**KCCI Carbon Standard**

Enacted Feb. 23, 2023

1. **(Purpose)** The purpose of the KCCI Carbon Standard (hereafter “KCS”) is to quantitatively evaluate and certify GHG reduction performance according to the standards.
2. **(Scope of Application)** KCS applies to those who wish to evaluate and receive certification for GHG reduction performance from KCCI Center for Carbon Reduction Certification.
3. **(Definition of Terms)** The definition of the terms used in the Carbon Standard are as follows.
4. “Project” is a project that reduces, absorbs, or removes GHGs inside or outside the value chain of the project proponent.
5. “Project proponent” is the operator in charge of discovering, implementing, and operating the project.
6. “Project participant” is a person participating in the project, advising on the project, or mediating the trade of certified project results.
7. “Steering Committee” is a committee organized by KCCI Center for Carbon Reduction Certification to deliberate and adjust Carbon Standards and prepare plans for the facilitation of the voluntary carbon market.
8. “Certification Committee” is a committee organized by KCCI Center for Carbon Reduction Certification to deliberate and adjust various matters related to projects.
9. “Certified reduction” is the reductions among the GHG reductions generated from projects registered in the registry finally certified by KCCI Center for Carbon Reduction Certification according to KCS and the project management requirements.
10. “Methodology” means a document describing standards, assumptions, calculation methods, procedures, etc. applied for calculating and monitoring GHG reductions.
11. “Baseline emissions” is the GHG emissions considering the conditions with the highest probability of occurrence within the project boundary in case the project proponent does not conduct the project.
12. “Project Boundary” is the area that includes GHG emission sources and sinks affected by the project.
13. “Additionality” means additional efforts beyond activities that can be conducted under normal business conditions to artificially reduce GHGs, and shall be considered in terms of legal, institutional, and general technological levels.
14. “Uncertainty” is the degree expressing the dispersion characteristics of the reasonably estimated value of the quantified amount in relation to the calculation results of GHG emissions.
15. “Conformity review” is the systematic, independent and documented process carried out by KCCI Center for Carbon Reduction Certification to evaluate whether the relevant documents are prepared according to the relevant standards when a project proponent applies for project methodology registration, methodology revision, methodology renewal, project registration, project change, project renewal, and reduction performance certification approval.
16. “Certification” is a systematic, independent, and documented process carried out by KCCI Center for Carbon Reduction Certification to evaluate the GHG reduction and absorption of registered projects.
17. “Monitoring” is the activity of continuously collecting and managing direct or indirect data related to GHG emission or absorption while the project proponent implements the project.
18. “Validation” is a series of systematic, independent, and documented activities performed by a 3rd party auditor to evaluate the methodology or PDD against applicable requirements of KCS.
19. “Verification” is a series of systematic, independent, and documented activities performed by a 3rd party auditor to evaluate whether the methodology or project proponent’s project plan and reduction performance monitoring report have been prepared according to the relevant standards.
20. “3rd party auditor” is a body conducting the verification of projects.
21. “Account” is a virtual space opened in the name of KCCI Center for Carbon Reduction Certification and project participants to manage the project certification results in the registry. The accounts are classified into the issue account with a serial number assigned, holding account, cancellation account, forest buffer account and CORSIA buffer account.
22. “Issue account” is an account for initially issuing certification results of projects and is managed as an independent account for each project.
23. “Holding account” means that each project participant is managed as an independent account.
24. “Cancellation account” is an account for managing the project certification results transferred by project participants and the certification results among forest buffers and CORSIA certification results not returned to project participants due to loss of forest, CORSIA certification cancellation, etc.
25. “Forest buffer account” is an account to buffer a certain portion of GHG reductions issued from forest sector projects to respond to the loss of carbon dioxide from forest sector projects.
26. “CORSIA buffer account” is an account to buffer a certain portion of GHG reductions issued from CORSIA projects to respond to cancellation of approval due to dual use of CORSIA projects.
27. “Registry” refers to an electronic system for continuous and systematic management of a series of processes e.g. project methodology, project registration, certification, etc.
28. “Crediting period start date” is the registration approval date for project. However, the reduction performance can be certified until the product life or service validity period only for products and services that have not passed the product life or service validity period for products sold or services implemented before the project if the start date of the project is earlier than the year of the project approval.
29. **(Composition)** The composition of KCS is as follows.
    1. KCS includes the principles of ISO 14064-2, the basis for international certification systems (CDM, VCS, etc.) and domestic external project certification systems.
    2. KCS consists of requirements, evaluation methods, and certification procedures.

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| **Requirements** | **[Standard Principles]** Requirements to meet reality, additionality, sustainability, and verifiability.  **[Evaluation Target]** Projects implemented after the enforcement date of the Framework Act on Low Carbon, Green Growth (April 14, 2010)  **[Crediting period]** Renewal/reexamination mandatory on exceeding 5 years after approval/registration |
| **Evaluation method** | **[Evaluation Criteria]** Based on the methodology registered in the registry  **[Scope of evaluation]** Project reducing GHGs specified by UNFCCC |
| **Certification procedure** | **[Issuance type]** Issued in units of 1 ton (tCO2eq)  **[Certification procedure]** Issued through third-party verification and certification committee resolution |

<Table 1> KCS Constituents

1. **(Standard Principles)** KCS shall define the standard principles including all the common principles of domestic and overseas GHG reduction inspection and certification systems, ‘practicality, additionality, sustainability, and verifiability.’

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| **Principles** | **Definition** |
| **Reality** | * Whether organizational boundaries and emission sources are all identified |
| * Whether following the approved methodology, applying a consistent calculation method available for quantification and monitoring |
| **Additionality** | * Whether additional efforts have been made to reduce GHGs  1. Reduction beyond legal and institutional regulations 2. Reduction beyond the general level |
| **Sustainability** | * Whether the GHG reduction effect is sustainable in the long term |
| **Verifiability** | * Quantified verifiability of GHG reduction performance * Whether the baseline data for verification have been objectively reviewed by eligible agency and auditors |

<Table 2> KCS Standard Principles and Definition

* 1. Reality
     1. Confirmation of organizational boundaries and emission sources
* It shall be possible to confirm the project boundary and organizational boundary implementing the project.
* It shall be possible to explain all GHG emission sources, sinks and leakages.
* The boundaries applicable to the project shall be clearly distinguished and defined for projects based on the LCA approach.
  + 1. Quantification
* GHG reductions, etc., shall be based on reliability and ensure reproducibility that allows repeated and identical measurement.
  1. Additionality
     1. Additionality beyond legal and institutional regulations
* Projects shall be GHG projects involving additional efforts other than the mandatory project activities to fulfill the regulations of all current laws and notifications.
* However, the effects exceeding that of fulfilling the strictest legal requirements may be considered as additional efforts.
* Projects recommended by government institutions such as central ministries or local governments through subsidization as necessary for GHG reduction shall be deemed to satisfy legal additionality as activities based on voluntary participation, not obligations.
* The negative environmental impact caused by the relevant GHG project must not exceed the legal regulatory level and not have a negative impact on the local community.
  + 1. Additionality beyond the general level
* The evaluation criteria beyond the general practice within the identical or similar business type or the improvement effect compared to the existing project performance shall be considered for establishing the baseline.
* Evaluation methods such as basic unit before and after the project, LCA, modeling such as multiple regression analysis, and standard baselines may be applied and assumptions and figures ensuring that GHG reduction or removal are not overestimated shall be used when applying the method.
* Unless otherwise specified in the methodology, the baseline set at the time of methodology registration is fixed for the crediting period (5 years).
  1. Sustainability
* Sustainability means that the effect of GHG reduction or removal must last for a long term and cannot be reversed.
* If there is a reversal risk of GHG reduction from the risk level of implementing the project, such as in the forest sector, a compensation mechanism to replace the emissions lost due to the reversal must be presented.
  1. Verifiability
     1. Verification
* Verification by an independent third-party 3rd party auditor is necessary apply for methodology and project plan registration or to submit reduction performance monitoring reports according to KCS.
  + 1. Eligibility of third-party 3rd party auditor
* The third-party 3rd party auditor must be registered as a 3rd party auditor in domestic and international reduction systems or satisfy relevant international standards such as ISO 14065: 2013 and IAF MD 6: 2014, and have auditors qualified for evaluating projects.
* The third-party 3rd party auditor must have a project evaluation process and auditor management system, etc., and be able to provide them transparently.
  + 1. Tasks of a third-party 3rd party auditor
* The third-party 3rd party auditor verifies the methodology upon its registration, revision and renewal, the project plan upon the registration, revision, and renewal of the project, and the GHG reductions of the registered projects, and implements necessary measures, such as requests for revision or supplementation of verification, upon certifying the GHG reductions.
  + 1. Assurance level
* While it is recommended to obtain a reasonable guarantee from a third-party 3rd party auditor for the GHG reduction or removal amount, limited guarantees are also allowed.

1. **(Process)** KCS consists of the process of registering the methodology and project plan, and then certifying the reduction performance monitoring report.
   1. If a methodology does not exist in the KCS, proceed with the methodology approval process.
   2. The project plan approval process may proceed simultaneously with the methodology approval process.
   3. If an additional project plan is requested for a project with the methodology registered, application is possible only by submitting the project plan.
2. **(KCR)** KCR (KCCI Certified Reduction) shall satisfy the standard principles and methodology of KCS and signifies the GHG reduction performance measured and certified through KCR.
   1. KCR is comprehensively evaluated for seven major GHGs (CO2, CH4, N2O, HFCs, PFCs, NF3, SF6) in units of 1 tCO2-eq.

Detailed standards, including heating value and emission factor are applied in the order of priority below. However, the latest approved methodology is applied if multiple applicable options do not exist.

1. (First priority) The most up-to-date international standard of the relevant country/region at the time of reduction
2. (Second priority) Requirements for reporting and certification of GHG emissions trading system
   1. In the case of converting the reduction performance of a project registered as a GHG project under other laws or systems into KCR, it is necessary to go through the deliberation of the certification committee to find whether the project registration and reduction performance and recognition standards of the relevant law or system conform to KCS. The source of converted emission credits must be indicated and managed to distinguish the converted reduction performance from the reduction performance certified by KCS.
3. **(KCS Evaluation Boundary)** The evaluation boundary as per KCS includes all areas inside and outside the value chain of a company.
4. **(Public Opinion Collection)** Upon revising this standard, stakeholders’ opinions must be collected through external disclosure, and it must be reviewed on whether to reflect the received opinions.

**Addendum** (Feb. 23, 2023)

**Article 1** **(Enforcement Date)** This standard shall enter into force from the date its enactment.