FSR REGULATORY POLICY WORKSHOP SERIES 2019-2020

The Role of Guarantees of Origin in Pursuing Energy Sector Decarbonisation

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Online on Zoom

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Introduction

The Online Workshop will consider which role the Guarantees of Origin (GOs) might play in promoting the development of renewable gases and, more generally, renewable energy vectors within a framework aimed at achieving the renewable penetration policy goal at least costs. It will also consider the relationship between GOs, Green Certificates (GCs) and other support schemes and whether the current governance of the GOs is fit for any new role that they might be called to play in the future.

To explore these issues, the Workshop will be structured in two sessions:

- **Session I** on **Renewables in the EU Green Deal and Guarantees of Origin** will consider what approach might deliver the renewable penetration goal at least costs and what role tradable quota instruments (GCs and GOs) can play in such an approach
- **Session II** on **Guarantees of Origin: Format and Governance** will focus on how the format and governance of the GOs might need to adapt for them to play the role which will emerge from the considerations developed in Session I.

Background

With the 2015 Paris Climate Agreement, the European Union pledged to achieve greenhouse gas (GHG) emission reductions of at least 40% by 2030. In the Clean Energy for All Europeans package legislation, the European Union committed to supporting this pledge with other ambitious sustainability targets for 2030:

32%[1] share of renewables in final energy consumption, with a sub-target of 14% for the transport sector[2], and 32.5%[3] energy efficiency improvements with respect to the 2007 baseline scenario. As part of the European Green Deal[4], the new European Commission has proposed to raise the level of ambition of EU environmental policies and to reach carbon neutrality by 2050. In order to achieve this goal, the GHG emission reduction target for 2030 should be increased to 50%, possibly to 55%.

The achievement of these ambitious environmental targets requires a change of pace in many sectors of the economy. The energy sector is called to contribute with a massive increase in the generation from renewable energy sources, both in the electricity and gas sectors. As it has been the case so far[5], the electricity sector will be called to provide a more than proportional contribution to the achievement of the renewable penetration target and it is likely that, by 2030, two-thirds or more of final electricity consumption will have to be met by renewable generation. The gas sector will also be called to play its role, no longer as a mere back-up for renewable electricity generation, but also as a conveyor of "green" molecules. Even if the decarbonisation of the economy requires increased electrification, not every sector or process can be easily "electrified", and gas will still be needed in some processes.

The EU policy approach to decarbonisation will be based on the reformed Emission Trading Scheme (ETS), which should provide a consistent pricing of carbon and, therefore, promote decarbonised/low carbon energy vectors. However, while being a very useful instrument, the EU ETS alone will not likely be able to promote the penetration of renewable energies to the extent needed to meet the policy targets and will thus need to be accompanied by other instruments/policies.

In this respect, renewable support schemes will be required to provide the additional stimulus for the deployment of renewable energies.

In the electricity sector, most jurisdictions in Europe have mainly relied on feed-in tariffs (FIT), being replaced by feed-in premia (FIP)[6]. Only a handful of them have implemented Green Certificates (GC) schemes[7]. While FIT are typically administratively set, an increasing number of jurisdictions are using tendering procedures to assign the right to FIP and to fix their level. Providing certainty to investors has been a major consideration in the choice of support instruments[8].

In the gas sector, support for renewable gases has been much more limited[9], and so has been the penetration of these gases.

In this context, it is now clear that, if decarbonised gases needed to replace natural gas for heating and cooling, in electricity generation and as feedstock in industrial processes, they would have to be more effectively promoted. It is also clear that any decarbonisation scenario would require the gas sector – and conceivably decarbonised gases – to support the greater penetration of renewables in the electricity sector, by providing flexibility in the forms of storing energy over longer periods of time and of transporting energy over longer distances.

Therefore, the question arises of the most effective instrument to promote the development of decarbonised gases, taking stock of the long experience gained in supporting renewable-based electricity. More generally, as the renewable penetration target could be achieved with different mixes of technologies and renewable energy vectors (renewable electricity, renewable gases, biomass, etc.), an approach is needed which promotes the achievement of the target at least cost. And the need for least-cost solutions will be greater the more ambitious the renewable target becomes.

A holistic approach to deliver overall efficiency in achieving the renewables penetration target requires a "common currency" which provides a consistent (price) signal against which the cost of different technologies and renewable vectors can be assessed. In the electricity sector, GCs could play such a role (even though, as already indicated, their use has so far been quite limited). Beyond the electricity sector, and therefore also in the gas sector, Guarantees of Origin (GOs)[10] might play a similar role[11]. In fact, they may also be interlinked with GCs to provide consistent "common currencies" for overall efficiency in achieving the policy

objectives[12]. Such interlinkage will be even more important in the face of the increasing integration of these two sectors through "sector coupling". Similarly, GOs might be used to promote renewable energy vectors in other sectors as well.

At present, GOs are mostly issued and used in voluntary schemes[13]. If they were to become the main instrument for evidencing the "renewable value" of energy vectors, they would need to acquire a statutory format.

The relationship between GOs and support schemes would also need to be explored, as it is conceivable that Member States would still wish to maintain targeted (additional) support for specific technologies. In this respect, the current provisions require that "*Member States […] ensure that when a producer receives financial support from a support scheme, the market value of the guarantee of origin for the same production is taken into account appropriately in the relevant support scheme*"[14]. This provision clarifies that, at least in the mind of the EU legislator, GOs shall provide the basic instrument for promoting renewables, with other support schemes providing additional stimulus. In all cases, double-counting of the same renewable-based energy needs to be avoided.

Moreover, at present, GOs display a wealth of information about the energy they cover and the installation producing it. While this information is very useful for verification and may be valued by consumers – e.g. if they seek to promote locally-produced "green energy"[15] -, it might segment the market.

Notes

[1] With an upward revision clause for 2023, "*where there are further substantial costs reductions in the production of renewable energy, where needed to meet the Union's international commitments for decarbonisation, or where a significant decrease in energy consumption in the Union justifies such an increase*" (Article 3(1) of 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 (recast)).

[2] With an upward revision clause for 2023, under the same conditions as for the overall target.

[3] With an upward revision clause for 2023.

[4] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal Brussels, 11.12.2019, COM (2019) 640. In reality, a European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, which would lead to achieving net-zero greenhouse gas emissions by 2050 had already been outlined in the Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, the Committee of the Regions, and the European Investment Bank: A Clean Planet for all – A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy, Brussels, 28.11.2018, COM (2018) 773.

[5] Against a 20% renewable target for 2020, in 2017 renewables already accounted for 30.7% of gross final electricity consumption.

[6] Where this happens, FIT may be maintained for smaller installations.

[7] According to the "Status Review of Renewable Support Schemes in Europe for 2016 and 2017" of the Council of European Energy Regulators, of the 27 jurisdictions surveyed, 17 were using FIT and 16 were using FIP in 2017. In contrast, in the same year, only 6 were using GC systems.

[8] However, failures in the design of support schemes forced at least one Member State retroactively to adjust the level of support granted to renewables, greatly affecting investors' confidence. This led to the inclusion, in Directive (EU) 2018/2001 of provisions (in Article 6) on stability of financial support for renewable energies, specifying that "*the support granted to renewable energy projects are not revised in a way that*

negatively affects the rights conferred thereunder and undermines the economic viability of projects that already benefit from support" (Article 6(1)) and that "*Member States may adjust the level of support in accordance with objective criteria, provided that such criteria are established in the original design of the support scheme*" (Article 6(2)).

[9] Article 4 of 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 (recast) governs "Support schemes for energy from renewable sources". However, beyond paragraph 1 which contains a general provision regarding the possibility for Member States to apply support schemes, paragraphs 2 to 6 only relate to renewable-based electricity.

[10] As defined in Article 19 of Directive (EU) 2018/2001. GOs were already introduced by Article 15 of 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, but there their scope was limited to the use of renewable energy sources in the production of electricity and heating and cooling.

[11] This is probably beyond what was envisaged by Directive (EU) 2018/2001, which, in recital (55) indicates that "*Guarantees of origin issued for the purposes of this Directive have the sole function of showing to a final customer that a given share or quantity of energy was produced from renewable sources*". However, as indicated in the text, the Directive recognises that GOs might have a "market value", and therefore might contribute to support energy produced from renewable sources.

[12] Recital (55) of Directive (EU) 2018/2001 indicates that "*It is important to distinguish between green certificates used for support schemes and guarantees of origin*". However, in case GOs have a "market value", such a distinction becomes somewhat blurred. In fact, what is clear is that, in those jurisdictions where GCs are used, energy from renewable sources is supported by the combined values of GOs and GCs.

[13] The largest European scheme of guarantees of origins is the European Energy Certificate System (EECS) administered by the Association of Issuing Bodies (AIB), which brings together 30 issuing bodies from 27 jurisdictions, including 22 EU Member States. In November 2019, the Gas CO Chapter of the EECS Rules was approved, to be implemented as of 1 January 2020.

[14] Article 19(2), third paragraph, of Directive (EU) 2018/2001.

[15] Consumers have also voiced concerns about the "greenwashing" of electricity tariffs through the use of GOs. This highlights the need to clarify, including to consumers, the role of GOs.

Programme

29 May

09.30 - 09.35 Welcome Address

Jean-Michel Glachant | Florence School of Regulation

09.35 - 09.45 Introduction to the workshop

Alberto Pototschnig | Florence School of Regulation

SESSION I – RENEWABLES IN THE EU GREEN DEAL AND GUARANTEES OF ORIGIN

Moderator: Nicolò Rossetto | Florence School of Regulation

09.45 - 10.00 The European Union policy background to Renewable Energy: Targets and Instruments

Antonio Lopez-Nicolas | DG ENER, European Commission

10.00 - 10.10 The importance of delivering the Renewable Target at least costs

Clara Poletti | ARERA; ACER

10.10 - 10.20 The future of renewable gases

Marc-Antoine Eyl-Mazzega | Institut français des relations internationales

10.20 - 10.30 The European Energy Certificate System

Philip Moody | Association of Issuing Bodies

10.30 - 10.45 A “common currency” for promoting renewable energy in the EU

Ilaria Conti | Florence School of Regulation

10.45 - 11.20 *Break*

11.20 - 11.40 The views of energy sector stakeholders

Gunnar Steck | Eurogas

Peter Claes | IFIEC Europe

11.40 - 12.20 The views of FSR Donors representatives

Claude Mangin | ENTSOG

Jeppe Bjerg | GIE

Francisco Pablo De la Flor Garcia | Enagas

Ignacio Vizcaino Gonzalez | Iberdrola

Céline Heidrecheid | GRT Gaz

Borut Rajer | Europex

Nadia Henry | EDF

Giulia Branzi | SNAM

12.20 - 12.50 Polling and general discussion

12.50 - 14.00 *Break*

SESSION II – GUARANTEES OF ORIGIN: FORMAT AND GOVERNANCE

Moderator: Ilaria Conti | Florence School of Regulation

14.00 - 14.10 The format and governance implications of Guarantees of Origins as “common currency”

Alberto Pototschnig | Florence School of Regulation

14.10 - 14.30 The policy and regulatory perspectives

Klaus-Dieter Borchardt | DG ENER, European Commission

Clara Poletti | ARERA; ACER

14.30 - 15.00 Polling and general discussion

15.00 - 15.20 Concluding remarks

Christopher Jones | Florence School of Regulation; Baker McKenzie

Alberto Pototschnig | Florence School of Regulation