

Revision of the Renewable Energy Directive: Fit for 55 package

OVERVIEW

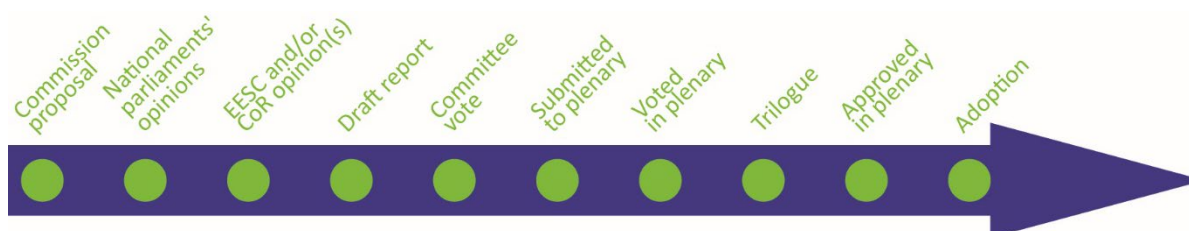
On 14 July 2021 the European Commission adopted the 'fit for 55' package, which adapts existing climate and energy legislation to meet the new EU objective of a minimum 55 % reduction in greenhouse gas (GHG) emissions by 2030. The 'fit for 55' package is part of the European Green Deal, which aims to put the EU firmly on the path towards climate neutrality by 2050.

A key element in the 'fit for 55' package is the revision of the Renewable Energy Directive (RED II), to help the EU deliver the new 55 % GHG target. Under RED II, the EU was obliged to ensure at least 32 % of its energy consumption comes from renewable energy sources (RES) by 2030. The 'fit for 55' revision increased this target to 40 %. Under the REPowerEU plan of May 2022 it was then raised to 45 %. Additional targets were also proposed for several sectors, such as transport, buildings, industry, and heating and cooling.

In the European Parliament, the file was referred to the Committee on Industry, Research and Energy (ITRE), with the Committee on the Environment, Public Health and Food Safety as associated committee under Rule 57. The trilogue negotiations were concluded on 30 March 2023 with an agreement raising the share of renewables to 42.5 % by 2030. The revised directive (RED III) was published in the Official Journal on 31 October, and entered into force on 20 November 2023.

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

<i>Committee responsible:</i>	Industry, Research and Energy (ITRE)	COM(2021) 557
<i>Rapporteur</i>	Markus Pieper (EPP, Germany)	14.7.2021
<i>Shadow rapporteurs:</i>	Nicolás González Casares (S&D, Spain) Christophe Grudler (Renew, France) Ville Niinistö (Greens/EFA, Finland) Evžen Tošenovský (ECR, Czechia) Paolo Borchia (ID, Italy) Sira Rego (The Left, Spain)	2021/0218(COD)
<i>Procedure completed.</i>	Directive (EU) 2023/2413 OJ L 2023/2413, 31.10.2023.	Ordinary legislative procedure (COD) (Parliament and Council on equal footing – formerly 'co-decision')



Introduction

On 14 July 2021 the European Commission adopted a [legislative proposal](#) to revise the Renewable Energy Directive (RED II), as part of a broader overhaul of EU climate and energy legislation referred to as the '[fit for 55](#)' package. The fundamental aim of this package is to deliver the EU's climate action objective of a **minimum 55 % reduction in greenhouse gas (GHG) emissions by 2030** (compared with 1990 levels), thereby setting the EU more firmly on the path towards meeting its long-term goal of climate neutrality (net zero GHG emissions) by 2050. The [European Climate Law](#) (July 2021) writes both the 2030 and the 2050 targets into EU law.

A 55 % GHG target was originally suggested by the Commission in its [European Green Deal](#) communication of December 2019, which broadly set out how to adapt EU climate and energy legislation to meet higher GHG targets, including a revision of RED II. EU legislation at the time was oriented towards delivering a 40 % GHG target by 2030. As a result, RED II aimed for a minimum 32 % renewable energy sources (RES) share in final energy consumption. The Commission's [2030 climate target plan](#) (September 2020) explicitly supported the 55 % GHG target and indicated that a **38-40 % RES share by 2030 was the minimum necessary** to meet this goal.

Existing situation

[Directive 2009/28/EC](#) on the promotion of the use of renewable energy sources – better known as the **Renewable Energy Directive (RED I)** – established a series of measures to help the EU reach its **20 % renewable energy target by 2020**, as part of the broader [2020 climate and energy package](#). RED I set binding minimum national targets for all Member States, calculated in terms of the RES share of their gross final energy consumption. These minimum targets varied between Member States (from 10 % in Malta up to 49 % in Sweden) in a way that was collectively sufficient for the EU to meet its overall 20 % target. RED I included the sub-target of a **10 % RES share in each Member State's transport sector by 2020**, an ambition that has generally not been met.¹ RED I also included several initiatives to support EU and Member States in their promotion of RES, especially on the cross-border dimension (statistical transfers, joint projects, joint support schemes, guarantees of origin). Furthermore, RED I defined in considerable detail the **EU sustainability criteria for biofuels and their method of calculation**. RED I contained its own reporting and monitoring requirements: Member States had to develop national renewable energy action plans, while the Commission prepared biennial renewable energy progress reports.

[Directive \(EU\) 2018/2001](#) – better known as **RED II** – was a full recast of RED I to reflect the goals of the [2030 climate and energy framework](#), including a **32 % EU renewable energy target by 2030**. While RED II did not set new binding targets on individual Member States, the existing 2020 targets remained as binding baseline levels (minimum RES share). The delivery of RED II objectives relies on a more integrated process of monitoring, reporting and improving EU and national climate and energy policies under [Regulation \(EU\) 2018/1999](#) on governance of the energy union.² The Governance Regulation requires Member States to develop comprehensive 10-year national energy and climate plans (NECPs). NECPs can be updated to reflect shifting EU climate objectives.

RED II contains several measures to improve the effectiveness of RES support, in particular cross-border schemes (see above) that so far have had limited impact, together with provisions to speed up the granting of permits for new RES installations. RED II set a new **14 % sub-target for the share of RES in the transport sector**, with further sub-targets to promote advanced biofuels and phase out support for biofuels considered environmentally unsustainable (e.g. imported palm oil). RED II contains **more stringent sustainability and GHG emissions-saving criteria for biofuels**, which vary by sector (electricity, heating and cooling, or transport). RED II includes indicative targets to raise the RES share in (district) heating and cooling. Renewable **self-consumers** and renewable **energy communities** are legally defined under RED II and targeted for support.

The Commission's 2020 [renewable energy progress report](#), prepared as part of the RED I reporting requirements, gave an updated perspective on how effective the EU has been at meeting its RES targets at EU and Member State level. The report found that **in 2018, the EU reached an average RES share of 18 % (18.9 % EU-27)**,³ well above its indicative trajectory for 2017/2018 (16 %) and putting the bloc on a steady path towards meeting its 2020 goals. Yet, whereas electricity and heating and cooling reached a higher than anticipated RES share, progress on transport has been slower, with an 8 % RES share for the EU in 2018 (lower than the 8.5 % indicative trajectory), and only two Member States exceeding the 10 % target (Finland and Sweden). Bioenergy continues to be the main source of renewable energy in the EU (around 60 %), and the majority of this comes from forestry, raising concerns about sustainability. Eurostat [data](#) indicates that the EU obtained a 22.1 % share of RES in final energy consumption in 2020, comfortably exceeding its target. However, more effort needs to be made to deliver the objectives set out by Member States in their NECPs, which collectively amount to a **33.1 to 33.7 % RES share by 2030**.

The [European Green Deal](#) raised the EU's climate ambition significantly, with a view to delivering on its multilateral commitments under the [Paris Agreement](#) and putting it on a path towards climate neutrality (net zero GHG emissions) by 2050. To achieve this goal, the Commission communication on a 2030 climate target plan proposed a new intermediate target of 55 % GHG emissions reductions by 2030 (up from 40 %), compared with 1990 levels. The 55 % GHG target was later agreed by the Council and Parliament in their interinstitutional negotiations over the European Climate Law (July 2021). According to the [impact assessment](#) (IA) underlying the 2030 climate target plan, the new 55 % GHG target will require a 38 to 40 % RES share in final energy consumption by 2030. This made it necessary for the EU to revise the RED II and related climate and energy legislation, since these were geared towards delivering a minimum 32 % RES share only.

Parliament's starting position

Parliament has expressed support for a RED II reform that sets **higher 2030 RES share targets at EU and Member State levels**.

The [resolution](#) of 21 October 2021 on the 2021 UN Climate Change Conference in Glasgow, UK (COP26) 'underlines the importance of increasing renewable energy and energy efficiency targets to achieve climate neutrality by 2050 at the latest and to comply with the Paris Agreement'.

Parliament's [resolution](#) of 15 January 2020 on the European Green Deal called for RED II to be revised in line with the EU goal of net zero GHG emissions by 2050, which will require the EU to greatly increase its share of renewable energy sources and phase out fossil fuel use.

The [resolution](#) of 23 June 2016 on the renewable energy progress report called for the original RED 'to be adapted to comply with the agreed goal of keeping the global temperature increase to 1.5 °C above pre-industrial levels', as set out in the Paris Agreement. The resolution stressed the value of binding national targets in the original RED (2009) and supported their inclusion in the forthcoming revision of the directive (RED II). It also included a series of suggestions about how to improve EU and Member State implementation of the RED.

During interinstitutional negotiations over RED II in 2018, Parliament [pushed](#) for the EU to set a binding minimum target of a 35 % RES share in final energy consumption by 2030 (12 % in the transport sector). Member States would need to set national targets that were collectively sufficient to meet this goal. The final compromise in RED II (see [EPRS briefing](#)) was a binding 32 % target at EU level, without setting new national targets. The existing 2020 targets would remain as a binding baseline level (minimum share) for each Member State at all times.

During interinstitutional negotiations over the European Climate Law in 2021, Parliament [pushed](#) for an **EU target of at least 60 % GHG emissions reductions by 2030**, significantly more than the 55 % reductions sought by the Commission and the Council. A 60 % GHG target would necessitate

greater investment in clean energy sources and a higher share of renewables in the energy mix, and would therefore require a much higher RES target for 2030 than the 32 % share outlined in RED II.

Council starting position

The European Council [conclusions](#) of December 2020 endorsed a binding EU minimum target of a 55 % reduction in GHG emissions by 2030, which would set the EU on the path towards climate neutrality (net zero GHG emissions) by 2050. The Council of the EU followed through on these high-level commitments when it negotiated the European Climate Law in 2021 and tasked the Commission with proposing the necessary measures to achieve these 2030 and 2050 targets, including the required changes to EU climate and energy legislation (inter alia RED II).

Preparation of the proposal

In July 2021, the Commission published an [impact assessment report](#) of around 400 pages to accompany its legislative proposal to revise RED II, together with a very short [executive summary](#). The IA assessed eight main **policy options** for aligning RED II with the EU's new climate target, and concluded that the preferred option was a package of measures, including:

- 1 a 40 % RES target by 2030 (binding at EU level with indicative national contributions);
- 2 increased RES ambition in the heating and cooling, and transport sectors through higher sub-targets;
- 3 new measures to improve energy system integration (sectoral coupling);
- 4 comprehensive terminology and certification of renewable fuels, to be traced through a single Union database;
- 5 stronger promotion of renewable fuels of non-biological origin (RFNBOs), in particular hydrogen, to be achieved inter alia through new targets;
- 6 extension of agricultural biomass no-go areas to cover forest biomass;
- 7 extension of the GHG and sustainability criteria for biofuels that already exist in RED II to cover all existing RES installations (the new criteria in RED II applied only to new installations);
- 8 greater cross-border cooperation, initially through pilot projects, with a particular focus on joint development of offshore energy;
- 9 various measures to promote the uptake of RES in industry.

This package of options was closely reflected in the text of the Commission's legislative proposal.

The Commission submitted its draft IA to the **Regulatory Scrutiny Board** (RSB) on 10 March 2021, and received an initial negative opinion on 19 April 2021, together with recommendations for improvement. The Commission submitted a second draft IA on 28 April 2021, which received a positive opinion with reservations from the RSB on 28 May 2021. The final IA adopted by the Commission sought to address the numerous reservations of the RSB. [Annex 1](#) to the IA explains in detail the RSB's various recommendations and how the Commission addressed them.

To prepare the legislative proposal, the Commission organised a series of consultations with stakeholders and the general public, as outlined in [Part 2](#) of the IA. First, an [inception impact assessment](#) (IIA) was published and opened to feedback between 3 August and 21 September 2020. The IIA received a total of 374 responses from 21 Member States and 7 non-EU countries. The vast majority of contributions supported the climate ambition of the European Green Deal and were in favour of revising RED II, including more ambitious sub-targets for transport, heating and cooling. Several stakeholders identified the need to change RED II to prohibit the use of forest biomass. A small number of stakeholders pointed out the potentially negative impact of such an early revision of RED II for the stability of the regulatory framework as well as investor certainty.

The Commission subsequently organised a broader [public consultation](#) between 17 November 2020 and 9 February 2021, using as its basis a detailed questionnaire containing multiple choice and open questions covering a wide range of issues relating to the revision of RED II. This public consultation received a very large number of replies (39 046), although the vast majority consisted of a standard reply to a single question on the types of biomass permitted for bioenergy production. This standard reply was part of a coordinated environmental campaign opposing the use of forest biomass as a RES. 98% of the respondents (38 400) identified as private citizens, while only 2% (670) represented an organisation. The latter generally expressed support for raising the headline target of RED II and making it more binding, expressing particular support for more ambitious sub-targets in the transport sector, with differences of view on biomass.

Stakeholder views were further refined in two policy workshops organised by the Commission on 11 December 2020 and 22 March 2021. Both took place online and attracted numerous participants (around 500 for the first workshop, close to 1 000 for the second workshop). Stakeholders were also consulted in specialised forums such as the Gas Regulatory Forum (14-15 October 2020), expert workshops on the decarbonisation of heating and cooling (26 November 2020 and 5 February 2021), and the Florence Electricity Forum (7 December 2020). Finally, consultations with the relevant sectoral social partners were held in a specific hearing on the 'fit for 55' package held by Commission Executive Vice-President Frans Timmermans and Commissioner Nicolas Schmit on 1 July 2021.

EPRS carried out an [implementation appraisal](#) of RED II on behalf of the European Parliament in March 2021. This looked at how the EU and its Member States had been meeting the goals set out in RED I and how they had progressed in terms of implementation of RED II. It also summarised some of the key views expressed by the European Parliament, other EU bodies and selected stakeholders. In November 2021, EPRS published an [initial appraisal](#) of the Commission's impact assessment.

The Commission (DG Energy) sponsored several external studies on the revision of RED II,⁴ as well as recent studies on offshore energy that fed into this legislative proposal (article 9, see below).

The changes the proposal would bring

The Commission's [legislative proposal](#) revises many provisions of RED II. The main legal basis for the revised RED II is Article 194(2) of the Treaty on the Functioning of the European Union (TFEU), which is dedicated to energy and gives the EU a specific mandate to adopt policies relating to the development of new and renewable forms of energy. **Article 194** was also the legal basis for RED II. Article 114 (internal market) is added as the legal basis for the revision of RED II because the Commission proposal amends Directive 98/70/EC on fuel quality, which is based on that article.

The Commission has opted for an **amending directive** (rather than a full recast) because of the relatively short time that has elapsed since RED II was adopted (21 December 2018) and transposed by the Member States (deadline of 30 June 2021). According to the Commission, the proposal to revise RED II is limited to what is necessary to meet the EU's new climate goals for 2030.

Below are some of the key changes that the Commission proposal makes to RED II.

Article 1 (Definitions) is modified to include several new definitions of RES technologies, as well as some modifications to existing definitions, reflecting a broader understanding of RES technologies.

Article 3 (Binding overall Union target for 2030) is amended to set a **new EU target of a minimum 40% share of energy from RES in final consumption**, and introduces an **obligation to phase out support for electricity production from biomass from 2026** (with limited exceptions). Other changes aim to minimise the risks of unnecessary market distortions resulting from RES support schemes, and prevent Member States from supporting certain raw materials for energy production.

Article 7 (Calculation of the share of energy from renewable sources) is amended so that i) RFNBOs, mainly hydrogen, are accounted for in the sector in which they are consumed (electricity, heating

and cooling, transport), and ii) renewable electricity used to produce RFNBOs is not included when calculating the share of RES in that particular sector.

Article 9 (Joint projects between Member States) is amended to introduce an obligation on Member States to have a **cross-border pilot project within three years**, and jointly define and cooperate on the amount of offshore renewable generation to be deployed within each sea basin by 2050.

Article 15 (Administrative procedures, regulations and codes) is amended to strengthen the existing provisions on **renewable power purchase agreements**.

A new article 15a (Mainstreaming renewable energy in buildings) sets an **indicative EU target of a 49 % share of RES in the heating and cooling of buildings by 2030**, reinforces existing measures and introduces new ones to promote the switch from fossil fuel heating systems to RES ones.

Article 19 (Guarantees of origin for energy from renewable sources) is amended to remove the ability of Member States **not** to issue guarantees of origin to a producer that receives financial support. This is closely related to changes to renewable power purchase agreements (see Article 15).

Article 20 (Access to and operation of the grids) is amended to enhance energy system integration between district heating and cooling (DHC) systems and other energy networks. A new article 20a includes several provisions to **facilitate system integration of renewable electricity**.

A new article 22a (Mainstreaming renewable energy in industry) sets an **indicative target of increasing RES use in industry by +1.1 % per annum**, together with a binding 50 % target for RFNBOs used as feedstock or as an energy carrier. It also introduces a requirement that the labelling of green industrial products must indicate the percentage of renewable energy used, following a common EU-wide methodology that has already been established.⁵

Article 23 (Mainstreaming renewable energy in heating and cooling) is amended so that the **existing indicative target (+1.1 % annual increase) will become a binding baseline target**. More generally, Member States will be obliged to carry out an assessment of their RES potential in this sector. The amended article 23 would propose a menu of measures to allow Member States to meet their heating and cooling targets, while at the same time **ensuring vulnerable consumers have access to such financial support**, as they would otherwise lack sufficient up-front capital.

Article 24 (District heating and cooling) is amended to **increase the indicative target** of RES from waste heat and cold in district heating and cooling (DHC) systems from +1 % to 2.1 % per annum. Third party access will be expanded for most DHC systems (>25 MWth, i.e. thermal megawatts) and a new definition of 'efficient DHC system' is introduced in line with [related changes](#) to the Energy Efficiency Directive.

Article 25 (Mainstreaming renewable energy in the transport sector) is amended to set a **new 13 % GHG intensity reduction target**; increase the sub-target for advanced biofuels (from 0.2 % in 2022 to 0.5 % in 2025 and 2.2 % in 2030); and introduce a new 2.6 % sub-target for RFNBOs. **A credit mechanism is introduced 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 in turn to satisfy their fuel supplier obligation.

Article 27 (Calculation rules with regard to the minimum shares of renewable energy in the transport sector) is amended to reflect the new targets above (see Article 25) and to **remove the multipliers** associated to certain renewable fuels and to renewable electricity used in transport under RED II.

Article 29 (Sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels) is amended to extend the existing land criteria for agricultural biomass (e.g. no-go areas) to cover forest biomass (including primary, highly diverse forests and peatlands). The aim is to **prohibit the sourcing of biomass for energy production from primary forests**. No forest biomass for electricity-only installations will be eligible for RES support from 2026, with a ban on national financial incentives for using saw or veneer logs, stumps and roots for energy generation.

Article 29 also sets out how small-scale biomass-based heat and power installations (5 MW+ total rated thermal capacity) will now be required to meet EU sustainability criteria that already apply to larger installations under RED II. Furthermore, **minimum GHG saving thresholds** for electricity, heating and cooling production from biomass fuels, which already exist in RED II but apply only to new installations, will henceforth **apply also to existing installations**.

A new article 29a (Greenhouse gas emissions saving criteria for renewable fuels of non-biological origin and recycled carbon fuels) would ensure that such fuels can only be counted towards the various targets set out in RED II if their **GHG emissions savings are at least 70 %**. This will encourage the development of 'green hydrogen' obtained from RES rather than fossil fuels.

A new article 31a (Union database) extends the scope of this EU database so that it can not only cover fuels in the transport sector, but also enable the **tracing of liquid and gaseous renewable fuels and recycled carbon fuels**, as well as their life-cycle GHG emissions. This EU database already exists as a monitoring and reporting tool where fuel suppliers must enter the information necessary to verify their compliance with the fuel suppliers' obligation (set out in Article 25).

As part of the [REPowerEU plan](#) (18 May 2022) to phase out the EU's dependence on Russian energy imports and continue to support the EU transition to climate neutrality, the Commission adopted a targeted [legislative proposal](#) that amends RED II. The Commission's proposal would raise the binding share of RES in EU final energy consumption to 45 % by 2030 (higher than the 40 % RES share proposed in July 2021). The new proposal includes enhanced measures to accelerate permitting procedures for new RES power plants, or for adaptation of existing RES installations. Member States would be required to designate 'renewables go-to areas', which are particularly suitable areas for RES installations and would benefit from accelerated permitting procedures. The proposal would limit the grounds of legal objection to new RES installations by considering that RES production, its connection to the grid, the grid itself and related storage assets would be presumed to be of over-riding public interest for this specific purpose.

Advisory committees

The European Economic and Social Committee (EESC) adopted an [opinion](#) (TEN/748) on the revision of the Renewable Energy Directive during its plenary session of 8-9 December 2021. The joint rapporteurs were Christophe Quarez (Workers–Group II, France) and Lutz Ribbe (Diversity Europe – Group III, Germany). The EESC welcomes the increase in the targeted share of renewable energy together with the focus on the industrial, transport and housing sectors. However, the EESC expresses disappointment at the Commission's lack of ambition when it comes to promoting and developing individual and community-based 'prosumerism'. The EESC maintains that a strategy for decentralisation and the effective promotion of community energy would help strengthen regional value chains and increase public acceptance of the energy transition. The EESC also regrets the lack of a clear strategy for developing onshore wind power and photovoltaics, along the lines of the Commission's recent strategy for offshore wind power.

The European Committee of the Regions (CoR) adopted a [legislative opinion](#) (CDR 4547/2021) on amending the Renewable Energy Directive to meet the new 2030 climate targets. The rapporteur was Andries Gryffroy (European Alliance Group, Belgium) and the CoR opinion was adopted during the 27-28 April 2022 plenary session. The CoR welcomes the Commission's proposal but reiterates the importance of taking into account the specific features of each region, and regrets the lack of further incentives for the setting up of renewable energy communities that can incentivise collective self-generation and self-consumption. The CoR calls for more cross-border renewable energy projects, involving local and regional authorities, and supports the new requirement for joint offshore energy planning. The CoR believes sustainable production of biomass is necessary to ensure environmental and biodiversity protection, but that introducing new and more stringent criteria applying to all existing small-scale biomass, heat and power installations would undermine the stability of the legal framework.

National parliaments

The Commission's proposal was transmitted to [national parliaments](#) on 1 July 2021, and they had until 8 November 2021 to submit reasoned opinions, of which two were received. The [Irish Parliament](#) considered the 'fit for 55' package as a whole and came to the view that the principle of subsidiarity was infringed, although no specific concerns were raised about the RED II proposal. The [Swedish Parliament](#) instead concluded that the RED II proposal specifically breached the proportionality principle, since the level of detailed regulation proposed by the Commission, in particular regarding bioenergy, went beyond what is necessary to achieve the given objectives.

Stakeholder views⁶

The Commission's 'fit for 55' package met with mixed reactions from stakeholders, with some praising it as an important milestone in tackling climate change, while others felt it lacked ambition for a task of this magnitude. Given the numerous legislative proposals, covering all aspects of climate and energy legislation, only certain stakeholders discussed the revised RED II in detail.

Environmental groups are generally critical of the 'fit for 55' package, including the revised RED II. [Greenpeace](#) argues that a renewable energy target of 40% is too low to keep global temperature rises below 1.5 °C, as confirmed in the [energy scenario](#) modelled by the Climate Action Network (CAN). CAN made a [rapid assessment](#) of all the main 'fit for 55' files, and concluded that RED II needed a higher EU target of at least 50%, to be supported by binding national targets. According to CAN, RED II should broaden incentives for system integration of renewable electricity; strengthen bioenergy criteria; and close the door to fossil fuels for hydrogen production. The [European Environmental Bureau](#) argues that the Commission has missed a historic opportunity to phase out fossil fuels from the energy system, and that a minimum RES target of 50% by 2030 is necessary to deliver on EU and global decarbonisation objectives. [WWF](#) also fully supports this 50% target. [Fern](#), meanwhile, is very critical about continued EU support for forest biomass, insisting that the new provisions of RED II to protect forests are inadequate and not additional to existing proposals. In the absence of stronger protections, Fern argues that the higher RES targets in RED II will encourage coal-fired power plants to switch to biomass, thereby further increasing the destruction of forests.

Industry responses tend to be more positive, especially those of most renewable producers. [Wind Europe](#) strongly supports the 40% RES target for providing certainty for businesses and consumers, and calculates that 'the EU will need 451 GW of wind power capacity by 2030, up from 180 GW today ... a major acceleration in the expansion of wind energy'. According to Wind Europe, the revised RED II would 'help the development of offshore wind including hybrid offshore wind farms that have multiple grid connections' and improve the legal framework for corporate power purchase agreements (CPPAs). [Solar Power Europe](#) believes the package 'represents a landmark moment for the European energy transition and the solar industry in particular'. They welcome the provisions on CPPAs and improvements to the guarantees of origin framework, the strong support for green hydrogen (including targets), and efforts to accelerate the permit granting process. However, they maintain that a higher 45% RES target is necessary to achieve the EU's decarbonisation goals.

[Renewable and Low-Carbon Liquid Fuels Platform](#) believes the revised RED II 'provides the opportunity to step up the contribution of sustainable and renewable liquid fuels in transport' and supports a 'technology-neutral approach, enabling the use of best available options with proven emissions-reduction credentials'. [Hydrogen Europe](#) welcomes targets for the use of renewable hydrogen in industry and transport, as well as the introduction of a level playing field for RES by removing multipliers associated with certain renewable fuels. By contrast, [Bioenergy Europe](#) criticises the Commission for choosing to reassess sustainability criteria at a time when the transposition of RED II still needs to be completed by most Member States. They call for a science- and practice-based assessment, and the avoidance of abrupt rule changes that create legal uncertainty. Most critically, Bioenergy Europe maintain that the [proposed framework for forest](#)

[biomass](#) is improper. [Eurofuel](#) (heating oil association) has published a position paper on the RED II review (February 2021) that welcomes and supports the goals of the reform but also calls for the EU to adopt a more innovation-friendly approach that can adjust easily to future technological changes.

Legislative process

The [file](#) was referred to the European Parliament's Committee on Industry, Research and Energy (ITRE), which appointed Markus Pieper (EPP, Germany) as rapporteur. The Committee on the Environment, Public Health and Food Safety (ENVI), associated to this file under Article 57, adopted its [opinion](#) on 24 May 2022. The Committees on Regional Development (REGI), Transport and Tourism (TRAN), Agriculture and Rural Development (AGRI) and Development (DEVE) all provided supporting opinions. On 13 July 2022, the ITRE committee adopted its report, which was discussed and [voted](#) on during the September 2022 plenary session.

The ITRE report supports a binding 45 % EU target for renewables in final energy consumption by 2030, consistent with the Commission's new REPowerEU plan (May 2022). Furthermore, Member States should aim for 5 % of newly installed RES capacity to come from **innovative renewable energy technologies**, with a further indicative target for storage technologies that can improve demand-side flexibility and deliver a 5 % reduction in peak electricity demand by 2030. The report tightens the proposed sustainability criteria for biomass and requires the Commission to adopt an implementing act (within 12 months) on how to apply the [cascading principle](#) to forest biomass. In terms of cross-border **joint projects for RES capacity**, each Member State would need to develop at least two such projects by the end of 2025, with larger Member States (annual electricity consumption >100 TWh, i.e. terawatt hours) required to develop three such projects by 2030.

The report supports an acceleration of the permit-granting process (again in line with the REPowerEU plan). It also sets more ambitious average annual targets (compared with the Commission proposal of July 2021) for mainstreaming RES in different sectors: +1.9 % indicative target in industry (with a greater role for hydrogen); +2.3 % binding target for heating and cooling (+2.8 % where Member States use waste heat and cold); and +2.3 % indicative target for district heating and cooling. The report likewise proposes more ambitious targets in the transport sector (compared with the Commission proposal): a **binding 16 % reduction in GHG intensity by 2030**; a 5.7 % share of RFNBOs by 2030; and a new target of 1.2 % of RFNBOs in the 'hard to abate' maritime sector. The report proposes a cap of 7 % on biofuels from food and feed crops in the transport sector by 2030, and would require the Commission to publish a report by 30 June 2023 on the worldwide expansion of food and feed crops grown for biofuels.

On 29 June 2022, the Council of the EU agreed a [general approach](#), which differs in significant ways from the ITRE report. The Council supports a binding RES target of only 40 % by 2030, reflecting the Commission's original proposal (July 2021). The general approach offers Member States the flexibility to choose between a 13 % reduction in GHG intensity **or** a 29 % share of RES in final energy consumption in the transport sector by 2030. Moreover, it proposes lower sub-targets for mainstreaming RES in heating and cooling (+0.8 % annually until 2026 and +1.1 % thereafter) and industry (+1.1 % annually), but also requires that 35 % of the hydrogen used in industry should come from RFNBOs by 2030, rising to 50 % by 2035. In the transport sector, the general approach sets less ambitious targets than the ITRE report in terms of promoting RFNBOs (+2.6 % by 2030), and would retain double counting for advanced biofuels. While the general approach does not propose any RES targets in the maritime sector, it would cap the amount of energy consumed in the maritime sector that can be included towards overall RES transport targets. In line with the ITRE report and the Commission's proposals, the general approach proposes a series of measures that would tighten sustainability criteria for biofuels and accelerate permitting procedures for RES installations.

Interinstitutional (trilogue) negotiations were concluded on 30 March 2023 with a provisional [agreement](#) between the co-legislators. The Parliament and Council agreed to raise the share of renewable energy in the EU final energy consumption to 42.5 % by 2030, with the possibility of an

additional top-up of 2.5 % (thus aiming for 45 %). They also set sub-targets for transport, industry, buildings, heating and cooling. In the transport sector, the Member States can choose between a target of reducing GHG intensity by 14.5 % up to 2030 or ensuring a share of at least 29 % of renewables in final energy consumption (also by 2030). A combined sub-target of 5.5 % is set for advanced biofuels and RFNBOs (mostly hydrogen) in the share of renewables in the transport sector (within this target, 1 % must come from RFNBOs). The agreement requires the industry sector to raise its use of renewable energy by 1.6 % each year, while 42 % of the hydrogen used in industry should come from RFNBOs by 2030 and 60 % by 2035 (these percentages may be reduced by Member States under certain conditions). In the buildings sector, the indicative target is at least 49 % of renewable energy share in 2030, while heating and cooling targets should be raised gradually (by 0.8 percentage points per year until 2025 and 1.1 percentage points from 2026 to 2030). The agreement also includes provisions on faster permit-granting procedures for renewable energy projects (especially short in the 'renewables acceleration areas').

The agreement takes into account Parliament's request that Member States set an indicative target for innovative renewable energy technology of at least 5 % of new installed renewable energy capacity by 2030, as well as establish a framework for cooperation on cross-border energy projects. It also follows up on Parliament's call for stricter criteria on biomass use, to reduce the risk of funding unsustainable practices and prevent negative impacts on soil quality and biodiversity. Parliament adopted the agreement in plenary on 12 September 2023 and the Council then did so on 9 October 2023. The final act was signed by the Presidents of the Parliament and of the Council on 18 October 2023. The revised [directive](#) was published in the EU Official Journal on 31 October 2023 and entered into force on 20 November 2023.

EUROPEAN PARLIAMENT SUPPORTING ANALYSIS

Dalli H., [Fit for 55 package: energy from renewable sources](#), initial appraisal of a Commission impact assessment, EPRS, European Parliament, November 2021.

Widuto A., Pradier S. and Chahri S., [Renewable energy in the EU](#), infographic, EPRS, March 2023.

Zygierewicz A. with Salvador Sanz L., [Renewable Energy Directive](#), implementation appraisal, EPRS, European Parliament, March 2021.

OTHER SOURCES

[Renewable Energy Directive, 'Fit for 55 package'](#), Legislative Observatory (OEIL), European Parliament.

ENDNOTES

- ¹ According to [Eurostat](#), the EU as a whole reached a RES share in transport of 10.3 % in 2020; however, this went down to 9.1 % in 2021 (latest available data).
- ² EPRS EU legislation-in-progress briefings on [RED II](#) (January 2019) and the regulation on the [governance of the energy union](#) (January 2019) provide more detail and context about these reforms and their process of negotiation.
- ³ The Commission's renewable energy progress report (October 2020) contains data up until the year 2018, when the United Kingdom (UK) was still an EU Member State. The RES shares listed in the Commission's report therefore include energy consumption from the UK, unless specifically indicated otherwise as EU-27.
- ⁴ Technical assistance studies have been published on the following topics: [technical support for RES policy development and implementation](#) (September 2021); [assessing options to establish an EU-wide green label with a view to promote the use of renewable energy coming from new installations](#) (July 2021); [preparation of guidance for the implementation of the new bioenergy sustainability criteria](#) (April 2021); [realisation of the fourth report on progress of renewable energy in the EU](#) (April 2019); and [realisation of the 2018 report on biofuels sustainability](#) (April 2019).
Policy studies have been published on [job creation and sustainable growth related to renewables](#) (February 2021); [shaping a sustainable industry: guidance for best practice and policy recommendations](#) (April 2020); and [competitiveness of the renewable energy sector](#) (August 2019), as well as a scoping study on [setting technical requirements and options for a Union database for tracing liquid and gaseous transport fuels](#) (September 2020).
- ⁵ This methodology is set out in [Recommendation 2013/179/EU](#).
- ⁶ This section aims to provide a flavour of the debate and is not intended to be an exhaustive account of all different views on the proposal. Additional information can be found in related publications listed under 'European Parliament supporting analysis'.

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Fourth edition of a briefing, the first two editions of which were drafted by Alex Wilson. The 'EU Legislation in Progress' briefings are updated at key stages throughout the legislative procedure.