

Level 3 „hotspot“ definition – where supply chain decarbonisation spreads

LCA-SG3

Level Concept Implementation in SG3
(proposal for hotspot parts in level 3)

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Initial proposal

Proposal for „hotspot parts“ in level 3

- Hotspot part #1:
battery
- Hotspot parts #2:
body-in-white
 - inhouse parts: primary data (wherever possible)
 - bought parts: primary data or regional information (wherever possible)
- Choice is justified by RICARDO & CATARC findings and is backed-up by OICA member findings

General options

Option 1: Definition of components based on their share of overall emissions

Approach:

Focus on the vehicle components (e.g., batteries, glider, engines, chassis,..) that contribute the most to overall greenhouse gas emissions, energy use, or material resource consumption as outcome of existing analyses.

Option 2: Definition of materials based on their share of overall emissions

Approach:

Focus on the materials used in the vehicle (e.g. steel, aluminum, battery materials, ...) that contribute the most to overall greenhouse gas emissions, energy use, or material resource consumption as outcome of existing analyses

Option 3: Definition of share of cradle-to-gate Carbon Footprint (CFP) that needs to be covered with supplier specific data

Approach:

Level 3: a minimum of 20% of cradle-to-gate CO₂e emissions to be covered by supplier-based data

Level 4: a minimum of XX% of cradle-to-gate CO₂e emissions to be covered by supplier-based data or PDS (primary data share)

New proposal

Option 3: Definition of share of cradle-to-gate Carbon Footprint (CFP) that needs to be covered with supplier specific data

Approach:

Level 3: a minimum of 20% of cradle-to-gate CO₂e emissions to be covered by specific/supplier-based data

Level 4: a minimum of XX% of cradle-to-gate CO₂e emissions to be covered by specific/supplier-based data or PDS (primary data share)

Disadvantage:

- Reduced comparability of LCAs compared to option 1 and option 2 →

Optional:

Derivation of a recommended parts / material list

Advantages:

← No “blaming” of hotspot components or materials: technology neutral

← No need for detailed in depth description / definition of hotspot parts

← No need for frequent update of component lists

← Agnostic to varying vertical integration of OEMs

← Realistically accessible entry to Level 3

← **Efficient: Primary data may be collected where suppliers and OEMs jointly work on reduction measures**

Text draft

New proposal

In level 3, a share of at least 20% of total vehicle cradle-to-gate CO2e emissions needs to be covered by supplier specific data.

This means that primary information on type and amount of input materials, energy used and waste as well as individual clipping rates, material losses and scrap rates are utilised for the calculation of the cradle-to-gate carbon footprint. This applies for processes at OEMs' and Tier 1 suppliers' production sites – including the part production before final assembly of the car – as a minimum.

As a recommendation, the following could be taken into account:

- steel, aluminum,
- body-in-white, battery, wheels, tires.