



European Association of Automotive Suppliers

UNECE IWG A-LCA

CLEPA Feedback on level concept

23rd May 2023



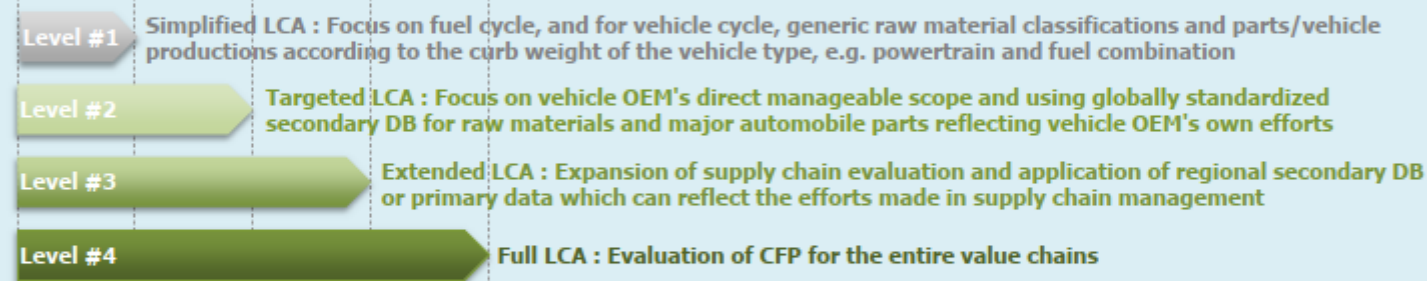
Proposal of level concept for Vehicle cycle

▪ General ideas of level concept

1. Provision of FOUR levels of carbon footprint evaluation for automobiles

- Evaluation of CFP related to vehicle OEM's manageable scope/supply chains **classified into levels** based on boundaries and data quality, encouraging stakeholders to choose level that is appropriate for their individual circumstances

❖ (Example) Level concept



2. Report of CFP results

- When disclosing assessment results of CFP following the A-LCA guideline, the level should be reported simultaneously
- The goal is to encourage both vehicle OEMs and supply chains to refine CFP evaluation system as well as to reduce environmental impact, but at an affordable manner

3. Expected effect

- CFP management systems of automotive industry are expected to be gradually promoted to enable higher levels of CFP evaluation

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Level concept of vehicle cycle in detail

- From practical and/or regulatory point of view, different levels can be selected for proper applications with different intentions
- ✓ **Level#1 (Simplified LCA)** : Focusing on evaluating GHG emissions from a fuel cycle and a generic model vehicle
- ✓ **Level#2 (Targeted LCA)** : Focusing on precise evaluation of GHG emissions within vehicle OEM's manageable scope to incorporate the OEM's own efforts to reduce carbon emissions on a specific vehicle
- ✓ **Level#3 (Extended LCA)** : By extending the assessment of GHG emissions to supply chains, vehicle OEM's initiatives to reduce GHG emissions beyond its management scope could be demonstrated
- ✓ **Level#4 (Full LCA)** : Assessment of GHG emissions for the entire value chains

Level	Assessment Methods			Note
	Raw material	Parts production	Vehicle production	
Lv.1	<ul style="list-style-type: none"> • Proportional evaluation based on curb weight of vehicle • (Or) generic (relatively simpler) material composition and globally standardized secondary DB for raw material and parts/vehicle production 			<ul style="list-style-type: none"> ✓ Easily evaluated based on information that is publicly available ✓ Possible to provide consumers with information on GHG emissions during operation in terms of comparing vehicle fuels and powertrains
Lv.2	<ul style="list-style-type: none"> • Comprehensive material analysis based on IMDS • Material classification criteria and globally standardized secondary DB 	<ul style="list-style-type: none"> • Specific parts such as batteries • Application of globally standardized secondary DB 	Primary data	<ul style="list-style-type: none"> ✓ Promoting widespread adoption of A-LCA through implementing globally harmonized secondary DB ✓ Vehicle OEM's efforts to reduce GHG emissions (Scope 1 & 2) at the workplace could be reflected
Lv.3	<ul style="list-style-type: none"> • Comprehensive material analysis using the IMDS • Application of regional secondary DB or primary data/LCA results from raw material suppliers 	<ul style="list-style-type: none"> • Specific parts which have product category rule(PCR) • Taking into account LCA results of parts 	Primary data	<ul style="list-style-type: none"> ✓ Level3 would be the most realistic and practical methodology until bottom-up approach is put in place ✓ Reflecting both efforts of vehicle OEMs and supply chains for reducing GHG emissions <ul style="list-style-type: none"> - OEMs : Being acknowledged for the use of environmentally-friendly materials, high-cost and low-carbon materials - Supply chains : Being acknowledged for the improvement of manufacturing processes for parts and other related efforts
Lv.4	<ul style="list-style-type: none"> • Incorporation of LCA results of raw material suppliers 	<ul style="list-style-type: none"> • The entire supply chains • Taking into account LCA results of parts 	Primary data	<ul style="list-style-type: none"> ✓ The most ideal approach for evaluating GHG emissions produced by automobiles * This requires not only establishment of a real-time GHG emissions management system but also participation of global supply chains

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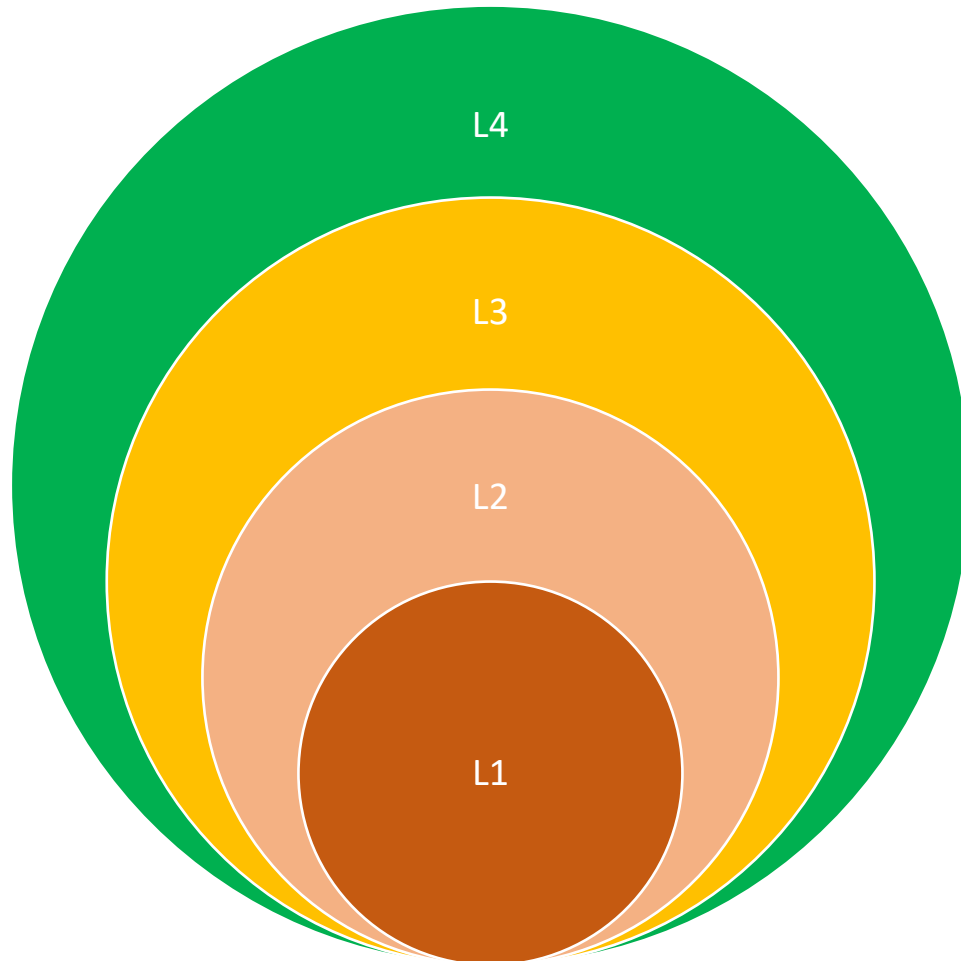
FEEDBACK ON LEVEL CONCEPT



- Reminder: the scope of the IWG A-LCA is the definition of a harmonized methodology and not the application of such one
- there should be only 1 A-LCA methodology covering all the 4 proposed levels
- The difference in the 4 levels will be done by the application of this methodology by means of:
 - Functional unit (generic vehicle model vs. specific vehicle model)
 - Primary vs. secondary databases from OEMs / supply chain
 - Choice of the different phases to be considered

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L4 = 100% methodology, all phases, best data available

L3 = 100% methodology, all phases, limited primary DB

L2 = 100% methodology, all phases, limited to pure OEM data, others secondary DB, functional unit: specific vehicle

L1 = 100% methodology, selected phases, limited to OEM primary data, others secondary DB, functional unit: generic vehicle

Same methodology for all levels,

but different utilization / guideline for the different levels.