

Renewables Good Practice (ReGP) Guidance Document

Good practice guidelines for reliable energy-attribute procurement

1. Introduction

RECS International has produced this Renewables Good Practice (ReGP) Guidance Document in order to support end-users, market players, policy makers and other stakeholders in the procurement of renewable electricity. We wish to ensure that all renewable electricity is procured reliably, with clarity about the associated claims. This document contains recommendations made by RECS International and its members. We believe that claims can only be reliably made when it is clear that the attributes of a specific technology are owned and disclosed by a specific end-user. As electricity markets around the world increasingly permit the procurement of renewable electricity, the principles which form the basis of reliable procurement have become even more important. This document, which has been reviewed by global renewable energy market participants, provides simple solutions and good practices for the procurement of renewables around the globe.

1.1 Why do we need a guidance document?

On a global scale, end-users are increasingly considering their electricity consumption and the impacts that it can have on the environment, climate change and the transition to renewable technologies. This has focused attention on the electricity which we consume within our homes and businesses. The procurement of renewable electricity can ultimately support the development of further renewable sources of power, while reducing consumers' environmental impacts as a result of their use of electricity.

Before guidance standards, known as consumer claim standards, were developed, end-users lacked a recognised method which they could use to procure renewable electricity. These standards created a degree of harmonization for ways in which renewables should be procured by end-users and disclosed in public documentation. Consumer claim standards, such as those described in the Greenhouse Gas Protocol (GHGP) Scope 2 Guidance Document, created a baseline for stakeholder understanding that has supported market development around the world, particularly in developed markets such as in Europe and the United States. This initiative was further strengthened by public reporting and disclosure frameworks, such as CDP and RE100, which support the publicising of renewable procurement in a standardized manner. These consumer claim standards and reporting methodologies rely on each other and build on common understandings among stakeholders. The idea behind the ReGP is to further reinforce this tradition and thus support the simplified procurement and uptake of renewable electricity by consumers.

The main purpose of this document is to provide market players and end-users with clarity as to how renewable electricity procurement can take place in a way that adheres to recognised industry best practices. It will also answer frequently asked questions regarding the validity of renewable procurement choices and their 'adherence' to these consumer claims standards. In this aspect, the ReGP was designed to address outstanding questions in the GHGP Scope 2 Guidance Document, RE100 technical criteria and CDP Scope 2 annual survey, based upon the best available information and the opinions of leading experts.

The ReGP is a ‘good practice’ guidance document – it does not reflect ‘best practice’. The rules and regulations set forth in it are intended to provide a degree of confidence to consumers and market players when procuring renewables. Market players, consumers and stakeholders are at all times encouraged to go above and beyond the requirements set forth in this document as a way to develop new best practices and forms of leadership in the market. However, it is essential that market players and consumers are familiar with the reporting guidelines in the GHGP Scope 2 Guidance Document, CDP and RE100 technical papers.

1.2 The genesis of the ReGP Guidance Document

The ReGP Guidance Document is an open and publicly available document that has been produced and maintained by industry experts for use by consumers and market players. These experts are members of the Consumer Claims Standard Working Group within RECS International. We intend this be a ‘living document’ which will be updated from time to time, so that it can continuously provide pragmatic solutions to issues related to international attribute procurement.

2. Defining consumer claims

Accountability is underpinned by responsibility and responsibility is proven by ownership of individual products, tasks or ideas. End-users’ ownership of the attributes of specific types of electricity generation is important for providing greater responsibility and wider accountability to consumers of electricity. As it is not physically possible to track electricity from the point of production to the point of consumption, electricity attribute tracking systems are actively being implemented in electricity markets around the world. These systems, which are based on the book-and-claim principle, allow for the emergence of a secondary market in parallel with the physical flow of electricity. This parallel market

makes it possible to separate the physical energy from its attributes (i.e. its “green characteristics”). This market allows consumers to purchase, procure and eventually own attributes from specific electricity production sources. The purchase of these attributes supports individual production devices and clarifies the ownership of the attributes of specific forms of electricity generation. As these consumers procure electricity, they can make this ownership known and make consumer claims as to the type of electricity they consume for their use and/or operations.

For the purposes of this document consumer claims are defined as the public and/or private assertion of ownership of the attributes related to a specific electricity generation source.

3. Key aspects of the ReGP Guidance Document

The GHGP Scope 2 Guidance Document, CDP Scope 2 annual survey and RE100 technical documents provided the background documentation for the ReGP. While these documents offer valuable initial guidelines for procuring renewables, some specific aspects of renewables procurement require further and more in-depth guidance. The ReGP Guidance Document highlights four essential areas which, while described in the documents listed above, require additional clarity and insights.

These four areas are: *market boundaries, vintage, attribute aggregation and quality criteria of attribute tracking systems*. The existing guidelines leave these four topics open to various interpretations, which can lead to uncertainty when consumers and market players purchase renewables and make associated claims. It is in these areas that we wish to build on existing consumer claim standards and clarify what would be accepted internationally as good practice when it comes to renewables procurement. Beyond this, the ReGP focuses on the need for verification of third-party consumer claims and public reporting of renewables procurement.

The ReGP, the Guarantee of Origin and US RECs

The ReGP Guidance Document was created to ensure that market players and end-users have the tools and clarity needed to provide renewable electricity procurement options which comply with good practices around the world. The ReGP may suggest that some geographical regions or market areas by definition

adhere to current guidance, due to the existing national/market context. This could be said for the Guarantee of Origin market in Europe and the RECs market in the US. Years of stakeholder consultations, work with national authorities and input from consumers has ensured that these markets are already in adherence with ‘good’ practices so they are also in adherence with this document.

3.1 Market Boundaries

Background

The GHGP Scope 2 Guidance Document 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.” This statement, however, leaves some ambiguity about the definition of a market boundary.

ReGP Criteria

It is a priority for end-users to consume attributes from within the same legal/energy market jurisdiction. This can be defined as consuming attributes from production devices that are within a single legal area where the disclosure of electricity purchases or sales adhere to the same rules and instruments. This would be applicable to markets such as those in Europe or the United States and parts of Canada, which are considered to be single-market regions.

Following the criteria of a single-market area, we can assume that in lieu of internationally regulated markets – as is the case in Europe – procuring attributes from the same country and/or national region in which the electricity is being claimed would also be acceptable, due to the assumption of similar legislation and energy market jurisdictions. In this way production in Southern India would be eligible for consumption in Northern India or production from one island in Indonesia would be acceptable for procurement in another island in the same country.

Problems arise when procurement is not possible in a specific country or region due to a lack of a reliable tracking instrument (see 3.4: *Quality criteria for tracking systems*). In this case it is important to procure attributes from a nearby geographic area. An example would be the origination of attributes from Finland/Estonia for consumption in Russia, which would be acceptable. In this regard a regional perspective is also possible. Attribute procurement from the UAE for use in Qatar, Bahrain, Saudi Arabia or Oman would also be acceptable. This view is upheld in recent ISO 14067 discussions where market boundaries are defined as “produced within the country, or within the market boundaries of –where consumption occurs if connected to the grid.”

There are however some caveats to this approach:

- Procurement from another market area should be limited and publically disclosed with clear reasoning about why attributes could not reliably be retained from within the same market area. Procurement from other market areas outside of the location where electricity is used can indirectly deny local electricity producers the direct financing that would have been provided if attributes were procured from within the market where the electricity was consumed. Because the market then supports producers in another market, and not where procurement takes place, this should be avoided.
- In situations where there is an available tracking instrument but limited available capacity of renewable technologies, market players and end-users should be wary of procuring attributes from another market region. Markets with a high demand, but a limited supply of renewable attributes, will naturally acquire higher renewable attribute values than other regions. It is acceptable in this instance to temporarily procure attributes from another market region, but future procurement strategies should focus on same-market procurement in the near term. This should be described in public reporting material such as the CDP sustainability survey.
- National regulations describing or restricting market boundaries must be adhered to in all circumstances. This type of legislation varies across market areas. In Europe, for example, attributes delivered via the Guarantee of Origin must be redeemed (i.e. cancelled) on behalf of the consumer in the country where the electricity is consumed. It may also be the case that national governments restrict the ability to consume attributes from specific production sites inside or outside of their borders for various reasons.

The ReGP Annex, which refers to a list of acceptable trading regions, should be consulted when there are no reliable procurement options within a market or legal boundary. This list is intended to support market players and consumers in the procurement of attributes from all markets in which they are operating, even if those markets do not have suitable procurement options or reliable tracking instruments.

The role of interconnection

Many stakeholders consider purchase from a 'connected' device or a device located on the same grid to allow for more robust or reliable attribute procurement. This line of thinking, however, impedes the development and growth of larger and more efficient electricity markets. Increasing the size of a possible procurement area provides greater access to resources and an increased ability to procure attributes from sites where it is

most cost-efficient to do so. It may be that increased production in a cost-efficient production area could lead to the development of physical interconnection if needed. By limiting procurement to current grid-connected areas market-driven incentives are inevitably limited in their potential ability to include cost-effective areas for renewables production. Market areas should be as large as possible and interconnection should not be a necessary prerequisite for renewables procurement in all cases.

3.2 Attribute age (Vintage)

Background

Generally speaking, stakeholders have focused on the vintage date of procured renewables as a way to ensure that attributes are consumed as close to the date of production as possible. This is supported by the GHGP Scope 2 Guidance Document, but this document has only limited guidance on the vintage of attribute procurement: "In order to ensure temporal accuracy of Scope 2 calculations, this criteria seeks to ensure that the generation on which the emission factors are based occurs close in time to the reporting period for which the certificates (or emissions) are claimed." The ReGP builds on this criterion and provides clear deadlines for end-users and market players to follow.

ReGP Criteria

End-users and market players should consume electricity as close to the time of consumption as possible. This generally means that consumption in a specific calendar year should be matched with production in that same calendar year. However, the ReGP recognizes that, where national or regional law differs, it may be possible to link vintages within fiscal years, specific contracts or according to local certification requirements. In addition, if end-users need to "true-up" procurement once final electricity consumption figures are known, it is acceptable for $\leq 10\%$ of the total production in the previous year to be consumed for three months following the end of the previous calendar year.

3.3 Full-attribute ownership

Background

Tracking systems sometimes interact with other environmental markets which could lay claim to various

aspects of the renewable electricity production. For this reason, as tracking systems developed around the world, the concept of full-attribute ownership (or attribute aggregation) has become increasingly important. The GHGP Scope 2 Guidance Document states that it is possible to disaggregate attributes of production into multiple certificates. Since the publication of this document, tracking systems have been developed around the world that allow, either implicitly or explicitly, for RECs to be issued without the ability to claim all of the attributes of the electricity production. In some locations this means that a tracking system will allow for REC issuance in combination with a carbon offset or avoided emission statement for the same MWh. This can be seen as problematic by end-users and market players working to ensure reliable electricity procurement.

ReGP criteria

The ReGP considers full-attribute aggregation to be good practice, i.e. electricity procurement should contain all the social, environmental and energy attributes related to a specific form of electricity production. This includes all of the associated carbon emissions, including the potential for avoided emission claims. The tracking system itself should provide the necessary information (*see Quality criteria for tracking systems*) for end-users to be able to make purchases that meet these criteria.

Based on the information provided by attribute tracking systems, consumers and market players need to make relevant choices that demonstrate good practice. An example would be to ensure that the same MWh have not received the rights to a carbon offset/avoided emission statement, even though this may have been allowed by the certificate tracking system and offset provider. In some cases this would need to be contractually organized outside of the tracking system and verified by a third party.

The significance of regulatory surplus

Regulatory surplus can only take place in locations where national or state targets and end-users' voluntary procurement are defined in such a way that end-users can procure attributes that go beyond the renewables targets mandated at the national or state level. The type of targets set at the national or state level must therefore first be identified. In most cases renewable targets are based on the level of renewable electricity production within a specific country. In some cases, however, targets are based on the consumption of electricity attributes by a specific entity. In these locations there are often well-designed Renewable Portfolio Standards (RPS) or Renewable Purchase Obligations (RPO) which place end-users in direct competition for attributes with entities required to meet specific targets. In these cases

the end-user will limit the supply of available attributes and theoretically increase the price for the procurement of attributes that can meet the targets. This would be considered to be regulatory surplus.

The significance of regulatory surplus is a frequent point of confusion among end-users and market players familiar with US markets. There are concerns among these stakeholders that the inability to provide regulatory surplus in Europe, due to the design of the target systems, means that the Guarantee of Origin cannot deliver robust claims. This is, however, incorrect from both a legal and a practical perspective. According to European law (2009/28/EC) Guarantees of Origin (GOs) are used to prove renewable electricity consumption to the end-user. It is also established in law that a GO cannot be used for national target counting.

Avoided emission statements (carbon offsets): attribute or not?

Avoided emission statements (also known as emission reductions or carbon offsets) cannot be owned by the renewable energy generator (or by the end-user of the attributes). This is due to the fact that the avoided emissions are not the result of the renewable electricity generation alone. It is more convincing to argue that a generator that reduced emissions (e.g. avoided emissions) is a generator that reduced emissions from a polluting source year by year by cutting back its output or implementing new emission-reducing technologies. This entity would then have the legal right to claim the reduction as their Scope 1 emissions. In this situation, considering avoided emissions to be an attribute of renewable generation will lead to double claims of emission reductions. However, this position remains a point of contention for some market players and stakeholders.

Some stakeholders consider that avoided emission statements do not preclude the ability of the emission factor (grams of emissions per MWh) to deliver attributes to the grid. This is proven by the fact that grid emission factors, in some regions with a high use of carbon offsets, are not adjusted in national grid emission factors for the issuance of offsets. In this respect attribute tracking mechanisms (a REC or GO) are nothing more than a specification of the attributes delivered to the grid. It is not the role of the attribute tracking system to forbid the issuance of attributes tracking certificates, but it is up to the end-user and market players to ensure that there is no double use of these instruments.

To this end the ReGP suggests that market players should ensure that there is no double use of instruments and that end-users should consult and procure all possible avoided emission statements associated with the MWh in order to follow good practice regulations.

3.4 Quality criteria for tracking systems

Background

The GHGP Scope 2 Guidance Document has clear requirements for determining if a specific attribute tracking system can be used to reliably allocate renewable electricity and make substantiated claims associated with such purchases. These "quality criteria" are a list of requirements to which an attribute tracking system must adhere. It states: "this guidance identifies a set of minimum criteria that relate to the integrity of the contractual instruments

as reliable conveyers of GHG emissions rate information and claims, as well as the prevention of double counting". When the document was published (February 2015) this reflected most of the developed systems at that time, including the US REC system, the European GO system and the International REC Standard (I-REC Standard). However, since the publication of the GHGP Scope 2 Guidance Document, there have been developments where national attribute tracking systems have been implemented which may not allow for reliable and/or robust renewables claims. This has brought with it questions as to the applicability

of these developing national systems and their ability to deliver reliable and robust claims.

Criteria

The ReGP has defined systems in which it is possible to make a robust claim. These systems are listed in the annex of this document. Stakeholders, consumers and market players should use the listed independent standards for

attribute deliveries and support the national authorities in developing a local system where no reliable attribute tracking system is in place.

National REC systems: are they by definition reliable?

National laws do not necessarily guarantee that a renewables claim is reliable and robust, as can be seen in some cases internationally. These systems, while referred to as a REC locally, do not function as a REC system of the type that those familiar with the US REC system or European GO system would recognize. There are several characteristics of these systems that are in conflict with ReGP guidelines:

- The RECs cannot be redeemed on behalf of a specific client
- There is no direct link with individual production devices, i.e. consumers cannot choose a specific product

- Certificates cannot be used as a vehicle for third-party labelling or verification
- Prices for certificates are controlled by price floors and/or ceilings
- There is a lack of clear information about how to register installations, issue RECs, redeem or transfer RECs
- There is no database or system allowing stakeholders, market players, producers or end-users to participate in the market.

For these and other reasons some national REC systems are not considered acceptable for the delivery of reliable attributes even though they may be supported by national legislation.

PPAs and the use of RECs/GOs

A renewable electricity power purchase agreement (PPA) is a combination of two aspects: (1) a long-term agreement to purchase a certain proportion of the volume (in percentage terms) of the total expected output of a generating asset, and (2) an agreement to claim the attributes from the specific volume of electricity which purchasers off-take. In most developed electricity markets it is the responsibility of the purchaser to ensure that all RECs and/or associated attributes are delivered with the PPA. This, among other reasons, is why markets for PPAs are developing in the Benelux and Nordic countries but not in Germany*.

A PPA is therefore a claim about a specific electricity source, agreed to contractually by the producer and the consumer. Such contractual deliveries should be verified through a standardized and robust third-party system. Even in locations where attribute tracking systems are voluntary and not state-sponsored this is still the case. RECs and claims about them may still exist in the absence

of a formal attribute tracking system. An RE generator creates attributes associated with each MWh produced, and these may be conveyed from the generator to a buyer through a PPA. In such cases, claims may be made by the buyer, but verification would need to take place through a chain-of-custody audit of the contract(s) rather than through a tracking system. The contract audit is a more cumbersome and less transparent way to verify ownership and the right to claim attributes than a tracking system report.

*Renewable PPAs are generally seen as too expensive in Germany due to the fact that they would require consumers to 'compete' with the national support schemes. As generators can receive a GO and a national subsidy in most EU countries, they are able to receive a combination of reduced support-levels (generally through support auctions) and consumer driven-support (through the PPA) to develop their project. The consumer can then retain the GOs as proof of their consumption. In Germany, however, support is granted at a fixed rate and the producer is required to release the attributes (and thus the rights to a GO) to the state. This eliminates the incentive for consumers to procure PPAs in Germany.

Good practice versus best practice and the role of additionality

As already stated, the ReGP is a good-practice document and not a best-practice document. This is a distinction that requires some additional clarification. Good practice should be considered as a minimum standard for ensuring that claims are satisfied. Going beyond this criterion does not in some way make the claims more reliable or more robust. Rather it meets some additional criteria that improve the product in a way a consumer requests.

It is possible that an electricity consumer wants to go above and beyond simply purchasing renewable electricity. Consumers may choose to procure renewable electricity from a specific country or electricity generated with a specific production technology. They may require that the electricity adheres to strict environmental standards held by environmental labels (such as EKOenergy, Naturemade, Green-e, etc.). They may have internal requirements that they can only purchase renewables if the generation capacity is built specifically for them or they are the only buyer. In all of these cases the consumers require more than just renewable electricity; they are demanding renewable electricity that adheres to a specific definition of best practice. Such definitions may be set by various types of stakeholders, from governments to special interest groups.

Consumers are encouraged to come up with their own definition of what their best-practice renewable electricity procurement is. This supports diversity in attribute procurement and, ultimately, diversity in electricity production. In this way consumers can financially support electricity production in the way

they believe is best for their procurement strategy and the future electricity mix. This is why the ReGP does not support a single definition of 'additionality'.

The term additionality has a long history. Additionality refers to the belief that the individual purchaser of renewable electricity is individually responsible for encouraging future renewable generation. There has, however, been considerable difficulty in making a clear, real-world definition of additionality.

In most cases stakeholders agree that additionality can be achieved through a focus on the context, end-user driven action and conscious decision-making. The actual impact of an individual project will be shaped by these and other conditions. For example, consumers who purchase attribute tracking certificates in a market that is short may have a bigger impact on pushing the whole market towards becoming renewable than consumers who build a wind turbine for their own use and consumption. In other markets, however, it may be better for consumers to work with environmental labels or purchase criteria in order to have a greater impact and ensure that their procurement is both sustainable and renewable. In yet other situations it may be best to have a long-term purchase agreement with a new or existing renewable device. This agreement may take a new project from concept to reality or support an older device in continuing to produce renewable electricity when it would otherwise have stopped doing so.

The ReGP encourages practices that go beyond purchasing renewables and acknowledges the fundamental value of leadership in this area; it does not recognize a single definition of additionality.

4. Third-party verification and publicly declaring procurement

The need for third-party verification, while not clearly defined in the GHGP, is a critical aspect of attribute procurement. While it does not affect the reliability or robustness of the procurement method itself, it does strengthen consumer claims that are based on attributes.

Third-party verification is an audit of the procurement, consumption, use or claims of an organization. At its core, this verification is about openness and transparency. Only when consumers are transparent about procurement can we increase public pressure on others to also procure renewable electricity.

Third-party verification is unique and separate from verification by, for example, ecolabels. While some labelling organizations are also able to audit the claims made by end-users, this is not the role of all labels or labelling organizations.

The first step in public disclosure is to release figures and statistics regarding electricity consumption and attribute procurement – verified by a third party – in annual reports and other company publications. This is frequently combined with external surveys such as those made by CDP and RE100. Just as with financial accounting, environmental accounting requires a check by a third party and thus the external 'approval' of claims that are made.

About the author

This document was prepared by the secretariat of RECS International with the support of the internal Consumer Claim Standards Working Group. RECS International is a non-profit organization that represents stakeholders who use energy-attribute tracking systems around the globe. RECS International is supported by more than 100 international members.

Annex

Market Boundaries

It is assumed that market players and consumers do their best to consume attributes from within the same legal/energy market jurisdiction. In some cases, however, reliable procurement will not be possible from within the same legal jurisdiction and market players and consumers will be forced to look outside of that area for reliable procurement options.

In such situations, acceptable market boundaries are based on the United Nations Geoscheme (United Nations Statistics Division). The listing of countries is intended to simplify procurement and market boundaries. It should be noted, however, that this list must be seen as a last resort after market players and consumers have determined that there are no reliable procurement options within a particular market or legal boundary. It is possible that in future the ReGP will make exceptions to this list, following input from market players, consumers, national authorities and informed stakeholders. In the meantime, in an effort to remain in compliance with ISO standards by ensuring a 'grid link' between the producer and end-user is recommended.

List of accepted attribute tracking systems

The following attribute tracking systems have been accepted for making consumer claims that adhere to the ReGP.

- The United States REC system
- The European Guarantee of Origin system
- Tracking systems that adhere to the International REC Standard

Currently under consideration – pending further input:

- The Chinese REC system
- The Taiwanese T-REC system
- The Mexican CEL system