

RE100 TECHNICAL CRITERIA

TECHNICAL NOTE ON RENEWABLE ELECTRICITY OPTIONS

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PURPOSE OF THE RE100 CRITERIA

The RE100 Criteria define what counts as renewable electricity for the purpose of participation in the RE100 campaign. This document outlines the options available to companies making progress towards 100% renewable electricity consumption, and basic requirements for making claims about the use of that electricity and its attributes.

The renewable electricity market is dynamic and varies country by country. To reflect this, RE100 may introduce electricity accounting and reporting rules, provide regional context and provide further briefings on emerging best practices. The Criteria are set by the RE100 Technical Advisory Group in consultation with the RE100 Steering Committee and the companies in the campaign.

100% RENEWABLE ELECTRICITY

Public commitment

RE100 companies make a public commitment to secure 100% of their electricity from renewable sources. For the purpose of the RE100 campaign, for a company to be considered '100% renewable' it must procure or self-produce 100% of its electricity from renewable sources.

Self-generation and purchases

RE100 companies can achieve 100% renewable electricity by making claims to:

- **Production of renewable electricity** from their own facilities. These can be grid-connected and onsite or offsite, or entirely off the grid. A company may consume its own renewable electricity or decide to make production-only claims.
- **Purchased renewable electricity** sourced from generators and suppliers in the market. This includes direct purchases from specific generators (e.g. power purchase agreements), which can be located onsite or offsite. It also includes retail purchases from suppliers and utilities, and the purchase of stand-alone ("unbundled") energy attribute certificates.

Alternative claims and rules

Companies procuring and/or self-producing renewable electricity in countries and markets that prevent them from complying with the RE100 Criteria, may be allowed to make alternative claims or follow different rules for achieving the 100% goal at the discretion of the RE100 Steering Committee.

Transparent reporting

Companies joining RE100 commit to reporting on their renewable electricity consumption and, where necessary, renewable electricity generation on an annual basis. Accounting and reporting of energy

consumption shall follow the principles and rules of the RE100 reporting guidance documents, which will be reviewed annually. Third party verification of consumption, and where necessary, generation of renewable electricity is required.

ENERGY SOURCES AND TECHNOLOGIES

RE100 considers renewable the electricity generated from biomass (including biogas), geothermal, solar, water and wind energy sources. The Technical Advisory Group will study the environmental and social sustainability of these technologies and may introduce related recommendations and criteria as consensus around best practices develop.

OPTIONS FOR RENEWABLE ELECTRICITY

To achieve 100% renewable electricity, a company may choose from the following options:

Self-generated electricity
1. Generation from installations owned by the company
Purchased electricity
2. Purchase from on-site installations owned by a supplier
3. Direct line to an off-site generator with no grid transfers
4. Direct procurement from offsite grid-connected generators
5. Contract with suppliers (green electricity products)
6. Unbundled energy attribute certificate purchase
7. Other options

FUTURE OPTIONS

If a company consumes renewable electricity through a method not outlined in these notes, the Technical Advisory Group will review it and the Steering Committee will decide about its eligibility.

MAKING UNIQUE CLAIMS

RE100 defines renewable electricity consumption as the ability to make unique claims on the use of renewable electricity generation and its attributes. Markets and environmental reporting standards (including the GHG Protocol *Scope 2 Guidance*) set requirements and criteria for making these claims, including that the company retires or retains energy attribute certificates issued by the energy generation

facility from which it wants to claim consumption. In countries where no tracking systems are in place, claims shall be made by transfer of attributes via contracts or any other means that ensure claims are unique and there is no double counting.

SELF-GENERATED ELECTRICITY

Option 1 relates to the production and consumption of renewable electricity that is generated from facilities directly owned by the company.

1. Generation from installations owned by the company

Definition

This option includes renewable electricity produced from installations that are owned by the company, onsite or offsite, connected to the local grid or entirely off-grid.

Claims

Companies shall disclose the amount of renewable electricity generated, consumed, and certificates produced. For consumption, companies must retain the certificates from their own generation. In markets without certificate systems, the company shall retain the attributes of generation and ensure no other entity may claim use or delivery of renewable electricity from the facility.

PURCHASED ELECTRICITY

The remaining options relate to the consumption of renewable electricity that is generated from facilities not directly owned by the company. These options are defined below.

2. Purchase from on-site installations owned by a supplier

Definition

In this option, electricity generated from on-site facilities owned and operated by a supplier is consumed by the company. The renewable electricity consumption claimed by a company using this option shall be backed by an electricity supply contract with the supplier.

Claims

In order to claim the renewable attributes of direct electricity consumption from on-site installations owned by third parties, certificates need not be produced, so long as the facility is off-grid and the amount of consumed electricity is measured by meter readings. However, if the facility is grid connected, certificates shall be retained or retired by or for the company. In markets without certificates, the attributes shall be contractually transferred to and owned by the company and no other entity may claim use or delivery of renewable electricity from the on-site facility.

3. Direct line from an off-site generator with no grid transfers

Definition

This option includes renewable electricity produced from off-site installations owned and operated by a third party and delivered to the company via a direct line, with no grid transfers. The renewable electricity

consumption claimed by a company using this option shall be backed by an electricity supply contract with the project owners and operators.

Claims

In order to claim the renewable attributes of direct electricity consumption from on-site installations owned by third parties, certificates need not be produced, so long as the facility is off-grid and the amount of consumed electricity is measured by meter readings. However, any certificates produced in this case shall be also retained or retired.

4. Direct procurement from offsite grid-connected generators

Definition

In a direct procurement contract, also known as Power Purchase Agreement (or PPA), an agreement is signed between a purchaser (the company buying the energy) and a power producer. The contract ensures the purchase of electricity generated by a specific renewable project with renewable attributes. In general, there are two types of PPAs (though there is variety within these). A Virtual PPA sets a price for electricity (a contract for differences), electricity is scheduled and delivered by the local electric service provider, and the attributes of the generation are delivered to the purchaser. A Physical PPA allows the buyer to schedule for the delivery of electricity and possible other terms. For all types of PPAs, electricity attribute certificates may be arbitrated across regions or countries, in accordance with the recommendations for claims outlined below.

Community or shared renewables (often solar) can also be considered as “Direct procurement from offsite grid-connected generators” if the facility is owned by a third party.

Claims

Certificates issued by the specific project shall be transferred to and retired by the company or retired on the company’s behalf. In the case that certificates are arbitrated, the company’s claims are associated with the certificates purchased, owned and retired by the company or on the company's behalf. The company cannot claim the attributes of the original project since they have been sold to another counter-party. In countries where certificates and/or tracking systems don't exist, transfer of attributes shall be specified in a contract or via an alternative system that ensures claims are unique and there is no double counting of attributes.

5. Contract with suppliers (green electricity products)

Definition

In a contract for electricity procurement the supplier (a utility, or other power developer or market entity) matches the electricity consumed by the company and delivered through the grid with renewable electricity produced or purchased from a variety of sources and projects, or a specified project or set of projects. Contracts can be structured in different ways with respect to the quantity and quality of renewable electricity offered to the consumer. Certain contracts of this kind are known as green electricity products (or tariffs).

Claims

The supplier shall purchase and retire or retain certificates on behalf of the company making the claims. In countries where no tracking systems are available, transfer of attributes shall be specified in a contract or

via an alternative system that ensures claims are unique and there is no double counting of attributes. Retail programs or products shall be certified or sales shall otherwise be verified by a third party to ensure the exclusive ownership and accurate delivery of attributes (e.g. the Green-e Energy certification program for renewable electricity products the U.S. and Canada).

6 – Unbundled energy attribute certificate purchase

Definition

Companies can claim the environmental benefits of renewable energy production by acquiring electricity attribute certificates issued by renewable electricity generators operating within the same market boundary as the claimant. Companies may purchase unbundled certificates like RECs (North America), Guarantees of Origin (Europe) and I-RECs (other regions) separately from electricity to match with their electricity consumption from non-renewable sources.

Claims

The company shall retire the certificates it purchases or the certificates shall be retired on behalf of the company. Retail products shall be certified or sales shall otherwise be verified by a third party to ensure the accurate and exclusive delivery of certificates as well as an exclusive claim on the attributes (e.g. the Green-e Energy certification program for REC products the U.S. and Canada). Where certificates are purchased directly and certification programs are not used or available, exclusive claims must otherwise be verified.

7 – Other options

Definition

There may be cases where options for corporate renewable electricity do not match the six outlined above. The RE100 Technical Advisory Group will review them and the RE100 Steering Committee will decide about their eligibility.

Claims

When making claims that fit into this 'other' option category companies should consider the recommendations in the RE100 reporting guidance document and from the Technical Advisory Group.

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