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|  | United Nations | ECE/TRANS/WP.29/GRPE/2025/17 |
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**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations**

**Working Party on Pollution and Energy**

**Ninety-third session**

Geneva, 14-17 October 2025

Item 14 of the provisional agenda

**Automotive Life Cycle Assessment (A-LCA)**

 Proposal for a new [Mutual] Resolution [No. 5 (M.R.5)] concerning Automotive Life Cycle Assessment (A-LCA)

**Submitted by the Informal Working Group on Automotive Life Cycle Assessment** [[1]](#footnote-2)\*

The text reproduced below was prepared by the Informal Working Group on Automotive - Life Cycle Assessment (A-LCA). It is a proposal for a new [Mutual] Resolution [No. 5 (M.R.5)] concerning Automotive Life Cycle Assessment (A-LCA). It is submitted to the Working Party on Pollution and Energy consideration at its 93rd session.

1. Reporting

The results of the A-LCA based on this Resolution shall be reported without bias to the intended audience and in accordance with paragraph 6 “Reporting” of ISO 14040: 2006. The results, data, methods, assumptions and limitations described in the background report shall be presented in sufficient detail to allow the reviewers/verifiers to comprehend the determination process and its CFP value. For all levels of the level concept, this background report is the basis for critical review / verification. Additionally, the following information shall be described within the background report as a summary report whenever the results of the A-LCA are available to the public.

Table 23
**Required information in the summary report**

|  |  |
| --- | --- |
| General information |  |
|  | practitioner |  |
| date of report |  |
| Goal of the study: |  |
|  | reasons for carrying out the study; |  |
|  | its intended applications; |  |
|  | the target audiences; |  |
| Applicable Methodology Level | 1/2/3/4 |
| Vehicle configuration (Level 3&4) |  |
|  | Declared vehicle configuration |  |
| Mass without traction battery |  |
| Battery configuration |  |
| LCA group ID |  |
|  | Region of production ? sales ? |  |
| Results (t CO2eq\_xxx/veh.) | 123456 |
|  | Upstream Emissions (Material/Production/Assembly [stages] |  |
|  | Material production [stage] | if available |
| Parts production and vehicle assembly [stage] | if available |
| Use [stage] |  | derived from |
|  | Fuel/Electric consumption |  | homologation |
| Discrepancy factor |  |  |
| Deterioration factor |  |  |
| Service life |  |  |
| Carbon intensity factor (fuel/electricity) |  |
|  | Modelling | Statistic/dynamic/dispatch |
| Database, if applicable |  |
|  |
| Leakage  |  |
| Maintenance  |  |
| End of Life [stage] (Battery excluded, MBBM included ) |  |
|  |  |  |
|  | Each MBBM for Material and Energy) | Material; Energy; |
|  |  |
| Batteries | (Least terms of specifications of Batteries) |
|  | Material production [stage] |  |
| Production [stage] |  |
| End of Life [stage](MBBM included) |  |
| Each MBBM for Material, Energy and Repurposing | Material; Energy;Repurposing; |
| Representative vehicle  |  |
|  | Configuration |  |
| Mass without traction battery |  |
| LCA group ID |  |
|  | group criteria (a) 🡨 up to RV discussion |  |
| group criteria (b) 🡨 up to RV discussion |  |
| group criteria (c) 🡨 up to RV discussion |  |
| Results of RV without traction battery |  |
|  | Material/Parts production and assembly [stage]:  |  |
|  | System boundaries |  |
| Cut-off items and its effect |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Applicable Energy modelling |  |
|  |  |
| Applicable secondary data base or set name |  |
|  |  |
| Detailed information is available on the background report and verified by reviewers / verifiers  |
|  |  |  |  |  |  |  |  |  |
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|  |
| End of Life [stage] |
|  | System boundaries  |  |
| Cut-off items and its effect |  |
| Applicable recycling modelling |  |
| In case of CFF application, CFF applied material type |  |
| Applicable material type sent to incineration with energy recovery |  |
|  |  |
| Applicable Energy modelling |  |
|  |  |
| Applicable secondary data base or set name |  |
|  |  |
|  |
| Reviewers/ Verifiers |  |
| Signature of Reviewers / Verifiers |  |

As outlined in ISO 14044, data quality considerations and uncertainty shall be documented in the study summary report and assessed using a suitable methodology such as those described by ILCD[[2]](#footnote-3), ecoinvent, and U.S. EPA[[3]](#footnote-4) [[4]](#footnote-5).

1. \* In accordance with the programme of work of the Inland Transport Committee for 2025 as outlined in proposed programme budget for 2025 (A/79/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate. [↑](#footnote-ref-2)
2. European Commission. (2010). ILCD handbook: General guide for Life cycle Assessment - Detailed guidance. Italy: European Union. [↑](#footnote-ref-3)
3. U.S. EPA. (2016). Guidance on Data Quality Assessment for Life Cycle Inventory Data. EPA Document No. EPA/600/R-16/096. <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100R8JX.PDF?Dockey=P100R8JX.PDF> [↑](#footnote-ref-4)
4. U.S. EPA. (2024). Data Quality Assessment Method to Support the Label Program for Low Embodied Carbon Construction Materials (Version 1). <https://www.epa.gov/system/files/documents/2024-08/dqa-method_v2_final.pdf> [↑](#footnote-ref-5)