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## Centre on Regulation in Europe

# RECOMMENDATION

July 2021 Catherine Banet

# REVISION OF THE RENEWABLE ENERGY DIRECTIVE (REDII) How to improve tendering, Planning and tracking rules to Deliver the European Green Deal?



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# **Abbreviations**

AIB	Association of Issuing Bodies
CCfD	Carbon Contracts for Difference
CEEAG	Climate, Energy and Environmental State Aid Guidelines
CEER	Council of European Energy Regulators
ECL	European Climate Law
EAC	Energy Attribute Certificate
EEAG	State Aid Guidelines for Environmental Protection and Energy
EECS	European Energy Certificate System
EED	Energy Efficiency Directive
EU	European Union
FCD	Full Consumption Disclosure
FPD	Full Production Disclosure
GBER	General Block Exemption Regulation
GHG	Greenhouse gases
GO	Guarantee of Origin
LCR	Local Content Requirement
MS	Member States
NECP	National Energy and Climate Plan
ORE	Offshore Renewable Energy
РРА	Power Purchase Agreement
R&D&I	Research Development and Innovation
RE	Renewable Energy
REDI	Renewable Energy Directive 2009/28/EC
REDII	Renewable Energy Directive (EU) 2018/2001
RES	Renewable Energy Sources
RES-E	Electricity from Renewable Energy Sources
RFNBOs	Renewable Fuels of Non-Biological Origin
TEU	Treaty in the European Union
TFEU	Treaty on the Functioning of the European Union
ωтο	World Trade Organization

## **Executive summary**

The recast of Directive (EU) 2018/2001 on the promotion of the use of energy from renewable energy sources (REDII) was adopted on 11 December 2018, as part of the Clean Energy Package for All Europeans. It entered into force on 24 December 2018, with a transposition deadline of 30 June 2021. The Directive is still pending transposition and implementation, but it is already in need of an update as part of the European Green Deal. The European Commission has announced that the revision process for REDII will start in July 2021.

Opening up the Directive for revision so quickly after its last recast raises the questions of both the objective and the scope of the upcoming revision. This Recommendation Paper aims to contribute to the discussion of how to amend REDII to ensure it is 'fit-for-purpose' under the European Union's (EU) new 2030 emissions reduction target, the 2050 climate-neutrality objective and the expected increase in the renewable energy (RE) target.

A number of new policy and legislative initiatives from the European Commission (EC) are driving the revision process of REDII, including:

- The EU greenhouse gas emissions targets for 2030 and the target of climate-neutrality by 2050, as part of the European Climate Law (ECL);
- The objective to facilitate energy system integration and the uptake of clean hydrogen, following the two Strategies on energy system integration and on hydrogen;
- The scale of Offshore Renewable Energy (ORE) Strategy; and
- The upcoming revision of the European Commission's State Aid Guidelines for Environmental Protection and Energy (EEAG).

As REDII was only recently adopted, a targeted revision, that is limited-in-scope, is required. Such a short-term revision is to be distinguished from a more thorough recast that will be needed over the longer-term. The scope of application of REDII and how it interacts with other EU energy legislation will also need to be taken into account when revising the directive.

The Recommendation Paper explores three specific areas, providing recommendations to improve:

- renewable energy support schemes and tendering procedures;
- enhanced coordination of energy system planning; and
- rules for the tracking and valorisation of renewable energy generation attributes.

# INTRODUCTION

01

## **1. Introduction**

## Background

The recast of Directive (EU) 2018/2001 on the promotion of the use of energy from renewable energy sources (REDII)<sup>1</sup> was adopted on 11 December 2018, as part of the Clean Energy Package for All Europeans. It entered into force on 24 December 2018, with a transposition deadline of 30 June 2021. The Directive is still pending transposition and implementation, but it is already in need of updating as part of the European Green Deal.<sup>2</sup> The European Commission has announced that the revision process for REDII will start in July 2021. Opening up the directive for revision so quickly after its last recast raises the questions of both the objective and the scope of the upcoming revision.

## Main question

This Recommendation Paper aims to contribute to the reflection process started by the European Commission with a view of revising REDII. How should REDII be designed to ensure it is 'fit-for-purpose' in the context of the new 2030 emissions reduction target, the 2050 climate-neutrality objective and the expected increase in the renewable energy (RE) target?

## Methodology

The Recommendation Paper relies primarily on legal-dogmatic analysis and contains policy considerations with a view of amending REDII.

It focuses primarily on the upcoming revision of REDII as part of the 'Fit for 55' climate package scheduled for July 2021. However, this Paper intends not only to identify and discuss some of the necessary short-term revisions to REDII, but also to begin the discussion of potential long-term changes, opening up the possibility of REDIII.

## Scope

This is a short Paper with a focused, two-step approach to the revision process. First, the Paper aims to define the rationale behind the revision of REDII, the level of EU regulatory intervention needed and the scope of the upcoming revision. Second, the Paper provides a more in-depth analysis of three key areas for possible improvement. The three areas are selected because they are key factors that will contribute to achieving a higher share of RE in the EU's energy system.

Other major aspects of the European Green Deal, such as biodiversity, are not covered by this Paper. Similarly, revision elements related to permitting and sustainability criteria for biomass are not included as they have already been the subject of other recommendation papers.

## Structure

The Recommendation Paper starts by identifying the reasons for revising REDII (Section 2) and the possible scope of the revision (Section 3). The rest of the Paper focuses on the Directive's potential for improvement as part of the revision process. In that context, the Paper does not intend to be exhaustive on all possible improvement aspects, but to formulate detailed recommendations for the three identified areas for improvement, namely: renewable energy support schemes and tendering

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> European Commission, 'The European Green Deal', Communication from the Commission, COM(2019) 640 final, 11.12.2019.



procedures (Section 4); enhanced coordination of energy system planning (Section 5); and rules for the tracking and valorisation of renewable energy generation attributes (Section 6).

02

# RATIONALE FOR REVISING REDII

# 2. Rationale for revising the Renewable Energy Directive (REDII)

The following paragraphs review the latest policy and legislative initiatives adopted by the European Commission that serve as primary drivers of the revision of REDII (2.1). Other external factors, such as technology and market developments, could also be accounted for, but those are deemed to already be reflected in the respective Commission initiatives. REDII has recently been adopted, but any new legislative proposal, even for the purpose of amending existing secondary legislation, raises the question of the extent to which EU intervention is needed and the form of EU regulatory intervention (2.2).

## 2.1 New policy and legislative initiatives by the European Commission

There are a number of new policy and legislative initiatives that should be reflected in a revision of REDII. These include:

- The EU greenhouse gas emissions targets for 2030 and the target of climate-neutrality by 2050, as part of the European Climate Law (2.1.1);
- The objective to facilitate energy system integration, following the Commission's Strategies on energy system integration and on hydrogen (2.1.2, 2.1.3);
- The Offshore Renewable Energy (ORE) Strategy (2.1.4); and
- The upcoming revision of the European Commission's State Aid Guidelines for Environmental Protection and Energy (EEAG) (2.1.5);

Other recent policy initiatives may also require REDII to be amended (2.1.6), and the assessment of the National Energy and Climate Plans (NECPs) may identify some 'ambition gaps' that will need to be bridged (2.1.7).

All these reforms will take place in 2021 and must be coordinated to ensure consistency between legislative frameworks<sup>3</sup> and foreseeability for governments, investors and project developers. Many of these initiatives will need to be incorporated into secondary legislation, such as in REDII.

The following paragraphs analyse the potential effects of the above-mentioned initiatives on the revision of REDII.

## 2.1.1. European Climate Law

The European Climate Law (ECL)<sup>4</sup> aims to enshrine into law the EU's commitment to reaching climate-neutrality by 2050<sup>5</sup> and the intermediate target of reducing net greenhouse gas (GHG) emissions by at least 55% by 2030, compared to 1990 levels. The European Climate Law, formally a Regulation, is the cornerstone of the European Green Deal and other related legislative initiatives. EU officials sometimes refer to it as 'the law of laws' within the EU climate legislative

<sup>&</sup>lt;sup>3</sup> As a reminder, pursuant to Article 7 TFEU, the Union has a *duty of consistency* between its policies and activities, 'taking all of its objectives into account and in accordance with the principle of conferral of powers'. The principle of consistency so defined applies both horizontally and vertically in the EU legal order, focusing on material consistency. The principle defined in Article 7 TFEU is completed by the obligation defined in Article 13(1) of the Treaty on the European Union for the Union to have an institutional framework able to ensure the consistency of its policies and actions, together with its effectiveness and continuity. <sup>4</sup> Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate-neutrality and amending Regulation (EU) 2018/1999 (European Climate Law), COM/2020/80 final, 4.3.2020. As amended by COM/2020/563 final, 17.9.2020.

<sup>&</sup>lt;sup>5</sup> European Council Conclusions of 12 December 2019, EUCO 29/19.



framework.<sup>6</sup> Following a provisional agreement reached in April 2021 (trilogue of 20 April 2021) between the European Parliament and the Council,<sup>7</sup> the ECL proposal was formally adopted by the European Parliament and the Council on the 24<sup>th</sup> and the 28<sup>th</sup> of June 2021, respectively,<sup>8</sup> concluding the legislative procedure. It is now pending publication in the Official Journal of the EU.

The main provisions in the proposal that will affect the REDII revision are identified and analysed below. They consist of defining:

- A binding objective of climate-neutrality and negative emissions after 2050;
- A duty to take necessary measures to implement the climate-neutrality objective;
- A binding interim Union 2030 climate target;
- A union-wide climate target for 2040;
- A duty for the Commission to review relevant EU legislation to implement the interim 2030 • target and the 2050 climate-neutrality objective;
- General guiding principles in the design of implementation policies.

In the following, the references to the provisions in the ECL are based on the provisional agreement released by the Council of the EU on 5 May 2021. The exact numbering of the articles in the ECL may change in the final version of the text.

Binding climate-neutrality objective and negative emissions after 2050 - The ECL defines a legally 'binding objective of climate-neutrality in the Union by 2050 in pursuit of the long-term temperature goal set out in Article 2 of the Paris Agreement' (draft Article 1). The objective of climate-neutrality is further detailed in Article 2 (Climate-neutrality objective), which states that 'Union-wide greenhouse gas emissions and removals regulated in Union law shall be balanced within the Union at the latest by 2050, thus reducing emissions to net zero by the date and the Union shall aim to achieve negative emissions thereafter' (draft Article 2.1).

Duty to take necessary measures to implement the climate-neutrality objective - Pursuant to the second paragraph of the same article (draft Article 2.2), both the relevant Union institutions and the Member States are required to ('shall') take the necessary measures at Union and national level respectively to enable the collective achievement of the climate-neutrality objective. This defines a duty to act for both Union institutions and the Member States. Not taking adequate measures will breach EU law, although infringement procedures for breaching such general obligations in EU secondary legislation are rarely launched.

Binding interim Union 2030 climate target - The ECL sets an ambitious legally-binding Union target of a net domestic reduction in greenhouse gas emissions for 2030 compared to 1990 (draft Article 1 and Article 3.1). This target brings some clarity to the contribution of emission reductions and removals, i.e. emissions after deduction of removals. The EU Institutions and Member States are legally required to take the necessary measures at EU and national level to meet the target, taking into account the importance of promoting fairness and solidarity among Member States.

<sup>&</sup>lt;sup>6</sup> 'The European climate law is "the law of laws" that sets the frame for the EU's climate-related legislation for the 30 years to come', said João Pedro Matos Fernandes, Portuguese minister of the environment (Portugal holding the rotating EU Council presidency in Spring 2021), after the Council and the European Parliament reached a provisional agreement. Council of the European Union, 'European climate law: Council and Parliament reach provisional agreement', Press release, updated 5 May 2021.

https://www.consilium.europa.eu/en/press/press-releases/2021/05/05/european-climate-law-council-and-parliament-reachprovisional-agreement/ Provisional Agreement: https://data.consilium.europa.eu/doc/document/ST-8440-2021-INIT/en/pdf (published 5 May 2021) <sup>8</sup> Council of the European Union, 'Council adopts European Climate Law', press release, 28 June 2021.

**Union-wide climate target for 2040** – Pursuant to draft Article 3.2a of the ECL, the Commission, within six months at the latest after the first global stocktake (as referred to in Article 14 of the Paris Agreement) shall make a legislative proposal to amend the ECL in order to include a Union-wide climate target for 2040, based on a detailed impact assessment.

**Duty for the Commission to review relevant EU legislation to implement the interim 2030 target and the 2050 climate-neutrality objective** – Pursuant to draft Article 3.2 of the ECL, the Commission is tasked with reviewing the relevant legislation in order to achieve the interim 2030 target of at least a 55% reduction in net GHG emissions compared to 1990 levels and the 2050 carbon-neutrality objective. Further details on this process are provided in Section 2.2 below as this provides a clear legal basis for the European Commission to put forward legislative proposals such as the revision of REDII.

**General guiding principles in the design of implementation policies** – The ECL sets out a series of general requirements, in the form of guiding principles to be considered when designing measures to implement the climate-neutrality objective and reduction target. These principles are:

- fairness and solidarity among Member States (draft Art. 2.2);
- cost-effectiveness in achieving the climate-neutrality objective (draft Art. 2.2);
- energy efficiency first principle (recital 5, draft Article 3.3);
- **technology neutrality** in achieving GHG emissions reductions and removals and increasing resilience (recital 15);
- prioritising 'swift and predictable emission reductions' (draft Art. 3.1);
- **consistency** of Union and national measures with the climate-neutrality objective (recitals 16, 18, draft articles 5.3, 5.4 and 6.2). The Commission shall review the consistency of the measures with the set objective by 30 September 2023, and every 5 years thereafter.

This list of principles complements others, such as the polluter pays principle, waste hierarchy principles, and the do no harm-principle, in particular by preserving biodiversity and reducing air pollution.<sup>9</sup>

## **Possible effects on REDII revision:**

The 2030 Climate Target Plan<sup>10</sup>, which contains an impact assessment of measures ahead of implementing the European Climate Law, comments on the need to revise the Renewable Energy Directive. In particular, it states that '*Market barriers and lack of incentives, particularly in end-use sectors such as heating and cooling or transport, hinder further penetration of renewables, either through electrification, or via the penetration of renewable and low-carbon fuels such as advanced biofuels and renewable and other sustainable alternative fuels and gases. An integrated approach to develop and deploy further renewable technologies like offshore wind energy and other is missing. Enhanced and expanded measures under REDII could deliver a larger uptake of renewable energy in the EU.'<sup>11</sup> Based on the conclusion of the 2030 Climate Target Plan and the previous review of the different relevant draft provisions of the ECL, the ECL may have the following impact on the revision of REDII:* 

• **Increased REDII targets** – The revision of REDII will be part of the definition of a new target for renewable energy. The Directive currently sets an objective of increasing the

<sup>&</sup>lt;sup>9</sup> The European Green Deal even includes a "Green Oath to do no harm".

<sup>&</sup>lt;sup>10</sup> 2030 Climate Target Plan (COM/2020/562 final)

<sup>&</sup>lt;sup>11</sup> The Plan also details some of the legislative proposals that will be put forward in 2021. Source: Impact Assessment, SWD(2020) 176 final, 17 September 2020, Section 2.2.2.

share of renewable energy in the EU's final energy consumption to at least 32% by 2030. In order to reflect the new 2050 climate-neutrality objective and 2030 (and later on 2040) interim targets, it will be necessary to review this figure to drive a faster deployment of renewables, both in general and in specific sectors (e.g. transport, heating and cooling). The Climate Target Plan suggests increasing the target to 38-40%.<sup>12</sup> Article 3 of REDII already requires the Commission to review and, if necessary, increase the current 2030 target.

- Reintroduction of national targets to ensure progress and compliance Apparently, this option is not favoured by the European Commission nor the Member States who answered the public consultation. Some stakeholders have been more supportive of the reintroduction of national targets as it puts additional constraints on national policies and brings more certainty.
- Larger share of RES in all vectors and sectors All tools already included in REDII will be assessed and may be subject to revision if they can contribute to achieving the 2050 climate-neutrality objective and 2030 interim target. This also means that the increase in RE use should concern all energy carriers (electricity, gas, heating/cooling, liquid fuels) and sectors (for example, transport, building, industry and agriculture) covered by the Directive. Subsequently, there will be an implementation challenge concerning the need for more specific sectoral targets, for example in transport and storage of heating and cooling.
- Additional pressure on planning and permitting for new renewable energy generation and related transport infrastructure – Increasing the target for renewables by 2030 will automatically result in an increase in the number of permit applications for new renewable energy generation and related infrastructure. This needs to be supported at the planning level for both generation and infrastructure. Permitting procedures will need to be adjusted to enable faster approval of projects, but a more prescriptive approach may also be needed ex ante at the planning level to better anticipate new projects, stimulate the necessary investments and identify synergies between projects (see Section 5 below). Re-use and repowering opportunities should also be encouraged through regulatory incentives.
- More financing needed for new RE generation capacity Adding new RE generation capacity and enabling the use of RE in final energy consumption will require new investments. This increases the demand for both public and private financing, which will put pressure on national budgets to finance support schemes or tax incentives and will also mean that it is essential to facilitate more private sector financing. In the context of REDII, this means that continuity in the regime for national support schemes should be pursued, and further provisions supporting the use of renewable power purchase agreements (PPAs) should be considered.

## **2.1.2. Energy system integration**

In July 2020, the European Commission adopted the EU Strategy on Energy System Integration.<sup>13</sup> It defines energy system integration as 'the planning and operating of the energy system "as a whole", across multiple energy carriers, infrastructures, and consumption sectors, by creating stronger links between them with the objective of delivering low-carbon, reliable and resource-efficient energy services, at the least possible cost for society.'

According to the European Commission, energy system integration encompasses three complementary concepts: (i) a more 'circular energy system, with energy efficiency at its core'; (ii)

<sup>&</sup>lt;sup>12</sup> SWD(2020) 176 final.

<sup>&</sup>lt;sup>13</sup> COM(2020) 299 final.

a greater direct electrification of end-use sectors; (iii) the use of renewable and low-carbon fuels, including hydrogen, for end-use applications where direct heating or electrification are not feasible. A more integrated system will also be 'a "multi-directional" system in which consumers play an active role in energy supply.'<sup>14</sup>

### Possible effects on REDII revision:

The revision of REDII is an opportunity to drive energy system integration in two ways:

- System integration measures can support the integration of a higher share of renewables into the energy system. More renewable energy sources will be needed for deep electrification under climate-neutrality constraints, and other energy carriers integrating RE can be used in sectors that are difficult to electrify. The question here is: what support measures can be introduced in REDII to ensure that a higher share of renewables is one of the goals of system integration? In other words, what support measures can be introduced in REDII to ensure that the pursuit of both energy system integration and a higher share of renewable sources are complementary? Some examples of such measures could be:
  - Supply the increased demand for electricity via a larger share of renewable energy sources in the energy mix to meet the climate neutrality goal.<sup>15</sup>
  - Promote electrification of transport, based on RES. The European Commission has proposed to design a credit system that will account for electricity provided to vehicles under the target. As electrification will not work for all transport modes, target-based measures to support clean hydrogen uptake in transport are envisaged.
  - Reuse energy from biowaste, as an example of a more 'circular' energy system.
  - Support the use of renewable gases, synthetic fuels produced from renewable electricity, liquids produced from biomass, or renewable hydrogen. This could contribute to a higher penetration rate of RES in end-use applications where direct heating or electrification are not feasible. Solutions allowing the storage of energy produced from variable renewable sources can also contribute to that goal.
  - Support underdeveloped supply chains into which RES can be integrated.
  - A possible indicative target for renewables in the industry sector. Currently, industry is not explicitly covered in REDII.
- New provisions in REDII can start the process of enshrining 'energy system integration' into law to ensure it is a central consideration when developing new policies and projects. The question here is: how can the revision of REDII contribute to greater energy system integration? Among the three topics subject to a detailed analysis in this Paper, energy system planning (Section 5) and the tracking of energy generation attributes across all vectors through Guarantees of Origin (Section 6) are two examples of measures supporting energy system integration.

<sup>&</sup>lt;sup>14</sup> COM(2020) 299 final.

<sup>&</sup>lt;sup>15</sup> LTS, figure 23, looking at the 1.5LIFE and 1.5TECH scenarios for 2050: 'by 2030, the share of renewable energy in the electricity mix should double to 55-60%, and projections show a share of around 84% by 2050. The remaining gap should be covered by other low-carbon options.' COM(2018) 773, A Clean Planet for all. A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy.

## 2.1.3. Hydrogen strategy

In July 2020, the Commission adopted a Hydrogen Strategy setting out its vision to significantly increase the role of clean hydrogen as an energy carrier.<sup>16</sup> This includes ensuring that renewable and low-carbon hydrogen and hydrogen-derived synthetic fuels become cost-competitive.

The priority for the EU is to develop hydrogen production from renewable electricity in the longrun, but through three successive phases in which there is an important role for low carbon hydrogen. In the first phase (2020-2024), the objective defined by the Commission is to install at least 6 GW of renewable hydrogen electrolysers across Europe and to produce up to 1 million tonnes of renewable hydrogen. In the second phase (2025-2030), the Commission foresees hydrogen becoming an intrinsic part of an integrated energy system with a strategic objective to install at least 40 GW of renewable hydrogen electrolysers by 2030 and to produce up to 10 million tonnes of renewable hydrogen in the EU. In the third phase (2030-2050), the Commission estimates that renewable hydrogen technologies will reach maturity and will be deployed at a large scale, including in hard-to-decarbonise sectors.<sup>17</sup> The third phase relies on a scenario where renewable electricity production is 'massively increased' and used for renewable hydrogen production.

## Possible effects on REDII revision:

The implementation of the EU Hydrogen Strategy is expected to lead to the following EU initiatives:

- Promoting the supply of renewable hydrogen through different support measures in order to scale up production. In the transition phase, low carbon hydrogen is expected to qualify for targeted support without leading to stranded assets. Carbon contracts for difference (CCfD) could be considered as part of a tendering regime.
- Promoting the use of renewable hydrogen in hard-to-decarbonise sectors, including by defining minimum shares/quotas of renewable hydrogen or derivatives in specific end-use sectors;
- Considering requesting that renewable hydrogen is produced from additional RE sources, because using existing RE production plants to produce renewable hydrogen instead would not accelerate the decarbonisation of the EU;
- Providing financial support for certain end-use applications. RES use can be promoted most effectively if these sources are easily distinguishable from more polluting energy sources. Therefore, the Commission aims to introduce comprehensive terminology and a European certification system covering all renewable and low-carbon fuels.

## 2.1.4. The Offshore Renewable Energy (ORE) Strategy

In July 2020, the European Commission announced highly ambitious targets for offshore renewable energy, including offshore wind and marine-based renewables, in its Strategy on Offshore Renewable Energy (ORE). The Commission estimates that an installed capacity of 300GW of offshore wind and around 60 GW of ocean energies by 2050 would be needed in order to achieve an integrated, greener and climate-neutral energy system by 2050.<sup>18</sup> Such ambitious goals will have consequences for rules applicable to planning, permitting and financially supporting projects and infrastructure development.

<sup>16</sup> COM(2020) 301 final

<sup>&</sup>lt;sup>17</sup> Ibid, pp.5-7.

<sup>&</sup>lt;sup>18</sup> COM(2020) 741 final, p.1.

## Possible effects on REDII revision:

The implementation of the ORE Strategy is expected to lead to the following EU initiatives:

- Further emphasis on regional cross-border cooperation between Member States within each sea basin, resulting, for example, in a duty to consider, assess or try cooperating;
- Support for offshore grid investments and permitting procedures;
- Guidance on the share of costs and benefits across borders for the relevant transmission projects;
- Working on a first EU-wide tender, based on the Renewable Energy Financing Mechanism defined in Article 33 of the Governance Regulation (EU) 2018/1999.

# **2.1.5.** Revision of the Commission's State Aid Guidelines for Environmental Protection and Energy (EEAG)

There is a tight link between State aid rules and the Renewable Energy Directive regarding the design of support schemes for energy from renewable sources. As demonstrated in a previous CERRE report, there is a clear dynamic of a procedural and structural nature between the elaboration of State aid rules and REDII.<sup>19</sup> A circular process consisting of three successive steps can be identified. It starts with the adoption of a new General Block Exemption Regulation (GBER),<sup>20</sup> then new State aid guidelines and finally new secondary legislation. Concerning the provisions on support to renewable energy, there are close interrelations between: (i) the adoption of binding provisions in the GBER, (ii) followed by more detailed provisions in the EEAG for the purpose of implementing the principles of the GBER, and (iii) the preparation of the revision of relevant EU secondary law in the Renewable Energy Directive.

The revision of the 2014 EEAG is ongoing and will be completed by the end of 2021. A draft version of the new guidelines, expected to be called Climate, Energy and Environmental State aid guidelines (CEEAG 2022), has been published for comments by the Commission.

#### Possible effects on REDII revision:

• The aspect of the State aid guidelines most relevant to the REDII revision is the design of support schemes for renewable energy sources. The relevant elements of the draft CEEAG are directly integrated in the analysis below.

## **2.1.6 Other relevant policy initiatives**

Other recent policy initiatives may also require REDII to be amended, such as the EU Biodiversity Strategy for 2030 (adopted on 20 May 2020), the Renovation Wave initiative, the Methane Strategy, the Industrial Strategy 2020, and the 2021 Blue Economy communication.

### Possible effects on REDII revision:

• These policy initiatives may reinforce some guiding principles for the design of the schemes, including energy efficiency first and waste hierarchy, amongst others.

<sup>&</sup>lt;sup>19</sup> Banet, Catherine, Legal status and legal effects of the Commission's state aid guidelines. The case of the Guidelines on state aid for environmental protection and energy (EEAG) (2014-2020), EStAL, Issue 2/2020; Banet, Catherine, State Aid Guidelines for Environmental Protection and Energy (EEAG) – Review Process, Possible Changes and Opportunities, CERRE Report, September 2020, p. 33-34.

<sup>&</sup>lt;sup>20</sup> Commission Regulation (EU) N°651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union.

• Against the backdrop of post-COVID-19 recovery and the EU Industrial Strategy, Member States will put increased emphasis on including local benefits in tendering procedures.

## 2.1.7 Assessment of NECPS and 'ambition gaps'

The Energy Union Governance Regulation defines a series of follow-up actions if the Commission identifies a delivery gap during its assessment of the integrated national energy and climate progress reports. Member States should implement the measures provided for in Regulation (EU) 2018/1999 to close that gap.

Following the submission of all the NECPs, the share of renewable energy in the EU's energy mix is now expected to reach 33.1-33.7% by 2030. Therefore, if the Member States meet (and exceed) their respective renewable energy goals, the share of renewable energy in the EU's overall energy mix will surpass the 32% target.<sup>21</sup>

Overall, the EU and the vast majority of Member States are on track to achieve the existing 2020 targets for renewables, but progress is still needed in some Member States. Belgium, France and Poland are at severe risk of failing to meet their targets. Furthermore, the Netherlands and Luxembourg are at moderate risk of not meeting theirs.<sup>22</sup>

Increasing the EU RES targets will broaden this gap between targets and delivery and is likely to trigger a series of actions at both EU and Member State level.

## 2.2 The need for EU regulatory intervention

First, it is important to remember that any EU regulatory intervention must comply with the principles of subsidiarity and proportionality. Therefore, the European Commission must clarify how the revision proposals will solve the identified problems or shortcomings.

Second, and as indicated in Section 2.1.1 above, the European Climate Law defines a duty for the Commission to review relevant EU legislation with the objective of achieving the interim 2030 target and the 2050 climate-neutrality objective (draft Article 3.2 ECL). The ECL defines a two-step process:

- The Commission shall review and assess, by 30 June 2021 (but also within future reviews), the availability under current EU law of 'adequate instruments and incentives for mobilising the investments needed, and propose measures as necessary.' (Art. 3.2). Based on this assessment, the Commission will put forward the necessary measures, including legislative proposals. This is a key starting point for the revision of REDII, which to take place as part of the first half of the 'Fit for 55' climate package.
- 2. The Commission is tasked with monitoring the legislative procedure for the different related legislative proposals it put forward, and 'may' put forward additional new proposals including legislative ones if the original proposals do not appear to be delivering on the interim 2030 target (draft Article 3.2). This provision provides the European Commission with a legal basis for proposing new legislative proposals if its original proposals do not result in sufficient ambition. This includes legislative proposals to revise REDII.

<sup>&</sup>lt;sup>21</sup> COM(2020) 952 final, p.2; COM(2020) 564 final EU-wide assessment of National Energy and Climate Plans

<sup>&</sup>lt;sup>22</sup> COM(2020)952 final, 14.10.2020; COM(2020) 950 final, 14.10.2020, p.3.



For the implementation of this process, the European Commission considers pursuing the following successive tasks:

- Designing and rolling out a process for setting a 2040 climate target, taking into account an indicative greenhouse gas budget for 2030-2050 to be published by the Commission;
- Developing measures to keep track of progress and adjust the Commission's actions accordingly, based on existing systems such as the governance process for Member States' national energy and climate plans;
- Assessing the consistency of EU and national measures with the climate-neutrality objective and the 2030-2050 EU-wide trajectory for greenhouse gas emission reductions by September 2023, and every five years thereafter;
- Committing to engage with sectors in order to prepare sector-specific roadmaps charting the path to climate-neutrality in different areas of the economy.

03

# SCOPE DELIMITATION FOR REDII AND ITS REVISION

## **3. Scope delimitation for REDII and its revision**

This section discusses the possible scope for the REDII revision, identifying priority areas (3.2) and taking into account the scope of application of the directive itself and its relationship with other EU legislative acts (3.3). As this is a recently adopted directive, a limited, targeted revision is needed. It is important to distinguish between revisions that can be implemented in the short-term and other long-term changes (3.1). This is also justified when considering the implementation process in national legislation.

## 3.1 The need for a two step-approach: towards REDIII

It is essential to distinguish clearly between elements of the Directive that can – and should – be fixed in the short-term, and those that should be considered in a broader revision of REDII. In other words, it is recommended to identify what should be revised within REDII and what can be left until REDIII is put forward.

In this context, the 'Fit for 55' Package – which includes the REDII revision – involves cooperation across several Directorate Generals (a cross-DG package) to a greater extent than previous energy and climate packages have demanded. The main objective will be to find the right balance between measures across legislative acts in order deliver the 55% target. It might therefore be difficult to achieve a very comprehensive revision of the current legislative framework in the short-term.

Moreover, it might not be necessary to define all the new measures proposed under REDII as new legal provisions. Some can take the form of guidance (soft law), allowing time to develop best practice, but the balance between soft low guidance instruments and new legally-binding provisions proposed in REDII should be discussed. Since there is not much time to meet the higher targets expected, waiting for the completion of the full legislative process, followed by transposition and application by Member States, might warrant a mix of regulatory instruments, both binding and non-binding, the latter of which would be available in the shorter-term.

# 3.2 Key provisions to be updated based on a systematic review of the REDII provisions

This analysis will identify the key provisions in need of update along with the existing gaps, following a systematic review of the REDII provisions.

The Impact Assessment of the European Commission's 2030 Climate Target Plan already identifies some proposals, based on different baseline scenarios, including:

- Establishing a common rulebook for the design of support schemes to facilitate a predictable, cost effective, market-oriented and European approach that ensures renewable electricity development;
- Removing specific barriers for offshore wind and other offshore technologies;
- Streamlining administrative procedures for renewable projects;
- Provisions for installers of renewable energy technologies;
- Deploying corporate power purchase agreements (PPAs), including in heating and cooling;
- Measures that enhance coordinated planning, also located offshore;

• Strengthening the regulatory framework to 'mainstream' renewable-based solutions for heating and cooling in all sectors.<sup>23</sup>

Other factors that have made implementation more challenging can be added to the above list, such as:

- Inconsistencies between definitions for renewable and sustainable gases;
- Shortcomings of the permitting regime for new production capacity;
- The task of rethinking grid connection rules within an integrated energy system;
- Improving the regime for cooperation mechanisms; and
- Developing a wider, more elaborate system for Guarantees of Origin.

REDII PROVISIONS	SHORT-TERM CHANGES	LONG-TERM CHANGES	NO NEED FOR CHANGE
<ul> <li>Targets:</li> <li>Binding overall Union target for 2030 (art. 3)</li> <li>Calculation of the share of energy from renewable sources (art. 7)</li> </ul>	Х		
<ul> <li>Support schemes:</li> <li>Support schemes for energy from renewable sources (art. 4)</li> </ul>	х		
<ul> <li>Opening of support schemes for electricity from renewable sources (art. 5)</li> <li>Stability of financial support (art. 6)</li> </ul>	Х		0
<ul> <li>Cooperation mechanisms:</li> <li>Union renewable development platform and statistical transfers between MSs (art. 8)</li> <li>Joint projects between MSs (art 9)</li> <li>Effects of joint projects between MSs (art. 10)</li> <li>Joint projects between MSs and third countries (art.11)</li> <li>Effects of joint projects between MSs and third countries (Art. 12)</li> <li>Joint support schemes (art. 13)</li> </ul>	X (for enabling further cross- border projects and offshore wind regional cooperation)	X	

<sup>&</sup>lt;sup>23</sup> Ibid, Section 5.2.2.2.

Capacity increases (Art. 14)			0
<ul> <li>Administrative procedures, regulations and codes (art. 15):</li> <li>Organisation and duration of the permit granting process (art. 16)</li> <li>Simple-notification procedure for grid connections (art. 17)</li> </ul>	X X		
Information and training (art. 18)			0
Guarantees of Origin for energy from renewable sources (art. 19)	Х	x	
Access to and operation of the grids (art.20)	Х	X	
Renewables self-consumers (art. 21)		X	
Renewable energy communities (art. 22)		X	
<ul> <li>Heating and cooling:</li> <li>Mainstreaming renewable energy in heating and cooling (Art 23)</li> </ul>	Х		
• District heating and cooling (art. 24)	х		
<ul> <li>RES in transport:</li> <li>Mainstreaming renewable energy in the transport sector (art. 25)</li> </ul>	Х		
<ul> <li>Specific rules for biofuels, bioliquids and biomass fuels produced from food and feed crops (art. 26)</li> </ul>	X		
<ul> <li>Calculation rules with regards to the minimum shares of renewable energy in the transport sector (art. 27)</li> </ul>	Х		
<ul> <li>Other provisions on renewable energy in the transport sector (art. 28)</li> </ul>	X		

Sustainability and GHG emissions saving criteria for biofuels, bioliquids and biomass fuels:		
<ul> <li>Sustainability and GHG emissions saving criteria for biofuels, bioliquids and biomass fuels (Art. 29)</li> </ul>	Х	
<ul> <li>Verification of compliance with the criteria (art. 30)</li> </ul>	Х	
<ul> <li>Calculation of the HG impact of biofuels, bioliquids and biomass fuels (Art. 31)</li> </ul>	Х	
Monitoring by the Commission		0

## **3.3** The role of REDII in EU energy legislation

Ahead of a period of legislative reforms for the implementation of new policy objectives (increased GHG emissions reduction, energy system integration, promotion of hydrogen and offshore renewable energies), this Paper intends to restate and clarify the scope of application of REDII compared to other directives aiming to achieve these policy objectives.

A revision of REDII will need to address the decarbonisation of all energy carriers and sectors (beyond electricity – transport, heating and cooling, buildings) via an increase in the share of renewable energy sources. This raises the question of the relationship between REDII and other directives, such as the Gas Directive (also to be revised).

## 3.3.1 The objective pursued by REDII

The legal basis for REDII is Article 194 TFEU. Pursuant to Article 194(1)(c) TFEU, one of the objectives of the Union policy on energy is to 'promote [...] the development of new and renewable forms of energy.'

Pursuant to REDII Article 1, the Directive '*establishes a common framework for the promotion of energy from renewable sources.*' This makes the Renewable Energy Directive a central instrument, or 'building block',<sup>24</sup> in the EU's renewable energy policy and, particularly, in meeting the renewable energy targets.<sup>25</sup>

Promoting the development of renewable energy is a broad objective that, in the context of REDII, covers the following actions:

- Promoting the integration of renewable energy into the internal energy market;
- Promoting energy generation from renewable energy sources, at all scales;
- Promoting the use of renewable energy in different sectors;
- Promoting the development of relevant infrastructure development, such as transmission and distribution grid infrastructures, storage, interconnections;

<sup>24</sup> COM(2020) 952 final, 14.10.2020, p.1.

<sup>&</sup>lt;sup>25</sup> This was already the case for Directive 2009/28/EC in relation to the 2020 targets, and now for Directive (EU) 2018/2001 in relation to the 2030 targets.



- Promoting research, development and innovation (R&D&I) in RES technologies;
- Promoting the development of a renewable energy industry in Europe;
- Reducing renewable energy costs;
- Promoting the export of renewable energy technologies;
- Enabling public acceptance for renewable energy sources.

REDII enables the promotion of RES through two types of commonly distinguished support:

- Regulatory support target setting, reducing regulatory barriers to the integration of RE into the internal energy market, improving administrative procedures, defining a preferential or guaranteed grid access regime, defining conditions for connection to the grid, consumer information, enabling consumption – including self-consumption – of RES;
- **Financial support** notably, direct or indirect financial support, reduction of the cost of capital of renewable energy projects.

Concerning the different types of energy from renewable sources, the main definitions have been established in Regulation (EC) No 1099/2008 on energy statistics, Directive 2001/77/EC and Directive 2009/28/EC. They are in most part reiterated in REDII for the purpose of consistency. Energy from renewable energy sources, or renewable energy, is defined as 'energy from renewable non-fossil sources, namely wind, solar (solar thermal and solar photovoltaic) and geothermal energy, ambient energy, tide, wave and other ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, and biogas.'<sup>26</sup>

## 3.3.2 Relationship to EU energy market and energy union governance legislation

From a historic perspective, the objective of European directives on renewable energy has been to increase the penetration of renewable energy into the internal market, creating **a common European framework for promoting the use** of renewable energy sources, first within **electricity** production (Directive  $2001/77/EC^{27}$  and Directive 2009/28/EC) and transport (Directive 2003/30/EC)<sup>28</sup>, then in energy consumption in general, including in the **transport** and **heating and cooling** sectors.

## Promotion of renewables vs. energy market legislation

REDII aims to promote energy from renewable energy sources (Article 1), while the Electricity and Gas directives focus on market design rules. When revising REDII, the European legislator should pay attention to the whole architecture of the EU energy and climate legislation.

For example, REDII covers competitive tendering procedures (as a market-based approach) to determine the level of support and the winning bidders of renewable energy projects. The Electricity and Gas Directives will also cover tendering procedures, but those relate to the attribution of generation or operation rights in the event that sufficient electricity generation capacity is not built on the basis of the authorisation procedure.

<sup>&</sup>lt;sup>26</sup> Directive (EU) 2018/2001, Art. 2.

<sup>&</sup>lt;sup>27</sup> Directive 2001/77/EC of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market, OJEU L 283, 33. The Directive aims to "promote an increase in the contribution of renewable energy sources to electricity production in the internal market for electricity and to create a basis for a future Community framework thereof." (Art. 1)

<sup>&</sup>lt;sup>28</sup> Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport (OJ L 123, 17.5.2003, p. 42–46).



The scope of application of the respective legislative frameworks are to be respected, but are also challenged by the fact that REDII covers the promotion of the use of RE in different sectors, such as electricity generation, heating and cooling, buildings and transport sector.

The challenge is keeping a clear delimitation of the scope of application of REDII with other directives. The following examples illustrate this challenge and the possible delimitation:

- **Example 1:** when deploying energy storage capacity from RES, REDII should focus on supporting the development of storage capacity for renewables only, while the Electricity and Gas Directives should define rules on, inter alia, ownership, connection and operation of energy storage facilities.
- **Example 2:** the regime for Guarantees of Origin covers both the valorisation on renewable energy generation attributes and market design elements (consumer empowerment through disclosure obligation).
- **Example 3:** e-fuels, regulated by RED and the Fuel Quality Directive.
- **Example 4**: More decentralised RES production needs to be supported by market design rules, at the same time as specific market access rules and associated support measures. An example of this is the treatment of biomethane produced from organic waste injected into gas networks at a local level.

#### Summary and recommendations:

- To summarise, REDII relies on a broad range of mechanisms, primarily regulatory but also financial, to ensure the further development of renewable energy in different energy carriers at all levels of the energy supply chain and in key sectors. The aim is to reach the binding Union target for the overall share of energy from renewable sources in the Union's gross final consumption of energy in 2030, which is currently 32%.
- The Directive focuses on renewable energy and does not deal with other sources of energy. It applies across energy vectors and sectors where renewable energy can be integrated. For example, promoting the use of low-carbon, non-renewable energy sources should not be an objective of the Directive. To be consistent with Article 1 of REDII, the objective and material scope of application of the Directive should remain unchanged.
- The objective of the Directive, the promotion of renewable energy sources, should be preserved, while market design rules should continue to be the focus of other directives and instruments. This does not exclude the inclusion of new provisions and a possible extension of the material scope of application of the Directive to include support for the increased production and use of energy based on renewable energy sources.

Parts III to V of the Paper will detail concrete proposals for revisions in the three selected priority areas: tendering (IV), planning (V) and tracking of renewable energy attributes rules (VI).

**RES SUPPORT SCHEMES AND TENDERING** 

04

## 4. RES support schemes and tendering

The main question explored below is how to refine the legal framework for RES support schemes, particularly tendering procedures, as a means of calculating and granting aid. These issues are crucial for advancing the promotion of RE in accordance with increased EU RES targets and also addressing some of the shortcomings identified so far in the deployment of RE across the EU.

In terms of terminology, the difference between auctions and tenders must be noted. Auctions are 'market mechanisms with the aims of allocating goods in case of excess supply and price discovery for goods with unknown market prices from an auctioneer's perspective.' <sup>29</sup> Most auctions focus on price determination as the sole award criterion. Auctions with more than one criterion are called tenders. This Paper uses the term tender when the bidding process relies on several criteria.

## 4.1 Refining tendering rules for renewable electricity and targeted revision

Both the 2014 EEAG and REDII define rules on tendering procedures for new electricity generation capacity. Here, it must be noted that there is a tight link between the State aid rules and the Renewable Energy Directive in relation to the design of support schemes for energy from renewable sources. On the one hand, the 2014 EEAG<sup>30</sup> introduced mandatory competitive bidding<sup>31</sup> to grant aid for RES-E as the general rule for installations above a defined threshold. This comes in addition to the requirement to use market premium<sup>32</sup> as the general rule for all new aid schemes as of 1 January 2017<sup>33</sup> when the aid is not granted via certificates.<sup>34</sup> On the other hand, REDII has consolidated the rules and made them mandatory in secondary legislation. When choosing a support scheme for RES-E, if direct price support schemes are applied the support must ('shall') be granted in the form of a market premium, either sliding or fixed.<sup>35</sup> Then, tendering procedures must be applied for granting the support.<sup>36</sup> As in the EEAG, small-scale installations and demonstration projects may be exempt from the use of premium and tendering procedures.<sup>37</sup>

Competitive tendering procedures aim to support RES deployment at the lowest possible cost for society. Indeed, along with technology development, the introduction of competitive bidding has been one of the key factors in the abatement of costs for renewable energy, particularly for electricity from solar PV and wind power.<sup>38</sup> It also led to significant savings in terms of public spending compared to the level of previous feed-in tariffs.<sup>39</sup> By July 2020, 18 Member States

<sup>35</sup> Art. 4.3, REDII.

<sup>&</sup>lt;sup>29</sup> See the Glossary on the AURESII project website available at < <u>http://aures2project.eu/</u> >. The AURESII project (AUctions for Renewable Energy Support II), funded under the Horizon 2020 Framework Programme, investigates auction design options to determine their policy performance. <sup>30</sup> As a reminder, EEAG are soft law instruments, adopted by the European Commission and legally binding on the European

Commission only.

<sup>&</sup>lt;sup>31</sup> In the 2014 EEAG (para. 19(43)), 'competitive bidding process' is defined as 'a non-discriminatory bidding process that provides for the participation of a sufficient number of undertakings and where the aid is granted on the basis of either the initial bid submitted by the bidder or a clearing price. In addition, the budget or volume related to the bidding process is a binding constraint leading to a situation where not all bidders can receive aid."

<sup>&</sup>lt;sup>32</sup> Under a market feed-in premium scheme, electricity from renewable energy sources is sold on the electricity spot market and RES-E producers receive a premium on top of the market price of their electricity production. The premium can either be fixed (i.e. at a constant level independent of market prices) or sliding (i.e. with variable levels depending on the evolution of market prices).

<sup>&</sup>lt;sup>33</sup> The general rule is defined in para. (124), EEAG. The threshold for applying is rule is set in para. (125) EEAG: 'The conditions established in paragraph (124) do not apply to installations with an installed electricity capacity of less than 500 kW or demonstration projects, except for electricity from wind energy where an installed electricity capacity of 3 MW or 3 generation units applies."

<sup>&</sup>lt;sup>34</sup> Paras (135)-(137), EEAG.

<sup>&</sup>lt;sup>36</sup> Art. 4.4, REDII.
37 Art. 4.3 and 4.4., REDII.

<sup>&</sup>lt;sup>38</sup> COM(2020) 952 final, p.4; 'Retrospective evaluation support study on State aid rules for environmental protection and energy', prepared for the European Commission by E.CA Economics, Centre for Competition Policy and Sheppard Mulin, Final Report, 2020.

<sup>&</sup>lt;sup>39</sup> CEER, 2<sup>nd</sup> Report on Tendering Procedures for RES in Europe, Ref. C20-RES-67-03, 17 November 2020. P,32.

determined the support levels for (larger) RES-E installations via a competitive bidding process.<sup>40</sup> Even if it is likely that an increasing number of renewable energy projects will develop outside tendering/auctioning systems in the mid- to short-term, it will still be necessary to ensure a minimum amount of support through state measures in the short-term.<sup>41</sup> Not least because the use of tenders also enables Member States to keep track of their progression towards renewable energy targets (target compliance). This lends itself to the argument of **maintaining both: (i) market premium as the common rule for direct price support schemes in favour of RES-E generation (as currently defined in REDII), and (ii) tendering as the common rule for granting the support when no other market-based instruments are applied (such as green certificates)**. Increasing the share of renewable sources in other energy uses or carriers, or for small-scale installations<sup>42</sup>, may still require more direct price support schemes.

The European Commission has repeatedly stated that the long-term goal is to phase out subsidies for renewable energy technologies that have become competitive, and for which there are no more market failures. The introduction of tendering procedures as a means of determining levels of support has fostered competition and recently resulted in cases of zero-subsidy bids.

During the past few years, a series of large-scale projects, including for offshore wind, have been able to develop without subsidies. Most of these subsidy-free renewable energy projects have developed under tendering systems, but they may also develop outside a tender/auction system.<sup>43</sup> In some bidding procedures, like in the Netherlands, bidders are required to submit zero-subsidy bids as part of the award criteria. For example, in July 2020, the 759-MW offshore wind Hollandse Kust Noord tender was awarded to the CrossWind consortium led by Shell and Eneco under a zero-subsidy bid.<sup>44</sup> Under the Dutch system, if several bidders managed to submit a zero-subsidy bid, they will be ranked on qualitative criteria under a procedure referred to as a 'beauty contest'. It should be noted that most of the offshore wind subsidy-free projects awarded so far have benefited from other forms of support, such as guaranteed or subsidised grid connection provided by the relevant TSO. It was reported that Germany and the Netherlands have, between mid-2016 to 2019, allocated more than 3.1 GW of offshore capacities under zero-subsidy bids.<sup>45</sup>

These subsidy-free cases continue to occur together with other market developments, and can be seen as the result of the competitive bidding process. It might be necessary to streamline practice and to regulate tendering further because award criteria may include other elements than price, amongst other reasons. This point is illustrated in Section 4.4 below, which discusses the importance of promoting local benefits within the award criteria for competitive tenders.

<sup>&</sup>lt;sup>40</sup> Navigant (2020): Technical assistance in relation of the 5<sup>th</sup> report on progress of renewable energy in the EU; CEER, 2<sup>nd</sup> Report on Tendering Procedures for RES in Europe, Ref. C20-RES-67-03, 17 November 2020, pp.9-11.

<sup>&</sup>lt;sup>41</sup> İbid, pp. 125-135.

<sup>&</sup>lt;sup>42</sup> The recognition of the possible further need for more direct support for small-scale installations is recognised in Recital (17), REDII.

<sup>&</sup>lt;sup>43</sup> Another manner to secure financing outside an auction/tender system, would for example be under a Corporate Renewable Power Purchase Agreement (PPA), which, in most cases, do not involve state aid.

<sup>&</sup>lt;sup>44</sup> 'Shell and Eneco to build third unsubsidised Dutch offshore wind farm', Government of the Netherlands, press release, 29 July 2020, available at < <u>https://www.government.nl/latest/news/2020/07/29/shell-and-eneco-to-build-third-unsubsidiseddutch-offshore-wind-farm</u> >. It should be noted that this project is not limited to offshore wind technology, and include five innovative technologies developed around the wind farm installations: floating solar park; short-term battery storage; turbines that are tuned to the network to minimise the negative 'wake'-effects that wind turbines have on each other; renewable energy hydrogen made by electrolysis as another storage technique; and the coordination among those technologies to ensure a continuous power supply despite wind situations.

<sup>&</sup>lt;sup>45</sup> See JRC, Wind Energy Technology Market Report, EUR 29922 EN, European Commission, Luxembourg, 2019.

#### **Recommendations:**

- The introduction of competitive bidding procedures (tenders) as a means of granting support has proven effective in reducing costs for renewable energy and generating public financial support. Some shortcomings in the deployment of RES projects can be attributed to external factors, such as permitting procedures. The use of tenders enables Member States to keep track of their progression towards renewable energy targets. As Member States are still in the process of adjusting their national schemes to REDII requirements, there is no need to change the general approach as part of the REDII revision.
- Increasing the share of renewable sources in other energy uses or carriers beyond electricity may still require the use of price support schemes that are more direct than market premium.
- The REDII revision should be targeted and limited to the necessary changes that will: (i) enable the European Climate Law's ambitious targets to be reached, and (ii) follow up the different strategies adopted by the European Commission (notably on energy system integration, hydrogen, ORE).
- Because the two revisions are running in parallel, there should be a discussion on which elements of the forthcoming CEEAG 2022 should be mirrored in the revised REDII.

## 4.2 Further promoting cross-border projects through tendering

The European Commission has also announced that it intends to further promote cross-boundary collaboration. This is in line with Article 12 of the Governance Regulation, which encourages regional cooperation.

Pursuant to REDII (Articles 8-13) (building on REDI), Member States can cooperate on renewable energy using several mechanisms, such as statistical transfers, joint projects and joint support schemes. The Renewable Energy Progress Report 2020 shows that there are currently four agreements making use of statistical transfers: two 2017 agreements between Luxembourg-Lithuania and Luxembourg-Estonia, and two 2020 agreements between the Netherlands-Denmark and Malta-Estonia.<sup>46</sup> In the Report, the European Commission 'strongly encourage[s]' Member States to 'explore all possible options to use cooperation mechanisms, notably statistical transfer, as the solution to address the situation with the few weeks till the end of 2020.'47

However, higher RE-targets for 2030 also means a bigger gap to fill. The benefits of crossboundary projects located in basins or regions with favourable conditions for renewable energy generation, such as offshore wind basins, would also contribute to completing the internal energy market and reach targets. However, all tendering schemes implemented between 2018 and mid-2020 (latest available figures) have remained national in scope.<sup>48</sup> Before 2018, only Denmark and Germany had implemented a cross-border tender for renewable energy,49 at the request of the

<sup>46</sup> COM(2020)952 final, p.6

 <sup>&</sup>lt;sup>47</sup> Ibid, p. 21.
 <sup>48</sup> CEER, 2nd Report on Tendering Procedures for RES in Europe, Renewable Energy Sources Work Stream of Electricity Working

<sup>&</sup>lt;sup>49</sup> See D. Dmitruk, Danish-German Cooperation on the first cross-border tenders for renewable energy – A blueprint for future cross-border RES projects?, in M. M. Roggenkamp and C. Banet (eds.), European Energy Law Report XII (Intersentia, 2028), pp.113-132.

European Commission as part of a State aid approval procedure.<sup>50</sup> It should be noted that the 2014 EEAG already promote the use of cooperation mechanisms to facilitate cross-border support of renewable energy where possible and appropriate. It can also be noted that the requirement of cross-border participation has been reinforced when Member States establish capacity remuneration mechanisms. Encouraging cross-border participation in tendering schemes could be an opportunity to create additional value and economies of scale.

In order to further promote cross-border renewable energy projects, REDII could consider the following mechanisms, in order of the least to the most legally constraining approach:

- Soft law guidance on the development of cross-border projects through joint tendering procedures;
- Rewards for increased cooperation and the resulting new generation capacity;
- A mandatory requirement to try to cooperate via cross-border tender, reflecting the potential for joint projects identified in the NECPs. Making cross-border cooperation mandatory seems disproportionate at this stage in view of the objectives pursued (integrating the internal energy market and increasing RES generation and use) and the differences in renewable energy mix between Member States. Interconnections – and possible investment in those – must also be taken into account.

Those different approaches are not mutually exclusive and could be combined.

## 4.3 Technology neutrality vs. specificity in tendering procedures

While technology-neutral tendering procedures are preferred,<sup>51</sup> both REDII and the 2014 EEAG allow Member States ('may') to limit tendering procedures for RES-E to specific technologies under specific conditions. Pursuant to REDII, a Member State could depart from a technology-neutral tendering procedure if it '*lead to a suboptimal result, in the view of: (a) the long-term potential of a particular technology; (b) the need to achieve diversification; (c) grid integration costs; (d) network constraints and grid stability; (e) for biomass, the need to avoid distortions of raw materials markets.*<sup>'52</sup> The 2014 EEAG contain similar, though more detailed, wording.<sup>53</sup>

The discussion around technology-neutral vs. technology-specific tenders was central to debates surrounding the adoption of the 2014 EEAG, and REDII reiterated most of the wording from these Guidelines without reopening the discussion. The criteria set out in the EEAG applied as of 1 January 2017 and the deadline for the transposition of the relevant provisions of REDII was 30 June 2021. In the draft 2022 CEEAG, subject to consultation by the European Commission, a similar approach is reiterated, where technology-neutral competitive bidding procedures are still preferred and a non-exhaustive list of possible exemptions for one or more specific beneficiaries is provided.<sup>54</sup>

<sup>&</sup>lt;sup>50</sup> Denmark and Germany have established a pilot cooperation on cross-border tenders that was approved by the European Commission (notified aid measures for solar PV and wind electricity in two separate State aid decisions dated October 2014). See decisions: SA.36204 (2013/N) – Denmark – Aid to photovoltaic installations and other renewable energy installations, of 24 October 2014; SA 37122 (2013/N) – Denmark – Aid to household wind turbines and offshore wind turbines with an experimental aspect. The two decisions were subsequently rectified by the Commission on 18 December 2014 <sup>51</sup> In accordance with the 2014 EEAG,

<sup>&</sup>lt;sup>52</sup> Art. 4.5, REDII.

<sup>&</sup>lt;sup>53</sup> Para. (126), fourth paragraph, 2014 EEAG reads as follows: 'The bidding process can be limited to specific technologies where a process open to all generators would lead to a suboptimal result which cannot be addressed in the process design in view of, in particular: (a) the longer-term potential of a given new and innovative technology; or (b) the need to achieve diversification; or (c) network constraints and grid stability; or (d) system (integration) costs; or (e) the need to avoid distortions on the raw material markets from biomass support.'

 $<sup>^{54}</sup>$  Draft 2022 CEEAG, paras. (82) and (83) on eligibility, and paras. (90) to (91).

Therefore, some Member States are still in the process of adjusting their support schemes and competitive bidding procedures to the latest requirements. The 2<sup>nd</sup> CEER Report on Tendering Procedures for RES in Europe analyses Member States' experiences with technology-neutral and technology-specific tenders at a national level.<sup>55</sup> It reveals that most Member States have opted to implement both technology-neutral and technology-specific tenders. Only a few States (five as of mid-2020) do not have technology-specific tenders. The CEER Report also observes that Member States tend to initially gain experience with technology-specific tenders and introduce or switch to technology-neutral tenders later on.

The deployment of offshore renewable energy technologies, either offshore wind alone or combined with other technologies, at the scale envisaged by the European Commission in its recent strategies will probably demand a revision of the tendering rules. The ORE strategy and the Hydrogen strategy are two recent examples of technology-specific approaches (deploying offshore wind and renewable hydrogen, respectively) that will need to be reflected in the criteria for competitive tendering procedures. Similarly, other benefits of technology-specific tenders could be more explicitly stated and could be weighted, specifically in terms of innovation, security of supply, sustainability and local environmental, economic and social benefits.

In some countries, it seems that technology-specific and technology-neutral tendering procedures are run in parallel for the same technologies, leading to speculation that negatively affects both the level of competition and the price. Such a situation should be avoided.

There should be a close link between energy system planning (see Section 5 below) and the launch of tendering procedures. In particular, the targets for new capacity and for specific technologies should be consistent with each other and supported by both energy system planning procedures and tendering procedures. This link could be made in a binding or non-binding manner, for example with a requirement of consistency between plans and tendering terms as either qualification or award criteria.

<sup>&</sup>lt;sup>55</sup> CEER, 2nd Report on Tendering Procedures for RES in Europe, Renewable Energy Sources Work Stream of Electricity Working Group, Ref: C20-RES-67-03 17, November 2020.

## **Recommendations:**

- The REDII provisions on competitive bidding procedures, including the requirements related to technology choice, are still in the implementation phase, with a transposition deadline of 30 June 2021. These provisions build on the rules set in the 2014 EEAG, but most Member States are still adapting their national support schemes and related competitive bidding procedures for support allocation. Therefore, it is not deemed appropriate to change the chosen approach in the upcoming REDII revision.
- However, during this transition phase, and in order to ensure innovation, security of supply, sustainability and local benefits, it is recommended to continue allowing technology-specific tenders under a specific set of conditions aligned with market developments. Among the criteria for technology-specific tendering procedures, REDII or the 2022 CEEAG could further elaborate on the baseline choice for multi-technology tenders.
- Ambitious targets for specific technologies, such as for offshore wind and renewable hydrogen, must be reflected in the criteria for granting competitive tendering procedures.
- The rules for competitive tendering procedures should maintain a balance between market exposure and competition amongst generators, and highlight other benefits of specific technologies.
- There should be a close link between energy system planning (see Section 5 below) and the launch of tendering procedures, where the targets for new capacity and for specific technologies should be consistent with each other. This link could be made in a binding or non-binding manner, with a requirement for consistency.

## 4.4 Promoting local benefits under tender schemes

In the context of support tenders for renewables, common criteria include: price; actor diversity; geographical distribution; domestic industry development; system integration; technical specifications.<sup>56</sup> The question raised in this section is whether competitive tendering procedures could also include criteria on local benefits in accordance with EU law. The importance of facilitating local benefits and of stressing local specificities is particularly relevant for projects based on bioenergy, biogases or green hydrogen, but the discussion also extends to wind power projects. As observed by CEER in its 2<sup>nd</sup> Report on Tendering Procedures for RES in Europe: '*Acceptance issues for RES deployment are being observed, especially for onshore wind, negatively impacting the participation level in onshore wind tenders*.'<sup>57</sup> The economic consequences of the COVID-19 pandemic have also made local benefits and supporting local economies/industries a central aspect of the recovery packages.

'Local benefits' can be diverse in nature and could cover economic, environmental and social benefits. Local benefits could be accrued through project ownership, direct community compensation or local job creation along the supply chain.

<sup>&</sup>lt;sup>56</sup> AURESII project website available at < <u>http://aures2project.eu/</u>

<sup>&</sup>lt;sup>57</sup> CEER, 2nd Report on Tendering Procedures for RES in Europe, Renewable Energy Sources Work Stream of Electricity Working Group, Ref: C20-RES-67-03 17, November 2020, p.7.

The concept of local benefits could be associated with the concept of 'local content'. If not qualifying for any exemption, local content requirements (LCRs) are prohibited both under the international trade rules of the World Trade Organisation (WTO) and under EU law. The possibility of allowing the inclusion of local benefits similar in content and legal nature to LCRs would therefore be very limited. However, local benefits could take other forms, including legal forms. The extent to which local benefits will be recognised as an award criterion (rather than a requirement) will also be central when assessing the legal feasibility of the measure. A useful comparison can be made with rules applying to 'sustainable procurement' where social and environmental factors are considered alongside financial factors when making procurement decisions.

Already some provisions of secondary legislation and EU soft law instruments refer to the need to consider local development opportunities and the socio-economic impact of renewable energy projects. Recital 63 of REDII outlines that: "*When favouring the development of the market for energy from renewable sources, it is necessary to take into account the positive impact on regional and local development opportunities, export prospects, social cohesion and employment opportunities, in particular as concerns SMEs and independent energy producers, including renewables self-consumers and renewable energy communities." REDII reinforces provisions on RE communities and aims to ensure that they are taken into account when developing tenders and bidding processes. However, the wording of the Directive could be improved to clarify the extent to which local benefit requirements can be considered as part of the competitive bidding process. The draft Guidelines on State aid for climate, environmental protection and energy 2022 (CEEAG, 2022) refer to the possibility of including non-price selection criteria in the competitive bidding process, such as 'additional environmental, technological or social criteria.' In such cases, the draft Guidelines suggest limiting this criteria to no more than 25% of the weighting of all the selection criteria.<sup>58</sup>* 

#### **Recommendations:**

- The revision of REDII should be an opportunity to consider the possibility of including criteria on local benefits as part of the competitive tendering procedures for granting support to renewable energy projects.
- The draft Guidelines on State aid for climate, environmental protection and energy 2022 (CEEAG) hint at the inclusion of such criteria, although it could be made clearer. In order to advance the Just Energy Transition, the revision of REDII should also reflect criteria on local benefits, in accordance with EU law.
- The tendering procedures should ensure the involvement of local communities and local authorities in order to ensure benefits, optimal location and local acceptance.

<sup>&</sup>lt;sup>58</sup> European Commission, Draft Guidelines on State aid for climate, environmental protection and energy 2022, Public Consultation, para. (49).

05

# ENERGY SYSTEM Planning

## 5. Enhanced coordination of energy system planning to deliver RES targets

This section focuses on existing and potential new measures to enhance the coordinated planning of the energy system, including at generation level. In the context of the EU Energy System Integration and the ORE strategies, coordinated energy system planning is expected to be a key mechanism to further develop a low-carbon energy system with a high share of renewable energy sources, in a cost-effective manner. It builds on existing provisions in currently applicable legislation, both in REDII, the Electricity and Gas Directives, and Energy Union Governance Regulation. To support a move towards more coordinated energy system planning, these provisions could be extended, notably in the context of the REDII revision. A revision of infrastructure planning requirements and permitting procedures has already been identified as a way of advancing energy generation and infrastructure projects. New proposals of this kind are expected as part of the revision of REDII, and stakeholders have also made proposals. To bring another (often missing) dimension forward in the debate, **this section focuses on the previous step, consisting of planning procedures and requirements for the energy system with the objective of IREDII)**.

#### **5.1** Shortcomings of the current approach

**Different types of planning procedures and requirements** will be relevant to ensure an increase in renewable energy generation capacity, including energy planning (both for generation and infrastructure development), climate adaptation planning, spatial planning and land-use planning. These different planning procedures often run in parallel,<sup>59</sup> but need to be further coordinated, if not integrated, in order to enable the deployment of renewable energy projects at the scale envisaged by the revised RES targets. They are also subject to different public consultation rules, which, among other goals, aim to ensure that the projects will not interact negatively with other interests (such as other economic activities, environmental protection, local acceptance) and are, in fact, developed in synergy with them. These planning procedures are mostly regulated by national law, with few EU requirements applying to them, in accordance with the subsidiarity and proportionality principles. Failing to steer and direct energy system planning risks leading to cost-inefficiencies and also non-compliance with RES targets.

One way to move forward would be to either: (i) develop guidance on best practices for coordinating these different planning procedures with a view of delivering RES objectives; or (ii) to define a joint requirement to assess interaction and consistency between these different planning procedures, and the manor the RES objective is taken into account.

#### 5.2 Towards a more prescriptive approach in energy system planning

Generation is one of the segments of the energy supply chain that is deemed to be open to competition (cf. liberalisation process), unlike transmission or distribution, which are natural monopolies. Generation capacity development should continue to be steered by market-based signals. However, the expected higher target for the share of renewable energy raises the question of whether planning requirements need to be more prescriptive, and even set

<sup>&</sup>lt;sup>59</sup> This weakness is also identified in Recital (24) of the Energy Union Governance Regulation: `[...] Sectoral Union law in the energy and climate fields sets out planning requirements, which have been useful tools to drive change at the national level. Their introduction at different times has led to overlaps and insufficient consideration of synergies and interactions between policy areas, to the detriment of cost-efficiency. Current separate planning, reporting and monitoring in the climate and energy fields should therefore as far as possible be streamlined and integrated.'

**targets for increased generation capacity**. As such, the question raised below is whether a more prescriptive approach towards developing new renewable energy generation capacity (for the purpose of target compliance) can be integrated into energy system planning requirements.

To answer this, it is necessary to first analyse the context of the current EU legislation.

#### 5.3 Currently applicable requirements on energy system planning

Firstly, REDII already contains some relevant provisions that can serve as a legal basis or model. Although not legally binding, Recital 45 encourages Member States to ('should') take into account the contribution made to environmental and climate change objectives by renewable sources in the planning phase of new renewable energy installations. The first sentence of Article 15.3 requires Member States to ('shall') 'ensure that their competent authorities at national, regional and local level include provisions for the integration and deployment of renewable energy [....] when planning, including early spatial planning, designing, building and renovating urban infrastructure, industrial, commercial or residential areas and energy infrastructure, including electricity, district heating and cooling, natural gas and alternative fuel networks.' This provision is carefully drafted, as only a duty to ensure the relevant provisions are included. Nevertheless, this is the most direct reference to integrating renewable energy sources for the purpose of further expansion in the different types of national planning procedures in EU legislation.<sup>60</sup> Therefore, it could serve as example or model for including similar new provisions in REDII.

Secondly, other pieces of secondary EU energy and climate legislation refer to planning obligations that both reflect an ongoing regulatory trend and could serve as a useful model for new REDII provisions. For example, several provisions of the Energy Union Governance Regulation show signs of a move towards a more prescriptive approach in terms of coordinated energy system planning at national and regional level. The provisions are not very detailed or constraining, but this can be interpreted as a first move, focusing – as in the Paris Agreement – on a series of formal reporting requirements. Regulation (EU) 2018/1999 integrates these obligations in the Energy Union governance system, where planning, reporting and monitoring obligations in the energy and climate fields are streamlined.

Pursuant to Article 15.4(e) of the Regulation, Member States' and the Union's long-term strategies shall cover, among other elements, links to other national long-term planning objectives. As part of the mandatory template for the integrated national energy and climate plans (Annex I), Member States include information on regional cooperation in preparing the plan, and notably '*elements subject to joint or coordinated planning with other Member States*.'<sup>61</sup> The transparency platform on renewable energy is also integrated in the broader e-platform established in that Regulation.

Similarly, the process of elaborating the 'territorial just transition plans' under the Just Transition Fund contains some elements of energy system planning. The plans define the territories in which the Just Transition Fund will be used, and the identification of these territories is carried out through a dialogue between Member States, local and regional authorities and the European Commission. The system planning dimension comes from the fact that the plans start by defining the challenges in each territory and the development needs and objectives to be met by 2030 before identifying the types of measures envisaged, including new renewable energy generation capacity to be supported by the Fund.

<sup>&</sup>lt;sup>60</sup> The second sentence of Article 15.3 requires Member States ('shall') in 'encourage' local and regional administrative bodies to include heating and cooling from renewables sources in city infrastructure planning and to consult the network operators in order to reflect the impact of energy efficiency and demand response and their grid development plans. This requirement is less strengthened than the one defined in the first sentence of Article 15.3, and targets grid infrastructure planning solely.
<sup>61</sup> Annex I, Part 1, para. 1.4, Energy Union Governance Regulation.



To take another example, at national level some Member States are proceeding to a preliminary 'meshing' (*maillage*) of local territories to identify potential additional renewable energy generation capacity. This could serve as best practice, either in the form of guidance for national authorities or as a requirement to conduct local energy system planning in line with national-level planning, based on the objective of increasing the share of renewable energy.

Thirdly, at a policy initiative level, the EU Energy System Integration Strategy calls for a more coordinated planning (and operation) of the energy system as a whole, across multiple energy carriers, infrastructures, and consumption sectors.<sup>62</sup> It calls, in particular, for the 'cost-effective planning and deployment of offshore renewable electricity', taking into account possible interaction and integration with hydrogen production.<sup>63</sup>

Another central concern is how to **coordinate compliance with the different targets**. More detailed requirements for the integration/coordination of the different planning procedures can enable such coordination.

#### Recommendations:

- The revision of REDII should facilitate enhanced, coordinated and integrated planning processes, including at generation level, in order to deliver the volumes required to reach renewable energy targets and system integration goals.
- One way to move forward would be to either: (i) develop guidance on best practices for coordinating these different planning procedures in view of delivering RES objectives; or (ii) define a joint requirement to assess interaction and consistency between these different planning procedures, and ensure the RES objective is taken into account.
- Coordinated planning should reflect all central considerations in energy system development and operation, including security of supply, decarbonisation, cost-effectiveness, and resilience, amongst others.

<sup>&</sup>lt;sup>62</sup> COM(2020) 299 final, p.10.

<sup>&</sup>lt;sup>63</sup> Excluded from the scope of this Paper are the procedures for the authorisation, certification and licensing of renewable energy plants. The simplification of administrative procedures, including for permitting, has been an objective of the RE legislation for a long time already.

06

# TRACKING AND VALORISATION OF RENEWABLE ENERGY GENERATION ATTRIBUTES

# 6. Rules for tracking and valorisation of renewable energy generation attributes

This section discusses the regime for energy disclosure and market valorisation of renewable energy as defined in REDII. More specifically, it deals with the use of Guarantees of Origin (GO) for the purpose of compliance with the disclosure obligation – currently defined in the Electricity Directive – and the manner in which it can contribute to the valorisation of renewable energy on the market as well as better inform customers about their energy consumption. REDII defines the GO as 'an electronic document which has the sole function of providing evidence to a final customer that a given share or quantity of energy was produced from renewable sources.'<sup>64</sup> A GO is a so-called Energy Attribute Certificate (EAC).

This section begins with a short review of the EU legal regime applicable to GOs (6.1), before assessing the implementation of REDII provisions on GOs and possible improvements (6.2).

#### 6.1 Applicable EU legal regime for GOs

The EU legal regime for GOs has developed progressively. Directive 2001/77/EC was the first directive containing provisions on GOs completed by the Electricity Directive (2003/54/EC) and the Cogeneration Directive (2004/8/EC). Directive 2001/77/EC aimed, among other things, to enable the generation attributes of RES-E to be tracked based on a reliable system. GOs are a certificate-based mechanism enabling the generation attributes of RES-E to be tracked reliably. It can be used for the purpose of complying with electricity disclosure requirements under in the Electricity Directive, and informing final consumers about the origin of the electricity they purchase.<sup>65</sup>

Since then, EU and national legal frameworks, as well as market practices, have evolved. The legal regime for GOs has recently been consolidated in REDII. GOs are currently regulated in three directives (although predominantly in REDII): the Electricity Directive (EU) 2019/944, the Renewable Energy Directive (REDII), and the Energy Efficiency Directive 2012/27/EU (EED). The Electricity Directive defines the 'electricity disclosure' obligation as part of the billing information.<sup>66</sup> Information requirements on the origin of electricity are designed to enable consumers to make an informed choice of electricity provider (consumer empowerment). It is therefore in relation to consumer protection and free choice of supplier that the Electricity Directive defines both an electricity disclosure obligation for suppliers and the role of GOs for that unique purpose.<sup>67</sup> Crucially, the Electricity Directive also defines an obligation to ('shall') use GOs to comply with the disclosure obligation when electricity is generated from renewable energy sources, except in a few circumstances.<sup>68</sup>

<sup>&</sup>lt;sup>64</sup> Art. 2, REDII.

<sup>&</sup>lt;sup>65</sup> For an analysis of electricity tracking requirements in secondary EU law under Electricity Directive 2009/72/EC, Renewable Energy Directive 2009/28/EC and the Cogeneration Directive 2004/8/EC, see C. Banet, *Tradable green certificates under EU Law*, (UniPub, 2012), pp.117-144.

<sup>&</sup>lt;sup>66</sup> Article 18.6 (Bills and billing information) of the Electricity Directive requires ('shall') Member States to ensure that bills and billing information fulfil the minimum requirements set out in Annex I.

<sup>&</sup>lt;sup>67</sup> Article 4, Electricity Directive (EU) 2019/944. Since 1 July 2007, all customers within the EU have been given the right freely to choose their suppliers. The information provided to customers through disclosure may influence the choice of supplier, on the basis in particular of the environmental generation attributes of electricity, in addition to price or quality of supply. By picking a RES-E supplier, the customer will voluntarily support RES-E generation. This is where the requirement of electricity disclosure coincides with the objective of voluntary support.

<sup>&</sup>lt;sup>68</sup> Electricity Directive (EU) 2019/944, Annex I (Minimum requirements for billing and billing information), Section 5 (Disclosure of energy sources), fourth alinea: 'For the disclosure of electricity from high efficiency cogeneration, Guarantees of Origin issued under Article 14(10) of Directive 2012/27/EU may be used. The disclosure of electricity from renewable sources shall be done by using Guarantees of Origin, except in the cases referred to in points (a) and (b) of Article 19(8) of Directive (EU) 2018/2001.' Emphasis added.

Currently, there are no equivalent disclosure obligations for other energy carriers or a general 'energy disclosure' requirement in EU law. This contrasts with the fact that REDII already enables the issuance of GOs for all energy carriers (electricity, gas, and heating and cooling). Owing to the implementation of REDII, an increasing number of countries will enable the use of non-electricity GOs. The upcoming revision of the Gas Directive<sup>69</sup> also presents an opportunity to define a disclosure obligation for gases, including biogases (like biomethane) and hydrogen. The growing number of interactions between different energy carriers in the context of a more integrated energy system also calls for a coherent disclosure system across energy carriers. The implications for the different GO schemes (such as electricity and biomethane or electricity and heating and cooling) once energy is converted from one modality into another should be assessed.<sup>70</sup>

When it comes to EU regulation of GOs, REDII is the main piece of legislation defining the entire GOs regime. The EED also contains provisions on the use of GOs, but for the sole purpose of guaranteeing the origin of electricity produced from high-efficiency cogeneration. <sup>71</sup> Ideally, the legal provisions on GOs could have been put together in one single piece of legislation, for example in the Electricity Directive, given that GOs can also be issued for non-renewable sources of energy.<sup>72</sup> A counter argument to this is that a GO can relate to either electricity, gas (including hydrogen), or heating and cooling, <sup>73</sup> which may require at least cross-referencing between the relevant directives. Nevertheless, it is both to ensure continuity from the previous legislative framework and because GOs have the primary function of 'showing to final customers that a given share or quantity of energy was produced from renewable sources'<sup>74</sup> that the regime for GOs remains primarily defined in REDII. In addition, the fact that the regime for GOs is defined in REDII emphasises the link between GOs – as a tracking mechanism – and the valorisation of energy generated by renewable energy – and its attributes – in the context of a liberalised market and free choice of supplier.

Furthermore, there is an important distinction to be made between GOs and support schemes such as renewable energy or green certificates. Both are certificate-based mechanisms, but GOs are a tracking instrument for the purpose of electricity disclosure only, while green certificates are certificate-based 'support schemes'. The role of GOs in target compliance was previously rejected and REDII reiterated the fact that GOs shall have no function in terms of target compliance under Article 3 of the Directive.<sup>75</sup> Article 19.2 of REDII further details the possible interactions between GOs as a disclosure mechanism and national support schemes, and how Member States should take into account 'the market value of the GO' without double counting:

- Schemes for the guarantee of origin do not by themselves imply a right to benefit from national support mechanisms;
- Directive 2009/28/EC distinguishes clearly GOs and target compliance, and defines the sole function of GOs as tracking electricity generation attributes for disclosure, as required by 2003/54/EC and later 2009/72/EC Article 3(9);
- This approach has since been supported by rulings of the European Court of Justice in the following cases: Case C-204/12, Ålands vindkraft AB v Energimyndigheten and ECJ 11

<sup>&</sup>lt;sup>71</sup> Art. 14.10 (Promotion of efficiency in heating and cooling) and Annex X (Guarantee of origin for electricity produced from high-efficiency cogeneration), Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, as amended.

<sup>&</sup>lt;sup>72</sup> Article 19.2, REDII provides that Member States 'may arrange for Guarantees of Origin to be issued for energy from nonrenewable sources.'

<sup>&</sup>lt;sup>73</sup> Article 19.7(b), REDII.

<sup>&</sup>lt;sup>74</sup> Recital (55), REDII.

<sup>&</sup>lt;sup>75</sup> Art. 19.2, last para., REDII.

September 2014, Case C-208/12, Essent Belgium NV v Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt.

• As the debate mostly focused on the purpose of GOs, many important details regarding their use for disclosure were left for national subsidiarity by the European legislators.

A major clarification of the GO regime was made via the recast of the Renewable Energy Directive as part of the Clean Energy Package for All Europeans. The Commission's proposal to strengthen the system of GOs for RES-E and the final REDII provisions, as adopted, consolidates the regime for GOs, making the use of GOs mandatory as proof of supply of RES-E (in other words, for electricity disclosure.<sup>76</sup> This consolidation and strengthening of the regime was perceived as a major improvement, as 'it consolidates the disclosure process on the basis of an instrument that has proven its reliability if correctly managed'.<sup>77</sup>

Indeed, the Renewable Energy Directive (2009/28/EC) still permitted the use of alternative tracking instruments, under the condition that they were proven to be reliable and did not lead to counting the same produced quantity of electricity twice.<sup>78</sup> This, however, opened up the risk of double-counting, due to the coexistence of different types of disclosure (for example, using blockchain-based application to track RES-E and also requesting GOs for the same production) and the recognition of different forms for disclosure. Under the revised Renewable Energy Directive (EU) 2018/2001 (RED II), this will no longer be authorised, as anyone claiming to supply or consume electricity from renewable sources will have to substantiate this claim with GOs.<sup>79</sup> It is also mandatory that expired GOs contribute to the 'residual mix'.<sup>80</sup>

Article 19.3 of REDII introduces another novelty, by **differentiating between the usability and the validity of a GO**. This introduces the concept of a variable lifespan for GOs. As was already the case, a GO is valid only 12 months after its production date. However, the use of a GO for disclosure purposes is extended by the process described in Article 19.3 to up to 18 months after the production date, thus introducing a usability period that differs from the validity period. The objective behind this provision is not clear in this respect. It seems that different fuel mix-procedures were preferred and that this outcome is actually a compromise between the disclosure models favoured by different Member States.

REDII introduces a new compliance obligation with **CEN/CENELEC standard EN16325**. Pursuant to REDII, Member States or the responsible designated competent bodies have the obligation to ('shall') ensure that the system for GOs is accurate, reliable and fraud-resistant. Standardisation initiatives have developed for that purpose and REDII requires that the GO system put in place by national authorities complies with the standard CEN-EN-16325 (Guarantees of Origin related to energy - Guarantees of Origin for Electricity). The CEN-EN-16325 standard is currently under review and will apply to electricity, but also to gas (including hydrogen and heating and cooling). The revision process is supervised by CEN CENELEC and should be completed when REDII enters into force. It should also be aligned with the EECS GO initiative (see section 6.2), which has been successful in leveraging international recognition of the GO, harmonising trade practices and ensuring continuous growth in the GO market. Ultimately, a growing market for GOs supports further growth in production from renewable energy sources.

<sup>&</sup>lt;sup>76</sup> Art. 19.8, REDII.

<sup>&</sup>lt;sup>77</sup> D. Van Evercooren, 'The EU Approach to the Regulation of Guarantee of Origin' in M. M. Roggenkamp and C. Banet (eds.), European Energy Law Report XIII (Intersentia, 2020).

<sup>&</sup>lt;sup>78</sup> Article 15 §7 of the Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources.

<sup>&</sup>lt;sup>79</sup> Article 19.8, REDII.

#### 6.2 REDII implementation and areas of improvement

There have been spontaneous harmonisation attempts on disclosure and GOs, through initiatives such as the European Energy Certificate System (EECS) developed by the Association of Issuing Bodies (AIB). These initiatives have been supported by organisations such as RECS International, the European Federation of Energy Traders and Eurelectric. They have contributed to the development of a more accurate, reliable and fraud-resistant system for the electronic issuance, transfer and cancellation of GOs, supporting the trade in GOs between EU/EEA Member States. The European Energy Certificate System, or 'EECS rules' acts as a de facto standard for all AIB members, and the AIB also created a hub which allows GOs to be transferred simply, reliably and efficiently. The regime is also developing at the international level, which argues in favour of continuity in the EU regime for GOs.

#### Minimum capacity limit for GOs

The recast Directive introduces the possibility of setting a **minimum capacity limit for GOs**.<sup>81</sup> The size of the GO is already standardised, at 1 MWh,<sup>82</sup> but REDII leaves it up to Member States to introduce a minimum capacity limit for issuing GOs. This is to avoid creating unnecessary costs for the smallest production installations below that threshold. The earnings from GOs for those installations would also be quite limited, so requiring the issuance of GOs for those may be disproportionate. However, the provisions allow for different national approaches ('*Issuance of Guarantees of Origin may be subject to a minimum capacity limit.*' [Emphasis added]), creating a risk of diverging approaches to the threshold limit applied between Member States. Technology innovation and the use of new IT or blockchain-based mechanisms may reduce the costs for small production installations. Aggregation could also be taken into account when setting the minimum capacity limit.

As illustrated in the above example, the scope of the GO is still not yet fully regulated. This may negatively affect the efficiency and consistency of disclosure, particularly when some crucial elements of the disclosure decision-making process are left up to Member States. This may result in a suboptimal European disclosure system. Any revision of REDII should ensure that the rules for issuing and cancelling RES-, HEC- and non-RES GOs are consistent across Europe.

Art. 19.13 of REDII also requires the European Commission to elaborate a report on the possibility of establishing a Union-wide green label. The release of the report is expected for the autumn of 2021.

#### Issuance of GOs into Power Purchase Agreements (PPAs)

As referred to above, the market for GOs and similar energy certificates has grown during the past decade, with increasingly standardised practices not only in Europe but also in the rest if the world. For example, **the inclusion of GOs into Corporate Renewable Power Purchase Agreements (PPAs)** has become of paramount importance to buyers. At the same time, the system for GOs has faced criticisms almost since the beginning, particularly in relation to double counting and public information. The current system can also be improved in terms of "product" definition, not only for electricity production, but also in relation to other energy carriers such as gases (renewables and hydrogen) and heating or cooling. Article 15 could be amended and require Member States to ensure that any associated GO can be transferred to the buyer of the RE under the renewable PPA.

<sup>&</sup>lt;sup>81</sup> Art. 19.2, para.1, REDII.

<sup>&</sup>lt;sup>82</sup> Art. 19.2, para.1, REDII.

#### Linking Article 27.3 of REDII (minimum share of RE in the transport sector) to Article 19 on GOs

In the context of the expected uptake of hydrogen in the energy system, it is important to ensure that the GO regime is applied in a consistent manner to the different energy carriers. To maximise the benefits of the GO system, the latter must not face unnecessary constraints. In the context of Article 27.3 of REDII, the Commission is to adopt a delegated act establishing a methodology setting out detailed rules with which operators must comply, particularly for electricity production from Renewable Fuels of Non-Biological Origin (RFNBOs). The definition of 'additionality' is one of the key starting points for developing the methodology for the transport sector. It is, therefore, necessary to look at the definition of Additionality in Article 27, the criteria proposed in the delegated act, and to ensure that the necessary links are made to other disclosure obligations in the Directive, particularly GOs. As it stands, clarification on how the GO system will apply in the context of the proposed delegated act is needed.

#### Extension of GOs to gases and further harmonisation of the content

REDII already allows GOs to be issued for different energy carriers, and the GO 'shall' specify whether it relates to electricity, gas (including hydrogen), or heating and cooling. However, using GOs for gas, and particularly hydrogen, is limited in practice, as the market is still under development. The fact that the transposition deadline for the Directive has now passed will certainly ensure that the necessary legal framework is adopted in national legislation. A wider use of GOs for hydrogen must be supported by further harmonisation of the content of the GO (and the manner in which the information is presented), which must also be aligned with the definition of the different types of hydrogen (as part of the REDII revision and the forthcoming revision of Gas Directive).

In the context of **energy system integration**, it will be fundamental to ensure that the regime for GOs is streamlined across the different energy carriers, to avoid distortion of competition and ensure a level playing field. This calls for closer alignment of the regulatory regime for GOs across the different legislative instruments, and especially between REDII and EED.

#### Full disclosure

REDII has strengthened and improved the regime for GOs, but the system can be further extended via the **definition of a full disclosure obligation**. Full disclosure means that all power consumers will need to prove the origin of all the power they consume. This will ultimately ensure a level playing field between renewable and non-renewable electricity sources. To maximise the benefits of full disclosure, it should be applied both at production level (**Full Production Disclosure**) and consumption level (**Full Consumption Disclosure**). Currently, REDII does not yet require Member States to implement full disclosure and the GO is still primarily focused on renewable energy sources, mostly for electricity generation. This has two shortcomings:

- First, customers are not empowered to make a fully informed choice, thus the full potential of market liberalisation is not yet realised. This also means that *residual mix* will still be needed as long as there is no full disclosure, which does not automatically ensure fully consistent and reliable disclosure information for consumers.
- Second, the full potential of electricity disclosure is not yet used. One option is to develop the electricity disclosure regime alongside the use of GOs as a reliable tracking mechanism, by requiring both FPD and FCD for all energy carriers. At the moment, Member States have

diverging practices. For example, Austria, the Netherlands and Switzerland have introduced full consumption disclosure requirements, but in two different ways.

A broader revision of REDII, probably in a REDIII version of the directive, should consider the possibility of introducing both Full Production Disclosure and Full Consumption Disclosure. This would contribute to:

- Further uptake of renewable energy sources in the system by making the information about production and consumption of energy transparent and mandatory;
- Increased empowerment of customers in their choice of energy supplier; and
- If combined with the current obligation to use GOs for the purpose of electricity disclosure, provide further support for the GOs market, as well as a reliable and harmonised mechanism to track electricity attributes.

#### **Recommendations:**

- The regime for GOs has improved as a result of the implementation of REDII, with the mandatory use of GOs for the purpose of electricity disclosure. Any revision of REDII should preserve the main elements of the GO regime and introduce only necessary improvements.
- Any amendment to the GO regime should ensure and improve transparency and consumer protection through an informed and reliable tracking system designed for energy disclosure. It should support the reinforcement and improvement of the GO system for other energy carriers beyond electricity, such as gas and heating and cooling. The upcoming revision of the Gas Directive presents an opportunity to define a disclosure obligation for gases, including biogases (like biomethane) and hydrogen, making a link to the use of GOs as disclosure instruments.
- A revision of the GO regime in REDII should enhance the benefits of the GO system in more sectors, based on the market valorisation of renewable energy generation capacity.
- Enabling the issuance of GOs in relation to corporate PPAs is seen as a measure that can provide additional market support for RES generation.
- The link between Article 27.3 of REDII and the use of GOs (Article 19) should be clarified in order to enable a large intake of renewable hydrogen.
- A broader revision of REDII, probably in a REDIII version of the directive, should consider the possibility of introducing full disclosure, both Full Production Disclosure and Full Consumption Disclosure.

# CONCLUSIONS AND RECOMMENDATIONS

07

### 7. Conclusions and recommendations

The implementation of the European Green Deal and the adoption of the European Climate Law means an increased target for renewable energy use in the European energy system. This higher level of ambition must be supported by EU legislative and regulatory measures, starting with a revision of the Renewable Energy Directive (EU) 2018/2001 on the promotion of the use of energy from renewable energy sources (REDII).

In order to reflect the new 2050 climate-neutrality objective and 2030 (and, later on, 2040) interim targets, additional measures will need to be adopted to support a greater deployment of renewables within the EU energy system, both in general and for the different sectors (for example, transport, heating and cooling) and energy carriers. Increasing the 2030 target for renewables requires increased commissioning of new renewable energy generation, as well as increased infrastructure development. This needs to be supported by a wide set of tools.

With the aim of directly contributing towards the revision process, this report makes the following recommendations:

#### Scope of the revision

- To summarise, REDII relies on a broad range of mechanisms, primarily regulatory but also financial, to ensure the further development of renewable energy in different energy carriers at all levels of the energy supply chain and in key sectors. The aim is to reach the binding Union target for the overall share of energy from renewable sources in the Union's gross final consumption of energy in 2030, which is currently 32%.
- The Directive focuses on renewable energy and does not deal with other sources of energy. It applies across energy vectors and sectors where renewable energy can be integrated. For example, promoting the use of low-carbon, non-renewable energy sources should not be an objective of the Directive. To be consistent with Article 1 of REDII, the objective and material scope of application of the Directive should remain unchanged.
- The objective of the Directive, the promotion of renewable energy sources, should be preserved, while market design rules should continue to be the focus of other directives and instruments. This does not exclude the inclusion of new provisions and a possible extension of the material scope of application of the Directive to include support for the increased production and use of energy based on renewable energy sources.

#### Competitive tendering procedure for allocating support

#### **Tendering rules for RES-E support**

- The introduction of competitive bidding procedures (tenders) as a means of granting support has proven effective in reducing costs for renewable energy and generating public financial support. Some shortcomings in the deployment of RES projects can be attributed to external factors, such as permitting procedures. The use of tenders enables Member States to keep track of their progression towards renewable energy targets. As Member States are still in the process of adjusting their national schemes to REDII requirements, there is no need to change the general approach as part of the REDII revision.
- Increasing the share of renewable sources in other energy uses or carriers beyond electricity may still require the use of price support schemes that are more direct than market premium.

- The REDII revision should be targeted and limited to the necessary changes that will: (i) enable the European Climate Law's ambitious targets to be reached, and (ii) follow up the different strategies adopted by the European Commission (notably on energy system integration, hydrogen, ORE).
- Because the two revisions are running in parallel, there should be a discussion on which elements of the forthcoming CEEAG 2022 should be mirrored in the revised REDII.

#### Further promote cross-border projects through tendering

- Higher RE-targets for 2030 means a bigger gap to fill. The benefits of cross-boundary projects located in basins or regions with favourable conditions for renewable energy generation, such as offshore wind basins, would contribute to completing the internal energy market and reach targets. However, all tendering schemes implemented between 2018 and mid-2020 (latest available figures) have remained national in scope. Before 2018, only Denmark and Germany had implemented a cross-border tender for renewable energy, at the request of the European Commission as part of a State aid approval procedure. It should be noted that the 2014 EEAG already promote the use of cooperation mechanisms to facilitate cross-border support of renewable energy where possible and appropriate. It can also be noted that the requirement of cross-border participation has been reinforced when Member States establish capacity remuneration mechanisms. Encouraging cross-border participation in tendering schemes could be an opportunity to create additional value and economies of scale.
- In order to further promote cross-border renewable energy projects, REDII could consider the following mechanisms, in order of the least to the most legally constraining approach:
  - Soft law guidance on the development of cross-border projects through joint tendering procedures;
  - o Rewards for increased cooperation and the resulting new generation capacity;
  - A mandatory requirement to try to cooperate via cross-border tender, reflecting the potential for joint projects identified in the NECPs. Making cross-border cooperation mandatory seems disproportionate at this stage in view of the objectives pursued (integrating the internal energy market and increasing RES generation and use) and the differences in renewable energy mix between Member States. Interconnections – and possible investment in those – must also be taken into account.

Those different approaches are not mutually exclusive and could be combined.

#### Technology neutrality vs. specificity in tendering procedures

- The REDII provisions on competitive bidding procedures, including the requirements related to technology choice, are still in the implementation phase, with a transposition deadline of 30 June 2021. These provisions build on the rules set in the 2014 EEAG, but most Member States are still adapting their national support schemes and related competitive bidding procedures for support allocation. Therefore, it is not deemed appropriate to change the chosen approach in the upcoming REDII revision.
- However, during this transition phase, and in order to ensure innovation, security of supply, sustainability and local benefits, it is recommended to continue allowing technology-specific tenders under a specific set of conditions aligned with market developments. Among the criteria for technology-specific tendering procedures, REDII or

the 2022 CEEAG could further elaborate on the baseline choice for multi-technology tenders.

- Ambitious targets for specific technologies, such as for offshore wind and renewable hydrogen, must be reflected in the criteria for granting competitive tendering procedures.
- The rules for competitive tendering procedures should maintain a balance between market exposure and competition amongst generators, and highlight other benefits of specific technologies.
- There should be a close link between energy system planning (see Section 5 below) and the launch of tendering procedures, where the targets for new capacity and for specific technologies should be consistent with each other. This link could be made in a binding or non-binding manner, with a requirement for consistency.

#### Promote local benefits under tender schemes

- The revision of REDII should be an opportunity to consider the possibility of including criteria on local benefits as part of the competitive tendering procedures for granting support to renewable energy projects.
- The draft Guidelines on State aid for climate, environmental protection and energy 2022 (CEEAG) hint at the inclusion of such criteria, although it could be made clearer. In order to advance the Just Energy Transition, the revision of REDII should also reflect criteria on local benefits, in accordance with EU law.
- The tendering procedures should ensure the involvement of local communities and local authorities in order to ensure benefits, optimal location and local acceptance.

#### Coordinated planning of the energy system for an increased share of renewables.

- The revision of REDII should facilitate enhanced, coordinated and integrated planning processes, including at generation level, in order to deliver the volumes required to reach renewable energy targets and system integration goals.
- One way to move forward would be to either: (i) develop guidance on best practices for coordinating these different planning procedures in view of delivering RES objectives; or (ii) define a joint requirement to assess interaction and consistency between these different planning procedures, and ensure the RES objective is taken into account.
- Coordinated planning should reflect all central considerations in energy system development and operation, including security of supply, decarbonisation, cost-effectiveness, and resilience, amongst others.

#### **Guarantees of Origin**

- The regime for GOs has improved as a result of the implementation of REDII, with the mandatory use of GOs for the purpose of electricity disclosure. Any revision of REDII should preserve the main elements of the GO regime and introduce only necessary improvements.
- Any amendment to the GO regime should ensure and improve transparency and consumer protection through an informed and reliable tracking system designed for energy disclosure. It should support the reinforcement and improvement of the GO system for other energy carriers beyond electricity, such as gas and heating and cooling. The upcoming revision of the Gas Directive presents an opportunity to define a



disclosure obligation for gases, including biogases (like biomethane) and hydrogen, making a link to the use of GOs as disclosure instruments.

- A revision of the GO regime in REDII should enhance the benefits of the GO system in more sectors, based on the market valorisation of renewable energy generation capacity.
- Enabling the issuance of GOs in relation to corporate PPAs is seen as a measure that can provide additional market support for RES generation.
- The link between Article 27.3 of REDII and the use of GOs (Article 19) should be clarified in order to enable a large intake of renewable hydrogen.
- A broader revision of REDII, probably in a REDIII version of the directive, should consider the possibility of introducing full disclosure, both Full Production Disclosure and Full Consumption Disclosure.

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