

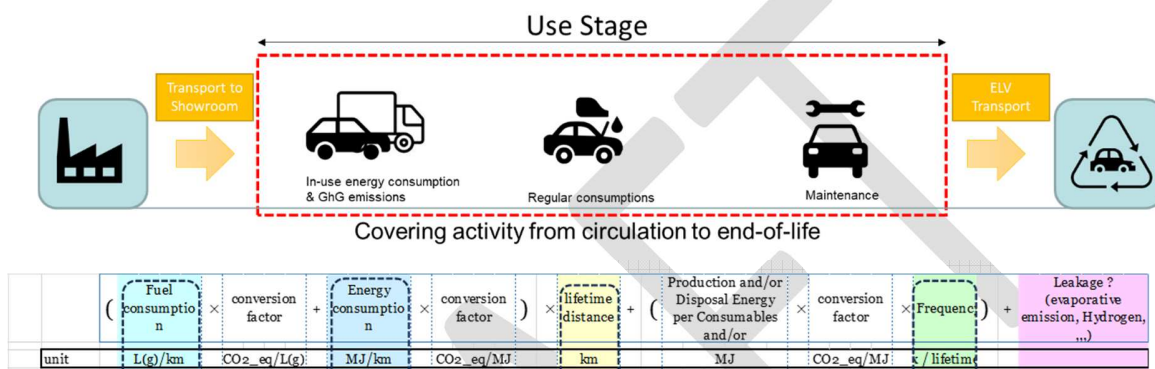
Table of Content

Use stage

Scope and System Boundaries

The scope is to provide a comprehensive methodology for calculating realistic GhG emissions and energy consumption over vehicle use-phase at various levels of detail and considering the availability of different information and datasets.

The system boundary and calculation method at the disposal and recycling stage are as follows.



Processes included in the scope of data collection

The following processes shall be covered:

[X1] Process of producing fuel or generating electricity – Fuel and Energy Cycle (SG6)

[C2] Process of driving

[C3] Process of emitting fluorocarbons

[C4] Process of producing maintenance parts and consumables

[C5] Process of transporting maintenance parts and consumables

[C6] Process of transporting, disposing of, and recycling waste materials generated during maintenance parts production

[C7] Process of driving out of region of sales?

Data collection items

Acceptable data/standard/sources

The following data shall be collected:

[X1] Process of producing fuel or generating electricity

- Certified fuel or electricity consumption
- GHG emission factor for producing fuel or generating electricity

[C2] Process of driving

- Certified fuel or electricity consumption
- Discrepancy RW factor

- Degradation factor
- GHG emission factor for burning fuel
- xEV charging if not included in the TA values
- Vehicle service life
- Boundary conditions:
 - parking time
 - average temperature
 - occupancy rates

[C3] Process of emitting fluorocarbons

- Fluorocarbon emissions
- GHG emission factor for emitting fluorocarbons

[C4] Process of producing maintenance parts and consumables

- List of maintenance parts and consumables
- Maintenance frequency of the maintenance parts and consumables
- Vehicle weight?
- GHG emission factor for producing maintenance parts and consumables

[C5] Process of transporting maintenance parts and consumables

- List of maintenance parts and consumables
- Maintenance frequency of the maintenance parts and consumables
- Vehicle weight?
- GHG emission factor for producing maintenance parts and consumables

[C6] Process of transporting, disposing of, and recycling waste materials generated during maintenance parts production

[C7] Process of driving out of region of sales?

Primary data collection items

The following data shall be collected as primary data:

[X1] Process of producing fuel or generating electricity

- Certified fuel or electricity consumption

[C2] Process of driving

- Certified fuel or electricity consumption
- Discrepancy RW factor
- Degradation factor
- xEV charging if not included in the TA values
- definition and calculation of vehicle service life

[C3] Process of emitting fluorocarbons

- Fluorocarbon emissions

[C4] Process of producing maintenance parts

- List of maintenance parts and consumables
- Maintenance frequency of the maintenance parts and consumables

[C5] Process of transporting maintenance parts

- List of maintenance parts and consumables
- Maintenance frequency of the maintenance parts and consumables

[C6] Process of transporting, disposing of, and recycling waste materials generated during maintenance parts production

[C7] Process of driving out of region of sales?

Secondary data collection items

The following data shall be collected as secondary data. The default values in Appendix Figure X may be adopted, or data collected independently by the party performing the calculation may be used. In this case, the validity of their own data is subject to verification.

[X1] Process of producing fuel or generating electricity

- GHG emission factor for producing fuel or generating electricity

[C2] Process of driving

- GHG emission factor for burning fuel
- boundary conditions:
 - parking time
 - average temperature
 - occupancy rates

[C3] Process of emitting fluorocarbons

- GHG emission factor for emitting fluorocarbons

[C4] Process of producing maintenance parts

- GHG emission factor for producing maintenance parts

[C5] Process of transporting maintenance parts

- GHG emission factor for transporting maintenance parts

[C6] Process of transporting, disposing of, and recycling waste materials generated during maintenance parts production

[C7] Process of driving out of region of sales?

Scenario

TBD (The number of times that maintenance parts are exchanged, etc.)

Others

For maintenance parts, although the calculation method is defined assuming that GHG emissions for production and transport are proportional to vehicle weight, it is acceptable to calculate GHG emissions for each part using the method shown in the dedicated section.