



EUROPEAN
COMMISSION

Brussels, **XXX**
[...] (2021) **XXX** draft

SENSITIVE*
UNTIL ADOPTION

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources and, as a consequence, Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action and Directive 98/70/EC relating to the quality of petrol and diesel fuels

* Distribution only on a 'Need to know' basis - Do not read or carry openly in public places. Must be stored securely and encrypted in storage and transmission. Destroy copies by shredding or secure deletion. Full handling instructions <https://europa.eu/db43PX>

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• **Reasons for and objectives of the proposal**

The European Green Deal (EGD) establishes the objective of becoming climate neutral in 2050 in a manner that contributes to European competitiveness, growth and jobs. This objective requires a greenhouse as emissions reduction of 55% by 2030 as confirmed by the European Council in December 2020. This in turn requires significantly higher shares of renewable energy sources in an integrated energy system. The current EU target of at least 32% renewable energy by 2030, set in the Renewable Energy Directive (REDII) is not sufficient and needs to be increased to 38-40%, according to the Climate Target Plan (CTP). At the same time, new accompanying measures in different sectors in line with the Energy System Integration, the Hydrogen, the Offshore Renewable Energy and the Biodiversity Strategies are required to achieve this increased target.

The overall objective of the revision of REDII is to achieve an increase in the use of energy from renewable sources by 2030, to foster better energy system integration and to ensure protection of biodiversity and climate objectives. This revision of REDII is essential to achieve the increased climate target as well as to protect our environment and health, reduce our energy dependency, and contribute to the EU's technological and industrial leadership along with the creation of jobs and economic growth.

• **Consistency with existing policy provisions in the policy area**

REDII is the main EU instrument dealing with the promotion of energy from renewable sources. The review of REDII does not stand alone. It is part of a broader exercise that affects other energy and climate legislation and policy initiatives, as announced in the EGD roadmap, and in the Commission work programme for 2021 under the title "Fit for 55 package". The proposal for the revision of RED II is consistent with:

- i. The EU Emission Trading Scheme, as carbon pricing works best hand in hand with regulatory measures.
- ii. The Energy Efficiency Directive, which contributes to the efficient use of renewable energy in end-use sectors.
- iii. Energy Performance of Buildings Directive, which ensures appropriate energy performance requirements related to renewable energy.
- iv. The Ecodesign Directive, incentivising consumers to move away from fossil fuel appliances.
- v. The Land Use, Land Use Change and Forestry Regulation, which provides incentives for economic operators to deploy emission-absorbing projects that can be a source of biomass.
- vi. The Energy Taxation Directive, which ensures that prices promote sustainable practices and incentivises production and use.
- vii. The Effort Sharing legislation, which establishes binding greenhouse gas (GHG) emission reductions for sectors covered by RED II such as transport, buildings, agriculture and waste.
- viii. The Fuel Quality Directive, which supports the use of renewable and low-carbon fuels in transport.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

The proposal is based primarily on Article 194(2) of the Treaty on the Functioning of the European Union¹ (TFEU), which provides the legal basis for proposing measures to develop new and renewable forms of energy, one of the goals of the Union's energy policy, set out in Article 194(1)(c) TFEU. REDII, which will be amended by this proposal, was also adopted under Article 194(2) TFEU in 2018. Article 114 TFEU, the internal market legal base, is added in order to amend Directive 98/70/EC on fuel quality, which is based on that Article.

• Subsidiarity (for non-exclusive competence)

The need for EU action

A cost-efficient accelerated development of sustainable renewable energy within a more integrated energy system cannot be sufficiently achieved by Member States alone. An EU approach is needed to provide the right incentives to Member States with different levels of ambition to accelerate, in a coordinated way, the energy transition from the traditional fossil fuel based energy system towards a more integrated and more energy-efficient energy system based on renewables-based generation. Taking into account the different energy policies and priorities among Member States, action at EU level is more likely to achieve the required increased deployment of renewables than national or local action alone.

EU added value

EU action on renewable energy brings added value because it is more efficient and effective than individual Member States' actions, avoiding a fragmented approach by addressing the transition of the European energy system in a coordinated way. It ensures net reduction of greenhouse gas emissions and pollution, protects biodiversity, harnesses the benefits of the internal market, fully exploits the advantages of economies of scale and technological cooperation in Europe, and it gives investors certainty in an EU-wide regulatory framework. The achievement of an increased share of renewable energy in final EU energy consumption depends on national contributions from each Member State. These will be more ambitious and cost-effective if driven by an agreed common legal and policy framework.

• Proportionality

The preferred package of policy options is considered proportionate and builds to the extent possible on current policy design. Several options set a target or a benchmark to be achieved, but leave the means to achieve those targets up to the Member States. Important national prerogatives, such as the Member State's right to determine the conditions for exploiting their energy resources, their choice between different energy technologies and the general structure of their energy supply, remain fully untouched. The balance between obligations and the flexibility left to the Member States on how to achieve the objectives is considered appropriate given the imperative of achieving climate neutrality (see sections 3.3 and 7.5 of the Impact Assessment accompanying this proposal, SWD (2021) XXX).

• Choice of the instrument

This proposal is for an amending Directive. Given its relatively recent adoption, this review of REDII is limited to what is considered necessary to contribute in a cost-effective way to the

¹ OJ C 326, 26/10/2012, p.1

Union's 2030 climate ambition, and is not a full revision of the Directive, so a recast is not considered appropriate.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

• Stakeholder consultations

Consultation methods, main sectors targeted and general profile of respondents

The Inception Impact Assessment (Roadmap) was published for feedback from 3 August to 21 September 2020 and 374 replies were received, from stakeholders from 21 Member States and 7 non-EU countries. Most responses came from companies or business associations, followed by NGOs, anonymous and citizens. In addition, the Commission launched an online public consultation (OPC) on 17 November 2020 for 12 weeks, in line with the Commission Better Regulation rules. It contains multiple choice and open questions covering a wide range of issues on the revision of REDII. 39,046 replies were received in total. Stakeholder views were also gathered in two workshops, the first one was held on 11 December 2020 (close to 400 participants) and the second one was on 22 March 2021 (close to 1000 participants).

Summary of stakeholder views

The majority (80%) of replies to the OPC showed a preference for an increased RES target in line with the CTP (43%) or higher (37%). 61% favoured a binding target both at EU and national level. Transport and heating and cooling were the two most popular sectors where additional efforts were considered necessary, with a majority supporting increased targets for both sectors at least at the level of the CTP. A coordinated response of more than 38,000 participants requested removing biomass from the list of renewable resources and limiting the use for bioenergy to locally available waste and residues, whereas representatives from trade unions, business and a majority of public authorities preferred not changing the current sustainability criteria for biomass.

The views of the stakeholders as expressed in the OPC and during the workshops were taken into account when elaborating the various policy options on the respective policy areas in the impact assessment.

• Collection and use of expertise

A study from external contractors Trinomics provided technical support for renewables policy development and implementation. The impact assessment carried out for the CTP and the Commission's assessment of the Member States' NECPs and the 2020 Renewable Energy Progress Report also formed part of the evidence base.

In addition the following studies also fed into the impact assessment:

- Technical support for renewables policy development and implementation: enhanced efficiency through sector integration
- Renewable Cooling under the Revised Renewable Energy Directive
- Renewable Space Heating under the Revised Renewable Energy Directive
- Policy support for heating and cooling decarbonisation
- Regulatory and market conditions of District Heating and Cooling
- Potentials and levels for the electrification of space heating in buildings

- Renewable Heating and Cooling Pathways, Measures and Milestones for the implementation of the recast Renewable Energy Directive and full decarbonisation by 2050
- Technical assistance to assess the potential of renewable liquid and gaseous transport fuels of non-biological origin (RFNBOs) as well as recycled carbon fuels (RCFs), to establish a methodology to determine the share of renewable energy from RFNBOs as well as to develop a framework on additionality in the transport sector
- Simplification of Permission and Administrative Procedures for RES Installations
- Establishing technical requirements & facilitating the standardisation process for guarantees of origin on the basis of Directive(EU) 2018/2001
- Technical assistance for assessing options to establish an EU-wide green label with a view to promote the use of renewable energy coming from new installations
- Assessment of the potential for new feedstocks for the production of advanced biofuels (ENER C1 2019-412)
- Support for the implementation of the provisions on ILUC set out in the Renewable Energy Directive (ENER/C2/2018-462)
- The use of woody biomass for energy production in the EU (JRC report, 01/2021)
- Scoping study setting technical requirements and options for a Union Database for tracing liquid and gaseous transport fuels

Impact assessment

The Impact Assessment (IA) accompanying the Proposal was elaborated based on modelling, stakeholder input and input from the Interservice Group. The report was submitted to the Regulatory Scrutiny Board on the 10th of March 2021. On 19 April 2021, the Regulatory Scrutiny Board delivered its first opinion on the Impact Assessment, and following the re-submission of the IA, the second was delivered on 19 May.

Against this background, this impact assessment has analysed the various options through which a revision of the RED II could effectively and efficiently contribute to the delivery of the updated target as part of a wider “Fit for 55” policy package.

Regarding the **overall renewable energy target** level, option 0 (no change) would provide no means of ensuring that the EU-wide renewable energy target is deployed to reach at least 38-40% share in final energy consumption. Option 2 (a higher target than 40%) would potentially lead to overshooting the climate target and to a lack of coherence with other EU legislative instruments. Hence, option 1 (a minimum target in the range of 38-40%) has no drawbacks and is thus the preferred and effective option. Regarding the nature of the target, although option 1 (national binding targets) would imply the most effective achievement of an increased RES share, this would create subsidiarity issues. The current Energy Union Governance process is an important foundation for achieving the renewables target. The first iteration of the review process of the national plans, completed in 2020, proved to be effective in that the national contributions were collectively sufficiently ambitious to reach the binding Union 2030 RES target. Under the Governance Regulation the Member States must submit their draft updates to their NECPs by June 2023, and can already show how they are planning

to reach the higher target 2030 target. Given the effective nature and architecture of the current system, option 0 (maintaining the EU binding target and national voluntary contributions) is the preferred option.

Regarding **heating & cooling**, option 1 (non-regulatory measures) will not trigger Member States to increase efforts in the RES heating and cooling sector to at least 1.1%-point. Translating the 39% EU RES heating and cooling figure from the Climate Target Plan into a binding uniform increased annual average share across Member States equally as per option 3b is not considered proportionate, although it is the most effective. The level of renewables needed in 2030 could also be set as a target as proposed in option 3c but that would depart from the current model and could disrupt the already on-going implementation efforts, although it would have the added benefit of setting the end-goal in 2030 clearly. Option 3a combined with sector and EU RES buildings and industry benchmarks of appropriate design (option 3d) would be effective in providing the right mix of drivers for integrating further these sectors into the energy system. This option 3a would set a minimum flat rate of RES growth by making the current indicative annual increase target of 1.1 p.p. as minimum required effort and complement it with Member State specific “top-ups” redistributing the additional efforts to the desired level of renewables in 2030 among Member States based on GDP and cost. The additional Member States specific increase rates could provide a means of assessing the relative level of ambition of each Member States in the heating and cooling sector but also as a potential gap filler measure to close the gap, if other sectors than heating and cooling would fail to deliver, the 38-40% overall RES target. The option of a benchmark for the use of renewable energy in the building sector is also considered here.

The extended list of measures as per option 2a allows flexibility at national level and ensures proportionality and gives the Member States a toolbox to choose from. The design respects national and local diversities in conditions and starting points, and provide a clear framework for actors at all levels (national, regional, local) and of all types (from utilities and companies to municipalities to citizen consumers/prosumers).

Regarding **district heating & cooling**, option 3c (increasing the indicative 1%-point indicative annual increase target to CTP levels of 1.4% without changing its nature) would steer district heating developments towards integrating more renewable energy in coherence with the CTP and carbon-neutrality goals, while respecting the wide variety of situations in Member States. Option 3b (indicative EU renewable target for renewables’ share in district heating & cooling could give similar benefits as option 3c but departs from the current provisions and could be disruptive for already ongoing implementation. Option 3d (increasing the 1%-point increase target and making it binding) would be the most effective target design, but is too stringent and leaves less room for Member States. Option 3a (no changes) would make it possible for district heating to indefinitely continue with the fossil fuels and thus is not coherent with the review’s objectives. Option 2 (list of measures) can be self-standing or complementary, as it gives a clearer enabling framework to transform district heating and cooling, make it into an enabler of renewable energy supply in buildings and to become a key heat decarbonisation instrument, while enhancing energy sector integration in national and EU energy systems. Combining option 2 on measures with the target design in option 3c is the preferred option to ensure that district heating and cooling aligns with the European Green Deal and becomes an enabler to deliver on the CTP and energy system integration goals. Together with the options on overall heating and cooling and buildings, this option would also set an enabling framework to develop and expand modern renewable based smart district heating and cooling systems.

Regarding **mainstreaming renewable electricity**, option 1.1 (availability of near-real-time information on the renewable share of electricity supplied by the grid) would provide

effective market incentivising signals that relate directly to renewable penetration and carbon reduction, without any administrative burden and in coherence with existing legislation. Option 1.2 (information on the RES-share and GHG emission profile would have some positive effects on consumer information, however it would otherwise bring limited added value. Options 2.1-2.3 cover different aspects of optimizing the intelligent charging infrastructure, with varying levels of positive contribution to overall implementation costs and benefits to the economy. In order to provide flexibility to Member States, allowing implementation based on national assessment was in each case selected as the preferred solution revolving around smart charging functionality, including bidirectional charging and deployment of additional smart charging points (2.1B, 2.2B and 2.3). Options 3.1-3.3 address various obstacles in the aggregation and mobility service provision market which hinder the development of competition. Option 3.1 (ensuring that the treatment of electricity storage systems or devices by network and market operators is not discriminatory or disproportionate irrespective of their size (small-scale vs large-scale) or whether they are stationary or mobile, so that they are able to competitively offer flexibility and balancing services) is a no-regrets option. Option 3.2 (independent aggregators and mobility service providers to have access to basic battery information, such as state-of-health and state-of-charge) is necessary in setting a level playing field and its early implementation would bring positive long term effects in the availability, quality and cost of services provided to domestic battery owners and EV users. Option 3.3 (ensure 3rd party access to all publically accessible charging infrastructure) is expected to become increasingly beneficial with the proliferation of EVs.

Of the options considered regarding the **increase of renewable energy in the transport sector**, a combination of option 1B (in addition to the increase of the target and the sub-target for advanced biofuels a dedicated sub-target for renewable fuels of non-biological origin is introduced) with options 2A (energy-based obligation fuel suppliers), 2C (the choice between the approaches described under 2A and 2B (emissions-based obligation fuel suppliers) is left to the Member States) or 2D (emissions-based obligation fuel suppliers but operators are required to achieve minimum shares for advanced biofuels and renewable fuels of non-biological origin) would perform the best overall. While all options apart from option 1 deliver on the needed level of ambition, there are substantial differences. The energy-based options may have the advantage to promote the development and production of innovative renewable and recycled carbon fuels as they provide the most predictable and stable policy framework for investments into such technologies. The GHG-intensity based options can stimulate supply chain improvements and technology efficiency in renewable and low carbon fuels, where costs of production are higher. This, however, would require applying changes to the methodology applied to determine the GHG emission intensity.

Promoting the use of renewable fuels of non-biological origin is fully in line with the Energy System Integration Strategy and the Hydrogen Strategy as well as the CTP especially if considering post-2030 perspective. This is in particular valid for option 1 (extension of the scope of accounting of RFNBOs beyond transport and improvement of the consistency of accounting of RFNBOs) and option 3 (creation of specific sub-targets for RFNBOs in hard-to-decarbonise sectors). Specific but realistic sub-targets for RFNBOs for the transport and industry sectors would support their large scale development post 2030.

Regarding the options to ensure **bioenergy sustainability**, option 1 (non-regulatory measures) would facilitate the implementation of the REDII sustainability criteria, but would not include additional safeguards to address the identified risks. Option 2 (targeted strengthening of the current EU bioenergy sustainability criteria) would provide the most direct safeguard against the risks of production of forest biomass in high biodiversity areas. It would also introduce additional safeguards promoting optimal lifecycle GHG emission saving and avoiding new

inefficient biomass use in the power sector. Option 3 (regulation of small installations) would further add to the effectiveness of option 2 by regulating a larger amount of biomass use for energy in the EU. It would also help improve public monitoring of biomass production and use. Building on the preferred options 2, 3 and 4 (requiring Member States to design their support schemes for biomass fuels with the aim to minimise the use of [high quality stemwood]), would also contribute to addressing the potential risk of undermining the goal set in the EU Biodiversity Strategy to minimize the use of whole trees for energy production.

In addition to the core objectives of the revision of RED II to address the insufficient ambition in a 2030 and 2050 perspective, to address the insufficient system integration, and to update bioenergy sustainability provisions, a limited number of **additional “flanking” or enabling measures** could contribute to the cost-efficient deployment of renewables.

Regarding **Power Purchase Agreements (PPAs)**, option 1 (guidelines) will provide additional guidance to Member States without increasing administrative burden, although the effectiveness will depend on the uptake of these guidelines. Option 2 (financial support for the use of PPAs for small and medium-sized enterprises) will have a positive benefit for the uptake of renewables and the competitiveness of the European economy. Option 3 (strengthening of regulatory measures on PPAs) would place additional burden upon Member States to remove any undue barriers, but could provide additional certainty for producers and consumers of renewable electricity. Options 1 and 2 are considered the preferred combination

Regarding **cross-border cooperation**, option 1 (updated Commission guidance) would, by itself, not be very effective whereas option 2 (obligation for Member States to test cross-border cooperation within the next 3 years) has a moderate effectiveness. Although option 3 (mandatory partial opening of support schemes) and option 4 (enhanced use of the Union renewable energy financing mechanism) would be highly effective, option 2 is expected to be more politically acceptable and thus the preferred option.

Regarding the promotion of **offshore energy**, given the binding nature of option 1 (joint planning) it would be very effective to ensure target setting and implementation per sea basin. Option 2 (introduction of one-stop shops for the permitting per sea basin) can be expected to have good effectiveness of facilitating permitting of cross-border offshore renewables projects. A combination of both options is preferred.

Regarding **industry**, option 0 (no changes) is not expected to increase the share of renewable energy consumption in the industry sector, creating serious concerns regarding the objective to reduce greenhouse gas emission reductions by 2030, and to achieve climate neutrality in 2050. Option 1 (introduction of use of renewable energy in the audits required in the EED) would provide an effective means to introduce industrial actors to existing cost-effective solutions to switch to renewable energy, without any administrative burden and in coherence with existing legislation. Option 2 (labelling for industrial products in certain sectors claimed to be made from renewable energy) provides an effective means to create a uniform and coherent market for those companies that are placing products and services produced from renewable energy on the market. However, mandatory labelling would create concerns regarding compatibility with the WTO and would possibly lead to a proliferation of labelling requirements. Options 1 and 2 would be complementary and the most effective options, combined with an indicative target for the use of renewable energy in industry.

Overall the policy options have positive economic, environmental and societal benefits. A more secure EU energy system, less dependent on imports, would be achieved by the increase in renewable energy, in particular from offshore. The revision of REDII is likely to have positive impacts on economic growth and investments, by creating quality jobs, and reducing fossil fuel imports, and energy costs for consumers and business. Many of the policy options

are projected to create jobs, in line with the envisaged green digital recovery. Positive employment effects are expected, especially in sectors linked to renewable energy, with an increase in employment and skills in the construction and energy supply sectors and shift in employment between the sectors. Per euro of expenditure, renewable energy creates nearly 70 per cent more jobs than fossil fuels spending and solar PV creates more than twice the number of jobs per unit of electricity generation compared to coal or natural gas. Greater use of energy from sustainable renewable sources, including renewable hydrogen, would result in reduced GHG emissions. Replacing fossil fuels will also reduce air pollutants and have a beneficial impact on health. Renewable-based electrification of road transport would have positive impacts in particular on urban air pollution, whereas electrification of, for example, heating in buildings would contribute substantially to reducing the GHG and other air pollutant emissions from the European building stock, which today relies heavily on fossil fuels. Air quality in cities will be improved by among others renewable heating, especially district heating in cities. Positive biodiversity impacts will follow from stronger sustainability criteria for bioenergy. It may reduce import from outside the EU of biomass fuels, as third countries choose not to comply with them and redirect their export away from the EU.

The revision of the REDII will mainly entail practical implications for Member States public administrations given the need to comply with higher (binding) targets which need to be worked towards to and monitored accordingly. Other actions required from the public administration include promotion and facilitation of the uptake of renewable energy across multiple carriers.

- Regulatory fitness and simplification

A regulatory fitness programme (REFIT) evaluation of the Renewable Energy Directive was carried out between 2014 and 2016. Given the relatively recent adoption of RED II, the proposed revision is limited to what is considered necessary to contribute in a cost-effective way to the Union's 2030 climate ambition, and is not a full revision of the Directive. The Impact Assessment identified possibilities for simplification of legislation and reduction of regulatory costs.

Compared to the current Directive, the amendments are expected to increase the administrative costs caused by the legislation in some areas namely related to accounting and certification of e-fuels/RFNBOs and strengthened sustainability criteria for biomass. The former will entail an increase in cost to have all renewable fuels accounted for and certified. The latter will moderately increase administrative and compliance costs for economic operators associated with monitoring and it might entail a possible rise in fuel costs for biomass plants owners.

No changes in the compliance monitoring regime are foreseen.

Increasing renewable energy use in heating and cooling and in buildings will require building works/renovation, leading to an increase in employment in the sector. Up to 95% of construction, architecture and civil engineering firms are small and medium sized enterprises (SMEs), so there is a likely positive economic effect on SMEs. Guidance and financial support on power purchase agreements will help SMEs who do not have the resources to deal with complex contracts. More stringent forest biomass criteria may create increased administrative costs and burden for small forest owners.

To ensure fair competition in the single market the same rules should apply to all economic operators. As such, the proposal does not exempt SMEs or micro-enterprises. However, the

envisaged economic impacts also likely to benefit SMEs as most of the value chain of deploying renewable energy technology, in particular solar PV, is operated by SMEs.

Fundamental rights

In terms of consistency with the Charter for fundamental rights, the overarching aim of this review is to increase the use of renewable energy and reduce GHG emissions, and this is entirely in line with Article 37 of the Charter under which a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.

4. BUDGETARY IMPLICATIONS

This proposal amends an existing Directive on the use of renewable energy, and the administrative impact and costs are therefore estimated to be moderate, as most of the necessary structures and rules are in place.

5. OTHER ELEMENTS

• Implementation plans and monitoring, evaluation and reporting arrangements

After the adoption of this amending Directive by the co-legislators, during the transposition period, the Commission will undertake the following actions to facilitate its transposition:

- Drafting of a correlation table that serves as transposition check-list for both Member States and the Commission.
- Organisation of meetings with Member States' experts in charge of transposing the different parts of the Directive to discuss how to transpose them and solve doubts, either in the context of the Concerted Action for Renewable Energy Sources (CA-RES) or in a committee format.
- Availability for bilateral meetings and calls with Member States in case of specific question on the transposition of the Directive.
After the transposition deadline, the Commission will carry out a comprehensive assessment of whether Member States have completely and correctly transposed the Directive.

Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action established an integrated energy and climate planning, monitoring and reporting framework, to monitor progress towards the climate and energy targets in line with the transparency requirements of the Paris Agreement. Member States had to submit to the Commission their integrated national energy and climate plans by the end of 2019, covering the five dimensions of the Energy Union for the period 2021-2030. Member States must report biennially on the progress made in implementing the plans and in addition, by 30 June 2023 they must notify the Commission of their draft updates of the plans, with the final updates due on 30 June 2024. This update would cover any new targets agreed in the revision of REDII. This reporting system under the Governance Regulation is considered to have been effective in monitoring Member States' progress towards the Union and national level renewable energy targets. The Governance Regulation also gives the Commission tools for dealing with both an 'ambition' and a 'delivery' gap which are considered adequate.

- **Explanatory documents (for directives)**

Following the ruling of the European Court of Justice in Commission vs Belgium (case C-543/17), Member States must accompany their notifications of national transposition measures with sufficiently clear and precise information, indicating which provisions of national law transpose which provisions of a directive. This must be provided for each obligation, not only at “article level”. If Member States comply with this obligation, they would not need, in principle, to send explanatory documents on the transposition to the Commission.

- **Detailed explanation of the specific provisions of the proposal**

The main provisions which substantially change Directive (EC) 2018/2001 or add new elements are the following:

Article 1(1) amends Article 2 REDII by modifying the definition of renewable fuels of non-biological origin and adding new definitions of renewable fuels, low-carbon fuels, low-carbon hydrogen, bidding zone, smart metering system, smart charging, bidirectional charging, state of health, state of charge, electric vehicle battery, industrial battery, recharging point, power set point, domestic battery, market participant, industry, and [high quality stem wood].

Article 1(2) amends Article 3(1) REDII with the updated 2030 EU target of [XX%] share of energy from renewable sources in the Union’s gross final consumption of energy in 2030. It also modifies Article 3(3) to add a reference to the biomass cascading principle and, as a consequence, to the obligation to minimise the risks of unnecessary market distortions resulting from support schemes. Furthermore, Article 1(2) adds a new paragraph on electrification, to help Member States reach their national contributions.

Article 1(3) amends Article 7 REDII with the updated calculation method of the share of energy from renewable energy sources so that (i) energy from renewable fuels of non-biological origin must be accounted in the sector in which it is consumed (electricity, heating and cooling or transport), and (ii) the renewable electricity used to produce renewable fuels of non-biological origin is not included in the calculation of the gross final consumption of electricity from renewable sources in the Member State.

Article 1(4) amends Article 9(1) REDII with an additional paragraph on the Member States’ obligation to have a cross border pilot project within 3 years and it amends Article 9(7) RED II with an additional paragraph on joint offshore energy planning per sea basin, under which Member States must jointly define and agree to cooperate on the amount of offshore renewable generation to be deployed within each sea basin by 2050, with intermediate steps in 2030 and 2040.

Article 1(5) and Article 1(6) amend Article 15 REDII by splitting the article in two, with Article 15 re-grouping the paragraphs on administrative procedures (paragraph 7 on the requirement to carry out an assessment of the potential for renewables and the use of waste heat and cold in the heating and cooling sector is moved to Article 23). The provisions on renewable power purchase agreements are strengthened, it is ensured that any associated guarantees of origin can be transferred to the buyer of the

renewable energy under the renewable power purchase agreement and a requirement for guidance from the Commission by 2024 is added. A new clause to review the administrative procedures by 2024 is also added.

Article 1(6) inserts a new Article 15a in REDII on mainstreaming renewable energy and enabling measures to mainstream heating & cooling in buildings. This new Article includes a new indicative share of renewables in buildings by 2030 of [XX%] and a reference to the new definition of ‘efficient district heating and cooling’ that will be added to the recast EED, which is a way the minimum level of RES in new buildings and buildings undergoing major renovation can be satisfied. It adjusts the text of current Article 15 to link it to the achievement of the indicative RES targets and to promote the switch from fossil fuel heating systems to RES, as well as to be coherent with the Energy Performance of Buildings Directive. Article 1(7) amends Article 16(1) REDII with an additional paragraph on a one-stop-shop for permitting per sea basin, as part of the specific measures to foster deployment of offshore renewable energy.

Article 1(8) amends Article 18(3) REDII with adjusted paragraphs on the qualification and certification requirements of installers to deal with the fact that there is a shortage of installers of renewable heating systems, which is a ‘brake’ on phasing out fossil fuel systems. It also deletes list of specific types of renewable heating technologies and replaces it by a generic reference to RES heating systems. Article 1(8) amends Article 18(4) REDII, obliging Member States to put in place measures to support participation in training programmes. The previous possibility for Member States to make the list of qualified installers public becomes a requirement.

Article 1(9) amends Article 19(2) and (8) REDII to remove Member States’ ability not to issue guarantees of origin to a producer that receives financial support, linking to the changes related to power purchase agreements in Article 15.

Article 1(10) amends Article 20(3) REDII with a new and additional paragraph to enhance energy system integration between DHC systems and other energy networks, by requiring Member States, where relevant, to develop efficient DHC to promote heating and cooling from RES.

Article 1(11) inserts a new Article 20a in REDII facilitating system integration of renewable electricity by the following measures:

- TSO and DSOs are required to make available information on the share of RES, and where possible the GHG content, of the electricity they supply, in order to increase transparency and give more information to electricity market players, aggregators, consumers and end-users;
- Battery manufacturers must enable access to information on battery capacity, state of health, state of charge and power set point, to battery owners as well as third parties acting on their behalf;
- Member States shall ensure smart charging capability of their newly installed recharging points;
- Regulatory authorities shall assess whether the deployment of additional recharging points, could enable electric vehicles to further contribute to system

flexibility and/or further absorption of renewable electricity. Member States are then required to take measures based on that assessment;

- Regulatory authorities shall assess the potential contribution of bidirectional charging to the penetration of renewable electricity and system optimisation of their electricity grids. Member States are then required to take measures based on that assessment;
- Operators of recharging points must allow third-party access;
- Member States shall ensure that regulatory provisions concerning the use of storage and balancing assets do not discriminate against participation of small and/or mobile storage systems in the flexibility, balancing and storage services market;

Article 1(12) inserts a new Article 22a in REDII on mainstreaming renewable energy in industry with an indicative target of an annual increase of renewable energy of [XX] percentage points and a binding target for renewable fuels of non-biological origin used as feedstock or as an energy carrier. It also introduces a methodology for labelling green industrial products.

Article 1(13) amends Article 23(1) REDII so that the [XX ppt] annual increase in heating and cooling becomes a binding baseline and adds an additional paragraph obliging the Member States to carry out an assessment of their potential of energy from renewable sources and of the use of waste heat and cold in the heating and cooling sector. It also amends Article 23(4) REDII with an extended menu of measures to help them implement the heating and cooling target. It also strengthens this paragraph so that Member States must ensure, rather than aim to ensure, the accessibility of measures to all consumers, in particular those in low-income or vulnerable households, who would not otherwise possess sufficient up-front capital to benefit.

Article 1(14) amends Article 24(1) REDII with an updated paragraph on information of the renewable energy share in district heating and cooling systems. Article 1(14) amends Article 24(4) REDII with an updated paragraph on increased target share, from 1ppt to [XX ppt] of energy from renewable sources and from waste heat and cold in district heating and cooling and a new paragraph is added expanding third party access to apply to district heating or cooling systems above 25 MWth where this makes sense. Article 1(14) amends Article 24(5) REDII with an updated paragraph adding a reference to the new definition of efficient district heating (to be added to the recast EED) and requiring Member States to put in place a mechanism to deal with unjustified refusals of third party access. Article 24(6) REDII is amended with a new paragraph on a framework to facilitate coordination among actors having a role in the use of waste heat and cold. Article 1(14) amends Article 24(8) REDII with updated paragraphs requiring DSOs to make an assessment every 4 years of the potential for district heating or cooling systems to provide balancing and other system services. Article 1(14) amends Article 24(9) REDII with an updated paragraph on Member States' obligation to ensure that the rights of consumers and the rules for operating district heating and cooling systems in accordance with the revised rules, that they are clearly defined, publicly available and enforced by the competent authority. Article 24(10) REDII is amended with an updated paragraph correcting the cross references and adding the new definition of efficient district heating (to be added to the recast EED).

Article 1(15) amends Article 25(1) REDII by increasing the ambition level of renewables in transport by setting a [XX%] greenhouse gas intensity target, increasing the subtarget for advanced biofuels from at least 0.2% in 2022 to 1% in 2025 and [XX%] in 2030, and introducing a [XX%] sub-target for RFNBOs. Article 1(15) also introduces a credit mechanism to promote electromobility, under which economic operators that supply renewable electricity to electric vehicles via public charging stations will receive credits they can sell to fuel suppliers who can use them to satisfy the fuel supplier obligation.

Article 1(16) amends Article 26 REDII to reflect the greenhouse gas intensity target set in transport.

Article 1(17) amends Article 27(1) REDII by setting out rules to calculate the reduction of the greenhouse gas intensity of fuels that is achieved by the use of renewables in transport. —Article 1(17) amends Article 27(3) REDII to make the provisions on the calculation of renewable fuels of non-biological origin produced from electricity apply regardless of the sector in which such fuels are consumed.

Article 1(18) amends Article 28 by deleting the paragraphs on the Union database, which is now regulated in Article 31(a), and by deleting the empowerment in paragraph 5 to adopt a delegated act specifying the methodology for assessing greenhouse gas emissions savings from renewable fuels of non-biological origin and from recycled carbon fuels, which is now regulated in Article 1(20).

Article 1(19) amends Article 29(1), (3), (4) and (5) REDII with updated paragraphs with targeted strengthening of the current sustainability criteria by applying the existing land criteria (e.g. no-go areas) for agricultural biomass also to forest biomass (including primary, highly diverse forests and peatlands). Those strengthened criteria are applied to small-scale biomass-based heat and power installations below a total rated thermal capacity of 5 MW. Article 1(19) amends Article 29(10) REDII with an updated paragraph applying the existing greenhouse gas saving thresholds for electricity, heating and cooling production from biomass fuels to existing installations (not only new installations).

Article 1(20) inserts a new Article 29a on greenhouse gas emissions saving criteria for renewable fuels of non-biological origin (RFNBOs) and recycled carbon fuels, so that energy from RFNBOs can only be counted towards the targets set in this Directive if its GHG emissions savings are at least 70% and energy from recycled carbon fuels can only be counted towards the transport target if its GHG emissions savings are at least 70%.

Article 1(21) modifies Article 30 REDII to adjust it to the changes introduced in Articles 29a and 31a.

Article 1(22) deletes paragraphs 2, 3 and 4 of Article 31 REDII, which regulated the possibility to use of regional cultivation values, in order to better promote producers' individual efforts to reduce the greenhouse gas emission intensity of raw materials

Article 1(23) inserts a new Article 31a, which regulates the Union database, extending its scope so that it can cover fuels not only in the transport sector. It will enable the tracing of liquid and gaseous renewable fuels and recycled carbon fuels as well as their life-cycle greenhouse gas emissions. The database is the monitoring and

reporting tool where fuel suppliers must enter the information necessary to verify their compliance with the fuel suppliers' obligation in Article 25.

Article 2 amends Regulation (EU) 2018/1999 in order to change the Union-level binding target of at least 32% for the share of renewable energy consumed in the Union in 2030 therein to 'the Union's binding target for renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001'.

Article 3 amends Directive 98/70/EC to avoid a duplication of regulatory requirements with regards to transport fuel decarbonisation objectives and align with Directive (EU) 2018/2001, among others regarding obligations regarding the greenhouse gas emission reduction and the use of biofuels.

Article 5 contains the stipulations regarding transposition.

Article 6 repeals Council Directive (EU) 2015/652.

REFORM

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources and, as a consequence, Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action and Directive 98/70/EC relating to the quality of petrol and diesel fuels

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,
Having regard to the Treaty on the Functioning of the European Union, and in particular Article 194(2) thereof and Article 114 thereof in relation to Article 4 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 Committee²,
Having regard to the opinion of the Committee of the Regions³,
Acting in accordance with the ordinary legislative procedure,
Whereas:

- (1) The European Green Deal⁴ establishes the objective of the European Union becoming climate neutral in 2050 in a manner that contributes to European competitiveness, growth and jobs. This objective, and the objective of a 55% reduction in greenhouse gas emissions by 2030 as set out in the 2030 Climate Target Plan⁵, which was endorsed both by the European Parliament⁶ and by the European Council⁷, requires an energy transition and significantly higher shares of renewable energy sources in an integrated energy system.
- (2) Renewable energy plays a fundamental role in delivering the European Green Deal and for achieving climate neutrality by 2050, given that the energy sector contributes over 75% of total greenhouse gas emissions in the Union.
- (3) Directive (EU) 2018/2001 of the European Parliament and of the Council⁸ set a binding EU target to reach a share of at least 32 % of energy from renewable sources in the Union's gross final consumption of energy by 2030. Under the Climate Target Plan, the share of renewable energy in gross final energy consumption would need to increase to [XX%] by 2030 in order to achieve the Union's greenhouse gas emissions

² OJ C , , p..

³ OJ C , , p..

⁴ COM(2019) 640 final

⁵ Stepping up Europe's 2030 climate ambition Investing in a climate-neutral future for the benefit of our people, COM/2020/562 final

⁶ European Parliament resolution of 15 January 2020 on the European Green Deal (2019/2956(RSP))

⁷ European Council conclusions of 11 December 2020, <https://www.consilium.europa.eu/media/47296/1011-12-20-euco-conclusions-en.pdf>

⁸ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources, OJ L 328, 21.12.2018, p. 82–209

reduction target. Therefore, the target set in Article 3 of that Directive needs to be increased.

- (4) When developing support schemes for bioenergy, Member States should take into consideration the available sustainable supply of biomass for energy and non-energy uses, and the maintenance of the national forest carbon sinks and ecosystems. Furthermore, they should take due account of the principles of the circular economy and biomass cascading, and of the waste hierarchy established in Directive 2008/98/EC of the European Parliament and of the Council⁹. For this, they should avoid promoting the use of [high quality stemwood] for energy in a way that creates unnecessary distortions of the biomass raw materials markets. In line with the cascading principle¹⁰, woody biomass should be used according to its highest economic and environmental added value in the following order of priorities: 1) wood-based products, 2) extending their service life, 3) re-use, 4) recycling, 5) bio-energy and 6) disposal. Where no other use for woody biomass is economically viable or environmentally appropriate, energy recovery helps to reduce energy generation from non-renewable sources. Waste prevention and recycling of waste should be the priority option. Member States should avoid creating support schemes which would be counter to targets on treatment of waste and which would lead to the inefficient use of recyclable waste.
- (5) The rapid growth and increasing cost-competitiveness of renewable electricity production can be used to satisfy a growing share of energy demand, for instance using heat pumps for space heating or low-temperature industrial processes, electric vehicles for transport, or electric furnaces in certain industries. Renewable electricity can also be used to produce synthetic fuels for consumption in hard-to-decarbonise transport sectors such as aviation and maritime transport. A framework for electrification needs to enable robust and efficient coordination and expand market mechanisms to match both supply and demand in space and time (or geographically and temporally), stimulate investments in flexibility, and help integrate large shares of variable renewable generation. Member States should therefore ensure that the deployment of renewable electricity continues to increase at an appropriate pace to meet growing demand. For this, Member States should also establish a regulatory framework that includes market-compatible mechanisms to tackle remaining barriers to have secure and adequate electricity systems fit for a high level of renewable energy, as well as storage facilities, fully integrated into the electricity system.
- (6) When calculating the share of renewables in a Member State, renewable fuels of non-biological origin should be counted in the energy sector where they are consumed (electricity, heating and cooling, or transport). To avoid double-counting, the renewable electricity used to produce these fuels should not be counted. This would result in a harmonisation of the accounting rules for these fuels throughout the Directive, regardless of whether they are counted for the overall renewable energy target or for any sub-target. It also allows to count the real energy consumed, taking account of energy losses in the process to produce these fuels. Last but not least, it allows for the accounting of renewable fuels of non-biological origin imported into and consumed in the Union.

⁹ 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).

¹⁰ COM(2013)659

- (7) Cross-border cooperation can take the form of statistical transfers, support schemes or joint projects. It allows for a cost-efficient deployment of renewable energy across Europe and contributes to market integration. Despite its potential, so far cross-border cooperation has been very limited, thus leading to suboptimal results in terms of efficiency to reach the overall renewable energy target. An obligation should therefore be introduced for Member States to test cross-border cooperation through implementing a pilot project within three years of the entry into force of this Directive. Projects financed under the renewable energy financing mechanism established by Commission Implementing Regulation (EU) 2020/1294¹¹ could meet this obligation for the Member States involved.
- (8) The market for renewable power purchase agreements is rapidly growing due to the increasing cost-competitiveness of renewable power generation, and provides a complementary route to the market for this power in addition to support schemes by Member States and or to selling directly on the wholesale electricity market. At the same time, the market for renewable power purchase agreements is still limited to a small number of Member States and large companies, with significant administrative, technical and financial barriers remaining in large parts of the Union's market. The existing measures to encourage the uptake of renewable power purchase agreements should therefore be strengthened further.
- (9) In the context of increased ambition regarding the use of renewable energy, overly complex and long administrative procedures constitute a major barrier for the deployment of renewable energy. On the basis of the measures to improve administrative procedures for renewable energy installations reported in 2023 by Member States in their first integrated national energy and climate progress reports pursuant to Regulation (EU) 2018/1999 of the European Parliament and of the Council¹², the Commission should assess whether the provisions included in this Directive to streamline these procedures have resulted in smooth and proportionate procedures. If that assessment reveals significant scope for improvement, the Commission should take appropriate measures to ensure Member States have streamlined and efficient administrative procedures in place.
- (10) Buildings have a large untapped potential to contribute effectively to the reduction in greenhouse gas emissions in the Union. The decarbonisation of heating and cooling through an increased share in production and use of renewable energy in buildings would make a significant contribution towards decarbonising the building sector. However, without specific measures to increase the production and use of renewable energy in buildings, emissions from the buildings sector will be very slow to decrease. Therefore, a benchmark for the use of renewable energy in buildings should be set to guide and incentivise Member States' efforts to exploit the renewable energy potential of buildings.

¹¹ Commission Implementing Regulation (EU) 2020/1294 of 15 September 2020 on the Union renewable energy financing mechanism (OJ L 303, 17.9.2020, p. 1).

¹² Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

- (11) Insufficient numbers of skilled workers, in particular installers and designers of renewable heating and cooling systems, slow down the replacement of fossil fuel heating systems by renewable based systems and is a major barrier to integrating renewables in buildings, industry and agriculture. A sufficient number of high-quality training programmes and certification possibilities ensuring proper installation and reliable operation of a wide range of renewable heating and cooling systems should be made available and designed in a way to attract participation in such training programmes and certification systems. The list of trained and certified installers should be made public to ensure consumer trust and easy access to tailored designer and installer skills guaranteeing proper installation and operation of renewable heating and cooling.
- (12) Guarantees of origin are a key tool for consumer information as well as for the further uptake of renewable power purchase agreements. To establish a coherent Union base for the use of guarantees of origin and to provide access to appropriate supporting evidence for persons concluding renewable power purchase agreements, all renewable energy production should be able to request a guarantee of origin without prejudice to Member States' obligation to take into account the market value of the guarantees of origin if the energy producers receive financial support. Infrastructure development for district heating and cooling networks should be stepped up and steered towards harnessing a wider range of renewable heat and cold sources in an efficient and flexible way in order to increase the deployment of renewable energy and deepen energy system integration. It is appropriate to update the list of renewable energy sources that district heating and cooling networks should increasingly accommodate and require the integration of thermal energy storage as a source of flexibility, greater energy efficiency and more cost-effective operation.
- (13) Distributed storage assets, such as domestic batteries and batteries of electric vehicles have the potential to offer considerable flexibility to the grid through aggregation. In order to facilitate the development of aggregation services, the regulatory provisions concerning connection and operation of the storage assets, such as tariffs, commitment times and connection specifications, should be designed in a way that does not hamper the potential of all storage assets, including small and mobile ones, to offer flexibility and balancing services to the system and to contribute to further absorb renewable electricity, in comparison with larger, stationary storage assets. In order for flexibility and balancing services from aggregation of such assets to be developed in a competitive manner, access to basic battery information such as state of health, state of charge, capacity and power set point should be provided free of charge to the owners or users of the batteries and the entities acting on their behalf, such as building energy system managers, mobility service providers and other electricity market participants and independent aggregators.
- (14) The increasing number of electric vehicles in road, rail, maritime and other transport sectors will require that recharging operations are optimised and managed in a way that does not cause congestion and takes full advantage of the availability of renewable electricity and low electricity prices in the system. For this to be possible, recharging points should have smart charging functionality to be able to react to price signals, information on the share of renewable electricity and other system or market realities in a dynamic manner. In situations where bidirectional charging would assist further penetration of renewable electricity by electric vehicle fleets in transport and the electricity system in general, such functionality should also be available. In view of

the long life span of recharging points, requirements for charging infrastructure should be kept updated in a way that would cater for future needs.

- (15) Industry accounts for 25% of the Union's energy consumption, and is a major consumer of heating and cooling, which is currently supplied 91% by fossil fuels. However, 50% of heating and cooling demand is low-temperature (<200 °C) for which there are cost-effective renewable energy options, including through electrification. Industrial investment decisions today will determine the future industrial processes and energy options that can be considered by industry, so it is important that these investments decisions are future-proof. Therefore, benchmarks should be put in place to incentivise the industry to switch to a renewables-based production process. Moreover, a common methodology should be developed by the Commission for products that are labelled as having been produced partially or fully using renewable energy or using renewable fuels of non-biological origin as feedstock. This will provide trust to consumers and can create the necessary market demand to bring products to the European market.
- (16) Renewable fuels of non-biological origin can be used for energy purposes, but also for non-energy purposes as feedstock or raw material in industries such as steel or chemicals. The use of renewable fuels of non-biological origin for both purposes exploits their full potential to replace fossil fuels used as feedstock and to reduce greenhouse gas emissions in industry and should therefore be included in a target for the use of renewable fuels of non-biological origin. To ensure that renewable fuels of non-biological origin contribute to greenhouse gas reduction, the rules ensuring that they are produced from electricity of renewable origin should apply independently of the sector in which they are consumed.
- (17) Increasing ambition in the heating and cooling sector is key to delivering the overall renewable energy target given that heating and cooling constitutes around half of the Union's energy consumption, covering a wide range of end uses and technologies in buildings, industry and district heating and cooling. To trigger an acceleration of the increase of renewables in heating and cooling, an annual [XX] percentage point increase at Member State level should be made binding as a minimum for all Member States, except for those which already have renewable shares above 50%. In addition, Member State-specific top-ups should be set, redistributing the additional efforts to the desired level of renewables in 2030 among Member States based on GDP and cost-effectiveness. A longer list of different measures should be included in Directive (EU) 2018/2001 to facilitate increasing the share of renewables in heating and cooling. Member States may implement one or more measures from the list of measures.
- (18) Modern renewable-based efficient district heating and cooling systems have demonstrated their potential to provide cost-effective solutions for integrating renewable energy, increased energy efficiency and energy system integration solutions facilitating the overall decarbonisation of the heating and cooling sector. To ensure this potential is harnessed, the annual increase of renewable energy and/or waste heat in district heating and cooling should be raised from 1 percentage point to [XX] without changing the indicative nature of this increase, reflecting the uneven development of this type of network across the Union.
- (19) To ensure that a greater role of district heating and cooling is accompanied by better information for consumers, it is appropriate to clarify and strengthen the disclosure about the renewables share and energy efficiency of these systems.

- (20) To reflect the increased importance of district heating and cooling and the need to steer the development of these networks towards the integration of more renewable energy, it is appropriate to set requirements to ensure the connection of third party suppliers of renewable energy and waste heat with cold district heating or cooling networks systems above 25MW.
- (21) To ensure district heating and cooling participate fully in energy sector integration, it is appropriate to extend the cooperation with electricity distribution system operators to electricity transmission system operators and widen the scope of cooperation to grid investment planning and markets to better utilise the potential of district heating and cooling for providing flexibility services in electricity markets. Further cooperation with gas network operators, including hydrogen and other energy networks, should also be made possible to ensure a wider integration across energy carriers and their most cost-effective use.
- (22) Waste heat and cold are underused despite their wide availability, leading to a waste of resources, lower energy efficiency in national energy systems and higher than necessary energy consumption in the Union. Requirements for closer coordination between district heating and cooling operators, industrial and tertiary sectors, and local municipalities can facilitate the dialogue and cooperation necessary to harness cost-effective waste heat and cold potentials via district heating and cooling systems.
- (23) The use of renewable fuels and renewable electricity in the transport sector can contribute to the decarbonisation of the Union transport sector in a cost-effective manner, and improve, inter alia, energy diversification in the transport sector while promoting innovation, growth and jobs in the Union economy and reducing reliance on energy imports. With a view to achieving the increased target for greenhouse gas emission savings agreed by the Union, the level of renewable energy supplied to all transport modes in the Union should be increased. Expressing the transport target as a greenhouse gas intensity reduction target should drive the most cost-effective and performing fuels, in terms of greenhouse gas saving, to the market. This would stimulate innovation and set out a clear benchmark to compare across fuel types and renewable electricity depending on their GHG intensity. Complementary to this, increasing the level of the energy-based target on advanced biofuels and biogas and introducing a target for renewable fuels of non-biological origin should ensure these fuels come to the market. The achievement of these targets should be ensured by obligations on fuel suppliers as well as by other measures included in the Union legislation regarding aviation and maritime fuels.
- (24) Electromobility will play an essential role for decarbonising the transport sector. To foster the further development of electromobility, Member States should establish a credit mechanism that allows operators charging points accessible to the public to contribute towards the fulfilment of the obligation on fuel suppliers by supplying renewable electricity. In addition, all electricity obtained from a direct connection to an installation generating renewable electricity and supplied to the transport sector should be fully counted as renewable. While supporting electricity in transport through such mechanism, it is important that Member States continue setting high ambitions for the decarbonisation of their liquid fuel mix in transport.
- (25) Since renewable fuels of non-biological origin are counted as renewable energy regardless of the sector in which they are consumed, the rules to determine their renewable nature when produced from electricity, which are applicable until now only to these fuels when consumed in the transport sector, should be extended to all

renewable fuels of non-biological origin, regardless of the sectors where they are consumed.

- (26) To ensure higher environmental effectiveness of the Union sustainability and greenhouse emissions saving criteria for solid biomass fuels in installations producing heating, electricity and cooling, the minimum threshold for the applicability of such criteria should be lowered from the current 20 MW to 5 MW.
- (27) Directive (EU) 2018/2001 strengthened the bioenergy sustainability and greenhouse gas savings framework by setting criteria for all end-use sectors. It set specific rules for biofuels, bioliquids and biomass fuels produced from forest biomass, requiring the sustainability of harvesting operations and the accounting of land-use change emissions. To achieve an enhanced protection of especially biodiverse and carbon-rich habitats, such as primary forests, highly biodiverse forests, grasslands and peat lands, exclusions or limitations to source forest biomass from those areas should be included, in line with the approach for biofuels, bioliquids and biomass fuels produced from agricultural biomass. In addition, the greenhouse gas emission saving criteria should also apply to existing biomass-based installations to ensure that bioenergy production in all such installations leads to greenhouse gas emission reductions compared to energy produced from fossil fuels.
- (28) In order to reduce the administrative burden for producers of renewable fuels and recycled carbon fuels and for Member States, when voluntary or national schemes have been recognised by the Commission as giving evidence or providing accurate data regarding the compliance of sustainability and greenhouse gas emissions saving criteria as well as other requirements, Member States should accept the results of the certification issued by such schemes within the scope of the Commission's recognition.
- (29) The Union database to be put in place by the Commission aims to enable the tracing of liquid and gaseous renewable fuels and recycled carbon fuels. Its scope should be extended from transport to all other end-use sectors in which such fuels are consumed. This should make a vital contribution to the comprehensive monitoring of the production and consumption of these fuels, mitigating risks of double-counting or irregularities along the supply chains covered by the Union database. In addition, to avoid any risk of double claims on the same renewable gas, a guarantee of origin issued for any consignment of renewable gas registered in the database should be cancelled.
- (30) The Governance Regulation (EU) 2018/1999 refers in a number of places to the Union-level binding target of at least 32% for the share of renewable energy consumed in the Union in 2030. As that target needs to be increased in order to contribute effectively to the ambition to decrease greenhouse gas emissions by 55% by 2030, those references should be amended. [TBC depending on the revision of the Governance Regulation]
- (31) The scope of Directive 98/70/EC of the European Parliament and of the Council¹³ should be amended in order to avoid a duplication of regulatory requirements with regards to transport fuel decarbonisation objectives and align with Directive (EU) 2018/2001.

¹³ 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).

- (32) The definitions of Directive 98/70/EC of the European Parliament and of the Council should be amended in order to align them with Directive (EU) 2018/2001 and thereby avoid different definitions being applied in those two acts.
- (33) The obligations regarding the greenhouse gas emission reduction and the use of biofuels in Directive 98/70/EC should be deleted in order to streamline and avoid double regulation with regards to the strengthened transport fuel decarbonisation obligations which are provided for in Directive (EU) 2018/2001.
- (34) The obligations regarding the monitoring of and reporting on the greenhouse gas emission reductions set out in Directive 98/70/EC should be deleted to avoid regulating reporting obligations twice.
- (35) Council Directive (EU) 2015/652 laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC provides the detailed rules for the uniform implementation of Article 7a of Directive 98/70/EC; it should be repealed as it becomes obsolete with the repeal of Article 7a of Directive 98/70/EC by this Directive.
- (36) For bio-based components in diesel fuel, limiting reference diesel fuel to B7, that is diesel fuel containing up to 7 % fatty acid methyl esters (FAME), limits available options to attain higher biofuel incorporation targets as set out in Directive (EU) 2018/2001, considering that almost the entire Union supply of diesel fuel was B7 in 2018. The maximum share of bio-based components should therefore be increased from 7% to [XX%]. Sustaining the market uptake of B[XX], that is diesel fuel containing up to [XX%] fatty acid methyl esters (FAME), requires an EU-wide B7 protection grade for 7% FAME in diesel fuel due to the sizeable proportion of vehicles not compatible with B[XX] expected to be present in the fleet by 2030.
- (37) In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents¹⁴, 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. With regard to this Directive, the legislator considers the transmission of such documents to be justified, in particular following the judgment of the European Court of Justice in Commission vs Belgium (case C-543/17).

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Amendments to Directive (EU) 2018/2001

Directive (EU) 2018/2001 is amended as follows:

- (1) Article 2 is amended as follows:
 - (a) Point (36) is replaced by the following:

¹⁴ OJ C 369, 17.12.2011, p. 14.

‘(36) ‘renewable fuels of non-biological origin’ means fuels other than biofuels or biogas, the energy content of which is derived from renewable sources other than biomass;’

(b) the following points are added:

‘(48) ‘renewable fuels’ means biofuels, bioliquids, biomass fuels and renewable fuels of non-biological origin;

(51) ‘bidding zone’ means bidding zone as defined in point (65) of Article 2 of Regulation (EU) 2019/943 of the European Parliament and of the Council*;

(52) ‘smart metering system’ means smart metering system as defined in point (23) of Article 2 of Directive (EU) No 2019/944 of the European Parliament and of the Council**;

(53) ‘smart charging’ means a recharging operation in which the intensity of electricity delivered to the battery is adjusted in real-time by the recharging point, based on information received through electronic communication;

(54) ‘bidirectional charging’ means smart charging where the direction of electric charge may be reversed, so that electric charge flows from the battery to the recharging point it is connected to;

(55) ‘state of health’ means state of health as defined in point (25) of Article 2 of [the proposal for a Commission Regulation ‘concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020 (xxxx)];

(56) ‘state of charge’ means state of charge as defined in point (24) of Article 2 of [the proposal for a Commission Regulation ‘concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020 (xxxx)];

(57) ‘electric vehicle battery’ means an electric vehicle battery as defined in Article 2(12) of the proposed Commission regulation ‘concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020 (xxxx);

(58) ‘industrial battery’ means industrial battery as defined in Article 2(11) of the proposed Commission regulation concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020 (xxxx);

(59) ‘recharging point’ means recharging point as defined in point 33 of Article 2 of Directive (EU) No 2019/944;

(60) ‘power set point’ means the information held in a battery’s management system prescribing the electric power settings at which the battery operates during a recharging or a discharging operation, so that its state of health and operational use are optimised;

(61) ‘domestic battery’ means a stand-alone rechargeable battery of rated capacity greater than 2 kwh, which is suitable for installation and use in a domestic environment;

(62) ‘market participant’ means market participant as defined in point (25) of Article 2 of Regulation (EU) 2019/943;

(63) ‘regulatory authority’ means regulatory authority as defined in point (2) of Article 2 of Regulation (EU) 2019/943;

(64) ‘electricity market’ means electricity market as defined in point (9) of Article 2 of Directive 2019/944;

(65) ‘industry’ means companies and products that fall under the Nomenclature of Economic Activities (NACE)¹⁵ codes B,C and F and J63;

(66) [‘high quality stemwood’ means wood of the stem or stems of a tree, including wood in main axes and in major branches, whose characteristics, such as species, dimensions, rectitude, and node density, make it suitable for industrial use, as defined and duly justified by Member States according to the relevant forest conditions. This does not include coppice forests, first thinning operations or trees extracted from forests affected by fires, pests, diseases or damage due to abiotic factors or growth conditions.’]

* Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (OJ L 158, 14.6.2019, p. 54).

** Regulation (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L 158, 14.6.2019, p. 125).’;

(2) Article 3 is amended as follows:

(a) paragraph 1 is replaced by the following:

‘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 [XX%.]’

(b) paragraph 3 is replaced by the following:

‘3. Member States shall ensure that their support schemes promoting bioenergy are designed in accordance with the biomass cascading principle, and the waste hierarchy as set out in Article 4 of Directive 2008/98/EC to avoid undue distortive effects on the raw material markets, in particular by minimising the use of [high quality stemwood] for energy. Member States shall grant no support for renewable energy produced from the incineration of waste if the separate collection obligations laid down in that Directive have not been complied with.’

¹⁵ <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>

(c) the following paragraph 4a is inserted:

‘4a. Member States shall establish a framework, which may include support schemes and facilitating the uptake of renewable power purchase agreements, enabling the deployment of renewable electricity to a level that is consistent with the Member State’s national contribution referred to in paragraph 2 and at a pace that is consistent with the indicative trajectories referred to in Article 4(a)(2) of Regulation (EU) 2018/1999 of the European Parliament and of the Council*. In particular, this framework shall tackle remaining barriers to a high level of renewable electricity supply. When designing this framework, Member States shall take into account the additional renewable electricity required to meet demand in the transport, industry, building and heating and cooling sectors and for the production of renewable fuels of non-biological origin.’

* Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).’;

(3) Article 7 is amended as follows:

(a) in paragraph 1, the second subparagraph is replaced by the following:

‘With regard to point (a), (b), or (c) of the first subparagraph, gas and electricity from renewable sources shall be considered only once for the purposes of calculating the share of gross final consumption of energy from renewable sources. Energy produced from renewable fuels of non-biological origin shall be accounted in the sector - electricity, heating and cooling or transport - where it is consumed.’

(b) in paragraph 2, the first subparagraph is replaced by the following:

‘For the purposes of point (a) of the first subparagraph of paragraph 1, gross final consumption of electricity from renewable sources shall be calculated as the quantity of electricity produced in a Member State from renewable sources, including the production of electricity from renewables self-consumers and renewable energy communities and electricity from renewable fuels of non-biological origin and excluding the production of electricity in pumped storage units from water that has previously been pumped uphill as well as the electricity used to produce renewable fuels of non-biological origin.’

(c) in paragraph 4, point (a) is replaced by the following:

‘Final consumption of energy from renewable sources in the transport sector shall be calculated as the sum of all biofuels, biogas and renewable fuels of non-biological origin consumed in the transport sector.’

(4) Article 9 is amended as follows:

(a) the following paragraph 1a is inserted:

‘1a. Within [3] years after the entry into force of this Directive, each Member State shall establish at least one joint project with one or more other Member States for the production of renewable energy. Projects financed under the renewable energy financing mechanism established by Commission Implementing Regulation (EU) 2020/1294 * may satisfy this obligation for the Member States involved. The Commission shall be notified of the project and the date on which it is expected to become operational.’

* Commission Implementing Regulation (EU) 2020/1294 of 15 September 2020 on the Union renewable energy financing mechanism (OJ L 303, 17.9.2020, p. 1).’;

(b) the following paragraph [...] is inserted:

[text on offshore]

(5) Article 15 is replaced by the following:

‘Article 15

Administrative procedures

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 networks for the production of electricity, heating or cooling from renewable sources, to the process of transformation of biomass into biofuels, bioliquids, biomass fuels or other energy products, and to renewable fuels of non-biological origin are proportionate and necessary and contribute to the implementation of the energy efficiency first principle.

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

- (a) administrative procedures are streamlined and expedited at the appropriate administrative level and predictable timeframes are established for the procedures referred to in the first subparagraph;
 - (b) rules concerning authorisation, certification and licensing are objective, transparent and proportionate, do not discriminate between applicants and take fully into account the particularities of individual renewable energy technologies;
 - (c) administrative charges paid by consumers, planners, architects, builders and equipment and system installers and suppliers are transparent and cost-related;
 - (d) simplified and less burdensome authorisation procedures, including a simple-notification procedure, are established for decentralised devices, and for producing and storing energy from renewable sources.
2. Member States shall clearly define any technical specifications which are to be met by renewable energy equipment and systems in order to benefit from support schemes. Where harmonised or European standards exist, including eco-labels, energy labels and other technical reference systems established by the European standardisation organisations, such technical specifications shall be expressed in terms of those standards in that order. Such technical specifications shall not prescribe where the equipment and systems are to be certified and shall not impede the proper functioning of the internal market.
3. Member States shall ensure that their competent authorities at national, regional and local level include provisions for the integration and deployment of renewable energy, including for renewables self-consumption and renewable energy communities, and the use of unavoidable waste heat and cold when planning, including early spatial planning, designing, building and renovating urban infrastructure, industrial, commercial or residential areas and energy infrastructure, as well as 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 sources in the planning of city infrastructure where appropriate, and to consult the network operators to reflect the impact of energy efficiency and demand response programmes as well as specific provisions on renewables self-consumption and renewable energy communities, on the infrastructure development plans of the operators.
4. Member States shall assess the regulatory and administrative barriers to long-term renewables power purchase agreements, and shall remove unjustified barriers to, and promote the uptake of, such agreements, including by exploring how to reduce the financial risks associated with them, in particular by using credit guarantees. Member States shall ensure that those agreements are not subject to disproportionate or

discriminatory procedures or charges, and that any associated guarantees of origin can be transferred to the buyer of the renewable energy under the renewable power purchase agreement.

Member States shall describe their policies and measures promoting the uptake of renewables power purchase agreements in their integrated national energy and climate plans and progress reports pursuant to Regulation (EU) 2018/1999.

Member States shall provide an indication of the volume of renewable power generation supported by renewables power purchase agreements in the progress reports submitted pursuant to Article 17 of Regulation (EU) 2018/1999.

5. By 2024, the Commission shall review, and where appropriate propose modifications to, the rules on administrative procedures set out in Articles 15, 16 and 17 and their application, and may take additional measures to support Member States in their implementation.’

- (6) The following Article is inserted:

“Article 15a

Mainstreaming renewable energy in buildings

1. In order to promote the production and use of renewable energy in the building sector, each Member State shall endeavour to achieve at least [XX] % share of renewables in the building sector by 2030 expressed in terms of share of national gross final energy consumption and calculated in accordance with the methodology set out in Article 7.
2. Member States shall introduce measures in their building regulations and codes and, where applicable, in their support schemes, to increase the share of energy from renewable sources in the building sector, including national measures relating to substantial increases in renewables self-consumption, in local energy storage and in energy efficiency, and relating to cogeneration, to renewable energy communities, and to passive, nearly zero-energy and zero-energy buildings.

To contribute to the achievement of the indicative share of renewables set out in the first subparagraph, Member States shall, in their building regulations and codes or by other means with equivalent effect, require the use of minimum levels of energy from renewable sources in buildings, in line with the provisions of Directive 2010/31/EU. Member States shall allow those minimum levels to be fulfilled, among others inter through efficient district heating and cooling.

For existing buildings, the requirements laid down in 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.

3. Member States shall ensure that public buildings at national, regional and local level, fulfil an exemplary role as regards the share of renewable energy used, in line with the provisions of Directive 2010/31/EU and Article 5 of Directive 2021/27/EU. Member States may, among others, allow that obligation to be fulfilled by providing for the roofs of public or mixed private-public buildings to be used by third parties for installations that produce energy from renewable sources.
4. In order to contribute to the achievement of the indicate share of renewable energy set out in the first subparagraph, Member States shall promote the use of renewable heating and cooling systems and equipment. To that end, Member States shall use all appropriate measures, tools and incentives, including, among others, energy labels developed under Regulation (EU) 2017/1369, energy performance certificates under Directive 2010/31/EU, or other appropriate certificates or standards developed at national or Union level, and shall ensure the provision of adequate information and advice on renewable, highly energy efficient alternatives as well as on financial instruments and incentives available to promote an increased replacement rate of old heating systems and an increased switch to solutions based on renewable energy.’
- (7) In Article 16(1), the following subparagraph is inserted:
[text on offshore]
- (8) In Article 18, paragraphs 3 and 4 are replaced by the following:
‘3. Member States shall ensure that certification schemes are available for installers and designers of all forms of renewable heating and cooling installations in buildings, industry and agriculture, and for installers of solar photovoltaic systems. 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 the certification awarded by other Member States in accordance with those criteria.

Member States shall endeavour to ensure that trained and qualified installers of renewable heating and cooling systems are available in sufficient numbers for the relevant technologies to service the growth of renewable heating and cooling required to contribute to the annual increase in the share of renewable energy in the heating and cooling sector as set out in Article 23. To that end, Member States shall ensure that sufficient training programmes covering renewable heating technologies

and their latest innovative solutions are available to train installers and shall put in place measures to promote participation in such training programmes. Member States may put in place voluntary agreements with the relevant technology providers and vendors to train sufficient numbers of installers, which may be based on estimates of sales, in the latest innovative solutions and technologies available on the market.

4. Member States shall make information on the certification schemes referred to in paragraph 3 available to the public. Member States shall ensure that the list of installers who are qualified or certified in accordance with paragraph 3 is regularly updated and available to the public.’

(9) Article 19 is amended as follows:

(a) paragraph 2 is amended as follows:

(a) the first subparagraph is replaced by the following:

‘To that end, Member States shall ensure that a guarantee of origin is issued in response to a request from a producer of energy from renewable sources. Member States may arrange for guarantees of origin to be issued for energy from non-renewable sources. 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.’

(b) the fifth subparagraph is deleted;

(b) in paragraph 8, point (b) is deleted.

(10) Article 20 is amended as follows:

(a) paragraph 3 is replaced by the following:

‘3. Subject to their assessment included in the integrated national energy and climate plans in accordance with Annex I to Regulation (EU) 2018/1999 on the necessity to build new infrastructure for district heating and cooling from renewable sources in order to achieve the Union target set in Article 3(1) of this Directive, Member States shall, where relevant, take the necessary steps with a view to developing efficient district heating and cooling infrastructure to promote heating and cooling from renewable energy sources including solar energy, ambient energy, geothermal energy, biomass biogas and bioliquids, and waste heat and cold in combination with thermal energy storage.’

(11) The following Article 20a is inserted:

‘Article 20a

Facilitating system integration of renewable electricity

1. Member States shall require transmission system operators and distribution system operators in their territory to make available information on the share of renewable electricity and the greenhouse gas emissions content of the electricity supplied in each bidding zone, as accurately as possible and as close to real time as possible but in time intervals of no more than one hour, with forecasting where available. This information shall be made available digitally in a manner that ensures it can be used by electricity market participants, aggregators, consumers and end-users, and it can be read by devices with electronic communication such as smart metering systems, electric vehicle recharging points, heating and cooling systems and building energy management systems.

2. Manufacturers of domestic, electric vehicle and industrial batteries shall enable real-time access to basic battery management system information, including battery capacity, state of health, state of charge and power set point, to battery owners and users as well as to third parties acting on their behalf, such as building energy management companies, electromobility service providers or independent aggregators, at no cost.

3. Member States shall ensure that recharging points installed in their territory from [the transposition deadline of this Directive] can support smart charging functionalities and, where appropriate, bidirectional charging functionalities.

4. Member States shall require their regulatory authority, based on input from transmission system operators and distribution system operators, to assess, within one year of the [transposition deadline] of this Directive and periodically every [3] years thereafter, the extent to which the deployment of additional recharging points in particular in locations where electric vehicles are typically parked for long periods of time could enable electric vehicles to further contribute to system flexibility or further absorption of renewable electricity. Based on the results of the regulatory authority's assessment, Member States shall take measures to establish the deployment of additional recharging points. The assessment and measures shall be made publicly available and shall be taken into account in future reports covering infrastructure investment and congestion by the system operators.

5. Member States shall require their regulatory authority to assess, within one year of the [transposition deadline] of this Directive and periodically every [3] years thereafter, the potential contribution of bidirectional charging to the penetration of renewable electricity, system optimisation of their electricity grids and security of supply. Based on the results of the energy regulator's assessment, Member States shall take measures to adjust the availability and geographical distribution of bidirectional charging infrastructure, in both public and private areas. The assessment and measures shall be made publicly available.

6. Member States shall ensure that operators of recharging points in their jurisdiction operate recharging points on the basis of third-party access, making available their recharging infrastructure to other electromobility service providers and aggregators, and do not discriminate between system users or classes of system users, and in particular in favour of their related undertakings. Private recharging points for own use are excluded from the application of this paragraph.

7. Member States shall ensure that the national regulatory framework does not discriminate against participation in the electricity markets, including congestion management and the provision of flexibility services, of small or mobile systems

such as domestic batteries and electric vehicles, both directly and through aggregation.’

- (12) The following Article 22a is inserted:

‘Article 22a

Mainstreaming renewable energy in industry

1. In order to promote the use of renewable energy in industry, each Member State shall endeavour to increase the share of renewable energy in the final energy consumed in this sector by an indicative [XX] percentage points annual increase in final energy consumption by industry calculated for the periods [2021] to [2025] and [2026] to [2030], starting from the share of renewable energy in industry in [2020] expressed in terms of share of national final energy consumption and calculated in accordance with the methodology set out in Article 7.

Member States shall ensure that the contribution of renewable fuels of non-biological origin used as feedstock or as an energy carrier shall be [XX] percent of the sum of the hydrogen used in final energy consumption and the hydrogen used as a feedstock within the industry.
2. Member States shall ensure that industrial products that are labelled as having been produced partially or fully using renewable energy or using renewable fuels of non-biological origin as feedstock, or claimed as such, use the methodology that the Commission shall develop for that purpose.
3. By 31 December 2023, the Commission shall adopt a delegated act[s] in accordance with Article 35 to supplement this Directive by setting out the methodology to be followed in order to claim that industrial products are produced partially or fully using renewable energy or using renewable fuels of non-biological origin as feedstock.

- (13) Article 23 is amended as follows:

- (a) paragraph 1 is replaced by the following:

‘1. In order to promote the use of renewable energy in the heating and cooling sector, each Member State shall, as a minimum, increase the share of renewable energy in that sector by [XX] percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030, starting from the share of renewable energy in the heating and cooling sector in 2020, expressed in terms of national share of gross final energy consumption and calculated in accordance with the methodology set out in Article 7.

That increase shall be of [XX] percentage points for Member States where waste heat and cold is used. In this case, Member States may count waste heat and cold up to 40 % of the average annual increase.

In addition to the minimum [XX] percentage points annual increase, each Member State shall endeavour to increase the share of renewable energy in their heating and cooling sector by the amount set out in Annex 1a.'

(b) the following paragraph 1a is inserted:

'1a. Member States shall carry out an assessment of their potential of energy from renewable sources and of the use of waste heat and cold in the heating and cooling sector. That assessment shall, where appropriate, include a spatial analysis of areas suitable for their deployment at low ecological risk and the potential for small-scale household projects. The assessment shall set out milestones and measures to increase renewables in heating and cooling and, where appropriate, the use of waste heat and cold through district heating and cooling with a view of establishing a long-term national strategy to decarbonise heating and cooling. The assessment shall be part of the integrated national energy and climate plans in accordance with Regulation (EU) 2018/1999, and shall accompany the comprehensive heating and cooling assessment required pursuant to Article 14(1) of Directive 2012/27/EU.'

(c) in paragraph 2, point (a) is deleted.

(d) paragraph 4 is replaced by the following:

'4. To achieve the average annual increase referred to in paragraph 1, Member States may implement one or more of the following measures:

- (a) physical incorporation of renewable energy or waste heat and cold in the energy sources and fuels supplied for heating and cooling;
- (b) the installation of highly efficient renewable heating and cooling systems in buildings, or the use of renewable energy or waste heat and cold in industrial heating and cooling processes;
- (c) measures covered by tradable certificates proving compliance with the obligation laid down in paragraph 1 through support to installation measures under point (b), carried out by another economic operator such as an independent renewable technology installer or energy service company providing renewable installation services;
- (d) capacity building for national and local authorities to plan and implement renewable projects and infrastructures;
- (e) creation of risk mitigation frameworks to reduce the cost of capital for renewable heat projects;
- (f) promotion of heat purchase agreements for corporate and collective small consumers;
- (g) planned replacement schemes of fossil heating systems or fossil phase-out schemes with milestones;
- (h) renewable heat planning requirements at local and regional level;
- (i) other policy measures, with an equivalent effect, including fiscal measures, support schemes or other financial incentives.

When adopting and implementing those measures, Member States shall ensure their accessibility to all consumers, in particular those in low-income or vulnerable households, who would not otherwise possess sufficient up-front capital to benefit.'

(14) Article 24 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. Member States shall ensure that information on the energy performance and the share of renewable energy in their district heating and cooling systems is provided to final consumers in an easily accessible manner, such as on bills or on the suppliers' websites and on request. The information on the renewable energy share shall be expressed at least as a percentage of gross final consumption of heating and cooling assigned to the customers of a given district heating and cooling system, including information on how much energy was used to deliver one unit of heating to the customer or end-user.'

(b) paragraph 4 is replaced by the following:

'4. Member States shall endeavour to increase the share of energy from renewable sources and from waste heat and cold in district heating and cooling by at least [XX] percentage points as an annual average calculated for the period 2021 to 2025 and for the period 2026 to 2030, starting from the share of energy from renewable sources and from waste heat and cold in district heating and cooling in 2020, and shall lay down the measures necessary for this increase. The share of renewable energy shall be expressed in terms of share of gross final energy consumption in district heating and cooling adjusted to normal average climatic conditions.

Member States with a share of energy from renewable sources and from waste heat and cold in district heating and cooling above 60 % may count any such share as fulfilling the average annual increase referred to in the first subparagraph.

Member States shall lay down the necessary measures to implement the average annual increase referred to in the first subparagraph in their integrated national energy and climate plans pursuant to Annex I to Regulation (EU) 2018/1999.'

(c) the following paragraph 4a is inserted:

'4a. Member States shall ensure that operators of district heating or cooling systems above 25 MWth capacity are obliged to connect third party suppliers of energy from renewable sources and from waste heat and cold or are obliged to offer to connect and purchase heat or cold from renewable sources and from waste heat and cold from third-party suppliers based on non-discriminatory criteria set by the competent

authority of the Member State concerned, where such operators need to do one or more of the following:

- (a) meet demand from new customers;
- (b) replace existing heat or cold generation capacity;
- (c) expand existing heat or cold generation capacity.’

(d) paragraphs 5 and 6 are replaced by the following:

‘5. Member States may allow an operator of a district heating or cooling system to refuse to connect and to purchase heat or cold from a third-party supplier where:

- (a) the system lacks the necessary capacity due to other supplies of heat or cold from renewable sources or of waste heat and cold;
- (b) the heat or cold from the third-party supplier does not meet the technical parameters necessary to connect and ensure the reliable and safe operation of the district heating and cooling system;
- (c) the operator can demonstrate that providing access would lead to an excessive heat or cold cost increase for final customers compared to the cost of using the main local heat or cold supply with which the renewable source or waste heat and cold would compete;
- (d) the system meets the definition of efficient district heating and cooling.

Member States shall ensure that, when an operator of a district heating or cooling system refuses to connect a supplier of heating or cooling pursuant to the first subparagraph, information on the reasons for the refusal, as well as the conditions to be met and measures to be taken in the system in order to enable the connection, is provided by that operator to the competent authority. Member States shall ensure that an appropriate process is in place to remedy unjustified refusals.

6. Member States shall put in place a framework facilitating the use of waste heat and cold via coordination between district heating and cooling system operators and the potential sources of waste heat and cold in the industrial and tertiary sectors. That coordination framework shall ensure dialogue as regards the use of waste heat and cold among at least:

- (a) district heating and cooling system operators;
- (b) industrial and tertiary sector enterprises generating waste heat and cold that can be economically recovered via district heating and cooling systems, such as data centres, industrial plants, large commercial buildings and public transport ; and
- (c) local municipalities responsible for planning and approving energy infrastructures.’

(f) paragraphs 8, 9 and 10 are replaced by the following:

‘8. Member States shall establish a framework under which electricity distribution system operators will assess, at least every four years, in cooperation with the operators of district heating and cooling systems in their respective areas, the potential for district heating and cooling systems to provide balancing and other system services, including demand response and thermal storage of excess electricity from renewable sources, and whether the use of the identified potential would be more resource- and cost-efficient than alternative solutions.

Member States shall ensure that electricity transmission and distribution system operators reflect the results of the assessment required under the first subparagraph in grid planning and grid investment in their respective territories and that the results are taken into account in energy infrastructure developments.

Member States shall facilitate coordination between operators of district heating and cooling systems and electricity transmission and distribution system operators to ensure that balancing, storage and other flexibility services, such as demand response, provided by district heating system operators can participate in their electricity markets.

Member States may extend the assessment and coordination requirements under the first and third subparagraphs to gas transmission and distribution system operators, including hydrogen networks and other energy networks.

9. Member States shall ensure that the rights of consumers and the rules for operating district heating and cooling systems in accordance with this Article are clearly defined, publicly available and enforced by the competent authority.

10. A Member State shall not be required to apply paragraphs 2 and 9 where:

(a) its share of district heating and cooling was less than or equal to 2% of the gross final energy consumption in heating and cooling on 24 December 2018;

(b) its share of district heating and cooling is increased from the share referred to in point (a) to above 2 % by developing new efficient district heating and cooling based on its integrated national energy and climate plan pursuant to Annex I to Regulation (EU) 2018/1999 and the assessment referred to in Article 23(1a) of this Directive; or

(c) 90% of the gross final energy consumption in district heating and cooling systems takes place in district heating and cooling systems meeting the definition in Article x of [the recast EED].’

(15) Article 25 is replaced by the following:

‘Article 25

Greenhouse gas intensity reduction in the transport sector from the use of renewable energy

1. Each Member State shall set an obligation on fuel suppliers to ensure that the amount of renewable fuels and renewable electricity supplied in the transport sector leads to a greenhouse gas intensity reduction of at least [XX%] by 2030, compared to the baseline set out in Article 27(1)(b), in accordance with an indicative trajectory set by the Member State. That share shall be calculated in accordance with the methodology set out in this Article and in Articles 26 and 27.

Member States may exempt, or distinguish between, different fuel suppliers and different energy carriers when setting the obligation on the fuel suppliers, with a view to ensuring that the target for the greenhouse gas intensity reduction referred to in the first subparagraph and the minimum shares of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX and of renewable fuels of non-biological origin referred in the fourth subparagraph are achieved.

For the calculation of the target referred to in the first subparagraph, Member States:

- (a) shall take into account renewable fuels of non-biological origin also when they are used as intermediate products for the production of conventional fuels;
- (b) may take into account recycled carbon fuels.

The share of advanced biofuels and biogas produced from the feedstock listed in Part A of Annex IX in the energy supplied to the transport sector, other than the maritime sector, shall be at least 0,2 % in 2022, 1% in 2025 and [XX] % in 2030, and the share of renewable fuels of non-biological origin shall be at least [XX]% in 2030.

2. Member States shall establish a mechanism allowing fuel suppliers in their territory to exchange credits for supplying renewable energy to the transport sector. The mechanism shall allow economic actors that supply renewable electricity to electric vehicles via public charging stations to receive credits irrespectively of whether the economic operators qualify as fuel suppliers and are subject to the obligation. Fuel suppliers shall be allowed to use the credits to fulfil the obligation set out in the first subparagraph.'

(16) Article 26 is amended as follows:

(a) paragraph 1 is amended as follows:

(a) subparagraph 1 is replaced by the following:

'For the calculation of a Member State's gross final consumption of energy from renewable sources referred to in Article 7 and the greenhouse gas intensity reduction target referred to in the first subparagraph of Article 25(1), the share of biofuels and bioliquids, as well as of biomass fuels consumed in transport, where produced from food and feed crops, shall be no more than one percentage point higher than the share of such fuels in the final consumption of energy in the road and rail transport sectors in 2020 in that Member State, with a maximum

of 7 % of final consumption of energy in the road and rail transport sectors in that Member State.’

(b) subparagraph 4 is replaced by the following:

‘Where the share of biofuels and bioliquids, as well as of biomass fuels consumed in transport, produced from food and feed crops in a Member State is limited to a share lower than 7 % or a Member State decides to limit the share further, that Member State may reduce the greenhouse gas intensity reduction target referred to in the first subparagraph of Article 25(1) accordingly, in view of the contribution these fuels would have made in terms of greenhouse gas emissions saving. For this, Member States shall consider these fuels save 50% greenhouse gas emissions.’

(b) in paragraph 2, the first subparagraph is replaced by the following:

‘For the calculation of a Member State's gross final consumption of energy from renewable sources referred to in Article 7 and the greenhouse gas emission reduction target referred to in the first subparagraph of Article 25(1), the share of high indirect land-use change-risk biofuels, bioliquids or biomass fuels produced from food and feed crops for which a significant expansion of the production area into land with high-carbon stock is observed shall not exceed the level of consumption of such fuels in that Member State in 2019, unless they are certified to be low indirect land-use change-risk biofuels, bioliquids or biomass fuels pursuant to this paragraph.’

(17) Article 27 is amended as follows:

(a) the title is replaced by the following:

‘Calculation rules for determining the greenhouse gas intensity reduction achieved by the use of renewable energy in the transport sector and calculation rules for renewable fuels of non-biological origin regardless its end use’

(b) paragraph 1 is replaced by the following:

‘1. For the calculation of the greenhouse gas intensity reduction referred to in the first subparagraph of Article 25(1), the following provisions shall apply:

(a) the greenhouse gas emissions savings shall be calculated as follows:

(i) for biofuel and biogas, by multiplying the amount of these fuels supplied to all transport sectors by their emissions savings determined in accordance with Article 31;

(ii) for renewable fuels of non-biological origin and recycled carbon fuels, by multiplying the amount of these fuels that is supplied to all transport sectors by their emissions savings determined in accordance with Article 29a(3);

(iii) for renewable electricity, by multiplying the amount of renewable electricity that is supplied to all transport sectors by the fossil fuel comparator $EC_{F(e)}$ set out in in Annex V;

(b) the baseline referred to in Article 25(1) shall be calculated by multiplying the amount of energy supplied to the transport sector, other than the maritime sector, by the fossil fuel comparator $E_{F(t)}$ set out in Annex V;

(c) for the calculation of the relevant amounts of energy, the following rules shall apply:

(i) for the purpose of determining the amount of energy supplied to the transport sector, the values regarding the energy content of transport fuels set out in Annex III shall be used;

(ii) for the determination of the energy content of transport fuels not included in Annex III, the Member States shall use the relevant ESO standards for the determination of the calorific values of fuels. Where no ESO standard has been adopted for that purpose, the relevant ISO standards shall be used. The Commission is empowered to adopt delegated acts in accordance with Article 35 to supplement this Directive by adapting the energy content of transport fuels, as set out in Annex III, in accordance with scientific and technical progress;

(iii) the amount of renewable electricity supplied in transport is determined by multiplying the amount of electricity supplied in the transport sector by the average share of renewable electricity supplied in their territory in the two previous years. By way of exception, where electricity is obtained from a direct connection to an installation generating renewable electricity and supplied to the transport sector, that electricity shall be fully counted as renewable;

(d) the greenhouse gas intensity reduction from the use of renewable energy is determined by dividing the greenhouse gas emissions saving from the use of biofuels, biogas and renewable electricity supplied to all transport sectors by the baseline.'

(c) paragraph 2 is deleted

(d) paragraph 3 is amended as follows:

(a) the first, second and third subparagraphs are deleted;

(b) the fourth subparagraph is replaced by the following:

'Where electricity is used for the production of renewable fuels of non-biological origin, either directly or for the production of intermediate products, the average share of electricity from renewable sources in the country of production, as measured two years before the year in question, shall be used to determine the share of renewable energy.';

(c) in the fifth subparagraph, the introductory sentence is replaced by the following:

'However, electricity obtained from direct connection to an installation generating renewable electricity may be fully counted as renewable electricity where it is used for the production of renewable fuels of non-biological origin, provided that the installation:';

- (18) Article 28 is amended as follows:
- (a) paragraphs 2, 3 and 4 are deleted.
 - (b) paragraph 5 is replaced by the following:

‘By 31 December 2021, the Commission shall adopt delegated acts in accordance with Article 35 to supplement this Directive by specifying the methodology to determine the share of biofuel, and biogas for transport, resulting from biomass being processed with fossil fuels in a common process.’
- (19) Article 29 is amended as follows:
- (a) paragraph 1 is amended as follows:
 - (a) in the first subparagraph, point (a) is replaced by the following:

‘(a) contributing towards the targets set in this Directive;’
 - (b) the fourth subparagraph is replaced by the following:

‘Biomass fuels shall fulfil the sustainability and greenhouse gas emissions saving criteria laid down in paragraphs 2 to 7 and 10 if used,

 - in the case of solid biomass fuels, in installations producing electricity, heating and cooling with a total rated thermal input equal to or exceeding 5 MW,
 - in the case of gaseous biomass fuels, in installations producing electricity, heating and cooling with a total rated thermal input equal to or exceeding 2 MW,
 - in the case of installations producing gaseous biomass fuels with the following average biomethane flow rate:
 - (i) above 200 m³ methane equivalent/h measured at standard conditions of temperature and pressure (i.e. 0°C and 1 bar atmospheric pressure);
 - (ii) if biogas is composed of a mixture of methane and non-combustible other gases, for the methane flow rate, the threshold set out in point (i), recalculated proportionally to the volumetric share of methane in the mixture;

Member States may apply the sustainability and greenhouse gas emissions saving criteria to installations with lower total rated thermal input or biomethane flow rate.’
 - (b) in paragraph 3, the following subparagraph is inserted after the first subparagraph:

‘This paragraph, with the exception of point (c), also applies to biofuels, bioliquids and biomass fuels produced from forest biomass.’;
 - (c) in paragraph 4, the following subparagraph is added:

‘The first subparagraph, with the exception of points (b) and (c), and the second subparagraph also apply to biofuels, bioliquids and biomass fuels produced from forest biomass.’;
 - (d) paragraph 5 is replaced by the following:

‘5. Biofuels, bioliquids and biomass fuels produced from agricultural or forest biomass taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph 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.’

(f) in paragraph 10, point (d) is replaced by the following:

‘(d) at least 70 % for electricity, heating and cooling production from biomass fuels used in installations until 31 December 2025, and at least 80% from 1 January 2026.’;

(20) The following Article is inserted:

‘Article 29a

Greenhouse gas emissions saving criteria for renewable fuels of non-biological origin and recycled carbon fuels

1. Energy from renewable fuels of non-biological origin shall be counted towards the share of renewable energy in accordance with Article 7 and the targets set in this Directive only if the greenhouse gas emissions savings from the use of these fuels are at least 70%.
2. Energy from recycled carbon fuels may be counted towards the greenhouse gas emissions reduction target referred to in the first subparagraph of Article 25(1) only if the greenhouse gas emissions savings from the use of these fuels are at least 70%.
3. The Commission is empowered to adopt delegated acts in accordance with Article 35 to supplement this Directive by specifying the methodology for assessing greenhouse gas emissions savings from renewable fuels of non-biological origin and from recycled carbon fuels, which shall ensure that credit for avoided emissions is not given for CO₂ the capture of which has already received an emission credit under other provisions of law.’;

(21) Article 30 is amended as follows:

(a) in paragraph 1, the first subparagraph is replaced by the following:

‘Where renewable fuels and recycled carbon fuels are to be taken into account for compliance with the targets set in this Directive, Member States shall require economic operators to show that the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29 and 29a for renewable fuels and recycled-carbon fuels have been fulfilled. For this purpose, they shall require economic operators to use a mass balance system which.’

(b) in paragraph 3, subparagraphs 1 and 2 are replaced by the following:

‘Member States shall take measures to ensure that economic operators submit reliable information regarding the compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29 and 29a, and that economic operators make available to the relevant Member State, upon request, the data used to develop the information.

The obligations laid down in this paragraph shall apply regardless of whether renewable fuels and recycled carbon fuels are produced within the Union or are imported. Information about the geographic origin and feedstock type of biofuels, bioliquids and biomass fuels per fuel supplier shall be made available to consumers on the websites of operators, suppliers or the relevant competent authorities and shall be updated on an annual basis.’

- (c) in paragraph 4, the first subparagraph is replaced by the following:

‘The Commission may decide that voluntary national or international schemes setting standards for the production of renewable fuels and recycled carbon fuels, provide accurate data on greenhouse gas emission savings for the purposes of Articles 29 and 29a, demonstrate compliance with Articles 27(3) and 31a, or demonstrate that consignments of biofuels, bioliquids and biomass fuels comply with the sustainability criteria laid down in Article 29. When demonstrating that the criteria laid down in Article 29(6) and (7) are met, the operators may provide the required evidence directly at sourcing area level. The Commission may 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 point (c)(ii) of the first subparagraph of Article 29(3).’

- (d) in paragraph 6, the first two sub-paragraphs are replaced by the following:

‘Member States may set up national schemes where compliance with the sustainability and greenhouse gas emissions saving criteria laid down in Articles 29 and 29a, in accordance with the methodology developed under Article 29a (3) is verified throughout the entire chain of custody involving competent national authorities. These schemes may also verify the accuracy and completeness of the information included by economic operators in the Union database.

A Member State may notify such a national scheme to the Commission. The Commission shall give priority to the assessment of such a scheme in order to facilitate mutual bilateral and multilateral recognition of these schemes. The Commission may decide, by means of implementing acts, whether such a notified national scheme complies with the conditions laid down in this Directive. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 34(3).

Where the decision is positive, other schemes recognised by the Commission in accordance with this Article shall recognise that national scheme as regards

verification of compliance with the criteria for which it has been recognised by the Commission.’

(e) in paragraph 9, the first subparagraph is replaced by the following:

‘Where an economic operator provides evidence or data obtained in accordance with a scheme that has been the subject of a decision pursuant to paragraph 4 or 6 of this Article, Member State shall not require the economic operator to provide further evidence of compliance with the elements covered by the scheme for which the scheme has been recognised by the Commission.

(22) Article 31 is amended as follows:

(a) paragraphs 2, 3 and 4 are deleted.

(23) The following Article is inserted:

‘Article 31a
Union database

1. The Commission shall ensure that a Union database is put in place to enable the tracing of liquid and gaseous renewable fuels and recycled carbon fuels.
2. Member States shall require the relevant economic operators to enter in a timely manner accurate information into that database on the transactions made and the sustainability characteristics of the fuels subject to these transactions, including their life-cycle greenhouse gas emissions, starting from their point of production to the moment it is consumed in the Union. Information on whether support has been provided for the production of a specific consignment of fuel, and if so, on the type of support scheme, shall also be included in the database.

If appropriate to improve traceability of data along the entire supply chain, the Commission may further extend the scope of the Union database to cover relevant data from the point of production or collection of the raw material used for the fuel production.

Member States shall require fuel suppliers to enter the information necessary to verify compliance with the requirements laid down in the first and fourth subparagraphs of Article 25(1) into the Union database.

3. Member States shall have access to the Union database for the purposes of monitoring and data verification.
4. If guarantees of origins have been issued for the production of a consignment of renewable gases, Member States shall ensure that those guarantees of origin are cancelled before the consignment of renewable gases can be registered in the database.

5. Member States shall ensure that the accuracy and completeness of the information included by economic operators in the database is verified, for instance by using national or voluntary schemes.

For data verification, national or voluntary schemes may use third party information systems as intermediaries to collect the data, provided that the Commission has recognised these third party information systems prior to their use.

The Commission may adopt implementing acts to recognise the third party information systems used by national or voluntary schemes as appropriate intermediaries, without prejudice to whether the voluntary schemes have been recognised by the Commission in accordance to Article 30(5). Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 34(3).

- (24) The Annexes are amended in accordance with the Annexes to this Directive.

Article 2

Amendments to Regulation (EU) 2018/1999 of the European Parliament and of the Council [in case the Governance Regulation is not to be amended this year]

- (1) Regulation (EU) 2018/1999 is amended as follows:
- (a) In paragraph 11 of Article 2, the reference to ‘the Union-level binding target of at least 32 % for the share of renewable energy consumed in the Union in 2030’ shall be replaced by ‘the Union's binding target for renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001’;
 - (b) In paragraph 20 of Article 2, the reference to ‘the Union-level binding target of at least 32 % for the share of renewable energy consumed in the Union in 2030’ shall be replaced by ‘the Union's binding target for renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001’;
 - (c) In paragraph 2 of Article 4, the reference to ‘the Union-level binding target of at least 32 % for the share of renewable energy consumed in the Union in 2030’ shall be replaced by ‘the Union's binding target for renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001’;
 - (d) In paragraph 2 of Article 5, the reference to ‘at least 32 % of energy from renewable sources in gross final energy consumption at Union level by 2030’ shall be replaced by ‘at least the level of the Union's binding target for renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001’;
 - (e) In paragraph 2 of Article 29, the reference to ‘the Union's 2030 renewable energy target of at least 32 % in 2030.’ shall be replaced by ‘the Union’s binding target for renewable energy in 2030 as referred to in Article 3 of Directive (EU) 2018/2001.’

Article 3

Amendments to Directive 98/70/EC of the European Parliament and of the Council

- (1) Article 1 is replaced by the following:

‘Article 1

Scope

This Directive sets, in respect of road vehicles, and non-road mobile machinery (including inland waterway vessels when not at sea), agricultural and forestry tractors, and recreational craft when not at sea, technical specifications on health and environmental grounds for fuels to be used with positive ignition and compression-ignition engines, taking account of the technical requirements of those engines.’;

- (2) Article 2 is amended as follows:

- (a) points 1, 2 and 3 are replaced by the following:

‘1. ‘petrol’ means any volatile mineral oil intended for the operation of internal combustion positive-ignition engines for the propulsion of vehicles and falling within CN codes 2710 12 41, 2710 12 45 and 2710 12 49 *;

* The numbering of these CN codes as specified in the Common Customs Tariff, Council Regulation (EEC) No 2658/87 of 23 July 1987 [on the tariff and statistical nomenclature and on the Common Customs Tariff](#) (OJ L 256 7.9.1987, p. 1).

2. ‘diesel fuels’ means gas oils falling within CN code 2710 19 43**; and used for self-propelling vehicles as referred to in Regulation (EC) 715/2007 of the European Parliament and the Council *** and Regulation (EC) 595/2009 of the European Parliament and of the Council****;

** The numbering of these CN codes as specified in the Common Customs Tariff, Council Regulation (EEC) No 2658/87 of 23 July 1987 [on the tariff and statistical nomenclature and on the Common Customs Tariff](#) (OJ L 256 7.9.1987, p. 1).

*** Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (OJ L 171, 29.6.2007, p. 1).

**** Regulation (EC) No 595/2009 of the European Parliament and of the Council of 18 June 2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI) and on access to vehicle repair and maintenance information and amending Regulation (EC) No 715/2007 and Directive 2007/46/EC and repealing Directives 80/1269/EEC, 2005/55/EC and 2005/78/EC (OJ L 188, 18.7.2009, p. 1);

‘3. ‘gas oils intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors, and recreational craft’ means any petroleum-derived liquid, falling within CN codes 27101943*****, intended for use in compression ignition engines referred to in Directive 2013/53/EU of the European Parliament and of the Council*****, Regulation (EU) 2016/1628 of the European Parliament and of the Council***** and Regulation (EU) 167/2013 of the European Parliament and of the Council*****;

***** The numbering of these CN codes as specified in the Common Customs Tariff, Council Regulation (EEC) No 2658/87 of 23 July 1987 [on the tariff and statistical nomenclature and on the Common Customs Tariff](#) (OJ L 256 7.9.1987, p. 1).

***** Directive 2013/53/EU of the European Parliament and of the Council of 20 November 2013 on recreational craft and personal watercraft and repealing Directive 94/25/EC (OJ L 354, 28.12.2013, p.90).

***** Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC, (OJ L 354 of 28.12.2013, p.53).

***** Regulation (EU) No 167/2013 of the European Parliament and of the Council of 5.02.2013 on the approval and market surveillance of agricultural and forestry vehicles, (OJ L 060 of 2.3.2013, p. 1).’;

(b) points 8 and 9 are replaced by the following:

‘8. ‘supplier’ means ‘fuel supplier’ as defined in Directive (EU) 2018/2001 of the European Parliament and of the Council*;

* Directive (EU) 2018/2001 of the European Parliament and of the Council on the promotion of the use of energy from renewable sources, (OJ L 328 of 21.12.2018, p. 82.)

‘9. ‘biofuels’ means ‘biofuels’ as defined in Directive 2018/2001;’

(3) Article 4 is amended as follows:

(a) In paragraph 1, the second subparagraph is replaced by the following:

‘Member States shall require suppliers to ensure the placing on the market of diesel with a fatty acid methyl ester (FAME) content of up to 7%.’

(b) Paragraph 2 is replaced by the following:

‘Member States shall ensure that the maximum permissible sulphur content of gas oils intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors and recreational craft shall be 10 mg/kg. Member States shall ensure that liquid fuels other than those gas oils may be used in

inland waterway vessels and recreational craft only if the sulphur content of those liquid fuels does not exceed the maximum permissible content of those gas oils.’

- (4) Articles 7a to 7e are deleted.
- (5) Article 9 is amended as follows:
 - (a) In paragraph 1, letters (g), (h), (i) and (k) are deleted.
 - (b) Paragraph 2 is deleted.
- (6) Annexes I, II, IV and V are amended in accordance with Annex II to this Directive.

Article 4

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by at the latest. They shall forthwith communicate to the Commission the text of those provisions.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.
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.

With regard to the obligations in Article 7a(1) subparagraph 3 and (7) to collect and report data under Directive 98/70/EC which are deleted by this Directive, suppliers and Member States shall still submit to the Commission those data which they had to collect during the year [OJ: replace by calendar year during which the repeal takes effect] or a part thereof. The Commission shall include those data in any report it is obliged to submit under Directive 98/70/EC.

Article 5

Repeal

Council Directive (EU) 2015/652¹⁶ is repealed with effect from xx.xx.xxxx

Article 6

Entry into force

This Directive shall enter into force on the day following that of its publication in the *Official Journal of the European Union*.

This Directive is addressed to the Member States.

¹⁶ Council Directive (EU) 2015/652 of 20 April 2015 laying down calculation methods and reporting requirements pursuant to Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels, OJ L 107, 25.4.2015, p. 26–67

Done at Brussels,

*For the European Parliament
The President*

*For the Council
The President*

REFORM