Life Cycle Assessment Reporting Checklists
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Checklist - Executive Summary

Goal of the Study
- State the intended application of the study
- State the reasons for carrying out the study
- State the intended audience of the study
- State whether the results are to be used in comparative assertions disclosed to the public
- State unambiguous research question(s)
- State the classification of the assessed CCU technology

Scope of the Study
- State the functional unit clearly and unambiguously according to the Guidelines; report any changes due to resolving multi-functionality
- State the system boundaries according to the Guidelines
- State relevant issues concerning data quality and assumptions
- State the technology readiness level (TRL) of processes and sub-processes
- State the production or storage capacity
- State the geographical scope
- State the software (and version) and data library (and version) used
- State the type of review and provide additional information about reviewers

Life Cycle Inventory and Life Cycle Impact Assessment
- State the main results of life cycle inventory and life cycle impact assessment
- If the results are reported on a relative basis, report this basis
- Describe the uncertainty and sensitivity analyses and report results separately

Interpretation
- State any conclusions, recommendations, and limitations

Checklist - Main Report

Goal of the Study
- State the intended application of the study
- State the reasons for carrying out the study
- State the intended audience of the study
- State whether the results are to be used in comparative assertions disclosed to the public
- State unambiguous research question(s)
- State the classification of the assessed CCU technology
- State limitations due to the assumptions and methods, e.g., if the study is preliminary
- State the commissioner of the study and other influential actors
- State the technology readiness level (TRL) of processes and sub-processes
- State the production or storage capacity
Scope of the Study
- State the functional unit clearly and unambiguously according to the Guidelines; report any changes due to resolving multi-functionality.
- State the performance characteristics, any omission of additional function in comparison, and how performance is measured (e.g., products where chemical structure and composition differ from conventional counterparts).
- State the system boundaries according to the Guidelines; state cut-off criteria; include a flow chart showing the system boundaries.
- State any omitted life cycle stages and processes (e.g., products where chemical structure and composition differ from conventional counterparts).
- State relevant issues concerning data quality and assumptions.
- State the method(s) used to resolve multi-functionality.
- State the impact assessment methods.
- State the data quality needs and how energy and material inputs/outputs are quantified.
- State the software (and version) and data library (and version) used.
- State the type of review and provide additional information about reviewers.

Life Cycle Inventory
- Include a flow diagram of the assessed process system(s).
- State the types and sources of required data and information.
- State the calculation procedures.
- State all assumptions made.
- Describe the sensitivity analysis for refining system boundaries.
- Include full calculated LCI results (if this does not breach confidentiality).
- State the representativeness and appropriateness of LCI data.
- If the results are reported on a relative basis, report this basis.
- State the results of scenario analysis (including the scenarios) and threshold values, if any.

Life Cycle Impact Assessment
- Include the results of life cycle impact assessment.
- State whether impact category coverage is reduced (e.g., in the case of carbon footprinting).
- If the results are reported on a relative basis, report this basis.
- State whether delayed emissions occur: if so, include the emission time profile.
- If applied, state the discounting method and discounted results.

Life Cycle Interpretation
- Include and describe the results.
- Negative emission in cradle-to-gate studies shall not be interpreted as CO₂ sinks if the life cycle does not end with permanent carbon fixation.
- Emission reductions due to substitution effects shall be interpreted as environmental benefits but not as negative emissions.
- Describe the uncertainty and sensitivity analyses and report results separately.
- Include a completeness check.
☐ Include a consistency check
☐ State assumptions and limitations associated with interpretation of the results
☐ Include conclusions
☐ Include recommendations, if any