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RECS INTERNATIONAL

Selling renewable energy attributes into Europe

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Executive summary

Several non-EU and non-EEA countries on the edges and outside of Europe have shown interest in generating renewable energy attributes to be sold into the European single market. Any country can develop an Energy Attribute Certificate (EAC) scheme and there are no restrictions on calling the certificates from such a scheme Guarantees of Origin (GO), as they are called within the EU[1]. While such a non-EU or non-EEA national scheme would facilitate the sale of renewable energy attributes to consumers within that country, there are three key market and regulatory barriers to such schemes being used to prove the export of those renewable electricity attributes to Europe:

1. EU law (Article 19.11 of the RED-2 stipulates that Member States not recognise EACs from a 3rd country (non-EU or non-EEA Member State) unless the EU and that country have agreed to recognise each other's certificate schemes (like with the EEA-countries) and only where there is direct import or export of energy;
2. Voluntary corporate reporting standards do not accept renewable energy attributes bought outside of the market boundaries they define for the European market for consumption within that market. This reflects their definition of good practice of keeping production and consumption in the same markets;
3. The supply and demand dynamics of Europe's renewable energy markets are complex[2] and it is not clear that additional supply from outside of Europe is needed at this time.

Rather than investing significant time and energy in seeking to overcome these barriers, this paper suggests that countries on the edges and outside of Europe focus instead on encouraging renewable energy consumption in their own markets. This consumption could, for example, include the use of certified renewable energy in domestic manufacturing to produce products with greater added value than electricity, such as green hydrogen or renewable produced aluminium. This alternative may become particularly attractive as the European Commission's proposals for a Carbon Border Adjustment Mechanism (CBAM) are further developed in the EU legislative process.

1 As specified by theEU's Renewable Energy Directive (EU2018/2001), also known as the RED-2.

2 See RECS International paper: https://recs.org/news/new-document-the-supply-demand-of-certified-european-renewable-electricity/

Introduction

Several countries on the edges and outside of Europe have expressed an interest in generating and certifying renewable energy for export, in the form of EACs to European consumers. For example, the RES4Africa Foundation[3] works to enhance existing European financial and non-financial instruments for risk mitigation to enable private investments at scale in support of renewable energy and power infrastructure in Africa. Part of this work includes assessing the potential for selling renewable electricity from north African countries to Europe, where direct grid connections exist. On the eastern European border, the Energy Community[4] brings together the European Union and its neighbours under the key objective of extending the EU internal energy market rules and principles to the Energy Community treaty's signatories. Achieving this goal would create an integrated energy market allowing for cross-border energy trade, including renewable energy. As such, several contracting parties to the Energy Community have joined, or are in the process of joining, the Association of Issuing Bodies (AIB)[5] in part to establish and/or develop their own EAC schemes for energy certification. To this end, the Energy Community Secretariat has launched a tender with the aim of contracting with a service provider for the setting up of national GO systems by way of sublicensing.

The nomenclature 'Guarantee of Origin' or GO is generic and does not apply only to the energy attribute certificates (EACs) of the European GO scheme for instance. Any country could call their EACs guarantees of origin. However, using such a name does not immediately make an EAC scheme equivalent to the European GO scheme. Likewise, there is no technical barrier to generating renewable energy anywhere, certifying it, and selling those certificates to consumers anywhere in the world on a purely voluntary basis. Most EAC schemes are at their core voluntary systems, meaning that each consumer can choose whether and how to buy renewable energy. So while the sale of certified renewable electricity – verified with EACs or GOs - is possible in theory, in practice three key barriers exist to selling renewable energy attributes when it comes to Europe.

Barrier 1: legal recognition

The principal article of law governing GOs in the EU and the EEA is article 19 of the Renewable Energy Directive EU-2018/2001 (RED-2). Paragraph 11 of this

3 https://www.res4africa.org/programmes
4 https://www.energy-community.org/aboutus/whoweare.html
5 https://www.aib-net.org/facts/aib-member-countries-regions/aib-members

article introduced a new requirement on GOs issued outside of the EU and the EEA:

> *Member States shall not recognise guarantees of origins issued by a third country except where the Union has concluded an agreement with that third country on mutual recognition of guarantees of origin issued in the Union and compatible guarantees of origin systems established in that country, and only where there is direct import or export of energy.*

While the EU has not formally defined what would constitute '*an agreement… on mutual recognition',* informal discussions suggest that any move towards mutual recognition would have to be part of larger agreements covering a wider range of energy-related topics. There are already two significant examples of the barrier this law presents to any person or organisation seeking to sell renewable energy into the EU.

Switzerland

RECS International has worked with different international and Swiss stakeholders to try to secure a technical agreement between the EU and Switzerland on the mutual recognition of GOs between the two parties. However, the EU has informally stated that such an agreement could only be negotiated after both parties have ratified the EU-CH inter-institutional framework agreement – which Switzerland has since decided not to do in its current form.

As a result, Swiss renewable energy producers will no longer be able to sell their GOs into the EU's Internal Market for the purpose of electricity Disclosure, even though they had been able to do so before this legal change. This is also despite Switzerland having one of the most sophisticated GO schemes, an electricity full disclosure scheme (both on production and consumption side), being one of the leading members of the AIB and having implemented the AIB's European Energy Certificate System rules. These are the same rules adhered to by the large majority of EU and EEA Member States who are also AIB members. Despite this export ban on Swiss GOs to the EU, the Swiss Federal Office of Energy (SFOE) has decided that Switzerland will unilaterally allow Swiss energy consumers to import GOs from the EU's Internal Market for cancellation in Switzerland.[6]

Post-Brexit UK

Having left the EU, the United Kingdom is now considered a third country in EU law and mutual recognition of GOs/REGOs was not included in the Brexit trade agreement closed in December 2020. Therefore, despite the UK's GO certificates, called Renewable Energy Guarantees of Origin (REGOs), being fully compliant

6 https://energeiaplus.com/2020/06/25/die-schweiz-wird-die-europaeischen-herkunftsnachweise-auch-in-zukunft-anerkennen/?translateto=en

with the relevant EU law they are no longer immediately recognised by the EU. In response to this change of circumstance, the UK's energy regulator, OFGEM, stated that the UK Government will continue to accept GOs from EU member states. Like Switzerland, despite having a fully developed GO scheme (although not EECS compliant) that was until recently a part of the EU GO scheme, UK producers join their Swiss counterparts in no longer being able to sell their GOs/REGOs into the EU's Internal Market.

The UK Government has indicated its intention to review this situation in 2021 to ensure that in the longer term, the UK and EU can achieve mutual recognition of their respective GOs/REGOs. However, this will require a bi-lateral agreement between the EU and the UK.

Achieving mutual recognition

While the EU has not formally defined what would constitute '*an agreement… on mutual recognition'*, it has placed a requirement on EU Member States that they comply with European standard CEN - EN 16325 on Guarantees of Origin. This standard is currently being updated to bring it into line with the legal changes made in the RED-2, including that GOs shall be issued to all forms of renewable energy, not only renewable electricity. The standard is stringent and detailed, and any country considering whether to pursue the mutual recognition of GOs with the EU should first assess its capacity to comply with this standard.

Barrier 2: Reporting standards & good practice

The Greenhouse Gas Protocol Scope 2 Guidance Document[7] has clear regulations when it comes to market boundaries:

> *"All contractual instruments used in the market-based method for Scope 2 accounting shall (…) be sourced from the same market in which the reporting entity's electricity consuming operations are located and to which the instrument is applied."*

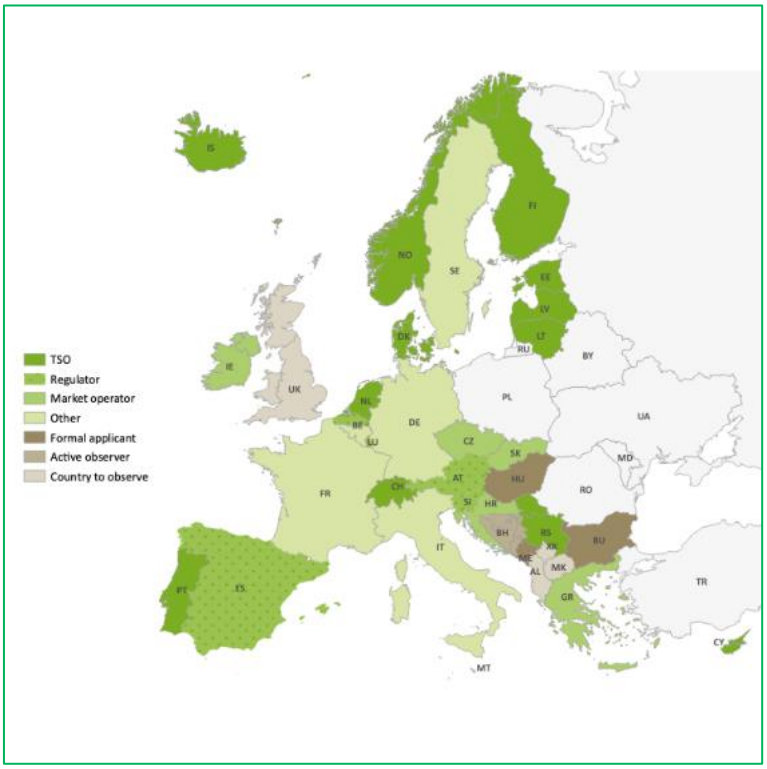
For many end-users of renewable energy, particularly corporate users, it is essential that their energy use be recognised by voluntary reporting standards such as the CDP.[8] In its technical note on accounting of scope 2 emissions[9], the CDP states that:

7 https://ghgprotocol.org/scope_2_guidance
8 https://www.cdp.net/en
9 https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/guidance_docs/pdfs/000/000/415/original/CDP-Accounting-of-Scope-2-Emissions.pdf?1479752807

> *For the purpose of CDP reporting, to claim the use of renewable electricity, companies must source renewable electricity from within the boundary of the market in which they are consuming the electricity.*

It goes on to define the market boundary for most of the countries as their geographical boundary, except in the case of European countries which are AIB Members and the United States of America and Canada together. There is one exception to this rule:

> *To avoid putting companies with existing sourcing contracts at a disadvantage and to enable a gradual transition to the market boundary criteria, renewable energy sourcing contracts involving transactions outside of the identified market boundary signed up to the 31st of December 2021 will be accepted in CDP reporting until the end of the respective contract period.*



This map shows AIB Membership in detail. All countries in green are AIB members, with the different shades of green denoting the type of organisation of the national Issuing Body in each country.

Therefore, the CDP's market boundaries are slightly different to those of the European internal market (all EU Member States and other European Economic Area countries - Iceland, Liechtenstein and Norway) since for instance Switzerland and Serbia (non-EU-EEA-countries) are AIB Members and Poland or

Romania (EU Member States) are not. However, these market boundaries are otherwise closely aligned and neither covers other regions such as North Africa.

In addition to the market boundary rules of the CDP, RECS International has published guidance for market participants on maximising the impact and reliability of buying renewable energy[10]. Regarding market boundaries, it states that renewable energy purchases where the consumption of a MWh happens within the same market as it was produced are considered to be more reliable because they take place within a single system, thereby minimising the risk of a loss of information and transparency when a certificate moves between systems. Furthermore, procurement from a market outside the one where the electricity is used can indirectly deny local electricity producers the financing and market opportunities that may have been provided if consumers placed more value on securing renewable energy from within the same market as their consumption. This should be avoided.

Barrier 3: Supply and demand dynamics

RECS International recently published an analysis of the supply and demand dynamics of the European renewable electricity certificates market.[11] This analysis finds that despite concerns that the market is chronically oversupplied, the actual gap between the supply of, and demand for, certified European renewable electricity has shown consistent signs of narrowing in recent quarters, particularly in the wind and solar sectors, to the extent that a structural shift may be taking place. However, this positive outlook should nevertheless be tempered by the fact that uncertified, latent, renewable electricity supply remains in the European power system. In 2018, while over 700 TWh of certified renewable energy was consumed through Guarantees of Origin (GOs) more than 500TWh of generation went uncertified. Non-certification can occur for both market and regulatory reasons, either of which could change, bringing a significant amount of additional domestic supply into the European single market.

It should, therefore, be questioned whether there is clear demand from European consumers for renewable energy produced outside of their market boundary, particularly considering the points covered above.

10 https://recs.org/app/uploads/2020/09/guidance-for-market-participants.pdf
11 See RECS International paper: https://recs.org/news/new-document-the-supply-demand-of-certified-european-renewable-electricity/

Conclusions

The EU is the largest economy in the world with a GDP per head of €25 000 for each of its 500 million consumers. The EU is also the top trading partner for 80 countries (compared to the US being the top trading partner for a little over 20 countries) and is the most open economy to developing countries. The buying power of European consumers is such that any producer in the world would be interested to sell their product into the EU. However, there are three clear barriers to the sale of renewable energy certificates into the European single market, namely:

1. Legal recognition by the EU;
2. Reporting standards and good practice on market boundaries; and
3. Supply and demand dynamics.

Faced with these barriers, some countries may still decide to pursue policies to sell renewable energy certificates into Europe. For those who decide that the barriers are too high, alternatives exist. These include:

1. Encouraging domestic demand for renewable energy by all consumers, for example by requiring energy suppliers to disclose the origin of the energy they are offering, or through other means such as full disclosure schemes or compliance markets (more information available on request).
2. Focusing support for renewable energy consumption on export-oriented manufacturers who can add value to their product through the use of renewable energy. This could be the case for several sectors, with the production of green hydrogen being foremost amongst them.
3. Assess the potential for selling excess renewable energy generation to neighbouring countries where the legal barriers are lower and/or there is clearer demand for certified renewable energy. This may be a particularly interesting option for countries with neighbours that have not yet established a functioning EAC scheme.

A further and as yet not fully understood complication to selling renewable energy certificates into Europe is the European Commission's proposal for a Carbon Border Adjustment Mechanism (CBAM). Goods manufactured using zero-carbon renewable energy may face lower CBAM compliance requirements than those manufactured using fossil fuels. This proposal will be further developed by the European Council and European Parliament in the coming months before the three EU institutions come back together to negotiate and agree on the final law.