

CHANGES TO THE GREEN-E® CLIMATE STANDARD FROM VERSION 1.1 TO VERSION 2.0

Version 2.0 of The Green-e Climate Standard was adopted by the Green-e Governance Board on June 2, 2011. This document presents the significant changes that were made to the document from version 1.1 to version 2.0. A summary of these changes is provided below, followed by the new language. Version 2.0 of the Standard incorporates these changes along with other minor clarification, organizational, and formatting changes.

Summary of Changes

1. *Crediting* – new requirement that credits shall not be issued for reductions which have not been verified
2. *Crediting Periods* – change requirements to 15 year per period max, 10 year renewable twice (30 year max), 20-100 year crediting period for sequestration
3. *Reporting period* – new requirement that a reporting period be specified which does not exceed 24 months
4. *Verification* – new requirement that a verification period be specified which does not exceed 3 years for non-sequestration projects and 7 years for sequestration projects, and change requirement regarding on-site verification visits to at least once every 7 years
5. *Hydropower* – change project-specific criteria for U.S. and Canadian facilities to conform with the Green-e Energy National Standard
6. *Hydropower* – new project-specific criterion for non-U.S./Canadian hydropower specifying that for “grouped” projects, the total combined capacity of the group may exceed 10 MW, but each individual instance of the grouped project must be smaller than 10 MW
7. *Biomass* – new project-specific criterion for biomass specifying that life-cycle impacts and secondary emissions associated with solid or liquid biomass must be accounted for
8. *Industrial Gases* – new project-specific criterion for industrial gas destruction projects specifying that HFC-23 destruction projects are not eligible
9. *Definition of GHG* – change to the definition of a GHG so that Green-e Climate addresses any gas with a radiative forcing effect on the atmosphere, including but not limited to the Kyoto (6) gases

Details of Changes

1. Section 5.1.c, *Principle 3: Environmental Integrity of GHG Emissions Reductions*, new requirement:
 - e) *The GHG Program shall not issue credits for GHG emissions reductions which have not been verified in accordance with program requirements and Section 5.1.d(e) of this Standard.*¹

¹ *In certain cases, certain projects (such as ozone depleting substances [ODS] destruction and composting activities) may receive immediate crediting of future avoided emissions, where the project immediately avoids future streams of GHG emissions as a result of an upfront intervention. Credits shall be issued only after such an intervention has occurred and the GHG emission reductions have been verified. Credits issued for future avoided emissions*

should be limited to emissions avoided over a defined time period based on conservative estimations of the time period over which emissions are avoided.

2. Section 5.1.c, *Principle 3: Environmental Integrity of GHG Emissions Reductions*, change to requirement (f).

V. 1.1:

Crediting periods may be: (1) up to fifteen years; (2) ten years with the option of one renewal; or, (3) seven years with the option of two renewals. Biological carbon sequestration or conservation projects may permit crediting periods of up to fifty years or the lifetime of the project management plan, whichever is shorter.

V. 2.0:

Crediting periods for non-sequestration projects may be: (1) up to 15 years for each period; and (2) renewed, with the total crediting period not to exceed 30 years. The total crediting period for sequestration projects may be up to 100 years, but must not be shorter than 20 years.

3. Section 5.1.d, *Principle 4: Validity and Verification of Emissions Reductions*, new requirement:

d) GHG Program requirements specify that the period of time for which a project quantifies and reports GHG reductions and removals to the Program Administrator (reporting period) must be contiguous and shall not exceed 24 months in duration.¹

¹ *The GHG Program may allow for the reporting period to exceed 24 months in certain cases (e.g. in the case of the first reporting period that precedes initial verification), provided that all reporting periods thereafter do not exceed 24 months in duration.*

4. Section 5.1.d, *Principle 4: Validity and Verification of Emissions Reductions*, change to requirement (e).

V. 1.1:

The Program requires an initial on-site verification of GHG emission reductions originating from all validated GHG projects except those designated by program requirements as "small scale." On-site verification must subsequently occur at minimum every five to seven years.

V. 2.0:

GHG Program requirements specify that the period of time for which GHG reductions/removals are verified (verification period) shall not exceed three years for non-sequestration projects, and shall not exceed seven years for sequestration projects. The GHG Program requires an initial on-site verification of GHG emissions reductions originating from all validated GHG projects, with subsequent on-site verification visits occurring at minimum once every seven years throughout the crediting period.¹

¹ *The GHG Program may allow for individual site visits to be deferred in certain cases, provided that subsequent site visits continue on an at least once every seven years basis.*

5. Section 6.2, change to project-specific criteria for hydropower projects, requirement (a).

V. 1.1:

- a) *In the United States and Canada, only GHG emission reductions from new generation capacity on a non-impoundment or new generation capacity on an existing impoundment that meets one or more of the following conditions are eligible:*
- i. *the hydropower facility is certified by the Low Impact Hydropower Institute;*
 - ii. *the facility is a run-of-the-river hydropower facility with a total rated nameplate capacity equal to or less than 5 MW. Multiple turbines will not be counted separately and cannot add up to more than a 5 MW nameplate capacity; and/or*
 - iii. *the hydropower facility consists of a turbine in a pipeline or a turbine in an irrigation canal.*

V. 2.0:

- a) *In the United States or Canada, only GHG emissions reductions from new generation capacity on a non-impoundment or new generation capacity on an existing impoundment that meets one or more of the following conditions is eligible:*
- i. *The hydropower facility is certified by the Low Impact Hydropower Institute (LIHI);*
 - ii. *For Canadian hydropower facilities only, the facility is EcoLogo^M certified; or*
 - iii. *The hydropower facility consists of a turbine in a pipeline or a turbine in an irrigation canal.*

For facilities falling under i. or ii. above, only output generated during the period of LIHI certification or EcoLogo certification is eligible for Green-e Climate Certified sale.

6. Section 6.2, project-specific criteria for hydropower projects, new requirement:

- d) *In countries other than the United States and Canada, for a “grouped” project, consisting of more than one instance of the project activity at multiple locations within a defined geographic boundary, which is certified as a group or program of activities under an Endorsed Program, the total capacity of the grouped project may exceed the 10 MW capacity limit given in Section 6.2.c above; however, no single instance of the project within the group shall exceed the applicable capacity limit.*

7. Section 6.3, new project-specific criteria for biomass power projects:

For biomass power projects that utilize solid or liquid biomass, the GHG program must account for life-cycle impacts and secondary emissions associated with the biomass.

8. Section 6.4, new project-specific criteria for industrial gas destruction projects:

HFC-23 destruction projects are ineligible under this Standard.

9. Section 8, Definitions, change to definition of Greenhouse Gas (GHG):

V. 1.1:

Gases that trap heat in the atmosphere and are emitted through natural processes and human activities. Green-e Climate addresses GHG emission reductions that originate from the six principal GHGs included in the Kyoto Protocol, namely carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride (CO₂, N₂O, CH₄, HFCs, PFCs and SF₆).

V. 2.0:

Gases that trap heat in the atmosphere and are emitted through natural processes and human activities. Green-e Climate addresses GHG emissions reductions that originate from any gas that has been determined by the Intergovernmental Panel on Climate Change (IPCC) to have an anthropogenic radiative forcing effect on the atmosphere, including but not necessarily limited to the six principal GHGs included in the Kyoto Protocol: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride (CO₂, N₂O, CH₄, HFCs, PFCs and SF₆).