

The Carbon Data Specifications Consortium (“CDS”) leverages the Community Specification License – 1.0, with the following modifications to the Scope.MD, Governance.MD and Code_of_Conduct.MD files of the Community Specification License.

Scope.MD

The Carbon Data Specification is a data dictionary for raw data and a standard for data requirements that enable energy data access for measuring, quantifying, and tracking carbon emissions from energy production and consumption. These standards and requirements should boost confidence in data sources, increase data utilization, promote scalability, and enable data aggregation for centralized platforms, which shall support and inform grid decarbonization pathways and decision-making.

- The Carbon Data Specifications Consortium (“CDS”) establishes specifications for the underlying measured / raw data needs used to calculate energy- and carbon-related metrics.
- It specifies procedures and technical standards for accessing and enabling aggregation of the raw / measured energy and emissions source data, including recommendations for temporal scale, locational scale, timely acquisition, and quality assurance.
- The power network-related metrics and raw data standards will be specified within the following categories:
 - Customer data. This may include, but is not limited to:
 - Metering consumption and production data
 - Account and bill data needed for project analysis
 - Authorization and consent processes
 - Power systems data. This may include, but is not limited to:
 - Power generation emissions

- Delivery capacities and/or constraints
- Generation mix
- Power imports and exports
- Power market data
- Contractual data

It is applicable to historical source data and metrics that support emissions based decision making and the measuring and tracking of carbon emissions.

Any changes of Scope are not retroactive.

Community Specification -- CDS

Governance.MD

This document provides the governance policy for specifications and other documents developed using the Community Specification process in a repository (each a “Working Group”) of the Carbon Data Specification project, a project of LF Energy (the “Project”). Each Working Group must adhere to the requirements in this document.

The Working Groups of the Project initially consist of:

- (a) Customer Data Working Group; and
- (b) Power Systems Data Working Group

The Project will also have a Strategy Committee and a Steering Committee. The Strategy Committee is focused on 1) care and evolution of the specification; 2) enabling adoption; and 3) determining and recommending changes to the scope of the Project.

1. Roles.

Each Working Group may include the following roles. Additional roles may be adopted and documented by the Working Group.

1.1. Maintainer. “Maintainers” are responsible for organizing activities around developing, maintaining, and updating the specification(s) developed by the Working Group. Maintainers are also responsible for determining consensus and coordinating appeals. Each Working Group will designate one or more Maintainer for that Working Group. A Working Group may select a new or additional Maintainer(s) upon Approval of the Working Group Participants.

1.2. Editor. “Editors” are responsible for ensuring that the contents of the document accurately reflect the decisions that have been made by the group, and that the specification adheres to formatting and content guidelines. Each Working Group will designate an Editor or Editors for that Working Group. A Working Group may select a new Editor or Editors upon Approval of the Working Group Participants.

1.3. Participants. “Participants” are those that have made Contributions to the Working Group subject to the Community Specification License.

2. Decision Making.

2.1. Consensus-Based Decision Making. Working Groups make decisions through a consensus process (“Approval” or “Approved”). While the agreement of all Participants is preferred, it is not required for consensus. Rather, the Maintainer will determine consensus based on their good faith consideration of a number of factors, including the dominant view of the Working Group Participants and nature of support and objections. The Maintainer will document evidence of consensus in accordance with these requirements. Consensus will not be deemed to have been met in the event of a sustained objection from one or more Working Group participants.

2.2. Appeal Process. Decisions may be appealed via a pull request or an issue, and that appeal will be considered by the Maintainer in good faith, who will respond in writing within a reasonable time.

3. Ways of Working.

Inspired by American National Standards Institute’s (ANSI) Essential Requirements for Due Process, Community Specification Working Groups must adhere to consensus-based due process requirements. These requirements apply to activities related to the development of consensus for approval, revision, reaffirmation, and withdrawal of Community Specifications. Due process means that any person (organization, company, government agency, individual, etc.) with a direct and material interest has a right to participate by: a) expressing a position and its basis, b) having that position considered, and c) having the right to appeal. Due process allows for equity and fair play. The following constitute the minimum acceptable due process requirements for the development of consensus.

3.1. Openness. Participation shall be open to all persons who are directly and materially affected by the activity in question. There shall be no undue financial barriers to participation. Voting membership on the consensus body shall not be conditional upon membership in any organization, nor unreasonably restricted on the basis of technical qualifications or other such requirements. Membership in a Working Group’s parent organization, if any, may be required.

3.2. Lack of Dominance. The development process shall not be dominated by any single interest category, individual or organization. Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints.

3.3. Balance. The development process should have a balance of interests. Participants from diverse interest categories shall be sought with the objective of achieving balance.

3.4. Coordination and Harmonization. Good faith efforts shall be made to resolve potential conflicts between and among deliverables developed under this Working Group and existing industry standards.

3.5. Consideration of Views and Objections. Prompt consideration shall be given to the written views and objections of all Participants.

3.6. Written procedures. This governance document and other materials documenting the Community Specification development process shall be available to any interested person.

4. Specification Development Process.

4.1. Pre-Draft. Any Participant may submit a proposed initial draft document as a candidate Draft Specification of that Working Group. The Maintainer will designate each submission as a "Pre-Draft" document.

4.2. Draft. Each Pre-Draft document of a Working Group must first be Approved to become a "Draft Specification". Once the Working Group approves a document as a Draft Specification, the Draft Specification becomes the basis for all going forward work on that specification.

4.3. Working Group Approval. Once a Working Group believes it has achieved the objectives for its specification as described in the Scope, it will submit it to the Steering Committee for its approval. Any Draft Specification approved by vote of the Steering Committee becomes an "Approved Specification".

4.4. Publication and Submission. Upon the designation of a Draft Specification as an Approved Specification by the Steering Committee, the Maintainer will publish the Approved Specification in a manner agreed upon by the Steering Committee (i.e., Working Group Participant only location, publicly available location, Working Group maintained website, Working Group member website, etc.). The publication of an Approved Specification in a publicly accessible manner must include the terms under which the Approved Specification is being made available.

4.5. Submissions to Standards Bodies. The Governing Board of the LF Energy Foundation (the "Governing Board") may submit a Draft Specification or Approved Specification to another standards development organization by vote. No Draft

Specification or Approved Specification may be submitted to another standards development organization without the vote of the Governing Board. Upon an affirmative vote of the Governing Board regarding such a submission, the applicable Maintainer or Maintainers, or any other individuals so directed by the Governing Board, will coordinate the submission of the applicable Draft Specification or Approved Specification to the other standards development organization as directed by the Governing Board. Working Group Participants that developed that Draft Specification or Approved Specification agree to grant the copyright rights necessary to make those submissions.

4.6 Steering Committee. The Steering Committee is responsible for (a) approval of any Draft Specification as an Approved Specification and (b) alignment among each of the Working Groups of the Carbon Data Specification project.

4.7. Voting of the Steering Committee and Strategy Committee. In any vote or Approval before the Steering Committee or Strategy Committee the affirmative vote of at least 50% of the voting members of the Steering Committee or Strategy Committee. The voting members of the Steering Committee and Strategy Committee consist of one appointee from each General Member and each Strategic Member of the LF Energy Foundation of the Linux Foundation.

5. Non-Confidential, Restricted Disclosure.

Information disclosed in connection with any Working Group activity, including but not limited to meetings, Contributions, and submissions, is not confidential, regardless of any markings or statements to the contrary. Notwithstanding the foregoing, if the Working Group is collaborating via a private repository, the Participants will not make any public disclosures of that information contained in that private repository without the Approval of the Working Group.

Code_of_Conduct.MD

Policies

The Carbon Data Specifications Consortium and its working groups (“CDSC”) have been established as Carbon Data Specifications Consortium a Series of LF Projects, LLC. Policies applicable to CSDC, including guidelines on the usage of trademarks, are located at www.lfprojects.org/policies/.

The Code of Conduct applicable to participation in CDSC is as follows: