RE100 CRITERIA

TECHNICAL NOTE 1 – RENEWABLE ELECTRICITY OPTIONS

APRIL 2015

PURPOSE OF THE RE100 CRITERIA

The RE100 Criteria define what counts as 100% renewable electricity for the purpose of participation in the RE100 campaign. This document defines 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 amend these criteria, introduce electricity accounting and reporting rules, and new "leadership" criteria. This will be via updates to these, as well as additional, notes. The Criteria are set by the Technical Working Group in consultation with the Steering Committee and the Corporate Partners.

ENERGY SOURCES AND TECHNOLOGIES

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

OPTIONS FOR RENEWABLE ELECTRICITY

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

On-site electricity generation
1. Direct consumption from on-site installations owned by the company
2. Purchase from on-site installations owned by a third party
Off-site electricity generation
3. Direct line to an off-site generator with no grid transfers
4. Direct procurement from a grid-connected generator
5. Contract with suppliers (green electricity products)
6. Unbundled energy attribute certificate purchase

Accounting and reporting of energy consumption and "scope 2" greenhouse gas emissions for all options shall follow the principles and rules of the GHG Protocol *Scope 2 Guidance* (January 2015).

FUTURE OPTIONS

If a company procures renewable electricity through a method not outlined in these notes, the Technical Working 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.

FINANCIAL INVESTMENT

RE100 recognizes that the options listed in this document rely on companies making varying levels of financial investment in renewable electricity generation. The RE100 Criteria do not currently specify requirements concerning the role of companies in providing finance to renewable electricity projects. However, financial investment will be given careful consideration in the future work aimed at studying the "leadership" dimension of corporate procurement.

ON-SITE GENERATION

Options 1 and 2 relate to the consumption of renewable electricity that is generated from facilities located on lands or buildings owned or operated by the company and often consumed on the premises by the company (i.e. on-site). Both options are defined below.

1. Direct consumption from on-site installations owned by the company

Definition

This option includes renewable electricity produced from on-site installations that are owned and operated by the company. In this option, the electricity generated is consumed directly by the company. The installations may be connected to the local grid or entirely off-grid.

Claims

If the on-site facility is grid-connected, certificates shall be produced and retained or retired by or for the company. In markets without certificates, the company shall retain the attributes of generation and no other entity may claim use or delivery of renewable electricity from the on-site facility. If off-grid and only connected by a direct line to consumer, meter readings shall constitute sufficient proof of consumption. Any certificates produced in the latter case shall be also retained or retired.

2. Purchase from on-site installations owned by a third party

Definition

In this option, electricity generated from on-site facilities owned and operated by a third party is directly delivered to the company, either directly or through the local grid. 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, 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.

Options 3, 4, 5 and 6 relate to the consumption of renewable electricity that is generated from facilities located off-site. These options are defined below.

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 a grid-connected generator

Definition

In direct procurement a contract is signed between a purchaser (the company consuming the energy) and a power producer. The contract ensures the purchase of electricity generated by a specific project and delivered through the grid. Virtual or synthetic Power Purchase Agreements (PPAs) or Contracts for Differences, or Physical PPAs, are tied to renewable capacity and can be a form of contract that defines revenue for the electricity delivered by the project, and may include other terms.

Claims

Certificates issued by the specific project shall be transferred to and retired by the company or retired on the company's behalf. In other cases certificates may be traded (stripped) and an equivalent purchase of certificates from another project shall be transferred to and retired by the company or retired on the company's behalf. In countries where 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. 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.

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