



## Green-e Renewable Energy Standard for Chile

Version 1.0.A

Comment Draft for First Stakeholder Review Period

Feedback on this Standard will be accepted until 11:59pm Chile Time on Monday, December 24, 2018 (6:59pm Pacific Standard Time). You may submit feedback either:

- Through an online survey:
  - English - <https://www.surveymonkey.com/r/SFG9MLP>
  - español - <https://es.surveymonkey.com/r/TX5YNKM>
- By emailing written comments to [comments@green-e.org](mailto:comments@green-e.org) using the subject "Chile Standard Comments".

You can review the survey PDF for the specific questions on which we are seeking feedback at [www.green-e.org/chile](http://www.green-e.org/chile)

Comments are welcome on any part of the Standard.

Center for Resource Solutions  
1012 Torney Avenue, 2<sup>nd</sup> Floor  
San Francisco, CA 94129 USA  
[www.resource-solutions.org](http://www.resource-solutions.org)  
[www.green-e.org](http://www.green-e.org)

## Table of Contents

I.	Introduction .....	3
A.	Definitions.....	3
B.	Usage and Geographic Range of the Criteria .....	4
II.	Eligible Product, Consumer and Market Types .....	5
A.	Renewable Energy Product Types .....	5
B.	Means of Renewable Energy Procurement .....	5
C.	Consumer Types.....	5
III.	Eligible Sources of Generation.....	6
A.	Renewable Resource Types .....	6
B.	Vintage of Eligible Renewable Generation .....	6
C.	Generator Age and “New Date” .....	6
D.	Location of Eligible Generators.....	7
1.	Geographic Location.....	7
2.	Grid-Connected Generators .....	7
3.	Consumer-Sited Generators.....	8
E.	Electricity Products that Combine EACs and Undifferentiated Electricity .....	8
E.	Emissions Limits .....	9
F.	Parasitic Load.....	9
IV.	Renewable Energy Product Specifications .....	9
A.	Fully Aggregated Renewable Generation Attributes.....	9
1.	Energy Attribute Certificates.....	9
2.	Carbon Legislation .....	9
B.	Regulatory Surplus: Renewable Quotas, Targets, Other Mandates and Incentives.....	10
1.	Non-Conforming Renewable Energy (ERNC), Law 20257 .....	10
2.	Auctions to Supply Electricity to Regulated Customers, Law 20018.....	10
C.	Double Counting, Double Selling, and Double Claiming .....	10
D.	Minimum Purchase Quantity .....	11
E.	Criteria for the Non-Eligible Portion of a Renewable Electricity Product.....	11
V.	Additional Criteria .....	12
A.	Third Party Verification.....	12
B.	Use of Renewable Energy Tracking Systems .....	12
C.	Consumer Disclosure.....	12
VI.	Governance and Revisions to the Standard .....	13

## I. Introduction

This Green-e Renewable Energy Standard for Chile (“Chile Standard”) document provides Green-e Energy’s requirements for certified renewable electricity sales and consumption in the Republic of Chile.

Green-e Energy is a voluntary certification program that promotes the use of high-quality renewable electricity generation by providing environmental standards and consumer protection to support voluntary purchasing and use of renewable electricity. High-quality renewable energy standards and certification accelerate the development of renewable electricity generation and renewable electricity markets, and provide consumers a meaningful mechanism through which they can express demand for renewable electricity.

This Chile Standard document was developed as a Regional Standard under the Green-e Framework for Renewable Energy Certification (“Framework”), with input from local and international stakeholders, by the non-governmental organization Center for Resource Solutions (“CRS”) that administers the Green-e Energy program. For more information and background on Green-e Energy and the Framework, visit <http://green-e.org/>

Sellers and users of renewable electricity and Energy Attribute Certificates may apply to CRS to offer renewable energy products certified under the Chile Standard or to certify eligible renewable energy usage by visiting the above website. The Chile Standard applies to the certification of renewable electricity transactions and use, and not, for example, the certification of generation equipment.

In the event of any conflict between the English version of any Green-e document and a translated version, the English version shall prevail.

### A. Definitions

Green-e Energy publishes a glossary that defines many of the terms used throughout the Chile Standard and other Green-e Energy documents. The glossary is available at <https://www.green-e.org/glossary>. Chile law and regulation may contain additional rules related to terms or concepts that appear in this document.

In addition, certain definitions specific to the Chile Standard are provided below:

Energy Attribute Certificate (“EAC”): A contractual instrument that represents and conveys all attributes of renewable electricity generation, without requiring that the electricity itself be sold with the attributes. Such attributes include, but are not limited to: the renewable resource type used to generate the electricity; the location of the generation; the time period (e.g. month) of generation; the air emissions associated with generation (i.e. the emissions factor or rate); all other legally available environmental benefits of generation; and all other information

relevant to using and claiming the benefits of generation. When a generator delivers electricity to the grid, it is able to sell these attributes bundled together in the form of an EAC to another party who draws electricity from the grid, as a means of tracking who is buying and using the renewable electricity. EACs as defined here are intended to be consistent with The World Resources Institute's *Greenhouse Gas Protocol* for the purposes of greenhouse gas accounting and Scope 2 claims.

Energy Attribute Certificate Product: This refers to EACs when they are marketed to electricity consumers as a way to use renewable electricity, without retail electricity supply necessarily being provided to the user by the EAC seller. See also Section II.A.1. Note that in EACs must be used to substantiate the delivery of any type of Renewable Energy Product, not only EAC Products.

Participant: Entities entering into a Green-e certification agreement with CRS are referred to as "Participants" in this Chile Standard. Participants may be electricity retailers, sellers of renewable EACs, the sellers or purchasers under a renewable electricity power purchase agreement or entities undertaking other means of procuring and consuming renewable electricity; see Section II.B for further details. Each Participant must have one or more contracts with CRS in order for their Renewable Energy Products to be Green-e certified. Only Participants may market and sell Renewable Energy Products as Green-e certified. Unless specifically permitted by CRS, marketing renewable energy as Green-e "eligible" or "certifiable" (or using similar words that imply certification where it does not exist) is not allowed.

Renewable Electricity Product: Retail electricity supply that is sourced from eligible renewable resources and offered to electricity consumers, where both electricity and EACs are provided to the consumer. Renewable electricity products are one type of renewable energy product that can be Green-e certified, and are distinct from EAC Products (which do not include electricity supply). See also Section II.A.2.

Renewable Energy Product: The renewable energy procurement options certified by Participants under the Chile Standard are collectively referred to as "Renewable Energy Products". See Sections II.A and II.B for details of which product types are eligible. Renewable Energy Products include all EAC Products and Renewable Electricity Products. Note that each Renewable Energy Product type is distinct and may be subject to different rules in the Chile Standard.

## **B. Usage and Geographic Range of the Criteria**

These certification criteria are intended to be used by Green-e Energy Participants that are selling and/or using renewable electricity and EACs that are generated in the Republic of Chile. Participants must have an active contract of the appropriate type with CRS in order to claim certification under the Chile Standard, and must comply with all rules in order to maintain their ability to use the Chile Standard year-on-year.

## **II. Eligible Product, Consumer and Market Types**

### **A. Renewable Energy Product Types**

1. Energy Attribute Certificate Products: Sale or use of EACs, independent from retail electricity supply.
2. Electricity Products: Electricity purchasing where electricity and EACs are delivered together as the consumer's electricity supply, such as a self-usage, direct supply or renewable electricity offered by an electric retailer.

### **B. Means of Renewable Energy Procurement**

The product types in Section II.A above may be Green-e Energy certified when provided to users in the following ways, all of which require that the renewable attributes be conveyed to the consumer claiming to use renewable electricity:

1. Self-consumed from an owned on-site renewable electricity generator
2. Delivered via a direct electrical connection between the generator to the user, for example by leased on-site generators or through an energy services company (ESCO) model
3. Delivered from the generator to the user through the electricity grid, for example through a power purchase agreement ("PPA") or wheeling
4. Energy Attribute Certificates sold separately from electricity supply

See also Section III.D.3 on eligibility of on-site generators providing electricity to the load on which it is installed versus exporting it to the grid.

### **C. Consumer Types**

Certified Renewable Energy Products may be sold to any commercial, industrial or institutional retail electricity consumer (collectively "non-residential" consumers) retail electricity consumers as allowed by law and regulation in effect at the time of sale or use. As of the time of publication of this Chile Standard, only Unregulated Customers are able to purchase renewable electricity in Chile.

Green-e does not endorse renewable electricity usage claims that are made by electricity users outside of Chile that buy a Renewable Energy Product certified under the Chile Standard, unless the consumer is applying the purchase to electricity consumed within Chile. Such claims may be allowed by other programs, however, so Green-e does not specifically prevent sales made to consumers outside of Chile. See also Section V.C on Consumer Disclosure.

### **III. Eligible Sources of Generation**

The following criteria apply to all Green-e Energy certified Renewable Energy Products.

#### **A. Renewable Resource Types**

The following types of renewable electricity generation are eligible to be used in Green-e Energy certified Renewable Energy Products in Chile. Other technology/resource types may be added in future in response to market demand, consistent with the Framework.

1. Solar, including photovoltaic and solar thermal electric
2. Wind
3. Geothermal

#### **B. Vintage of Eligible Renewable Generation**

A Renewable Energy Product certified under the Chile Standard may include only renewable electricity that is generated in the six months before the calendar year in which the Renewable Energy Product is sold, the calendar year of sale or the first three months of the following calendar year.

#### **C. Generator Age and “New Date”**

For the output of a renewable electricity generator to be eligible for use in a Green-e Energy certified transaction made in a particular calendar year (January 1 – December 31), the generator must meet at least one of the following conditions in relation to the applicable New Date (defined below):

1. The generator was first placed in operation on the grid on or after the applicable New Date;<sup>1</sup> or
2. The generator is a separable improvement to or enhancement, made on or after the applicable New Date, of an existing operating generator that was first placed in operation prior to the applicable New Date, such that the proposed incremental generation is contractually available for sale and metered separately from the existing generation at the generator.

---

<sup>1</sup> Test electricity put onto the grid before a generator’s official operational date can be eligible for use in a certified Renewable Energy Product.

The New Date that is applicable to a given year of sale of a Green-e Energy certified Renewable Energy Product is shown on the following table, with the New Date continuing to advance by one year each year after 2025:<sup>2</sup>

Year Certified Renewable Energy Product is Sold	Applicable New Date
2018-2022	2008
2023	2009
2024	2010
2025	2011

Long-term purchases or use of renewable electricity or EACs, where the purchase contracts were executed between the generator and purchaser of the certified Renewable Energy Product within 12 months of the date that a generator first met one of criteria 1. – 2. above and where the term of the contract extends beyond 15 years, may be allowed to remain eligible for the entirety of the contract term or 30 years, whichever is shorter.

## **D. Location of Eligible Generators**

### **1. Geographic Location**

Generators providing electricity or EACs for certified Renewable Energy Products must be located within the Republic of Chile.

### **2. Grid-Connected Generators**

#### **a. Renewable Energy Products that are sold by a Participant to a retail customer**

Generators must be one of the following:

- i. Directly connected to a grid; or
- ii. Connected behind the meter to a grid-connected electricity user; or
- iii. Part of a microgrid that is able to connect to the grid; or
- iv. Part of a microgrid that is not able to connect to the grid but only when the retail customer receiving the Renewable Energy Product is connected to the same microgrid.

#### **b. Renewable Energy Products used and certified by the Participant itself**

Generators must be:

- i. Directly connected to a grid; or
- ii. Connected behind the meter to a grid-connected electricity user; or

---

<sup>2</sup> For example, a certified Renewable Energy Product sold in 2031 would have to use generation from generators that came online during or after 2017. The next year, in 2032, the New Date would increase to 2018, and any generators built in 2017 would no longer be eligible.

- iii. Part of a microgrid that is able to connect to the grid; or
- iv. Part of a microgrid to which the Participant is connected; or
- v. Electrically connected to the Participant; in this case the generator may Participant-sited or not, and the Participant may be grid-connected or not.

### **3. Consumer-Sited Generators**

Generators co-located with electricity load are eligible for all Renewable Energy Product types. See also Sections III.D.2 on grid connection and IV.C on claims.

## **E. Electricity Products that Combine EACs and Undifferentiated Electricity**

EACs are allowed to be combined with undifferentiated or system mix electricity for sale as a certified Renewable Electricity Product if all of the following conditions are met:

1. The emission rates per kWh for SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> for the electricity delivered with the EACs is lower than or equal to the average emissions rates<sup>3</sup> of consumed power of either:
  - a. The default retail electricity supply provided by the customer's default retail electricity distributor; or
  - b. Chile; and
2. The electricity delivered with the EACs cannot include any specific purchases of nuclear power in the non-renewable portion of the Renewable Energy Product, beyond what is contained in system power (e.g. the Renewable Energy Product may not include differentiated nuclear power); and
3. For the electricity from which the EACs were derived, there are processes, policies and/or other methods in place with the electricity retailer and/or by the relevant government entity(ies) assuring that such electricity is not marketed or represented as renewable electricity that is delivered to retail electricity users.

While any electricity that meets the above criteria will qualify, the residual mix of Chile may explicitly be used to satisfy the non-eligible portion of a Green-e Energy certified Renewable Electricity Product.

If criteria 1. – 3. above cannot be met, then the Renewable Energy Product will either need to be marketed as an EAC product or the Participant must purchase generation for the product through bundled renewable electricity purchases where the Participant procures and sells the electricity and the attributes from the same generator.

---

<sup>3</sup> Emission rates of default retail electricity supply should be based on the most detailed and recent data provided by the relevant government-approved body that collects and publishes such data, unless one or more of Chile's transmission system administrators, electric retailer oversight body(ies) or other authorities makes more up-to-date and accurate information available. Emission rates will be checked during annual verification.

## **E. Emissions Limits**

All generation facilities must be in compliance with all applicable laws/rules regarding emissions limits and other relevant emissions-related criteria.

## **F. Parasitic Load**

Renewable electricity consumed as parasitic load (load that contributes to the process of electricity generation) of an eligible generator is not eligible.

# **IV. Renewable Energy Product Specifications**

## **A. Fully Aggregated Renewable Generation Attributes**

To the extent allowable under Chile's legal and regulatory structures, all attributes that can be owned that are associated with the electricity generation must be aggregated in a certified Renewable Energy Product. None of the attributes of generation may be sold off, transferred, or claimed elsewhere or by another party. There must be a legally enforceable contract, instrument (e.g. EAC), or collection of contracts and/or instruments in place to substantiate the exchange and exclusive ownership of the attributes of renewable electricity generation. These attributes include, but are not limited to, all the greenhouse gas ("GHG") emission benefits associated with the megawatt-hour ("MWh") of renewable electricity when it was generated, including avoided carbon dioxide ("CO2") benefits. If a generator receives carbon offsets for an amount of renewable electricity generation,<sup>4</sup> those offsets must be retired on behalf of the certified sale of that renewable electricity/those corresponding EACs.

### **1. Energy Attribute Certificates**

Energy Attribute Certificates, if issued for the transacted generation, must be included and retired/cancelled by or on behalf of the retail user of a Green-e Energy certified Renewable Energy Product. All environmental attributes must be included in certified transactions, whether or not EACs are issued.

### **2. Carbon Legislation**

Interactions between the carbon tax (Law 20780) and renewable electricity are still being discussed in Chile. Once these interactions are finalized, the Chile Standard will be updated as necessary to avoid double counting and maintain all carbon attributes with the renewable

---

<sup>4</sup> Examples include Certified Emissions Reductions issued for the generator under the Clean Development Mechanism of the Kyoto Protocol or a voluntary carbon offset standard for which the generator has registered.

electricity and EACs sold in Green-e Energy certified Renewable Energy Products. Likewise, other carbon legislation will be analyzed as it is developed in Chile.

National carbon emissions goals under the Kyoto Protocol and Paris Agreement do not affect eligibility under the Chile Standard.

## **B. Regulatory Surplus: Renewable Quotas, Targets, Other Mandates and Incentives**

Green-e Energy certified Renewable Energy Products must be comprised of eligible renewable generation over and above any amount required by applicable requirements or legislation. Green-e Energy does not certify renewable electricity or EAC sales that result in double counting, including double counting between compliance and voluntary markets.

EACs or renewable electricity from generators that obtain tax or financial incentive payments unrelated to delivery of renewable electricity to a particular buyer or user are eligible under Green-e Energy (to the extent allowed by law, regulation, and contract language governing the tax or financial incentives program), so long as these incentives do not also claim the EACs or other attributes.

Below is a non-exhaustive list of how certain specific renewable energy policies in Chile are treated.

### **1. Non-Conforming Renewable Energy (ERNC), Law 20257**

Renewable energy generation that is used to demonstrate compliance with the ERNC law is ineligible for use in Green-e Energy certified Renewable Energy Products.

### **2. Auctions to Supply Electricity to Regulated Customers, Law 20018**

Generators that have won bids to supply Regulated Customers are not eligible under the Chile Standard, unless they can demonstrate to Green-e's satisfaction that the generation claimed toward a Green-e Energy certified Renewable Energy Product is from capacity that is not covered by the contract to supply Regulated Customers.

## **C. Double Counting, Double Selling, and Double Claiming**

A given amount of eligible renewable electricity and any associated attributes can be applied to an electricity consumer's claim of using renewable electricity only once.<sup>5</sup> Renewable electricity or attributes that can be reasonably attributed to a party other than the user of a certified

---

<sup>5</sup> For further resources on double claims, see <https://resource-solutions.org/learn/rec-claims-and-ownership/>

Renewable Energy Product may not be used in Green-e Energy certified Renewable Energy Products. Examples of prohibited double uses include, but are not limited to:

1. When the same MWh or attributes are sold to more than one party, or any case where another party has a conflicting contract for the attributes or the renewable electricity;
2. When the same MWh is claimed by more than one party, including any expressed or implied environmental claims made pursuant to electricity coming from a renewable electricity resource, environmental labeling or disclosure requirements. This includes representing the electricity from which attributes are derived as renewable if the EACs are not also owned and retired/cancelled;<sup>6</sup>
3. When the same MWh is used by an electricity provider or other entity to meet a delivery or consumption mandate for renewable energy (such as a quota) and is also used in certified sales, transactions, or consumption under Green-e Energy; or
4. When another party uses one or more attributes of the renewable generation (See Section IV.A. on Fully Aggregated Renewables for details). This includes when a MWh or associated attributes are sold as a Renewable Energy Product to one party, and one or more attributes associated with the same MWh of generation (such as CO2 reduction or offset) are sold to another party.

In all cases, the relevant government agency(ies) in Chile must be notified, by or on behalf of the Participant in writing at least annually, of all generation used in Green-e Energy certified Renewable Energy Products. A renewable energy tracking system or other infrastructure that already provides this information to the relevant agency(ies) may satisfy this requirement if approved by Green-e Energy.

#### **D. Minimum Purchase Quantity**

Green-e Energy certified Renewable Energy Products sold to non-residential electricity consumers have no minimum purchase quantity requirement. However, non-residential purchasers seeking guidance on environmental claims or having interest in using the Green-e logo to promote their purchase may participate in the Green-e For Businesses and Products Program when available in Chile: [www.green-e.org/marketplace](http://www.green-e.org/marketplace).

#### **E. Criteria for the Non-Eligible Portion of a Renewable Electricity Product**

For Renewable Electricity Products that provide less than 100% of a consumer's load with eligible renewable electricity, the portion of such products that is not composed of eligible renewable electricity must meet the criteria for electricity in Section III.E.1-2.

---

<sup>6</sup> An example of such representations includes use of the renewable energy in calculating product or portfolio resource mixes for the purpose of marketing or disclosing to electricity end-users when the attributes have been sold off or claimed separately.

## **V. Additional Criteria**

### **A. Third Party Verification**

Green-e Energy certification requires that certified Renewable Energy Products undergo an annual verification process to substantiate certified product-related purchases, sales, and claims. The Green-e Energy Participant must employ an independent qualified auditor to conduct this verification in accordance with verification procedures supplied by CRS. Required auditor qualifications are specified in the Green-e Energy Chile Verification Requirements. The results of the verification and selected supporting documents must be made available to CRS, and verification is not considered completed until all materials are submitted and accepted as complete and final by CRS. All audit costs are the responsibility of the Green-e Energy Participant undergoing verification.

### **B. Use of EACs and Renewable Energy Tracking Systems**

Until there is a government-approved, consistent method to define, track and transact EACs, generators are not required to register in a tracking system in order to be eligible under the Chile Standard. However, the Chile Standard will be updated as necessary as discussions in Chile around certificates and tracking advance. See Section VI of the Framework for information on how Regional Standards such as the Chile Standard are updated.

Generators that are not registered in approved tracking systems will be subject to additional verification procedures.

For generators registered in a tracking system approved by Green-e, EACs must be retired in that tracking system for all renewable MWh used in Green-e Energy certified Renewable Energy Products. Approved tracking systems are listed at [www.green-e.org](http://www.green-e.org).

All costs associated with use of any approved tracking system are the responsibility of tracking system users. Tracking systems seeking approval under the Chile Standard will be assessed by CRS against the applicable criteria in the Framework.

### **C. Consumer Disclosure**

Participants selling Green-e Energy certified Renewable Energy Products must disclose product information (including price, terms and conditions, a product content label and that the Renewable Energy Product is certified under the Chile Standard) to each consumer prior to their purchase of the Renewable Energy Product and also make additional disclosures in the case that the Renewable Energy Product changes during the term of the purchase agreement with the affected consumer. Disclosure will be required and detailed in the applicable Green-e Energy Code of Conduct.

## **VI. Governance and Revisions to the Standard**

The Chile Standard is a dynamic document and may be updated over time to accommodate changes in renewable electricity markets, policy changes that affect renewable energy, and/or innovations in renewable energy technology, as well as to reflect relevant changes in the Framework. Please see Section VI of the Framework for details on Governance and on the impacts of changes to Green-e rules, which also apply to the Chile Standard.

Details of the standard-setting process and of how to submit comments or grievances are available at: [http://green-e.org/about\\_standards.shtml](http://green-e.org/about_standards.shtml)