



# Oregon

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The Oregon Department of Energy seeks stakeholder comments on the questions listed below related to renewable energy certificates (RECs), the Oregon renewable portfolio standard (RPS), and renewable energy imported into California via the energy imbalance market (EIM) and counted towards California's cap and trade program. This public input opportunity follows from a stakeholder meeting held on June 15, 2017.

Please direct written comments to Rebecca Smith at [rebecca.smith@oregon.gov](mailto:rebecca.smith@oregon.gov) by Friday, July 7, 2017.

For more information on definitions and guidelines related to RECs, the RPS, and the EIM, please see the definitions and excerpts that follow these questions.

1. Does the definition of a REC in ODOE's RPS administrative rules (OAR 330-160-0015) include the *direct* greenhouse gas zero-emissions attributes associated with renewable energy generation?
2. Does the California Air Resource Board's assignment of a zero-emissions factor to renewable energy imported into California via the EIM constitute a claim on the RECs associated with that renewable energy?

## **Definitions related to RECs, RPS, and GHG Emissions**

### *Definition of “renewable energy certificate” in OAR 330-160-0015(15)*

“Renewable Energy Certificate” (REC or Certificate) means a unique representation of the environmental, economic, and social benefits associated with the generation of electricity from renewable energy sources that produce Qualifying Electricity. One Certificate is created in association with the generation of one MegaWatt-hour (MWh) of Qualifying Electricity. While a Certificate is always directly associated with the generation of one MWh of electricity, transactions for Certificates may be conducted independently of transactions for the associated electricity.<sup>1</sup>

### *Definition of “certificate” in WREGIS Operating Rules*

A WREGIS Certificate (also called a renewable energy credit) represents all Renewable and Environmental Attributes from MWh of electricity generation from a renewable energy Generating Unit registered with WREGIS or a Certificate imported from a Compatible Registry and Tracking System and converted to a WREGIS Certificate.<sup>2</sup> The WREGIS system will create exactly one Certificate per megawatt-hour of generation that occurs from a registered Generating Unit or that is imported from a Compatible Registry and Tracking System. Disaggregation of Certificates is not currently allowed within WREGIS.<sup>3</sup>

### *Definition of “renewable and environmental attributes” in WREGIS Operating Rules*

Any and all credits, benefits, emissions reductions, offsets, and allowances—howsoever titled—attributable to the generation from the Generating Unit, and its avoided emission of pollutants.<sup>4</sup> Renewable and Environmental Attributes do not include (i) any energy, capacity, reliability, or other power attributes from the Generating Unit; (ii) production tax credits associated with the construction or operation of the Generating Unit and other financial incentives in the form of credits, reductions, or allowances associated with the Generating Unit that are applicable to a state, provincial, or federal income taxation obligation; (iii) fuel-related subsidies or “tipping fees” that may be paid to the seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular pre-existing pollutants or the promotion of local environmental benefits; or (iv) emission reduction credits encumbered or used by the Generating Unit for compliance with local, state, provincial, or federal operating and/or air quality permits.

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<sup>1</sup> Oregon Administrative Rules 330-160-0005 (2017). [Link](#)

<sup>2</sup> A renewable Generating Unit, for the purposes of WREGIS, includes any Generating Unit that is defined as renewable by any of the states or provinces in WECC.

<sup>3</sup> Western Renewable Energy Generating Information System. [WREGIS Operating Rules](#). (July 15, 2013). [Link](#)

<sup>4</sup> The avoided emissions referred to here are the emissions avoided by the generation of electricity by the Generating Unit and therefore do not include the reduction in greenhouse gases (GHG) associated with the reduction of solid waste or treatment benefits created by the use of biomass or biogas fuels. Avoided emissions may or may not have any value for complying with any local, state, provincial, or federal GHG regulatory program. Although avoided emissions are included in the definition of a WREGIS Certificate, this definition does not create any right to use those avoided emissions to comply with any GHG regulatory program.

*Definition of “renewable energy credit” in California Public Utilities Code*

(1) “Renewable energy credit” means a certificate of proof associated with the generation of electricity from an eligible renewable energy resource, issued through the accounting system established by the Energy Commission pursuant to Section 399.25, that one unit of electricity was generated and delivered by an eligible renewable energy resource.

(2) “Renewable energy credit” includes all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource, except for an emissions reduction credit issued pursuant to Section 40709 of the Health and Safety Code and any credits or payments associated with the reduction of solid waste and treatment benefits created by the utilization of biomass or biogas fuels.<sup>5</sup>

*California Energy Commission Renewable Portfolio Standard Eligibility Guidebook*

Use of a REC for compliance with the California RPS does not preclude an [load serving entity’s] ability to report a specified import or use the RPS adjustment in accordance with the California Air Resources Board’s “California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for Use of Compliance Instruments Issues by Linked Jurisdictions and Regulation for the Mandatory Reporting of Greenhouse Gas Emissions” (California Code of Regulations, Title 17, Sections 95801 – 96022 and California Code of Regulations, Title 17, Sections 95100-95158).<sup>6</sup>

*Center for Resource Solutions slide on Direct and Indirect Emissions and RECs*

The direct emissions associated with the generation [of renewable energy] – tons or tons/MWh. <sup>7</sup>	Claimed as the indirect (Scope 2) emissions of the user	<p>“By purchasing renewable energy, I’ve reduced my carbon footprint by X tons of CO<sub>2</sub>e.”</p> <p>“I use 100% zero-emissions energy.”</p>
The net change in emissions on the grid due to the generation [of renewable energy] (avoided grid emissions) – the difference in direct emissions between the renewable generation and the generation that it likely displaced.	Claimed as an attribute of the generation of the user’s electricity.	<p>“The renewable energy I purchase avoids X tons of CO<sub>2</sub>e annually.”</p> <p>“The renewable energy I use has a GHG benefit equivalent to taking X cars off the road for a year.”</p>

<sup>5</sup> California Public Utilities Code section 399.12 (h). [Link](#)

<sup>6</sup> California Energy Commission. [Renewable Portfolio Standard \(RPS\) Eligibility Guidebook](#), Ninth Edition, Revised. (April 27, 2017). [Link](#)

<sup>7</sup> Center for Resource Solutions. “GHG Attributes of Renewable Energy and Claims.” Presentation. (April 14, 2017).

### 10.2.1 Defining GHG attributes and claims

All energy generation has a GHG emission rate attribute, even if that attribute is “zero emissions/MWh” at the point of generation.

**Attribute aggregation.** It is theoretically possible to disaggregate different energy generation attributes across multiple certificates, where each certificate conveys different information and related claims. For example, one certificate could convey that the energy comes from a “renewable” resource, while another conveys a claim about the GHG emission rate associated with the production, or claims about the emissions of other pollutants like NO<sub>x</sub> and SO<sub>x</sub>. But attribute disaggregation has generally not occurred in the programs surveyed in this guidance. In the U.S., most states define RECs for RPS purposes as encompassing “all environmental attributes,” including the attribute of the fuel type/generation technology as well as GHG emission rate, and U.S. tracking systems do not support separating individual attributes. This “all attributes” approach effectively prevents the same MWh being used to create multiple consumer claims from renewable energy projects in the U.S.<sup>8</sup>

*Council on Environmental Quality “Federal Greenhouse Gas Accounting and Reporting Guidance”*

### 4.0.2. Retention of Renewable Energy Certificates

In all cases of agency consumption of renewable energy, if an agency does not own the RECs and environmental attributes for the renewable energy that it consumes, the consumed energy and associated emissions are considered and calculated the same as conventional energy from the electric grid or fossil fuels and are reflected as such in Scope 2 emissions. Once a REC has been used to make a claim of renewable energy use or reduced Scope 2 emissions from purchased electricity, the REC cannot be sold or transferred. Making a claim constitutes retirement of the REC and avoids the possibility of a claim by another party or double counting of the renewable energy.

### 4.2. Renewable Energy Purchases and Use of Renewable Energy Certificates to Meet Greenhouse Gas Reduction Targets

RECs are essential to claims concerning renewable energy and adjustments to GHG emissions. . . . RECs are generally defined by states and certification organizations to contain the “environmental attributes” of electricity generated from renewable energy sources. This allows REC owners to claim to be using renewable energy as well as the attributes of renewable energy (e.g., GHG emissions benefits) for renewable energy projects. . . when compared with conventional electricity or energy.<sup>9</sup>

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<sup>8</sup> World Resources Institute. GHG Protocol Scope 2 Guidance. An Amendment to the GHG Protocol, Corporate Standard. (2015). [Link](#)

<sup>9</sup> Council on Environmental Quality. Federal Greenhouse Gas Accounting and Reporting Guidance. (January 17, 2016). [Link](#)