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EXECUTIVE SUMMARY
of the
REFIT evaluation of the Directive 2009/28/EC of the European Parliament and of the Council

Accompanying the document

Proposal for a

Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast)

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The Renewable Energy Directive[1] (RES Directive), with its nationally binding renewable energy targets for 2020, is a core element of the 2009 EU climate and energy package. Given their contribution to innovation, growth, jobs and security of energy supply, the renewable energy targets are also part of the Europe 2020 strategy for growth, in particular of its flagship initiative for a resource-efficient Europe,. Furthermore, the Directive is the central EU level instrument to "*promote the development of new and renewable forms of energy*", an aim set out in Art 194(1)(c) TFEU.

The 2009 RES Directive has **effectively** ensured that all Member State but one are currently on track to achieve their 2020 targets. The share of renewable energy (RES) in the EU increased by almost 7 percentage points between 2007 and 2015 (from 10.4% to 17%)[2]. The Directive has triggered the development of comprehensive policies in all Member States in the electricity, heating and cooling and transport sectors. In parallel with additional national RES policies, it has also spurred European-led global investment and technology cost reductions that were still unimaginable a few years ago. While production volume and scale were probably the most successful elements triggered in 2009, the future framework for RES development will need to emphasise more market integration.

Results of the public consultation[3] highlighted that the RES Directive is considered successful in helping the EU reach its energy and climate objectives by 72% of respondents[4]. In particular, the RES REFIT evaluation study[5] found that its national binding targets were the most important driver for renewable energy policies and investments in many Member States, and its reporting, planning and monitoring obligations were rated as highly effective in the Fitness Check Evaluation on energy planning and reporting[6].

Nevertheless, the Directive has so far delivered more impact in the electricity sector than in the heating and cooling sector. In transport, the 10% sub-target established in the Directive has successfully resulted in the implementation of blending mandates in the vast majority of the Member States. However, the biofuels sustainability scheme included in the Directive in 2009 failed to anticipate and address the risk of indirect land use change, and this gap was only addressed with the adoption of the ILUC Directive[7] in 2015.

With regard to **efficiency**, this evaluation found that the methodology underpinning the effort sharing for the 20% EU target struck the right balance between cost effectiveness and political acceptance. However, the flexibility and cooperation mechanisms included in the RES Directive (Articles 6 to 11), intended to help Member States achieve their national targets and

1 Directive 2009/28/EC on the promotion of the use of energy from renewable sources (Renewable Energy Directive), OJ L 140, 5.6.2009

2 Reference year used in 2007 model runs for the 2008 IA for the 2009 Climate and energy package. Data: EUROSTAT and 2015 estimates (Öko –Institute, 2016).

3 "Public consultation on the Renewable Energy Directive for the period after 2020: Analysis of stakeholder views", European Commission, 2016, available at: https://ec.europa.eu/energy/en/consultations/preparation-new-renewable-energy-directive-period-after-2020

4 Among those 72%, 100% of Member states and public authorities consider the RED as successful or even very successful and 94% of non-RES energy industries and 90% of network operators agree.

5 "Mid-term evaluation of the Renewable Energy Directive. A study in the context of the REFIT Programme", CE Delft , 2015

6 Fitness check of the Reporting, "Planning and Monitoring Obligations in the EU energy acquis". Reference number to be added when this REFIT is adopted.

7 Directive (EU) 2015/1513 amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources, OJ L 239, 15.9.2015

the EU overall target by making use of cost effective RES development in other Member States and third countries, have hardly been used by Member States.

The Directive did not prescribe support schemes as obligatory, nor did it set out details as regards their design and management. However, most Member States have relied on support measures to incentivise RES deployment. Many Member States have introduced support schemes which were not related to market signals, resulting in distortions of the electricity market and leading in some cases to high support costs. In some cases, adjustments were also made too abruptly, or even retroactively, resulting in market uncertainty and ultimately increasing the overall impact on investors.

Solid evidence shows the **relevance** of the Renewable Energy Directive for reaching the greenhouse gas (GHG) reduction targets, as well as for the delivery of Article 194(1c) of the Treaty. The increase in the use of renewable energy resulted in approximately 380 Mt of gross avoided CO_2 emissions at EU level in 2014[8]. Moreover, the benefits of renewables include greater security of supply and more innovation, jobs and growth. For example, avoided imported fuel costs due to increasing use of renewable energy amount to around €20 billion a year for the EU as a whole[9]. This makes renewable energy a key delivery tool for several dimensions of the Energy Union Strategy and for EU commitments in the 2015 Paris Climate Agreement on climate change.

With regard to **coherence** with other policies, the RES Directive has close links with Internal Energy Market provisions, the Emissions Trading System (ETS), and the Energy Efficiency Directive, among other policies. Despite general coherence with these policies, the impact of the RES support schemes in the electricity market and a better alignment of measures to promote renewables and energy efficiency in buildings are issues to be further analysed as part of the preparations for the forthcoming proposal for a revised RES Directive.

The Directive has had an **EU-added value** since the EU wide roll-out also resulted in significantly higher effects of scale and consecutively more pronounced technology cost reductions for new on-shore wind and solar photovoltaic capacity (and since 2015 also for off-shore wind). This has made deployment cheaper for all the Member States involved.

Moreover, by laying down common EU sustainability criteria for biofuels, the RES Directive has prevented market fragmentation and potential trade barriers that could have arisen if national sustainability rules had diverged.

Finally, the EU global leadership role in renewable energy has contributed to the spread of renewable energy policies around the world. By 2015, at least 173 countries had adopted renewable energy targets, and an estimated 146 countries had renewable energy support policies in place[10].

8 "Renewable Energy in Europe 2016 – Recent growth and knock-on effects", EEA, 2016, No 4/2016

9 "Interim Renewable Energy Progress Report", Öko Institut, 2016. 2014 figures

10 Renewables 2016 - Global Status Report, REN21, 2016