feedstocks listed in Annex IX, Member States shall have due regard to the waste hierarchy as established in Article 4 of Directive 2008/98/EC, including its provisions regarding life-cycle thinking on the overall impacts of the generation and management of different waste streams.

The Commission shall publish in accordance with Article 24 of this Directive:

– the national targets of the Member States,

– where available, the Member States' plans for achieving the national targets,

– where applicable, the grounds for differentiation of the national targets of the Member States as compared to the reference value, notified in accordance with Article 4(2) of Directive (EU) 2015/1513; and

– a synthesis report on Member States' achievements towards their national targets;

(f) biofuels produced from feedstocks listed in Annex IX shall be considered to be twice their energy content for the purpose of complying with the target set out in the first subparagraph.

↓ 2015/1513 Art. 2.2(c)

By 31 December 2017, the Commission shall present, if appropriate, a proposal permitting, subject to certain conditions, the whole amount of the electricity originating from renewable sources used to power all types of electric vehicles, and for the production of renewable liquid and gaseous transport fuels of non-biological origin to be considered.

↓ 2009/28/EC

By 31 December 2011, the Commission shall also present, if appropriate, a proposal for a methodology for calculating the contribution of hydrogen originating from renewable sources in the total fuel mix.

↓ 2015/1513 Art. 2.2(d)

~~5. With a view to minimising the risk of single consignments being claimed more than once in the Union, Member States and the Commission shall endeavour to strengthen cooperation among national systems and between national systems and voluntary schemes established pursuant to Article 18, including where appropriate the exchange of data. To prevent materials from being intentionally modified or discarded in order to fall under Annex IX, Member States shall encourage the development and use of systems which track and trace feedstocks and the resulting biofuels over the whole value chain. Member States shall ensure that when fraud is detected, appropriate action is taken. Member States shall by 31 December 2017, and every two years thereafter, report on the measures they have taken if they have not provided equivalent information on reliability and protection against fraud in their reports on progress in the promotion and use of energy from renewable sources drawn up in accordance with Article 22(1)(d).~~

~~The Commission shall be empowered to adopt delegated acts in accordance with Article 25a to amend the list of feedstocks in part A of Annex IX in order to add feedstocks, but not to remove them. The Commission shall adopt a separate delegated act in respect of each feedstock to be added to the list in part A of Annex IX. Each delegated act shall be based on an analysis of the latest scientific and technical progress, taking due account of the principles of the waste hierarchy established in Directive 2008/98/EC, and supporting the conclusion that the feedstock in question does not create an additional demand for land or cause significant distortive effects on markets for (by-)products, wastes or residues, that it delivers substantial greenhouse gas emission savings compared to fossil fuels, and that it does not risk creating negative impacts on the environment and biodiversity.~~

⇩ new

Article 3

Union binding overall target for 2030

1. 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 27%.

2. Member States' respective contributions to this overall 2030 target shall be set and notified to the Commission as part of their Integrated National Energy and Climate Plans in accordance with Articles 3 to 5 and Articles 9 to 11 of Regulation [Governance].

3. From 1 January 2021 onwards, the share of energy from renewable sources in each Member State's gross final consumption of energy shall not be lower than that shown in the third column of the table in part A of Annex I. Member States shall take the necessary measures to ensure compliance with this baseline.

4. The Commission shall support the high ambition of Member States through an enabling framework comprising the enhanced use of Union funds, in particular financial instruments, especially in view of reducing the cost of capital for renewable energy projects.

5. In case the Commission finds in the context of the assessment of the Integrated National Energy and Climate Plans in accordance with Article 25 of Regulation [Governance] that the Union trajectory is not collectively met or that the baseline referred to in paragraph 3 is not maintained, Article 27(4) of that Regulation shall apply.

Article 4

Financial support for electricity from renewable sources [1]

1. Subject to State aid rules, in order to reach the Union target set in Article 3(1), Member States may apply support schemes. Support schemes for electricity from renewable sources shall be designed so as to avoid unnecessary distortions of electricity markets and ensure that producers take into account the supply and demand of electricity as well as possible grid constraints.

2. Support for electricity from renewable sources shall be designed so as to integrate electricity from renewable sources in the electricity market and ensure that renewable energy producers are responding to market price signals and maximise their market revenues.

[1] **Note: The Presidency has taken good note of the positions expressed so far during the discussions and in written positions on Article 4. The Presidency is in the process of developing a compromise text.**

3. Member States shall ensure that support for renewable electricity is granted in an open, transparent, competitive, non-discriminatory and cost-effective manner.

4. Member States shall assess the effectiveness of their support for electricity from renewable sources at least every **~~four~~ five** years. Decisions on the continuation or prolongation of support and design of new support shall be based on the results of the assessments.

Article 5

Opening of support schemes for renewable electricity

1. Member States shall open support for electricity generated from renewable sources to generators located in other Member States under the conditions laid down in this Article.

2. Member States shall ensure that support for at least **[**10%**]** of the newly-supported capacity in each year between 2021 and 2025 and at least **[**15%**]** of the newly-supported capacity in each year between 2026 and 2030 is open to installations located in other Member States.

2bis. Member States may decide to only open support to installations located in Member States to which they are directly interconnected.

3. Support schemes may be opened to cross-border participation through, inter alia, opened tenders, joint tenders, opened certificate schemes or joint support schemes. The allocation of renewable electricity benefiting from support under opened tenders, joint tenders or opened certificate schemes towards Member States respective contributions shall be subject to a cooperation agreement setting out rules for the cross-border disbursement of funding, following the principle that energy should be counted towards the Member State funding the installation.

4. The Commission shall assess by 2025 the **costs and** benefits on the **~~cost-effective~~** deployment of renewable electricity in the Union of provisions set out in this Article. On the basis of this assessment, the Commission may propose to increase **or decrease** the percentages set out in paragraph 2.

Article 6

Stability of financial support

Without prejudice to adaptations necessary to comply with State aid rules, Member States shall ensure that the level of, and the conditions attached to, the support granted to renewable energy projects are not revised in a way that negatively impacts the rights conferred thereunder and the economics of supported projects. [1]

↓ 2009/28/EC

~~*Article 4*~~

~~**National renewable energy action plans**~~

~~1. Each Member State shall adopt a national renewable energy action plan. The national renewable energy action plans shall set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020, taking into account the effects of other policy measures relating to energy efficiency on final consumption of energy, and adequate measures to be taken to achieve those national overall targets, including cooperation between local, regional and national authorities, planned statistical transfers or joint projects, national policies to develop existing biomass resources and mobilise new biomass resources for different uses, and the measures to be taken to fulfil the requirements of Articles 13 to 19.~~

~~By 30 June 2009, the Commission shall adopt a template for the national renewable energy action plans. That template shall comprise the minimum requirements set out in Annex VI. Member States shall comply with that template in the presentation of their national renewable energy action plans.~~

~~2. Member States shall notify their national renewable energy action plans to the Commission by 30 June 2010.~~

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[1] **Note: see text added to recital 18.**

~~3. Each Member State shall publish and notify to the Commission, six months before its national renewable energy action plan is due, a forecast document indicating:~~

~~(a) its estimated excess production of energy from renewable sources compared to the indicative trajectory which could be transferred to other Member States in accordance with Articles 6 to 11, as well as its estimated potential for joint projects, until 2020; and~~

~~(b) its estimated demand for energy from renewable sources to be satisfied by means other than domestic production until 2020.~~

~~That information may include elements relating to cost and benefits and financing. That forecast shall be updated in the reports of the Member States as set out in Article 22(1)(l) and (m).~~

~~4. A Member State whose share of energy from renewable sources fell below the indicative trajectory in the immediately preceding two-year period set out in part B of Annex I, shall submit an amended national renewable energy action plan to the Commission by 30 June of the following year, setting out adequate and proportionate measures to rejoin, within a reasonable timetable, the indicative trajectory in part B of Annex I.~~

~~The Commission may, if the Member State has not met the indicative trajectory by a limited margin, and taking due account of the current and future measures taken by the Member State, adopt a decision to release the Member State from the obligation to submit an amended national renewable energy action plan.~~

~~5. The Commission shall evaluate the national renewable energy action plans, notably the adequacy of the measures envisaged by the Member State in accordance with Article 3(2). In response to a national renewable energy action plan or to an amended national renewable energy action plan, the Commission may issue a recommendation.~~

~~6. The Commission shall send to the European Parliament the national renewable energy action plans and the forecast documents in the form as made public on the transparency platform as referred to in Article 24(2), as well as any recommendation as referred to in paragraph 5 of this Article.~~

↓ 2009/28/EC

⇨ new

Article ~~5~~7

Calculation of the share of energy from renewable sources

1. The gross final consumption of energy from renewable sources in each Member State shall be calculated as the sum of:

(a) gross final consumption of electricity from renewable energy sources;

(b) gross final consumption of energy from renewable sources for heating and cooling; and

(c) final consumption of energy from renewable sources in transport.

Gas, electricity and hydrogen from renewable energy sources shall be considered only once in point (a), (b), or (c) of the first subparagraph, for calculating the share of gross final consumption of energy from renewable sources.

Subject to the second subparagraph of Article ~~17~~26 (1), biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ that do not fulfil the sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria set out in Article 26~~17~~(2) to ~~(6)~~ (7) shall not be taken into account.

⇩ new

For the calculation of a Member State's gross final consumption of energy from renewable energy sources, the contribution from biofuels and bioliquids, as well as from biomass fuels consumed in transport, if produced from food or feed crops, shall be no more than 7% of final consumption of energy in road and rail transport in that Member State. This limit shall be reduced to [3,8%] in 2030 following the trajectory set out in part A of Annex X. Member States may set a lower limit and may distinguish between different types of biofuels, bioliquids and biomass fuels produced from food and feed crops, for instance by setting a lower limit for the contribution from food or feed crop based biofuels produced from oil crops, taking into account indirect land use change.

↓ 2009/28/EC (adapted)
⇨ new

~~2. Where a Member State considers that, due to force majeure, it is impossible for it to meet its share of energy from renewable sources in gross final consumption of energy in 2020 set out in the third column of the table in Annex I, it shall inform the Commission accordingly as soon as possible. The Commission shall adopt a decision on whether force majeure has been demonstrated. In the event that the Commission decides that force majeure has been demonstrated, it shall determine what adjustment shall be made to the Member State's gross final consumption of energy from renewable sources for the year 2020.~~

~~3~~2. For the purposes of paragraph 1(a), gross final consumption of electricity from renewable energy sources shall be calculated as the quantity of electricity produced in a Member State from renewable energy sources, ⇨ including the production of electricity from renewable self-consumers and energy communities and ⇦ excluding the production of electricity in pumped storage units from water that has previously been pumped uphill.

In multi-fuel plants using renewable and conventional sources, only the part of electricity produced from renewable energy sources shall be taken into account. For the purposes of this calculation, the contribution of each energy source shall be calculated on the basis of its energy content.

The electricity generated by hydropower and wind power shall be accounted for in accordance with the normalisation rules set out in Annex II.

~~4~~3. For the purposes of paragraph 1(b), the gross final consumption of energy from renewable sources for heating and cooling shall be calculated as the quantity of district heating and cooling produced in a Member State from renewable sources, plus the consumption of other energy from renewable sources in industry, households, services, agriculture, forestry and fisheries, for heating, cooling and processing purposes.

In multi-fuel plants using renewable and conventional sources, only the part of heating and cooling produced from renewable energy sources shall be taken into account. For the purposes of this calculation, the contribution of each energy source shall be calculated on the basis of its energy content.

⇨ Ambient ⇦ ~~Aerothermal, geothermal and hydrothermal~~ **heat** energy captured by heat pumps shall be taken into account for the purposes of paragraph 1(b) provided that the final energy output significantly exceeds the primary energy input required to drive the heat pumps. The quantity of heat **or cold** to be considered as energy from renewable sources for the purposes of this Directive shall be calculated in accordance with the methodology laid down in Annex VII.

Thermal energy generated by passive energy systems, under which lower energy consumption is achieved passively through building design or from heat generated by energy from non-renewable sources, shall not be taken into account for the purposes of paragraph 1(b).

The Commission is empowered to adopt delegated acts in accordance with Article 32 to establish a methodology for calculating the quantity of renewable energy used for heating and cooling and district heating and cooling and to revise Annex VII on calculation of energy from heat pumps.

⇩ new

4. For the purposes of paragraph 1(c), the following provisions shall apply:

(a) The gross final consumption of energy from renewable sources in transport shall be calculated as the sum of all biofuels, biomass fuels and renewable liquid and gaseous transport fuels of non-biological origin consumed in the transport sector. However, renewable liquid and gaseous transport fuels of non-biological origin that are produced from renewable electricity shall only be considered to be part of the calculation pursuant to paragraph 1(a) when calculating the quantity of electricity produced in a Member State from renewable energy sources.

(b) For the calculation of gross final consumption of energy in transport the values regarding the energy content of transport fuels, as 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 respective ESOs standards for determination of calorific values of fuels. Where no ESOs standard has been adopted for this purpose, the respective ISO standards shall be used.

5. With a view to minimising the risk of single consignments being claimed more than once in the Union, Member States and the Commission shall strengthen cooperation among national systems and between national systems and voluntary schemes established pursuant to Article 27, including where appropriate the exchange of data.

The Commission is empowered to adopt delegated acts in accordance with Article 32 to amend the list of feedstocks in parts A and B of Annex IX in order to add feedstocks, but not to remove them. Each delegated act shall be based on an analysis of the latest scientific and technical progress, taking due account of the principles of the waste hierarchy established in Directive 2008/98/EC, in compliance with the Union sustainability criteria, supporting the conclusion that the feedstock in question does not create an additional demand for land and promoting the use of wastes and residues, while avoiding significant distortive effects on markets for (by-)products, wastes or residues, delivering substantial greenhouse gas emission savings compared to fossil fuels, and not creating risk of negative impacts on the environment and biodiversity.

Every 2 years, the Commission shall carry out an evaluation of the list of feedstocks in parts A and B of Annex IX in order to add feedstocks, in line with the principles set out in this paragraph. The first evaluation shall be carried out no later than 6 months after [date of entry into force of this Directive]. If appropriate, the Commission shall adopt delegated acts to amend the list of feedstocks in parts A and B of Annex IX in order to add feedstocks, but not to remove them.

↓ 2015/1513 Art. 2.3 (adapted)

~~5~~6. The Commission ~~shall be~~ ⌦ is ⌫ empowered to adopt delegated acts in accordance with Article ~~25a~~ 32 concerning the adaptation of the energy content of transport fuels, as set out in Annex III, to scientific and technical progress.

↓ 2009/28/EC (adapted)

~~6~~7. The share of energy from renewable sources shall be calculated as the gross final consumption of energy from renewable sources divided by the gross final consumption of energy from all energy sources, expressed as a percentage.

For the purposes of the first subparagraph, the sum referred to in paragraph 1 shall be adjusted in accordance with Articles ~~6, 8, 10 and 11~~ 8, 10, 12 and 13.

In calculating a Member State's gross final energy consumption for the purpose of measuring its compliance with the targets and indicative trajectory laid down in this Directive, the amount of energy consumed in aviation shall, as a proportion of that Member State's gross final consumption of energy, be considered to be no more than 6,18 %. For Cyprus and Malta the amount of energy consumed in aviation shall, as a proportion of those Member States' gross final consumption of energy, be considered to be no more than 4,12 %.

~~7~~8. The methodology and definitions used in the calculation of the share of energy from renewable sources shall be those of Regulation (EC) No 1099/2008 ~~of the European Parliament and of the Council of 22 October 2008 on energy statistics~~[1].

Member States shall ensure coherence of statistical information used in calculating those sectoral and overall shares and statistical information reported to the Commission under Regulation (EC) No 1099/2008.

Article ~~6~~8

Statistical transfers between Member States

↓ 2015/1513 Art. 2.4 (adapted)
⇨ new

1. Member States may agree on ~~and may make arrangements for~~ the statistical transfer of a specified amount of energy from renewable sources from one Member State to another Member State. The transferred quantity shall be:

(a) deducted from the amount of energy from renewable sources that is taken into account in measuring ⇨ the renewable energy share of ⇦ ~~compliance by~~ the Member State making the transfer ⇨ for the purposes of this Directive ⇦ ~~with the requirements of Article 3(1), (2) and (4)~~; and

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1 ~~OJ L 304, 14.11.2008, p. 1.~~

(b) added to the amount of energy from renewable sources that is taken into account in measuring ~~compliance by another~~ ⇨ the renewable energy share of ⇦ Member State accepting the transfer ~~with the requirements of Article 3(1), (2) and (4)~~ ⇨ for the purposes of this Directive ⇦.

2. The arrangements referred to in paragraph 1 ~~of this Article in respect of Article 3(1), (2) and (4)~~ may have a duration of one or more years. They shall be notified to the Commission not later than ~~three~~ ⇨ 12 ⇦ months after the end of each year in which they have effect. The information sent to the Commission shall include the quantity and price of the energy involved.

🡻 2009/28/EC (adapted)
⇨ new

3. Transfers shall become effective only after all Member States involved in the transfer have notified the transfer to the Commission.

Article ~~7~~9

Joint projects between Member States

1. Two or more Member States may cooperate on all types of joint projects relating to the production of electricity, heating or cooling from renewable energy sources. That cooperation may involve private operators.

2. Member States shall notify the Commission of the proportion or amount of electricity, heating or cooling from renewable energy sources produced by any joint project in their territory, that became operational after 25 June 2009, or by the increased capacity of an installation that was refurbished after that date, which is to be regarded as counting towards the national overall ~~target~~ ⇨ renewable energy share ⇦ of another Member State for the purposes ~~of measuring compliance with the requirements~~ of this Directive.

3. The notification referred to in paragraph 2 shall:

(a) describe the proposed installation or identify the refurbished installation;

(b) specify the proportion or amount of electricity or heating or cooling produced from the installation which is to be regarded as counting towards the national overall ~~target~~ ⇨ renewable energy share ⇦ of another Member State;

(c) identify the Member State in whose favour the notification is being made; and

(d) specify the period, in whole calendar years, during which the electricity or heating or cooling produced by the installation from renewable energy sources is to be regarded as counting towards the national overall ~~target~~ ⇨ renewable energy share ⇦ of the other Member State.

4. ~~The period specified under paragraph 3(d) shall not extend beyond 2020.~~ The duration of a joint project may extend beyond ~~2020~~ ⇨ 2030 ⇦ .

5. A notification made under this Article shall not be varied or withdrawn without the joint agreement of the Member State making the notification and the Member State identified in accordance with paragraph 3(c).

Article ~~8~~10

Effects of joint projects between Member States

1. Within three months of the end of each year falling within the period specified under Article ~~7~~ 9 (3)(d), the Member State that made the notification under Article ~~7~~9 shall issue a letter of notification stating:

(a) the total amount of electricity or heating or cooling produced during the year from renewable energy sources by the installation which was the subject of the notification under Article ~~7~~ 9; and

(b) the amount of electricity or heating or cooling produced during the year from renewable energy sources by that installation which is to count towards the national overall ~~target~~ ⇨ renewable energy share ⇦ of another Member State in accordance with the terms of the notification.

2. The notifying Member State shall send the letter of notification to the Member State in whose favour the notification was made and to the Commission.

3. For the purposes of ~~measuring target compliance with the requirements of~~ this Directive ~~concerning national overall targets~~, the amount of electricity or heating or cooling from renewable energy sources notified in accordance with paragraph 1(b) shall be:

(a) deducted from the amount of electricity or heating or cooling from renewable energy sources that is taken into account, in measuring ~~compliance by~~ ⇨ the renewable energy share of ⇦ the Member State issuing the letter of notification under paragraph 1; and

(b) added to the amount of electricity or heating or cooling from renewable energy sources that is taken into account~~.~~ in measuring ~~compliance by~~ ⇨ the renewable energy share of ⇦ ~~compliance by~~ the Member State receiving the letter of notification in accordance with paragraph 2.

Article ~~9~~ 11

Joint projects between Member States and third countries

1. One or more Member States may cooperate with one or more third countries on all types of joint projects regarding the production of electricity from renewable energy sources. Such cooperation may involve private operators.

2. Electricity from renewable energy sources produced in a third country shall be taken into account only for the purposes of measuring ~~compliance with the requirements of this Directive concerning national overall targets~~ ⇨ Member States' renewable energy shares ⇦ if the following conditions are met:

(a) the electricity is consumed in the ~~Community~~ ⌦ Union. This ⌫ ~~, a~~ requirement ~~that~~ is deemed to be met where:

(i) an equivalent amount of electricity to the electricity accounted for has been firmly nominated to the allocated interconnection capacity by all responsible transmission system operators in the country of origin, the country of destination and, if relevant, each third country of transit;

(ii) an equivalent amount of electricity to the electricity accounted for has been firmly registered in the schedule of balance by the responsible transmission system operator on the ~~Community~~ ⌦ Union ⌫ side of an interconnector; and

(iii) the nominated capacity and the production of electricity from renewable energy sources by the installation referred to in paragraph 2(b) refer to the same period of time;

(b) the electricity is produced by a newly constructed installation that became operational after 25 June 2009 or by the increased capacity of an installation that was refurbished after that date, under a joint project as referred to in paragraph 1; and

(c) the amount of electricity produced and exported has not received support from a support scheme of a third country other than investment aid granted to the installation.

3. Member States may apply to the Commission, for the purposes of Article ~~5~~7, for account to be taken of electricity from renewable energy sources produced and consumed in a third country, in the context of the construction of an interconnector with a very long lead-time between a Member State and a third country if the following conditions are met:

(a) construction of the interconnector started by 31 December ⇨ 2026 ⇦ ~~2016~~;

(b) it is not possible for the interconnector to become operational by 31 December ⇨ 2030 ⇦ ~~2020~~;

(c) it is possible for the interconnector to become operational by 31 December ⇨ 2032 ⇦ ~~2022~~;

(d) after it becomes operational, the interconnector will be used for the export to the ~~Community~~ ⌦ Union ⌫ , in accordance with paragraph 2, of electricity generated from renewable energy sources;

(e) the application relates to a joint project that fulfils the criteria in points (b) and (c) of paragraph 2 and that will use the interconnector after it becomes operational, and to a quantity of electricity that is no greater than the quantity that will be exported to the ~~Community~~ ⌦ Union ⌫ after the interconnector becomes operational.

4. The proportion or amount of electricity produced by any installation in the territory of a third country, which is to be regarded as counting towards the national overall ~~target~~ ⇨ energy share ⇦ of one or more Member States for the purposes of ⇨ this Directive ⇦ ~~measuring compliance with Article 3~~, shall be notified to the Commission. When more than one Member State is concerned, the distribution between Member States of this proportion or amount shall be notified to the Commission. This proportion or amount shall not exceed the proportion or amount actually exported to, and consumed in, the ~~Community~~ ⌦ Union ⌫ , corresponding to the amount referred to in paragraph 2(a)(i) and (ii) of this Article and meeting the conditions as set out in its paragraph (2)(a). The notification shall be made by each Member State towards whose overall national target the proportion or amount of electricity is to count.

5. The notification referred to in paragraph 4 shall:

(a) describe the proposed installation or identify the refurbished installation;

(b) specify the proportion or amount of electricity produced from the installation which is to be regarded as counting towards the national ~~target~~ ⇨ renewable energy share ⇦ of a Member State as well as, subject to confidentiality requirements, the corresponding financial arrangements;

(c) specify the period, in whole calendar years, during which the electricity is to be regarded as counting towards the national overall ~~target~~ ⇨ renewable energy share ⇦ of the Member State; and

(d) include a written acknowledgement of points (b) and (c) by the third country in whose territory the installation is to become operational and the proportion or amount of electricity produced by the installation which will be used domestically by that third country.

6. ~~The period specified under paragraph 5(c) shall not extend beyond 2020.~~ The duration of a joint project may extend beyond ~~2020~~ ⇨ 2030 ⇦ .

7. A notification made under this Article may not be varied or withdrawn without the joint agreement of the Member State making the notification and the third country that has acknowledged the joint project in accordance with paragraph 5(d).

8. Member States and the ~~Community~~ ⌦ Union ⌫ shall encourage the relevant bodies of the Energy Community Treaty to take, in conformity with the Energy Community Treaty, the measures which are necessary so that the Contracting Parties to that Treaty can apply the provisions on cooperation laid down in this Directive between Member States.

Article ~~10~~12

Effects of joint projects between Member States and third countries

1. Within ⇨ 12 ⇦ ~~three~~ months of the end of each year falling within the period specified under Article ~~9~~ 11 (5)(c), the Member State having made the notification under Article ~~9~~ 11 shall issue a letter of notification stating:

(a) the total amount of electricity produced during that year from renewable energy sources by the installation which was the subject of the notification under Article ~~9~~ 11 ;

(b) the amount of electricity produced during the year from renewable energy sources by that installation which is to count towards its national overall ~~target~~ ⇨ renewable energy share ⇦ in accordance with the terms of the notification under Article ~~9~~ 11 ; and

(c) proof of compliance with the conditions set out in Article ~~9~~ 11 (2).

2. The Member State shall send the letter of notification to the third country which has acknowledged the project in accordance with Article ~~9~~ 11 (5)(d) and to the Commission.

3. For the purposes of ~~measuring target compliance with the requirements of this Directive concerning~~ ⇨ calculating the ⇦ national overall ⇨ renewable energy shares under this Directive ⇦ ~~targets~~, the amount of electricity produced from renewable energy sources notified in accordance with paragraph 1(b) shall be added to the amount of energy from renewable sources that is taken into account, in measuring ⇨ the renewable energy shares of ⇦ ~~compliance by~~ the Member State issuing the letter of notification.

Article ~~11~~13

Joint support schemes

1. Without prejudice to the obligations of Member States under Article ~~3~~ 5, two or more Member States may decide, on a voluntary basis, to join or partly coordinate their national support schemes. In such cases, a certain amount of energy from renewable sources produced in the territory of one participating Member State may count towards the national ~~overall target~~ ⇨ renewable energy share ⇦ of another participating Member State if the Member States concerned:

(a) make a statistical transfer of specified amounts of energy from renewable sources from one Member State to another Member State in accordance with Article ~~6~~ 8; or

(b) set up a distribution rule agreed by participating Member States that allocates amounts of energy from renewable sources between the participating Member States. Such a rule shall be notified to the Commission no later than three months after the end of the first year in which it takes effect.

2. Within three months of the end of each year each Member State having made a notification under paragraph 1(b) shall issue a letter of notification stating the total amount of electricity or heating or cooling from renewable energy sources produced during the year which is to be the subject of the distribution rule.

3. For the purposes of ~~measuring compliance with the requirements of this Directive concerning~~ ⇨ calculating the ⇦ national overall ⇨ renewable energy shares under this Directive ⇦ ~~targets~~, the amount of electricity or heating or cooling from renewable energy sources notified in accordance with paragraph 2 shall be reallocated between the concerned Member States in accordance with the notified distribution rule.

Article ~~12~~14

Capacity increases

For the purpose of Article ~~7~~ 9 (2) and Article ~~9~~ 11 (2)(b), units of energy from renewable sources imputable to an increase in the capacity of an installation shall be treated as if they were produced by a separate installation becoming operational at the moment at which the increase of capacity occurred.

🡻 2009/28/EC (adapted)

Article ~~13~~15

Administrative procedures, regulations and codes

1. Member States shall ensure that any national rules concerning the authorisation, certification and licensing procedures that are applied to plants and associated transmission and distribution network infrastructures for the production of electricity, heating or cooling from renewable energy sources, and to the process of transformation of biomass into biofuels or other energy products, are proportionate and necessary.

Member States shall, in particular, take the appropriate steps to ensure that:

~~(a) subject to differences between Member States in their administrative structures and organisation, the respective responsibilities of national, regional and local administrative bodies for authorisation, certification and licensing procedures including spatial planning are clearly coordinated and defined, with transparent timetables for determining planning and building applications;~~

~~(b) comprehensive information on the processing of authorisation, certification and licensing applications for renewable energy installations and on available assistance to applicants are made available at the appropriate level;~~

(a) ~~(c)~~ administrative procedures are streamlined and expedited at the appropriate administrative level;

(b) ~~(d)~~ rules governing authorisation, certification and licensing are objective, transparent, proportionate, do not discriminate between applicants and take fully into account the particularities of individual renewable energy technologies;

(c) ~~(e)~~ administrative charges paid by consumers, planners, architects, builders and equipment and system installers and suppliers are transparent and cost-related; and

(d) ~~(f)~~ simplified and less burdensome authorisation procedures, including through simple notification if allowed by the applicable regulatory framework, are established ~~for smaller projects and~~ for decentralised devices for producing energy from renewable sources~~, where appropriate~~.

2. Member States shall clearly define any technical specifications which must be met by renewable energy equipment and systems in order to benefit from support schemes. Where European standards exist, including eco-labels, energy labels and other technical reference systems established by the European standardisation bodies, such technical specifications shall be expressed in terms of those standards. Such technical specifications shall not prescribe where the equipment and systems are to be certified and should not impede the operation of the internal market.

⇩ new

3. Member States shall ensure that investors have sufficient predictability of the planned support for energy from renewable sources. To this aim, Member States shall define and publish a long-term schedule in relation to expected allocation for support, covering at least the following three years and including for each scheme the indicative timing, the capacity, the budget expected to be allocated, as well as a consultation of stakeholders on the design of the support.

🡻 2009/28/EC Article 13 (adapted)
⇨ new

43. Member States shall ~~recommend to all actors, in particular local and regional administrative bodies to ensure equipment and systems are installed for the use of electricity, heating and cooling from renewable energy sources and for district heating and cooling~~ ⇨ ensure that their competent authorities at national, regional and local level include provisions for the integration and deployment of renewable energy and the use of unavoidable waste heat or cold ⇦ when planning, designing, building and renovating ⇨ urban infrastructure, ⇦ industrial or residential areas ⇨ and energy infrastructure, including electricity, district heating and cooling, natural gas and alternative fuel networks ⇦. ~~Member States shall, in particular, encourage local and regional administrative bodies to include heating and cooling from renewable energy sources in the planning of city infrastructure, where appropriate.~~

54. Member States shall introduce in their building regulations and codes appropriate measures in order to increase the share of all kinds of energy from renewable sources in the building sector.

In establishing such measures or in their ~~regional~~ support schemes, Member States may take into account national measures relating to substantial increases in energy efficiency and relating to cogeneration and to passive, low or zero-energy buildings.

~~By 31 December 2014,~~ Member States shall, in their building regulations and codes or by other means with equivalent effect, ~~where appropriate,~~ require the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation⇨ , reflecting the results of the cost-optimal calculation carried out pursuant to Article 5(2) of Directive 2010/31/EU. ⇦ Member States shall permit those minimum levels to be fulfilled, inter alia, **through district heating and cooling and other energy infrastructure** ~~through district heating and cooling produced~~ using a significant proportion of renewable energy sources.

The requirements of the first subparagraph shall apply to the armed forces, only to the extent that its application does not cause any conflict with the nature and primary aim of the activities of the armed forces and with the exception of material used exclusively for military purposes.

6~~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 an exemplary role in the context of this Directive from 1 January 2012 onwards. Member States may, inter alia, allow that obligation to be fulfilled ~~by complying with standards for zero energy housing, or~~ by providing that the roofs of public or mixed private-public buildings are used by third parties for installations that produce energy from renewable sources.

7~~6~~. With respect to their building regulations and codes, Member States shall promote the use of renewable energy heating and cooling systems and equipment that achieve a significant reduction of energy consumption. Member States shall use energy or eco-labels or other appropriate certificates or standards developed at national or ~~Community~~ ⌦ Union ⌫ level, where these exist, as the basis for encouraging such systems and equipment.

~~In the case of biomass, Member States shall promote conversion technologies that achieve a conversion efficiency of at least 85 % for residential and commercial applications and at least 70 % for industrial applications.~~

~~In the case of heat pumps, Member States shall promote those that fulfil the minimum requirements of eco-labelling established in Commission Decision 2007/742/EC of 9 November 2007 establishing the ecological criteria for the award of the Community eco-label to electrically driven, gas driven or gas absorption heat pumps[1].~~

~~In the case of solar thermal energy, Member States shall promote certified equipment and systems based on European standards where these exist, including eco-labels, energy labels and other technical reference systems established by the European standardisation bodies.~~

~~In assessing the conversion efficiency and input/output ratio of systems and equipment for the purposes of this paragraph, Member States shall use Community or, in their absence, international procedures if such procedures exist.~~

~~1 OJ L 301, 20.11.2007, p. 14.~~

⇩ new

8. Member States shall carry out an assessment of their potential of renewable energy sources and of the use of waste heat and cold for heating and cooling. That assessment shall be included in the second comprehensive assessment required pursuant to Article 14(1) of Directive 2012/27/EU for the first time by 31 December 2020 and in the updates of the comprehensive assessments thereafter.

9. Member States shall remove administrative barriers to corporate long-term power purchase agreements to finance renewables and facilitate their uptake.

Article 16

Organisation and duration of the permit granting process

1. By 1 January 2021 Member States shall set up **or designate one or more ~~single administrative~~** contact points **~~which will~~ that shall** coordinate the entire permit **application and** granting process **~~for applicants.~~ For each application process, an applicant shall only have to contact one contact point. The permit granting process shall cover ~~for~~** permits to build and operate plants and associated transmission and distribution network infrastructures for the production of energy from renewable energy sources.

2. The **~~single administrative~~** contact point shall guide the applicant through the application process in a transparent manner, provide the applicant with all necessary information**~~,~~ and** coordinate and involve, where appropriate, other authorities**~~, and deliver a legally binding decision.~~ At the end of the process, the contact point shall transmit the outcome of the procedure which may include one or several decisions from the relevant authorities.**

3. The **~~single administrative~~** contact point**~~, in collaboration with transmission and distribution system operators,~~** shall **make available ~~publish~~** a manual of procedures for renewable **energy production** project developers, **addressing distinctly also ~~including for~~** small scale projects and renewable self-consumers projects.

4. The permit granting process referred to in paragraph 1 shall not exceed a period of three years, except for the cases set out in Article 16(5) and Article 17.

5. Member States shall facilitate the repowering of existing renewable energy plants by, inter alia, ensuring a simplified and swift permit granting process**, with timeframes that should be significantly shorter than three years.**~~**, which shall not exceed one year from the date on which the request for repowering is submitted to the single administrative contact point.**~~

Article 17

Simple notification procedures

1. **[] Member States shall establish a simple notification procedure whereby** installations **of renewable self-consumers and demonstration projects** with an electricity capacity of less than 50 kW shall be allowed to connect to the grid following a notification to the distribution system operator**, unless the technical requirements of the grid are not met.**

The distribution system operator shall confirm receiving such notification within one month.

2. **Member States shall establish a simple notification procedure whereby an application for r**epowering shall be **submitted to a contact point that is designated or set up for this purpose** ~~**allowed following a notification to the single administrative contact point established**~~ in accordance with Article 16**,** ~~**where no additional singificant negative environmental or social impact is expected.**~~

3. The ~~**single administrative**~~ **contact point** shall ~~**decide**~~ **coordinate with the relevant authorities to determine whether there are significant negative environmental and social impacts to the repowering project and shall transmit the outcome of the consultation** within ~~**six**~~ **three** months of the receipt of the notification **to the project developer [].**

~~**Where the single administrative contact point decides that the notification is sufficient, it shall automatically grant the permit.**~~

Repowering shall be allowed on the conditions stated in the application when the outcome of the consultation process referred to in the previous subparagraph is that the notification itself is deemed sufficient.

Where the ~~**single administrative contact point decides**~~ **outcome of the consultation process is** that the notification is not sufficient, ~~**it shall be necessary to apply for a new permit. In this case**~~ **the simplified procedure within the** time limits referred to in Article 16(5) **shall** apply.

↓ 2009/28/EC (adapted)
⇨ new

Article ~~14~~18

Information and training

1. Member States shall ensure that information on support measures is made available to all relevant actors, such as consumers, builders, installers, architects, and suppliers of heating, cooling and electricity equipment and systems and of vehicles compatible with the use of energy from renewable sources.

2. Member States shall ensure that information on the net benefits, cost and energy efficiency of equipment and systems for the use of heating, cooling and electricity from renewable energy sources is made available either by the supplier of the equipment or system or by the national competent authorities.

3. Member States shall ensure that certification schemes or equivalent qualification schemes ~~become or~~ are available ~~by~~ ~~31 December 2012~~ for installers of small-scale biomass boilers and stoves, solar photovoltaic and solar thermal systems, shallow geothermal systems and heat pumps. Those schemes may take into account existing schemes and structures as appropriate, and shall be based on the criteria laid down in Annex IV. Each Member State shall recognise certification awarded by other Member States in accordance with those criteria.

4. Member States shall make available to the public information on certification schemes or equivalent qualification schemes as referred to in paragraph 3. Member States may also make available the list of installers who are qualified or certified in accordance with the provisions referred to in paragraph 3.

5. Member States shall ensure that guidance is made available to all relevant actors, notably for planners and architects so that they are able properly to consider the optimal combination of renewable energy sources, of high-efficiency technologies and of district heating and cooling when planning, designing, building and renovating industrial, ⇨ commercial ⇦ or residential areas.

6. Member States, with the participation of local and regional authorities, shall develop suitable information, awareness-raising, guidance or training programmes in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources.

↓ 2009/28/EC (adapted)
⇨ new

Article ~~15~~19

Guarantees of origin of electricity, heating and cooling produced from renewable energy sources

1. For the purposes of proving to final customers the share or quantity of energy from renewable sources in an energy supplier's energy mix ⇨ and in the energy supplied to consumers under contracts marketed with reference to the consumption of energy from renewable sources ⇦ ~~in accordance with Article 3(6) of Directive 2003/54/EC~~, Member States shall ensure that the origin of ~~electricity~~ ⌦ energy ⌫ produced from renewable energy sources can be guaranteed as such within the meaning of this Directive, in accordance with objective, transparent and non-discriminatory criteria.

2. To that end, Member States shall ensure that a guarantee of origin is issued in response to a request from a producer of ~~electricity~~ ⌦ energy ⌫ from renewable ~~energy~~ sources. Member States may arrange for guarantees of origin to be issued ⇨ for non-renewable energy sources. ⇦ ~~in response to a request from producers of heating and cooling from renewable energy sources. Such an arrangement~~ ⇨ Issuance of guarantees of origin ⇦ may be made subject to a minimum capacity limit. A guarantee of origin shall be of the standard size of 1 MWh. No more than one guarantee of origin shall be issued in respect of each unit of energy produced.

Member States shall ensure that the same unit of energy from renewable sources is taken into account only once.

Member States ~~may provide~~ ⇨ shall ensure ⇦ that **~~no~~ when** ~~support be granted~~ ⇨ guarantees of origin are issued ⇦ to a producer ~~when~~ that ~~producer~~ receives ⇨ financial support from a support scheme ⇦ ~~a guarantee of origin~~ for the same production of energy from renewable sources**, the market value of the guarantee of origin is taken into account in the relevant support scheme**. **To that end, Member States may decide not to issue a guarantee of origin to the producer but to** ⇨ ~~**Member States shall**~~ issue such guarantees of origin and transfer them to the market by auctioning them. The revenues raised as a result of the auctioning shall be used to offset the costs of renewables support. ⇦

The guarantee of origin shall have no function in terms of a Member State's compliance with Article 3. Transfers of guarantees of origin, separately or together with the physical transfer of energy, shall have no effect on the decision of Member States to use statistical transfers, joint projects or joint support schemes for target compliance or on the calculation of the gross final consumption of energy from renewable sources in accordance with Article ~~5~~ 7.

~~3. Any use of a guarantee of origin shall take place within 12 months of production of the corresponding energy unit. A guarantee of origin shall be cancelled once it has been used.~~

⇩ new

3. For the purposes of paragraph 1, guarantees of origin shall be valid with respect to the calendar year in which the energy unit is produced. Six months after the end of each calendar year, Member States shall ensure that all guarantees of origin from the previous calendar year that have not been cancelled shall expire. Expired guarantees of origin shall be included by Member States in the calculation of the residual energy mix.

4. For the purposes of disclosure referred to in paragraphs 8 and 13, Member States shall ensure that guarantees of origin are cancelled by energy companies by 30 June of the year following the calendar year in relation to which the guarantees of origin are issued.

↓ 2009/28/EC
⇨ new

~~4~~5. Member States or designated competent bodies shall supervise the issuance, transfer and cancellation of guarantees of origin. The designated competent bodies shall have non-overlapping geographical responsibilities, and be independent of production, trade and supply activities.

~~5~~6. Member States or the designated competent bodies shall put in place appropriate mechanisms to ensure that guarantees of origin shall be issued, transferred and cancelled electronically and are accurate, reliable and fraud-resistant. ⇨ Member States and designated competent bodies shall ensure that the requirements they impose are compliant with the standard CEN - EN 16325. ⇦

~~6~~7. A guarantee of origin shall specify at least:

(a) the energy source from which the energy was produced and the start and end dates of production;

(b) whether it relates to:

(i) electricity; or

⇩ new

(ii) gas, or

↓ 2009/28/EC (adapted)

(~~ii~~iii) heating or cooling;

(c) the identity, location, type and capacity of the installation where the energy was produced;

(d) whether ~~and to what extent~~ the installation has benefited from investment support~~,~~ ⌦ and ⌫ whether ~~and to what extent~~ the unit of energy has benefited in any other way from a national support scheme, and the type of support scheme;

(e) the date on which the installation became operational; and

(f) the date and country of issue and a unique identification number.

⇩ new

Simplified information may be specified on guarantees of origin from ~~small scale~~ installations **of less than 50 kW**.

🡻 2009/28/EC (adapted)
⇨ new

8~~7~~. Where an electricity supplier is required to prove the share or quantity of energy from renewable sources in its energy mix for the purposes of Article 3~~(69)~~ of Directive ~~2003/54/EC~~2009/72/EC, it ~~may~~ ⇨ shall ⇦ do so by using ~~its~~ guarantees of origin. ⇨ Likewise, guarantees of origin created pursuant to Article 14(10) of Directive 2012/27/EC shall be used to substantiate any requirement to prove the quantity of electricity produced from high-efficiency cogeneration. Member States shall ensure that transmission losses are fully taken into account when guarantees of origin are used to demonstrate consumption of renewable energy or electricity from high efficiency cogeneration. ⇦

~~8. The amount of energy from renewable sources corresponding to guarantees of origin transferred by an electricity supplier to a third party shall be deducted from the share of energy from renewable sources in its energy mix for the purposes of Article 3(6) of Directive 2003/54/EC.~~

9. Member States shall recognise guarantees of origin issued by other Member States in accordance with this Directive exclusively as proof of the elements referred to in paragraph 1 and paragraph ~~6~~7 (a) to (f). A Member State may refuse to recognise a guarantee of origin only when it has well-founded doubts about its accuracy, reliability or veracity. The Member State shall notify the Commission of such a refusal and its justification.

10. If the Commission finds that a refusal to recognise a guarantee of origin is unfounded, the Commission may adopt a decision requiring the Member State in question to recognise it.

⇩ new

11. Member States shall not recognise guarantees of origins issued by a third country except where the Commission has signed an agreement with that third country on mutual recognition of guarantees of origin issued in the Union and compatible guarantees of origin systems established in that country, where there is direct import or export of energy. The Commission is empowered to adopt delegated acts in accordance with Article 32 to enforce these agreements.

🡻 2009/28/EC (adapted)
⇨ new

~~11~~12. A Member State may introduce, in conformity with ~~Community~~ ⌦ Union ⌫ law, objective, transparent and non-discriminatory criteria for the use of guarantees of origin in complying with the obligations laid down in Article 3(~~6~~9) of Directive ~~2003/54/EC~~ 2009/72/EC.

~~12~~13. Where energy suppliers market energy from renewable sources ⇨ or high-efficiency cogeneration ⇦ to ~~consumers~~ customers with a reference to environmental or other benefits of energy from renewable sources ⇨ or from high-efficiency cogeneration ⇦ , Member States ~~may~~ ⇨ shall ⇦ require those energy suppliers to ~~make available, in summary form, information on~~ ⇨ use guarantees of origin to disclose ⇦ the amount or share of energy from renewable sources ⇨ or from high efficiency cogeneration ⇦ ~~that comes from installations or increased capacity that became operational after 25 June 2009.~~

⇩ new

14. The Commission is empowered to adopt delegated acts in accordance with Article 32 establishing the rules to monitor the functioning of the system set out in this Article.

↓ 2009/28/EC (adapted)
⇨ new

Article ~~16~~20

Access to and operation of the grids

~~1. Member States shall take the appropriate steps to develop transmission and distribution grid infrastructure, intelligent networks, storage facilities and the electricity system, in order to allow the secure operation of the electricity system as it accommodates the further development of electricity production from renewable energy sources, including interconnection between Member States and between Member States and third countries. Member States shall also take appropriate steps to accelerate authorisation procedures for grid infrastructure and to coordinate approval of grid infrastructure with administrative and planning procedures.~~

~~2. Subject to requirements relating to the maintenance of the reliability and safety of the grid, based on transparent and non-discriminatory criteria defined by the competent national authorities:~~

~~(a) Member States shall ensure that transmission system operators and distribution system operators in their territory guarantee the transmission and distribution of electricity produced from renewable energy sources;~~

~~(b) Member States shall also provide for either priority access or guaranteed access to the grid system of electricity produced from renewable energy sources;~~

~~(c) Member States shall ensure that when dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources in so far as the secure operation of the national electricity system permits and based on transparent and non-discriminatory criteria. Member States shall ensure that appropriate grid and market-related operational measures are taken in order to minimise the curtailment of electricity produced from renewable energy sources. If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the national electricity system and security of energy supply, Members States shall ensure that the responsible system operators report to the competent regulatory authority on those measures and indicate which corrective measures they intend to take in order to prevent inappropriate curtailments.~~

~~3. Member States shall require transmission system operators and distribution system operators to set up and make public their standard rules relating to the bearing and sharing of costs of technical adaptations, such as grid connections and grid reinforcements, improved operation of the grid and rules on the non-discriminatory implementation of the grid codes, which are necessary in order to integrate new producers feeding electricity produced from renewable energy sources into the interconnected grid.~~

~~Those rules shall be based on objective, transparent and non-discriminatory criteria taking particular account of all the costs and benefits associated with the connection of those producers to the grid and of the particular circumstances of producers located in peripheral regions and in regions of low population density. Those rules may provide for different types of connection.~~

~~4. Where appropriate, Member States may require transmission system operators and distribution system operators to bear, in full or in part, the costs referred to in paragraph 3. Member States shall review and take the necessary measures to improve the frameworks and rules for the bearing and sharing of costs referred to in paragraph 3 by 30 June 2011 and every two years thereafter to ensure the integration of new producers as referred to in that paragraph.~~

~~5. Member States shall require transmission system operators and distribution system operators to provide any new producer of energy from renewable sources wishing to be connected to the system with the comprehensive and necessary information required, including:~~

~~(a) a comprehensive and detailed estimate of the costs associated with the connection;~~

~~(b) a reasonable and precise timetable for receiving and processing the request for grid connection;~~

~~(c) a reasonable indicative timetable for any proposed grid connection.~~

~~Member States may allow producers of electricity from renewable energy sources wishing to be connected to the grid to issue a call for tender for the connection work.~~

~~6. The sharing of costs referred in paragraph 3 shall be enforced by a mechanism based on objective, transparent and non-discriminatory criteria taking into account the benefits which initially and subsequently connected producers as well as transmission system operators and distribution system operators derive from the connections.~~

~~7. Member States shall ensure that the charging of transmission and distribution tariffs does not discriminate against electricity from renewable energy sources, including in particular electricity from renewable energy sources produced in peripheral regions, such as island regions, and in regions of low population density. Member States shall ensure that the charging of transmission and distribution tariffs does not discriminate against gas from renewable energy sources.~~

~~8. Member States shall ensure that tariffs charged by transmission system operators and distribution system operators for the transmission and distribution of electricity from plants using renewable energy sources reflect realisable cost benefits resulting from the plant's connection to the network. Such cost benefits could arise from the direct use of the low-voltage grid.~~

~~9~~1. Where relevant, Member States shall assess the need to extend existing gas network infrastructure to facilitate the integration of gas from renewable energy sources.

~~10~~2. Where relevant, Member States shall require transmission system operators and distribution system operators in their territory to publish technical rules in line with Article 6 of Directive 2003/55/EC of the European Parliament and of the Council ~~of 26 June 2003 concerning the common rules for the internal market in natural gas~~[1], in particular regarding network connection rules that include gas quality, gas odoration and gas pressure requirements. Member States shall also require transmission and distribution system operators to publish the connection tariffs to connect renewable gas sources based on transparent and non-discriminatory criteria.

~~11~~3 ~~Member States in their national renewable energy action plans shall assess the necessity to build new infrastructure for district heating and cooling produced from renewable energy sources in order to achieve the 2020 national target referred to in Article 3(1).~~ Subject to ~~that~~ ⌦ their ⌫ assessment, ⇨ included in the integrated national energy and climate plans in accordance with Annex I of Regulation [Governance], on the necessity to build new infrastructure for district heating and cooling produced from renewable energy sources in order to achieve the Union target referred to in Article 3(1) of this Directive, ⇦ Member States shall, where relevant, take steps with a view to developing a district heating infrastructure to accommodate the development of heating and cooling production from large biomass, solar and geothermal facilities.

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[1] Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC (OJ L 176, 15.7.2003, p. 57).

⇩ new

Article 21

Renewable self-consumers

1. Member States shall ensure that renewable self-consumers **[]:**

(a) are entitled to carry out **generation of renewable energy for their own consumption ~~self-consumption~~** and sell, including through power purchase agreements**, aggregators and electricity suppliers**, their excess production of renewable electricity without being subject to disproportionate procedures and charges that are not cost-reflective[1];

(b) maintain their rights as consumers;

(c) are not considered as energy suppliers according to Union or national legislation in relation to the **excess** renewable electricity they feed into the grid **at least until it exceeds ~~not exceeding~~** 10 MWh for households and 500 MWh for legal persons on an annual basis; and

(d) **are ~~receive a~~** remunerat**ed ~~ion~~ appropriately** for the self-generated renewable electricity they feed into the grid**, ~~which~~ reflectings** the market value of the electricity fed in **and the relevant support schemes in place**.

Member States may set a higher threshold than the one set out in point (c).

2. Member States shall ensure that renewable self-consumers living in the same multi-apartment block, or located in the same commercial, or shared services, site or closed distribution system, are allowed to jointly engage in self-consumption as if they were an individual renewable self-consumer. In this case, the threshold set out in paragraph 1(c) shall apply to each renewable self-consumer concerned.

3. The renewable self-consumer's installation may be managed by a third party for installation, operation, including metering, and maintenance.

[1] **Note: see added text in recital 53 on proportionality of charges and the proposal for Electricity Regulation Art. 16 about network tariffs (no changes).**

Article 22

Renewable energy communities

1. Member States shall ensure that renewable energy communities are entitled to generate, consume, store and sell renewable energy, including through power purchase agreements, without being subject to disproportionate procedures and charges that are not cost-reflective.

For the purposes of this Directive, a renewable energy community shall be **[**an SME or a not-for-profit organisation, the shareholders or members of which cooperate in the generation, distribution, storage or supply of energy from renewable sources, fulfilling at least four out of the following criteria:

(a) shareholders or members are natural persons, local authorities, including municipalities, or SMEs operating in the fields or renewable energy;

(b) at least 51% of the shareholders or members with voting rights of the entity are natural persons;

(c) at least 51% of the shares or participation rights of the entity are owned by local members, i.e. representatives of local public and local private socio-economic interests or citizen having a direct interest in the community activity and its impacts;

(d) at least 51% of the seats in the board of directors or managing bodies of the entity are reserved to local members, i.e. representatives of local public and local private socio-economic interests or citizens having a direct interest in the community activity and its impacts;

(e) the community has not installed more than 18 MW of renewable capacity for electricity, heating and cooling and transport as a yearly average in the previous 5 year.**]** [1]

2. Without prejudice to State aid rules, when designing support schemes, Member States shall take into account the specificities of renewable energy communities.

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[1] **Note: the Presidency invites delegations to provide specific comments and suggestions for the part of the text between [], if necessary, as regards the conditions that renewable energy communities should comply with.**

Article 23

Mainstreaming renewable energy in the heating and cooling installations

1. In order to facilitate the penetration of renewable energy in the heating and cooling sector, each Member State shall endeavour to increase the share of renewable energy supplied for heating and cooling by at least 1 percentage point (pp) every year **starting from the level achieved in 2020**, expressed in terms of national share of final energy consumption and calculated according to the methodology set out in Article 7.

Member States with a share of renewable energy in heating and cooling above [60%][1] may count any such share as fulfilling the yearly increase referred to in the first subparagraph.

2. Member States may designate and make public, on the basis of objective and non-discriminatory criteria, a list of measures and the implementing entities, such as fuel suppliers, **public or professional bodies,** which shall contribute to the increase set out in paragraph 1.

3. The increase set out in paragraph 1 may be implemented through**, *inter alia*,** one or more of the following options:

(a) physical incorporation of renewable energy in the energy and energy fuel supplied for heating and cooling;

(b) direct mitigation measures such as installation of highly efficient renewable heating and cooling systems in buildings or renewable energy use for industrial heating and cooling processes;

(c) indirect mitigation measures covered by tradable certificates proving compliance with the obligation through support to indirect mitigation measures, carried out by another economic operator such as an independent renewable technology installer or energy service company - ESCO providing renewable installation services.

(d) other policy measures, including fiscal measures or other financial incentives.

[1] **Note: see added text in recital 57**

4. Member States may use the established structures under the national energy efficiency obligation schemes set out in Article 7 of Directive 2012/27/EU to implement and monitor the measures referred to in paragraph 2.

5. The entities designated under paragraph 2 shall ensure that their contribution is measurable and verifiable and shall report annually starting from 30 June 2021, to the authority designated by the Member State, on:

(a) the total amount of energy supplied for heating and cooling;

(b) the total amount of renewable energy supplied for heating and cooling;

(c) the share of renewable energy in the total amount of energy supplied for heating and cooling; and

(d) the type of renewable energy source.

6. Member States shall ensure that the reports referred to in paragraph 5 are subject to verification by the competent designated authority.

Article 24

District Heating and Cooling

1. Member States shall ensure that district heating and cooling suppliers provide information to end-consumers on their energy performance and the share of renewable energy in their systems. Such information shall be in accordance with standards used under Directive 2010/31/EU.

2. Member States shall lay down the necessary measures to allow customers of those district heating or cooling systems which are not 'efficient district heating and cooling' within the meaning of Article 2(41) of Directive 2012/27/EU to disconnect from the system in order to produce heating or cooling from renewable energy sources themselves, or to switch to another supplier of heat or cold which has access to the system referred to in paragraph 4.

3. Member States may restrict the right to disconnect or switch supplier to customers who can prove that the planned alternative supply solution for heating or cooling results in a significantly better energy performance. The performance assessment of the alternative supply solution may be based on the Energy Performance Certificate as defined in Directive 2010/31/EU.

4. Member States shall lay down the necessary measures to ensure non-discriminatory access to district heating or cooling systems for heat or cold produced from renewable energy sources and for waste heat or cold. This non-discriminatory access shall enable **~~direct~~** supply of heating or cooling from such sources to customers connected to the district heating or cooling system by suppliers other than the operator of the district heating or cooling system.

5. An operator of a district heating or cooling system may refuse access to suppliers where the system lacks the necessary capacity due to other supplies of waste heat or cold, of heat or cold from renewable energy sources or of heat or cold produced by high-efficiency cogeneration. Member States shall ensure that where such a refusal takes place the operator of the district heating or cooling system provides relevant information to the competent authority according to paragraph 9 on measures that would be necessary to reinforce the system.

6. New district heating or cooling systems may, upon request, be exempted from the application of paragraph 4 for a defined period of time. The competent authority shall decide on such exemption requests on a case-by-case basis. An exemption shall only be granted if the new district heating or cooling system constitutes 'efficient district heating and cooling' within the meaning of Article 2(41) of Directive 2012/27/EU and if it exploits the potential for the use of renewable energy sources and of waste heat or cold identified in the comprehensive assessment made in accordance with Article 14 of Directive 2012/27/EU.

7. The right to disconnect or switch supplier may be exercised by individual customers, by joint undertakings formed by customers or by parties acting on the behalf of customers. For multi-apartment blocks, such disconnection may only be exercised at whole building level.

8. Member States shall require electricity distribution system operators to assess at least **every four years** **~~biennially~~**, in cooperation with the operators of district heating or cooling systems in their respective area, the potential of district heating or cooling systems to provide balancing and other system services, including demand response and storing of excess electricity produced from renewable sources and if the use of the identified potential would be more resource- and cost-efficient than alternative solutions.

9. Member States shall designate one or more independent authorities to ensure that the rights of consumers and the rules for operating district heating and cooling systems in accordance with this Article are clearly defined and enforced.

Article 25

Mainstreaming renewable energy in the transport sector

1. With effect from 1 January 2021, Member States shall require fuel suppliers to include a minimum share of energy from advanced biofuels and other biofuels and biogas produced from feedstock listed in Annex IX, from renewable liquid and gaseous transport fuels of non-biological origin**~~, from waste-based fossil fuels~~** and from renewable electricity in the total amount of transport fuels they supply for consumption or use on the market in the course of a calendar year.

The minimum share shall be at least equal to 1.5% in 2021, increasing up to at least **[**6.8%**][Note: to be adjusted upwards based on the inclusion of an electricity multiplier factor]** in 2030, following the trajectory set out in part B of Annex X. Within this total share, the contribution of **~~advanced~~** biofuels and biogas produced from feedstock listed in **~~part A of~~** Annex IX shall be at least **~~0~~ 1**.5% of the transport fuels supplied for consumption or use on the market as of 1 January 2021, increasing up to at least **~~3.6~~ 5.3**% by 2030, following the trajectory set out in part C of Annex X.

The greenhouse gas emission savings from the use of advanced biofuels and other biofuels and biogas produced from feedstock listed in Annex IX shall be at least 70% as of 1 January 2021.

For the calculation of the shares referred to in the second sub-paragraph, 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**~~, waste-based fossil fuels~~** and electricity, shall be taken into account;

b) for the calculation of the numerator, the energy content of advanced biofuels and other biofuels and biogas produced from feedstock listed in Annex IX, renewable liquid and gaseous transport fuels of non-biological origin**~~, waste-based fossil fuels~~** supplied to all transport sectors, and renewable electricity supplied to road vehicles, shall be taken into account.

For the calculation of the numerator, **Member States shall limit** the contribution from biofuels and biogas produced from feedstock included in part B of Annex IX**. The limit shall reflect the availability of feedstock included in part B of Annex IX and ensure that an increasing portion of the share referred to in the second subparagraph is represented by advanced biofuels and biogas. In 2021, the share of advanced biofuels and biogas shall be at least equal to 0.5%.** ~~**shall be limited to 1.7% of the energy content of transport fuels supplied for consumption or use on the market and t**~~The contribution of fuels supplied in the aviation and maritime sector shall be considered to be 1.2 times their energy content. **[The contribution of renewable electricity supplied to road vehicles shall be considered to be 2.5 times its energy content.]**

c) For the calculation of both numerator and denominator, the values regarding the energy content of transport fuels, as 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 respective ESOs standards for determination of calorific values of fuels. Where no ESOs standard has been adopted for this purpose, the respective ISO standards shall be used.

2. For the purpose of paragraph 1, Member States shall set up a system allowing fuel suppliers to transfer the obligation set out in paragraph 1 to other fuel suppliers **within the Member State concerned** ~~**and ensure that all transfers are documented in the national databases referred to in paragraph 4**~~.

3. To determine the share of renewable electricity for the purposes of paragraph 1 either the average share of electricity from renewable energy sources in the Union or the share of electricity from renewable energy sources in the Member State where the electricity is supplied, as measured two years before the year in question may be used. ~~**In both cases, an equivalent amount of guarantees of origin issued in accordance with Article 19 shall be cancelled.**~~

The share of renewable energy in liquid and gaseous transport fuels shall be determined on the basis of the share of renewable energy in the total energy input used for the production of the fuel.

For the purposes of this paragraph, the following provisions shall apply:

(a) When 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, either the average share of electricity from renewable energy sources in the Union or the share of electricity from renewable energy sources in the country of production, as measured two years before the year in question, may be used to determine the share of renewable energy. **~~In both cases, an equivalent amount of guarantees of origin issued in accordance with Article 19 shall be cancelled.~~**

However, electricity obtained from direct connection to an installation generating renewable electricity (i) that comes into operation after or at the same time as the installation producing the renewable liquid and gaseous transport fuel of non-biological origin and (ii) is not connected to the grid, can be fully counted as renewable electricity for the production of that renewable liquid and gaseous transport fuel of non-biological origin.

(b) When biomass is processed with fossil fuels in a common process, the amount of biofuel in the product shall be established applying adequate conversion factors to the biomass input. In case the process yields more than one product, all products stemming from the process shall be assumed to contain the same share of biofuel. The same rules shall apply for the purposes of Article 27(1).

4. **The Commission** **~~Member States~~** shall **ensure that** **~~put in place~~** a database **is put in place** enabling tracing of transport fuels that are eligible for counting towards the numerator set out in paragraph 1(b), and **Member States shall** require the relevant economic operators to enter information on the transactions made and the sustainability characteristics of the eligible fuels, including their life cycle greenhouse gas emissions, starting from their point of production to the fuel supplier that places the fuel on the market.

The fuel suppliers shall enter the information necessary to verify compliance with the requirements set out in paragraph 1, first subparagraph. **~~The database shall include information on the requirement placed on fuel suppliers described in paragraph 1 and how the requirement is fulfilled.~~**

~~The national databases shall be interlinked so as to allow transactions of fuels between Member States to be traced. In order to ensure the compatibility of national databases,~~

~~**5. Member States shall report on the aggregated information from the national databases, including fuels' life cycle greenhouse gas emissions, in accordance with Annex VII of Regulation [Governance].**~~

5. Member States shall have access to the database and take measures to ensure that within each Member States economic operators enter the correct information. The Commission shall require the schemes that are the subject of a decision pursuant to paragraph 4 of Article 27 to verify compliance with this requirement when checking compliance with the sustainability criteria for biofuels, bioliquids and biomass fuels.

The Commission shall set out detailed rules for economic operators to comply with the requirement set out in paragraph 4 and this paragraph, including independent auditing, by means of implementing acts adopted in accordance with the examination procedure referred to in Article 31.

6. The Commission is empowered to adopt delegated acts in accordance with Article 32 to further specify the methodology referred to in paragraph 3(b) of this Article to determine the share of biofuel resulting from biomass being processed with fossil fuels in a common process, to specify the methodology for assessing greenhouse gas emission savings from renewable liquid and gaseous transport fuels of non-biological origin ~~**and waste-based fossil fuels**~~ and to determine minimum greenhouse gas emission savings required for these fuels for the purpose of paragraph 1 of this Article.

7. By 31 December 2025, in the context of the biennial assessment of progress made pursuant to Regulation [Governance], the Commission shall assess whether the obligation laid down in paragraph 1 effectively stimulates innovation and promotes greenhouse gas savings in the transport sector, and whether the applicable greenhouse gas savings requirements for biofuels and biogas are appropriate. The Commission shall, if appropriate, present a proposal to modify the obligation laid down in paragraph 1.

↓ 2009/28/EC (adapted) ⇨ new

Article ~~17~~26

Sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦

1. ~~Irrespective of whether the raw materials were cultivated inside or outside the territory of the Community, e~~Energy from biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ shall be taken into account for the purposes referred to in points (a), (b) and (c) ⌦ of this paragraph ⌫ only if they fulfil the sustainability criteria set out in paragraphs 2 to 6 ⇨ and the greenhouse gas emissions saving criteria set out in paragraph 7 ⇦ :

(a) ~~measuring compliance with the requirements of this Directive concerning national targets;~~ ⇨ contributing towards the Union target and Member States renewable energy share ⇦;

(b) measuring compliance with renewable energy obligations ⇨ , including the obligations set out in Articles ~~23 and~~ 25 ⇦ ;

(c) eligibility for financial support for the consumption of biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ .

However, biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ produced from waste and residues, other than agricultural, aquaculture, fisheries and forestry residues, need only fulfil the ~~sustainability~~ ⇨ greenhouse gas emissions saving ⇦ criteria set out in paragraph ~~2~~7 in order to be taken into account for the purposes referred to in points (a), (b) and (c) ⌦ of this paragraph ⌫. ⇨ This provision shall also apply to waste and residues that are first processed into a product before being further processed into biofuels, bioliquids and biomass fuels. ⇦

⇩ new

Biomass fuels shall have to fulfil the sustainability and greenhouse gas emissions saving criteria set out in paragraphs 2 to 7 only if used in installations producing electricity, heating and cooling or fuels with a fuel capacity equal to or exceeding 20 MW in case of solid biomass fuels and with a~~n~~ **~~electrical~~ fuel** capacity equal to or exceeding **~~0.5~~ 2** MW in case of gaseous biomass fuels. **~~Member States may apply the sustainability and greenhouse gas emission saving criteria to installations with lower fuel capacity.~~**

The sustainability criteria set out in paragraphs 2 to 6 and the greenhouse gas emissions saving criteria set out in paragraph 7 shall apply irrespectively of the geographical origin of the biomass.

🡻 2009/28/EC Article 17 (adapted)
⇨ new

~~3~~2. Biofuels, ~~and~~ bioliquids ⇨ and biomass fuels produced from agricultural biomass ⇦ taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall not be made from raw material obtained from land with high biodiversity value, namely land that had one of the following statuses in or after January 2008, whether or not the land continues to have that status:

(a) primary forest and other wooded land, namely forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed;

(b) 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~~second~~ subparagraph of Article ~~18~~27(4);

unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes;

(c) highly biodiverse grassland ⇨ spanning more than one hectare ⇦ that is:

(i) natural, namely grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes; or

(ii) non-natural, namely grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded ⇨ and has been identified as being highly biodiverse by the relevant competent authority, ⇦ unless evidence is provided that the harvesting of the raw material is necessary to preserve its ~~grassland~~ status ⌦ as highly biodiverse grassland ⌫ .

⇩ new

The Commission may establish the criteria to determine which grassland shall be covered by point (c) by means of implementing acts adopted in accordance with the examination procedure referred to in Article 31(2).

🡻 2009/28/EC Article 17 (adapted)
⇨ new

~~4.~~3. Biofuels ~~and~~, bioliquids ⇨ and biomass fuels produced from agricultural biomass ⇦ taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall not be made from raw material obtained from land with high carbon stock, namely land that had one of the following statuses in January 2008 and no longer has that status:

(a) wetlands, namely land that is covered with or saturated by water permanently or for a significant part of the year;

(b) continuously forested areas, namely land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30 %, or trees able to reach those thresholds in situ;

(c) land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10 % and 30 %, or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in part C of Annex V is applied, the conditions laid down in paragraph 7~~2~~ of this Article would be fulfilled.

The provisions of this paragraph shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008.

~~5~~4. Biofuels, ~~and~~ bioliquids ⇨ and biomass fuels produced from agricultural biomass ⇦ taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall not be made from raw material obtained from land that was peatland in January 2008~~, unless evidence is provided that the cultivation and harvesting of that raw material does not involve drainage of previously undrained soil~~.

⇩ new

5. Biofuels, bioliquids and biomass fuels produced from forest biomass taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall meet the following requirements to minimise the risk of using unsustainable forest biomass production:

(a) the country in which forest biomass was harvested has national and/or sub-national laws applicable in the area of harvest as well as monitoring and enforcement systems in place ensuring that:

i) harvesting is carried out in accordance to the conditions of the harvesting permit **or equivalent procedure** within legally gazetted boundaries;

ii) forest regeneration of harvested areas takes place;

iii) areas **designated for nature protection purposes** ~~**of high conservation value**~~, including wetlands and peatlands, **unless evidence is provided that the protection of that raw material did not interfere with those nature protection purposes,** are protected;

iv) the impacts of forest harvesting on soil quality and biodiversity are minimised; and

v) harvesting does not exceed the long-term production capacity of the forest;

(b) when evidence referred to in the first subparagraph is not available, the biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 if management systems are in place at forest **sourcing area** ~~**holding**~~ level to ensure that:

i) the forest biomass has been harvested according to a legal permit **or equivalent procedure**;

ii) forest regeneration of harvested areas takes place;

iii) areas **designated for nature protection purposes** ~~**of high conservation value**~~, including wetlands and peatlands, **unless evidence is provided that the protection of that raw material did not interfere with those nature protection purposes,** are protected;

(iv) impacts of forest harvesting on soil quality and biodiversity are minimised;

(v) harvesting does not exceed the long-term production capacity of the forest.

6. Biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 **only** if the country or regional economic integration organisation of origin of the forest biomass meets the following LULUCF requirements:

(i) is a Party to, and has ratified, the Paris agreement;

(ii) has submitted a Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC), covering emissions and removals from agriculture, forestry and land use which ensures that either changes in carbon stock associated with biomass harvest are accounted towards the country's commitment to reduce or limit greenhouse gas emissions as specified in the NDC, or there are national or sub-national laws in place, in accordance with Article 5 of the Paris Agreement, applicable in the area of harvest, to conserve and enhance carbon stocks and sinks;

iii) has a national system in place for reporting greenhouse gas emissions and removals from land use including forestry and agriculture, which is in accordance with the requirements set out in decisions adopted under the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement;

When evidence referred to in the first subparagraph is not available, the biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 if management systems are in place at forest **sourcing area** ~~**holding**~~ level to ensure that carbon stocks and sinks levels in the forest are maintained **over the long term**.

The Commission may establish the operational evidence for demonstrating compliance with the requirements set out in paragraphs 5 and 6, by means of implementing acts adopted in accordance with the examination procedure referred to in Article 31(2).

By 31 December **2026** ~~**3**~~, the Commission shall assess whether the criteria set out in paragraphs 5 and 6 effectively minimise the risk of using unsustainable forest biomass and address LULUCF requirements, on the basis of available data. The Commission shall, if appropriate, present a proposal to modify the requirements laid down in paragraphs 5 and 6.

↓ 2009/28/EC

~~6. Agricultural raw materials cultivated in the Community and used for the production of biofuels and bioliquids taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall be obtained in accordance with the requirements and standards under the provisions referred to under the heading 'Environment' in part A and in point 9 of Annex II to Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers[1] and in accordance with the minimum requirements for good agricultural and environmental condition defined pursuant to Article 6(1) of that Regulation.~~

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[1] ~~OJ L 30, 31.1.2009, p. 16.~~

⇩ new

7. The greenhouse gas emission saving from the use of biofuels, bioliquids and biomass fuels taken into account for the purposes referred to in paragraph 1 shall be:

(a) at least 50 % for biofuels**, biogas consumed in transport** and bioliquids produced in installations in operation on or before 5 October 2015;

(b) at least 60 % for biofuels**, biogas consumed in transport** and bioliquids produced in installations starting operation from 5 October 2015;

(c) at least 70 % for biofuels**, biogas consumed in transport** and bioliquids produced in installations starting operation after 1 January 2021;

(d) at least **8 7**0 % for electricity, heating and cooling production from biomass fuels used in installations starting operation after 1 January 2021 and **8 7**5% for installations starting operation after 1 January 2026.

An installation shall be considered to be in operation once the physical production of biofuels or bioliquids and of heating and cooling, and electricity for biomass fuels has started.

🡻 2015/1513 Art. 2.5(a)
⇨ new

~~2. The greenhouse gas emission saving from the use of biofuels and bioliquids taken into account for the purposes referred to in paragraph 1 shall be at least 60 % for biofuels and bioliquids produced in installations starting operation after 5 October 2015. An installation shall be considered to be in operation if the physical production of biofuels or bioliquids has taken place.~~

~~In the case of installations that were in operation on or before 5 October 2015, for the purposes referred to in paragraph 1, biofuels and bioliquids shall achieve a greenhouse gas emission saving of at least 35 % until 31 December 2017 and at least 50 % from 1 January 2018.~~

The greenhouse gas emission saving from the use of biofuels, ~~and~~ bioliquids ⇨ and biomass fuels used in installations producing heating, cooling and electricity ⇦ shall be calculated in accordance with Article ~~19~~ 28(1).

⇩ new

8. Electricity from biomass fuels produced in installations with a fuel capacity equal to or exceeding 20 MW shall be taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 only if it is produced applying high efficient cogeneration technology as defined under Article 2(34) of Directive 2012/27/EU. For the purposes of points (a) and (b) of paragraph 1, this provision shall only apply to installations starting operation after [3 years from date of adoption of this Directive]. For the purposes of point (c) of paragraph 1, this provision is without prejudice to public support provided under schemes approved by [3 years after date of adoption of this Directive].

The first sub-paragraph shall not apply to electricity from installations which are the object of a specific notification by a Member State to the Commission based on the duly substantiated existence of risks for the security of supply of electricity. Upon assessement of the notification, the Commission shall adopt a decision taking into account the elements included therein.

⇩ 2009/28/EC (adapted)
⇨ new

~~7. The Commission shall, every two years, report to the European Parliament and the Council, in respect of both third countries and Member States that are a significant source of biofuels or of raw material for biofuels consumed within the Community, on national measures taken to respect the sustainability criteria set out in paragraphs 2 to 5 and for soil, water and air protection. The first report shall be submitted in 2012.~~

~~The Commission shall, every two years, report to the European Parliament and the Council on the impact on social sustainability in the Community and in third countries of increased demand for biofuel, on the impact of Community biofuel policy on the availability of foodstuffs at affordable prices, in particular for people living in developing countries, and wider development issues. Reports shall address the respect of land-use rights. They shall state, both for third countries and Member States that are a significant source of raw material for biofuel consumed within the Community, whether the country has ratified and implemented each of the following Conventions of the International Labour Organisation:~~

– Convention concerning Forced or Compulsory Labour (No 29),

– Convention concerning Freedom of Association and Protection of the Right to Organise (No 87),

– Convention concerning Equal Remuneration of Men and Women Workers for Work of Equal Value (No 100),

– Convention concerning Discrimination in Respect of Employment and Occupation (No 111),

– Convention concerning Minimum Age for Admission to Employment (No 138),

– Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour (No 182).

Those reports shall state, both for third countries and Member States that are a significant source of raw material for biofuel consumed within the Community, whether the country has ratified and implemented:

– the Cartagena Protocol on Biosafety,

– the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The first report shall be submitted in 2012. The Commission shall, if appropriate, propose corrective action, in particular if evidence shows that biofuel production has a significant impact on food prices.

9. The Commission shall report on requirements for a sustainability scheme for energy uses of biomass, other than biofuels and bioliquids, by 31 December 2009. That report shall be accompanied, where appropriate, by proposals for a sustainability scheme for other energy uses of biomass, to the European Parliament and the Council. That report and any proposals contained therein shall be based on the best available scientific evidence, taking into account new developments in innovative processes. If the analysis done for that purpose demonstrates that it would be appropriate to introduce amendments, in relation to forest biomass, in the calculation methodology in Annex V or in the sustainability criteria relating to carbon stocks applied to biofuels and bioliquids, the Commission shall, where appropriate, make proposals to the European Parliament and Council at the same time in this regard.

~~8.~~ 9. For the purposes referred to in points (a), (b) and (c) of paragraph 1, Member States **may not establish additional sustainability requirements for biofuels, bioliquids and biomass fuels** ~~**shall not refuse to take into account, on other sustainability grounds, biofuels and bioliquids**~~ obtained in compliance with this Article.

⇩ new

~~**10. For the purposes referred to in points (a), (b) and (c) of paragraph 1, Member States may place additional sustainability requirements for biomass fuels.**~~

🡻 2009/28/EC (adapted)
⇨ new

Article ~~18~~27

Verification of compliance with the sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦

1. Where biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ are to be taken into account for the purposes referred to ⇨ in Articles 23 and 25 and ⇦ in points (a), (b) and (c) of Article ~~17~~26(1), Member States shall require economic operators to show that the sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria set out in Article 26~~17~~(2) to ~~(5)~~ (7) have been fulfilled. For that purpose they shall require economic operators to use a mass balance system which:

(a) allows consignments of raw material or biofuels, ⇨ bioliquids or biomass fuels ⇦ with differing sustainability ⇨ and greenhouse gas emissions saving ⇦ characteristics to be mixed ⇨ for instance in a container, processing or logistical facility, transmission and distribution infrastructure or site ⇦ ;

⇩ new

(b) allows consignments of raw material with differing energy content to be mixed for the purpose of further processing, provided that the size of consignments is adjusted according to their energy content;

↓ 2009/28/EC (adapted)
⇨ new

(~~b~~c) requires information about the sustainability ⇨ and greenhouse gas emissions saving ⇦ characteristics and sizes of the consignments referred to in point (a) to remain assigned to the mixture; and

(~~c~~d) provides for the sum of all consignments withdrawn from the mixture to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture ⇨ and requires that this balance be achieved over an appropriate period of time ⇦.

⇩ new

2. Where a consignment is processed, information on the sustainability and greenhouse gas emissions saving characteristics of the consignment shall be adjusted and assigned to the output in accordance with the following rules:

(a) when the processing of a consignment of raw material yields only one output that is intended for the production of biofuels, bioliquids or biomass fuels, the size of the consignment and the related quantities of sustainability and greenhouse gas emissions saving characteristics shall be adjusted applying a conversion factor representing the ratio between the mass of the output that is intended for the production of biofuels, bioliquids or biomass fuels and the mass of the raw material entering the process;

(b) when the processing of a consignment of raw material yields more than one output that is intended for the production of biofuels, bioliquids or biomass fuels, for each output a separate conversion factor shall be applied and a separate mass balance shall be used.

🡻 2009/28/EC (adapted)
⇨ new

~~2. The Commission shall report to the European Parliament and the Council in 2010 and 2012 on the operation of the mass balance verification method described in paragraph 1 and on the potential for allowing for other verification methods in relation to some or all types of raw material, biofuel or bioliquids. In its assessment, the Commission shall consider those verification methods in which information about sustainability characteristics need not remain physically assigned to particular consignments or mixtures. The assessment shall take into account the need to maintain the integrity and effectiveness of the verification system while avoiding the imposition of an unreasonable burden on industry. The report shall be accompanied, where appropriate, by proposals to the European Parliament and the Council concerning the use of other verification methods.~~

3. 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 set out in Article 26(2) to (7) ⇦ and make available to the Member State, on 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 evidence that this has been done. The auditing shall verify that the systems used by economic operators are accurate, reliable and protected against fraud. It shall evaluate the frequency and methodology of sampling and the robustness of the data.

~~The information referred to in the first subparagraph shall include in particular information on compliance with the sustainability criteria set out in Article 17(2) to (5), appropriate and relevant information on measures taken for soil, water and air protection, the restoration of degraded land, the avoidance of excessive water consumption in areas where water is scarce and appropriate and relevant information concerning measures taken in order to take into account the issues referred to in the second subparagraph of Article 17(7).~~

~~The Commission shall adopt implementing acts in accordance with the examination procedure referred to in Article 25(3), to establish the list of appropriate and relevant information referred to in the first two subparagraphs of this paragraph. The Commission shall ensure, in particular, that the provision of that information does not represent an excessive administrative burden for operators in general or for smallholder farmers, producer organisations and cooperatives in particular.~~

↓ 2009/28/EC (adapted) ⇨ new

The obligations laid down in this paragraph shall apply whether the biofuels, ~~or~~ bioliquids ~~,~~ ⇨ , and biomass fuels ⇦ are produced within the ~~Community~~ ⌦ Union ⌫ or imported.

Member States shall submit to the Commission, in aggregated form, the information referred to in the first subparagraph of this paragraph. The Commission shall publish that information on ~~the transparency platform~~ ⇨ the e-reporting platform ⇦ referred to in Article 24 ⇨ of Regulation [Governance] ⇦ in summary form preserving the confidentiality of commercially sensitive information.

~~4. The Community shall endeavour to conclude bilateral or multilateral agreements with third countries containing provisions on sustainability criteria that correspond to those of this Directive. Where the Community has concluded agreements containing provisions relating to matters covered by the sustainability criteria set out in Article 17(2) to (5), the Commission may decide that those agreements demonstrate that biofuels and bioliquids produced from raw materials cultivated in those countries comply with the sustainability criteria in question. When those agreements are concluded, due consideration shall be given to measures taken for the conservation of areas that provide, in critical situations, basic ecosystem services (such as watershed protection and erosion control), for soil, water and air protection, indirect land-use changes, the restoration of degraded land, the avoidance of excessive water consumption in areas where water is scarce and to the issues referred to in the second subparagraph of Article 17(7).~~

↓ 2015/1513 Art. 2.6(b) (adapted)
⇨ new

4. The Commission may decide that voluntary national or international schemes setting standards for the production of biomass products contain accurate data for the purposes of Article ~~17(2)~~ 26(7), and/or demonstrate that consignments of biofuels, ~~or~~ bioliquids ⇨ or biomass fuels ⇦ comply with the sustainability criteria set out in Article ~~17~~26(2), (3), (4), ~~and~~ (5) and (6), and/or that no materials have been intentionally modified or discarded so that the consignment or part thereof would fall under Annex IX. ⇨ When demonstrating that requirements set out in Article 26(5) and (6) for forest biomass are met, the operators may decide to directly provide the required evidence at the forest holding level. ⇦ ~~The Commission may decide that those schemes contain accurate data for the purposes of information on measures taken for the conservation of areas that provide, in critical situations, basic ecosystem services (such as watershed protection and erosion control), for soil, water and air protection, the restoration of degraded land, the avoidance of excessive water consumption in areas where water is scarce and on the issues referred to in the second subparagraph of Article 17(7).~~ The Commission may also recognise areas 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 for the purposes of Article 26~~17~~(2~~3~~)(b)(ii).

↓ 2009/28/EC (adapted)
⇨ new

The Commission may decide that ⇨ those ⇦ ~~voluntary national or international~~ schemes ~~to measure greenhouse gas emission saving~~ contain accurate ~~data~~ ⇨ information on measures taken ⇦ for ~~the purposes of Article 17(2).~~ ⇨ soil, water and air protection, the restoration of degraded land, the avoidance of excessive water consumption in areas where water is scarce, and for certification of biofuels and bioliquids with low indirect land-use change-risk ⇦ .

~~The Commission may decide that land that falls within the scope of a national or regional recovery programme aimed at improving severely degraded or heavily contaminated land fulfils the criteria referred to in point 9 of part C of Annex V.~~

5. The Commission shall adopt decisions under paragraph 4 only if the ~~agreement or~~ scheme in question meets adequate standards of reliability, transparency and independent auditing. In the case of schemes to measure greenhouse gas emission saving, such schemes shall also comply with the methodological requirements in Annex V ⇨ or Annex VI ⇦ . Lists of areas of high biodiversity value as referred to in Article 26~~17~~(2~~3~~)(b)(ii) shall meet adequate standards of objectivity and coherence with internationally recognised standards and provide for appropriate appeal procedures.

🡻 2015/1513 Art. 2.6(c) (adapted)
⇨ new

The voluntary schemes referred to in paragraph 4 ~~('the voluntary schemes')~~ shall regularly, and at least once per year, publish a list of their certification bodies used for independent auditing, indicating for each certification body by which entity or national public authority it was recognised and which entity or national public authority is monitoring it.

In order ⇨ to ensure that compliance with the sustainability and greenhouse gas emissions saving criteria is verified in an efficient and harmonised manner and ⇦ in particular to prevent fraud, the Commission may~~, on the basis of a risk analysis or the reports referred to in the second subparagraph of paragraph 6 of this Article,~~ specify ~~the~~ ⇨ detailed implementing rules, including adequate ⇦ standards of ⇨ reliability, transparency and ⇦ independent auditing and require all voluntary schemes to apply those standards. ⇨ When specifying these standards, the Commission shall pay special attention to the need to minimize administrative burden. ⇦ This shall be done by means of implementing acts adopted in accordance with the examination procedure referred to in Article ~~25~~ 31 (3). Such acts shall set a time frame by which voluntary schemes need to implement the standards. The Commission may repeal decisions recognising voluntary schemes in the event that those schemes fail to implement such standards in the time frame provided for.

🡻 2015/1513 Art. 2.6(d) (adapted)
⇨ new

6. Decisions under paragraph 4 of this Article shall be adopted in accordance with the examination procedure referred to in Article ~~25~~31(3). Such decisions shall be valid for a period of no more than five years.

The Commission shall require that each voluntary scheme on which a decision has been adopted under paragraph 4 submit by 6 October 2016 and annually thereafter by 30 April, a report to the Commission covering each of the points set out in **Annex IX of Regulation [Governance]** ~~**the third subparagraph of this paragraph**~~. Generally, the report shall cover the preceding calendar year. The first report shall cover at least six months from 9 September 2015. The requirement to submit a report shall apply only to voluntary schemes that have operated for at least 12 months.

~~By 6 April 2017, and thereafter within its reports in accordance with Article 23(3), the Commission shall submit a report to the European Parliament and to the Council analysing the reports referred to in the second subparagraph of this paragraph, reviewing the operation of the agreements referred to in paragraph 4 or voluntary schemes in respect of which a decision has been adopted in accordance with this Article, and identifying best practices. The report shall be based on the best information available, including following consultations with stakeholders, and on practical experience in the application of the agreements or schemes concerned. The report shall analyse the following:~~

~~in general:~~

~~(a) the independence, modality and frequency of audits, both in relation to what is stated on those aspects in the scheme documentation, at the time the scheme concerned was approved by the Commission, and in relation to industry best practice;~~

~~(b) the availability of, and experience and transparency in the application of, methods for identifying and dealing with non-compliance, with particular regard to dealing with situations or allegations of serious wrongdoing on the part of members of the scheme;~~

~~(c) transparency, particularly in relation to the accessibility of the scheme, the availability of translations in the applicable languages of the countries and regions from which raw materials originate, the accessibility of a list of certified operators and relevant certificates, and the accessibility of auditor reports;~~

~~(d) stakeholder involvement, particularly as regards the consultation of indigenous and local communities prior to decision making during the drafting and reviewing of the scheme as well as during audits and the response to their contributions;~~

~~(e) the overall robustness of the scheme, particularly in light of rules on the accreditation, qualification and independence of auditors and relevant scheme bodies;~~

~~(f) market updates of the scheme, the amount of feedstocks and biofuels certified, by country of origin and type, the number of participants;~~

~~(g) the ease and effectiveness of implementing a system that tracks the proofs of conformity with the sustainability criteria that the scheme gives to its member(s), such a system intended to serve as a means of preventing fraudulent activity with a view, in particular, to the detection, treatment and follow-up of suspected fraud and other irregularities and where appropriate, number of cases of fraud or irregularities detected;~~

~~and in particular:~~

~~(h) options for entities to be authorised to recognise and monitor certification bodies;~~

~~(i) criteria for the recognition or accreditation of certification bodies;~~

~~(j) rules on how the monitoring of the certification bodies is to be conducted;~~

~~(k) ways to facilitate or improve the promotion of best practice.~~

The Commission shall make the reports drawn up by the voluntary schemes available, in an aggregated form or in full if appropriate, on the ~~transparency~~ ⇨ e-reporting ⇦ platform referred to in Article 24 ⇨ of Regulation [Governance] ⇦.

⇩ new

Member States may set up national schemes where compliance with the sustainability and greenhouse gas emissions saving criteria set out in Article 26(2) to (7) is verified throughout the entire chain of custody involving competent national authorities.

🡻 2015/1513 Art. 2.6(d) (adapted)
⇨ new

A Member State may notify its national scheme to the Commission. The Commission shall give priority to the assessment of such a scheme. A decision on the compliance of such a notified national scheme with the conditions set out in this Directive shall be adopted in accordance with the examination procedure referred to in Article ~~25~~31(3), in order to facilitate mutual bilateral and multilateral recognition of schemes for verification of compliance with the sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria for biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ . 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 the verification of compliance with the sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria set out in Article 26~~17~~(2) to (7~~5~~).

🡻 2009/28/EC (adapted)
⇨ new

7. When an economic operator provides proof or data obtained in accordance with ~~an agreement or~~ a scheme that has been the subject of a decision pursuant to paragraph 4 ⇨ or 6 ⇦ , to the extent covered by that decision, a Member State shall not require the supplier to provide further evidence of compliance with the sustainability ⇨ and greenhouse gas emissions saving ⇦ criteria set out in Article 26~~17~~(2) to (7~~5~~)~~nor information on measures referred to in the second subparagraph of paragraph 3 of this Article~~.

⇩ new

Competent authorities of the Member States shall ~~**be allowed to**~~ supervise the operation of certification bodies that are accredited by the national accreditation body and are conducting independent auditing under a voluntary scheme. **In case Member States find issues of non-conformity, they shall inform promptly the voluntary scheme and the accreditation body.**

🡻 2015/1513 Art. 2.6(e)

~~8. At the request of a Member State or on its own initiative, the Commission shall examine the application of Article 17 in relation to a source of biofuel and, within six months of receipt of a request decide, in accordance with the examination procedure referred to in Article 25(3), whether the Member State concerned may take biofuel from that source into account for the purposes of Article 17(1).~~

🡻 2009/28/EC

~~9. By 31 December 2012, the Commission shall report to the European Parliament and to the Council on:~~

~~(a) the effectiveness of the system in place for the provision of information on sustainability criteria; and~~

~~(b) whether it is feasible and appropriate to introduce mandatory requirements in relation to air, soil or water protection, taking into account the latest scientific evidence and the Community's international obligations.~~

~~The Commission shall, if appropriate, propose corrective action.~~

🡻 2009/28/EC Article 19 1.2. (adapted)
⇨ new

Article ~~19~~28

Calculation of the greenhouse gas impact of biofuels, ~~and~~ bioliquids ⇨ **and biomass fuels** ⇦

1. For the purposes of Article 26 (7)~~17~~ ~~(2)~~, the greenhouse gas emission saving from the use of biofuel, ~~and~~ bioliquids ⇨ and biomass fuels⇦ shall be calculated as follows:

(a) where a default value for greenhouse gas emission saving for the production pathway is laid down in part A or B of Annex V ⇨ for biofuels and bioliquids ⇦ and ⇨ in part A of Annex VI for biomass fuels⇦ where the e_l value for those biofuels or bioliquids calculated in accordance with point 7 of part C of Annex V ⇨ and for those biomass fuels calculated in accordance with point 7 of part B of Annex VI⇦ is equal to or less than zero, by using that default value;

(b) by using an actual value calculated in accordance with the methodology laid down in part C of Annex V ⇨ for biofuels and bioliquids and in part B of Annex VI for biomass fuels ⇦ ; ~~or~~

(c) by using a value calculated as the sum of the factors of the ~~formula~~ ⌦ formulas ⌫ referred to in point 1 of part C of Annex V, where disaggregated default values in part D or E of Annex V may be used for some factors, and actual values, calculated in accordance with the methodology laid down in part C of Annex V, for all other factors; ⌦ or ⌫

⇩ new

(d) by using a value calculated as the sum of the factors of the formulas referred to in point 1 of part B of Annex VI, where disaggregated default values in part C of Annex VI may be used for some factors, and actual values, calculated in accordance with the methodology laid down in part B of Annex VI, for all other factors.

↓ 2009/28/EC Article 19 1.2. (adapted)
⇨ new

2. ~~By 31 March 2010,~~ Member States ~~shall~~ ⇨ may ⇦ submit to the Commission ~~a report~~ ⌦ reports ⌫ including ~~a list~~ ⇨ information on the typical greenhouse gas emissions from cultivation of agricultural raw materials ⇦ of those 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 of the Council ~~of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS)~~[1] ~~where the typical greenhouse gas emissions from cultivation of agricultural raw materials can be expected to be lower than or equal to the emissions reported under the heading 'Disaggregated default values for cultivation' in part D of Annex V to this Directive, accompanied by a description of the method and data used to establish that list.~~ ⇨ The 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.

↓ 2015/1513 Art. 2.7(a) (adapted)
⇨ new

3. ~~The typical greenhouse gas emissions from cultivation of agricultural raw materials included in the reports referred to in paragraph 2 in the case of Member States, and,~~ ~~i~~In the case of territories outside the Union, ~~in~~ reports equivalent to those referred to in paragraph 2 and drawn up by competent bodies, may be reported to the Commission.

[1] Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS) (OJ L 154, 21.6.2003, p. 1).

4. The Commission may decide, by means of an implementing act adopted in accordance with the examination procedure referred to in Article 31~~25~~(2~~3~~), 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 ⇦ ~~biofuel and bioliquid~~ feedstocks ~~typically~~ produced in ~~those~~ ⌦ the ⌫ areas ⌦ included in such reports ⌫ for the purposes of Article ~~17(2)~~ 26(7). ⇨ These data may therefore 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. ⇦

~~5. By 31 December 2012 at the latest and every two years thereafter, the Commission shall draw up and publish a report on the estimated typical and default values in parts B and E of Annex V, paying special attention to greenhouse gas emissions from transport and processing.~~

~~In the event that the reports referred to in the first subparagraph indicate that the estimated typical and default values in parts B and E of Annex V might need to be adjusted on the basis of the latest scientific evidence, the Commission shall, as appropriate, submit a legislative proposal to the European Parliament and to the Council.~~

🡻 2015/1513 Art. 2.7(c) (adapted)
⇨ new

5~~7~~. The Commission shall keep Annex V ⇨ and Annex VI ⇦ under review, with a view, where justified, to ~~the~~ add ⌦ ing ⌫ ~~ition of~~ ⇨ or revising ⇦ values for ~~further~~ biofuel ⇨ , bioliquid and biomass fuel ⇦ production pathways ~~for the same or for other raw materials~~. That review shall also consider the modification of the methodology laid down in part C of Annex V ⇨ and in part B of Annex VI ⇦ ~~, particularly with regard to:~~

~~– the method of accounting for wastes and residues;~~

~~– the method of accounting for co-products;~~

~~– the method of accounting for cogeneration; and~~

– ~~the status given to agricultural crop residues as co-products~~.

~~The default values for waste vegetable or animal oil biodiesel shall be reviewed as soon as possible.~~ In the event that the Commission's review concludes that ~~additions~~ ⇨ changes ⇦ to Annex V ⇨ or Annex VI ⇦ should be made, the Commission ⌦ is ⌫ ~~shall be~~ empowered to adopt delegated acts pursuant to Article 32~~25a~~ ~~to add, but not to remove or amend, estimated typical and default values in parts A, B, D and E of Annex V for biofuel and bioliquid pathways for which specific values are not yet included in that Annex~~.

🡻 2009/28/EC (adapted)
⇨ new

⌦ In the case of ⌫ ~~A~~any adaptation of or addition to the list of default values in Annex V ⇨ and Annex VI ⇦ ~~shall comply with the following:~~

(a) ~~(a)~~ where the contribution of a factor to overall emissions is small, or where there is limited variation, or where the cost or difficulty of establishing actual values is high, default values ~~must~~ ⌦ shall ⌫ be typical of normal production processes.~~;~~

(b) in all other cases default values must be conservative compared to normal production processes.

🡻 2015/1513 Art. 2.7(d) (adapted)
⇨ new

6~~8~~. Where necessary in order to ensure the uniform application of ~~point 9 of~~ Part C of Annex V ⇨ and Part B of Annex VI ⇦, the Commission may adopt implementing acts setting out detailed technical specifications ⌦ including ⌫ ~~and~~ definitions ⇨ , conversion factors, calculation of annual cultivation emissions and/ or emission savings caused by changes above and below-ground carbon stocks on already cultivated land, calculation of emission savings from carbon capture, carbon replacement and carbon geological storage ⇦. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 31 ~~25~~ (2~~3~~).

↓ 2009/28/EC (adapted)
⇨ new

Article ~~20~~29

Implementing measures

The implementing measures referred to in the second subparagraph of Article 26(2)~~17(3)~~ ⇨ and (6) ⇦ , ~~the third subparagraph of Article 18(3)~~, Article 27 ~~18~~(6), ~~Article 18(8)~~, ~~Article 19(5)~~, the first subparagraph of Article 28(5) ⌦ and Article 28(6) ⌫ ~~19(7)~~, ~~and Article 19(8)~~ shall also take full account of the purposes of Article 7a of Directive 98/70/EC[1]

↓ 2009/28/EC

~~*Article 22*~~

~~**Reporting by the Member States**~~

~~1. Each Member State shall submit a report to the Commission on progress in the promotion and use of energy from renewable sources by 31 December 2011, and every two years thereafter. The sixth report, to be submitted by 31 December 2021, shall be the last report required.~~

~~The report shall detail, in particular:~~

~~(a) the sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources in the preceding two calendar years and the measures taken or planned at national level to promote the growth of energy from renewable sources taking into account the indicative trajectory in part B of Annex I, in accordance with Article 5;~~

[1] Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (OJ L 350, 28.12.1998, p. 58).

(b) the introduction and functioning of support schemes and other measures to promote energy from renewable sources, and any developments in the measures used with respect to those set out in the Member State's national renewable energy action plan, and information on how supported electricity is allocated to final customers for purposes of Article 3(6) of Directive 2003/54/EC;

(c) how, where applicable, the Member State has structured its support schemes to take into account renewable energy applications that give additional benefits in relation to other, comparable applications, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material;

(d) the functioning of the system of guarantees of origin for electricity and heating and cooling from renewable energy sources and the measures taken to ensure the reliability and protection against fraud of the system;

(e) progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of energy from renewable sources;

(f) measures taken to ensure the transmission and distribution of electricity produced from renewable energy sources, and to improve the framework or rules for bearing and sharing of costs referred to in Article 16(3);

(g) developments in the availability and use of biomass resources for energy purposes;

(h) changes in commodity prices and land use within the Member State associated with its increased use of biomass and other forms of energy from renewable sources;

↓ 2015/1513 Art. 2.9(a)

(i) the development and share of biofuels made from feedstocks listed in Annex IX including a resource assessment focusing on the sustainability aspects relating to the effect of the replacement of food and feed products for biofuel production, taking due account of the principles of the waste hierarchy established in Directive 2008/98/EC and the biomass cascading principle, taking into consideration the regional and local economic and technological circumstances, the maintenance of the necessary carbon stock in the soil and the quality of the soil and the ecosystems;

↓ 2009/28/EC

(j) the estimated impact of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within the Member State;

(k) the estimated net greenhouse gas emission saving due to the use of energy from renewable sources;

(l) the estimated excess production of energy from renewable sources compared to the indicative trajectory which could be transferred to other Member States, as well as the estimated potential for joint projects, until 2020;

(m) the estimated demand for energy from renewable sources to be satisfied by means other than domestic production until 2020;

(n) information on how the share of biodegradable waste in waste used for producing energy has been estimated, and what steps have been taken to improve and verify such estimates; and

↓ 2015/1513 Art. 2.9(b)

(o) the amounts of biofuels and bioliquids in energy units corresponding to each category of feedstock group listed in part A of Annex VIII taken into account by that Member State for the purpose of complying with the targets set out in Article 3(1) and (2), and in the first subparagraph of Article 3(4).

↓ 2009/28/EC

2. In estimating net greenhouse gas emission saving from the use of biofuels, the Member State may, for the purpose of the reports referred to in paragraph 1, use the typical values given in part A and part B of Annex V.

3. In its first report, the Member State shall outline whether it intends to:

(a) establish a single administrative body responsible for processing authorisation, certification and licensing applications for renewable energy installations and providing assistance to applicants;

(b) provide for automatic approval of planning and permit applications for renewable energy installations where the authorising body has not responded within the set time limits; or

(c) indicate geographical locations suitable for exploitation of energy from renewable sources in land-use planning and for the establishment of district heating and cooling.

4. In each report the Member State may correct the data of the previous reports.

🡻 2009/28/EC (adapted)
➔1 2015/1513 Art. 2.10(a)
⇨ new

Article ~~23~~30

Monitoring ~~and reporting~~ by the Commission

1. The Commission shall monitor the origin of biofuels, ~~and~~ bioliquids ⇨ and biomass fuels ⇦ consumed in the ~~Community~~ ⌦ Union ⌫ and the impact of their production, including impact as a result of displacement, on land use in the ~~Community~~ ⌦ Union ⌫ and the main third countries of supply. Such monitoring shall be based on Member States' ⇨ integrated national energy and climate plans and corresponding progress ⇦ reports ⇨ required in Articles 3, 15 and 18 of Regulation [Governance] ⇦, ~~submitted pursuant to Article 22(1)~~, and those of relevant third countries, intergovernmental organisations, scientific studies and any other relevant pieces of information. The Commission shall also monitor the commodity price changes associated with the use of biomass for energy and any associated positive and negative effects on food security. ➔1 --- ←

2. The Commission shall maintain a dialogue and exchange information with third countries and biofuel, ⇨ bioliquid and biomass fuel ⇦ producers, consumer organisations and civil society concerning the general implementation of the measures in this Directive relating to biofuels, ~~and~~ bioliquids⇨ and biomass fuels ⇦ . It shall, within that framework, pay particular attention to the impact ⌦ that ⌫ biofuel ⇨ and bioliquid ⇦ production may have on food prices.

~~3. On the basis of the reports submitted by Member States pursuant to Article 22(1) and the monitoring and analysis referred to in paragraph 1 of this Article, the Commission shall report every two years to the European Parliament and the Council. The first report shall be submitted in 2012.~~

↓ 2015/1513 Art. 2.10(b)

4. In reporting on greenhouse gas emission savings from the use of biofuels and bioliquids, the Commission shall use the amounts reported by Member States in accordance with point (e) of Article 22(1), including the provisional mean values of the estimated indirect land-use change emissions and the associated range derived from the sensitivity analysis as set out in Annex VIII. The Commission shall make data on the provisional mean values of the estimated indirect land-use change emissions and the associated range derived from the sensitivity analysis publicly available. In addition, the Commission shall evaluate whether and how the estimate for direct emission savings would change if co-products were accounted for using the substitution approach.

↓ 2009/28/EC

5. In its reports, the Commission shall, in particular, analyse:

(a) the relative environmental benefits and costs of different biofuels, the effects of the Community's import policies thereon, the security of supply implications and the ways of achieving a balanced approach between domestic production and imports;

(b) the impact of increased demand for biofuel on sustainability in the Community and in third countries, considering economic and environmental impacts, including impacts on biodiversity;

(c) the scope for identifying, in a scientifically objective manner, geographical areas of high biodiversity value that are not covered in Article 17(3);

(d) the impact of increased demand for biomass on biomass-using sectors;

↓ 2015/1513 Art. 2.10(c)

(e) the availability and sustainability of biofuels made from feedstocks listed in Annex IX, including an assessment of the effect of the replacement of food and feed products for biofuel production, taking due account of the principles of the waste hierarchy established in Directive 2008/98/EC and the biomass cascading principle, taking into consideration the regional and local economic and technological circumstances, the maintenance of the necessary carbon stock in the soil and the quality of soil and ecosystems;

(f) information on, and analysis of, the available scientific research results regarding indirect land-use change in relation to all production pathways, accompanied by an assessment of whether the range of uncertainty identified in the analysis underlying the estimations of indirect land-use change emissions can be narrowed and the possible impact of Union policies, such as environment, climate and agricultural policies, can be factored in; and

(g) technological developments and availability of data on the use, economic and environmental impacts of biofuels and bioliquids produced in the Union from dedicated non-food crops grown primarily for energy purposes.

↓ 2009/28/EC

The Commission shall, if appropriate, propose corrective action.

6. On the basis of the reports submitted by Member States pursuant to Article 22(3), the Commission shall analyse the effectiveness of measures taken by Member States on establishing a single administrative body responsible for processing authorisation, certification and licensing applications and providing assistance to applicants.

7. In order to improve financing and coordination with a view to the achievement of the 20 % target referred to in Article 3(1), the Commission shall, by 31 December 2010, present an analysis and action plan on energy from renewable sources with a view, in particular, to:

(a) the better use of structural funds and framework programmes;

(b) the better and increased use of funds from the European Investment Bank and other public finance institutions;

(c) better access to risk capital notably by analysing the feasibility of a risk sharing facility for investments in energy from renewable sources in the Community similar to the Global Energy Efficiency and Renewable Energy Fund initiative which is aimed at third countries;

(d) the better coordination of Community and national funding and other forms of support; and

(e) the better coordination in support of renewable energy initiatives whose success depends on action by actors in several Member States.

8. By 31 December 2014, the Commission shall present a report, addressing, in particular, the following elements:

(a) a review of the minimum greenhouse gas emission saving thresholds to apply from the dates referred to in the second subparagraph of Article 17(2), on the basis of an impact assessment taking into account, in particular, technological developments, available technologies and the availability of first and second-generation bio-fuels with a high level of greenhouse gas emission saving;

↓ 2015/1513 Art. 2.10(d)

(b) with respect to the targets referred to in Article 3(4), a review of:

(i) the cost-efficiency of the measures to be implemented to achieve the targets;

(ii) an assessment of the feasibility of reaching the targets whilst ensuring the sustainability of biofuels production in the Union and in third countries, and considering economic, environmental and social impacts, including indirect effects and impacts on biodiversity, as well as the commercial availability of second-generation biofuels;

(iii) the impact of the implementation of the targets on the availability of foodstuffs at affordable prices;

(iv) the commercial availability of electric, hybrid and hydrogen-powered vehicles, as well as the methodology chosen to calculate the share of energy from renewable sources consumed in the transport sector;

(v) the evaluation of specific market conditions, considering, in particular, markets in which transport fuels represent more than half of the final energy consumption, and markets which are fully dependent on imported biofuels;

↓ 2009/28/EC (adapted)
⇨ new

(c) an evaluation of the implementation of this Directive, in particular with regard to cooperation mechanisms, in order to ensure that, together with the possibility for the Members States to continue to use national support schemes referred to in Article 3(3), those mechanisms enable Member States to achieve the national targets defined in Annex I on the best cost-benefit basis, of technological developments, and the conclusions to be drawn to achieve the target of 20 % of energy from renewable sources at Community level.

On the basis of that report, the Commission shall submit, if appropriate, proposals to the European Parliament and the Council, addressing the above elements and in particular:

– for the element contained in point (a), a modification of the minimum greenhouse gas emission saving referred to in that point, and

– for the element contained in point (c), appropriate adjustments of the cooperation measures provided for in this Directive in order to improve their effectiveness for achieving the target of 20 %. Such proposals shall neither affect the 20 % target nor Member States' control over national support schemes and cooperation measures.

3~~9~~. In ~~2018~~ ⌦ 2026 ⌫, the Commission shall present a ~~Renewable Energy Roadmap for the post-2020~~ ⇨ legislative proposal on the regulatory framework for the promotion of renewable energy for the post-2030 ⇦ period.

~~That roadmap shall, if appropriate, be accompanied by proposals to the European Parliament and the Council for the period after 2020. The roadmap~~ ⇨ This proposal ⇦ shall take into account the experience of the implementation of this Directive ⇨ , including its sustainability and greenhouse gas saving criteria, ⇦ and technological developments in energy from renewable sources.

4~~10~~. In ~~2021~~ ⌦ 2032 ⌫, the Commission shall present a report reviewing the application of this Directive. ~~That report shall, in particular, address the role of the following elements in having enabled Member States to achieve the national targets defined in Annex I on the best cost-benefit basis:~~

~~(a) the process of preparing forecasts and national renewable energy action plans;~~

~~(b) the effectiveness of the cooperation mechanisms;~~

~~(c) technological developments in energy from renewable sources, including the development of the use of biofuels in commercial aviation;~~

~~(d) the effectiveness of the national support schemes. and~~

~~(e) the conclusions of the Commission reports referred to in paragraphs 8 and 9.~~

~~*Article 24*~~

~~**Transparency platform**~~

~~1. The Commission shall establish an online public transparency platform. That platform shall serve to increase transparency, and facilitate and promote cooperation between Member States, in particular concerning statistical transfers referred to in Article 6 and joint projects referred to in Articles 7 and 9. In addition, the platform may be used to make public relevant information which the Commission or a Member State deems to be of key importance to this Directive and to the achievement of its objectives.~~

~~2. The Commission shall make public on the transparency platform the following information, where appropriate in aggregated form, preserving the confidentiality of commercially sensitive information:~~

~~(a) Member States' national renewable energy action plans;~~

~~(b) Member States' forecast documents referred to in Article 4(3), complemented as soon as possible with the Commission's summary of excess production and estimated import demand;~~

~~(c) Member States' offers to cooperate on statistical transfers or joint projects, upon request of the Member State concerned;~~

~~(d) the information referred to in Article 6(2) on the statistical transfers between Member States;~~

~~(e) the information referred to in Article 7(2) and (3) and Article 9(4) and (5) on joint projects;~~

~~(f) Member States' national reports referred to in Article 22;~~

~~(g) the Commission reports referred to in Article 23(3).~~

~~However, upon request of the Member State that submitted the information, the Commission shall not make public Member States' forecast documents referred to in Article 4(3), or the information in Member States' national reports referred to in Article 22(1)(l) and (m).~~

↓ 2015/1513 Art. 2.
⇨ new

Article ~~25~~31

Committee procedure

1. ~~Except in the cases referred to in paragraph 2, t~~The Commission shall be assisted by the ~~Committee on Renewable Energy Sources~~ ⇨ Energy Union Committee⇦ . That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 ~~of the European Parliament and of the Council[1]~~ ⇨ and work in the respective sectorial formations relevant for this Regulation ⇦ .

~~2. For matters relating to the sustainability of biofuels and bioliquids, the Commission shall be assisted by the Committee on the Sustainability of Biofuels and Bioliquids. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.~~

2~~3~~. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Where the Committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

~~1 Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).~~

↓ 2015/1513 Art. 2.12 (adapted)

Article ~~25a~~32

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Articles ~~3(5)~~ ⌦ 7(5) ⌫, ~~5(5)~~ ⌦ 7(6); 19(11), 19(14), 25(6) ⌫ and ⌦ 28(5) ⌫ ~~19(7)~~ shall be conferred on the Commission for a period of five years from ~~5 October 2015~~ ⌦ 1st January 2021 ⌫ .

3. The delegation of power referred to in Articles ~~3(5)~~ ⌦ 7(5) ⌫, ~~5(5)~~ ⌦ 7(6); 19(11), 19(14), 25(6) ⌫ and ⌦ 28(5) ⌫ ~~19(7)~~

may be revoked at any time by the European Parliament or by the Council. A decision of revocation shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

⌦ 4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making. ⌫

↓ 2015/1513 Art. 2.12 (adapted)

~~4~~5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

~~5~~6. A delegated act adopted pursuant to Articles ~~3(5)~~ ⌦ 7(5) ⌫, ~~5(5)~~ ⌦ 7(6); 19(11), 19(14), 25(6) ⌫ and 28(5)~~19(7)~~ shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or ⌦ of ⌫ the Council.

🡻 2009/28/EC (adapted)

~~*Article 26*~~

~~**Amendments and repeal**~~

~~1. In Directive 2001/77/EC, Article 2, Article 3(2), and Articles 4 to 8 shall be deleted with effect from 1 April 2010.~~

~~2. In Directive 2003/30/EC, Article 2, Article 3(2), (3) and (5), and Articles 5 and 6 shall be deleted with effect from 1 April 2010.~~

~~3. Directives 2001/77/EC and 2003/30/EC shall be repealed with effect from 1 January 2012.~~

🡻 2009/28/EC (adapted)
⇨ new

Article ~~27~~33

Transposition

1. ~~Without prejudice to Article 4(1), (2) and (3),~~ Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with th~~e~~is Directive ⇨ by 30 June 2021, at the latest. ⇦ ~~by 5 December 2010~~ ⇨ They shall immediately communicate the text of those measures to the Commission ⇦.

When Member States adopt ⌦ those ⌫ measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. ~~The methods of making such a reference shall be laid down by the Member States.~~ ⌦ They shall also include a statement that references in existing laws, regulations and administrative provisions to the Directives repealed by this Directive shall be construed as references to this Directive. Member States shall determine how such reference is to be made and how that statement is to be formulated. ⌫

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

⇩ new

Article 34

Repeal

Directive 2009/28/EC, as amended by the Directives listed in Annex XI, Part A is repealed with effect from 1 January 2021, without prejudice to the obligations of the Member States relating to the time-limits for the transposition into national law of the Directives set out in Annex XI, Part B.

References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex XII.

↓ 2009/28/EC (adapted)

Article ~~28~~35

Entry into force

This Directive shall enter into force on ~~the 20th day following its publication in the *Official Journal of the European Union*~~ ⌦ 1 January 2021 ⌫.

Article ~~29~~36

Addressees

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament	*For the Council*
The President	*The President*