## Proposal for subgroup structure

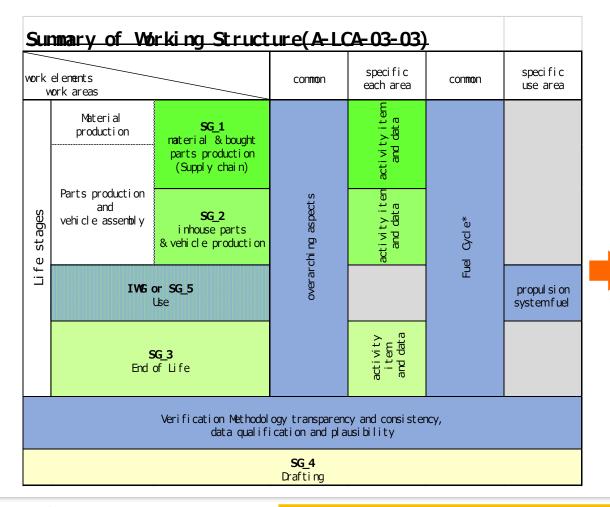
3rd A-LCA IWG

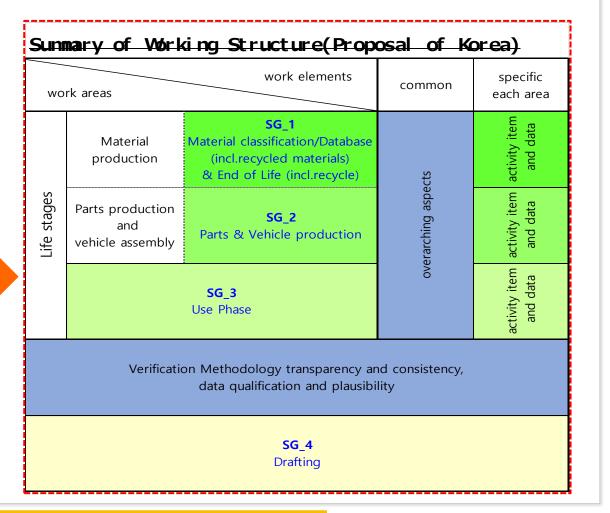
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## >> Proposal by Korea









## >> Proposal regarding SG #1

#### Sunmary of Working Structure (Proposal of Korea) work elements specific common work areas each area **SG 1** Material classification/Database Material production (incl.recycled materials) & End of Life (incl.recycle) overarching aspects y item data stages Parts production SG 2 activity Parts & Vehicle production vehicle assembly y item data **SG** 3 Use Phase Verification Methodology transparency and consistency, data qualification and plausibility **SG 4** Drafting

#### > Prior discussion needed regarding material classification

- Material classification and corresponding database should be determined and harmonized prior to discussing materials and parts production as levels of material classification vary among supply chains and OEMs
- It could encourage supply chains and OEMs to be involved in the same subgroup sharing their status and ideas which could lead intimate cooperation with SG #2

#### Organizing Materials and End of Life in the same subgroup

- Material acquisition and processing phase have significant impacts on GHG emissions, so vehicle OEMs are aiming to improve carbon footprint by investigating recycled materials
- It would be ideal to discuss End of life phase including recycle in the same subgroup of material production, so as to reflect carbon reducing activities by using recycled materials which could be possible to be aligned with primary materials in terms of material quality and usage ratio





## >>> Proposal regarding SG #2

#### Sunmary of Working Structure (Proposal of Korea) work elements specific common work areas each area **SG 1** Material classification/Database Material production (incl.recycled materials) & End of Life (incl.recycle) overarching aspects y item data stages Parts production SG 2 activity and di Parts & Vehicle production vehicle assembly y item data **SG** 3 Use Phase Verification Methodology transparency and consistency, data qualification and plausibility **SG 4** Drafting

#### > Separating Materials and Parts production

- There are significant differences in characteristics of processing and GHG emissions between material production and parts production
- GHG emissions of producing materials could be significant than parts production as material processing is generally accompanied by operating process of creating high temperature (steel/naphtha production process), whereas parts production process is relatively simple (forging/assembling)

#### Combining Bought & Inhouse parts production

- Configurations of bought & inhouse parts could vary among vehicle manufacturers and even among vehicle models in the same OEM
- So, it could be critical that system boundary should be clearly defined for both bought & inhouse parts for LCA purpose
  - → After discussing overarching aspects on scope and balance between accuracy and workload, we might come up with generic boundary of vehicle manufacturers





### >>> Proposal regarding SG #3

#### Sunmary of Working Structure (Proposal of Korea) work elements specific common work areas each area **SG 1** Material classification/Database Material production (incl.recycled materials) & End of Life (incl.recycle) overarching aspects item stages Parts production SG 2 Parts & Vehicle production vehicle assembly **SG** 3 Use Phase Verification Methodology transparency and consistency, data qualification and plausibility **SG 4** Drafting

#### Discussing Use phase in subgroup not in IWG

- Fuel cycle could have larger environmental burden than vehicle cycle from a LCA perspective, and it has complicated fuels/electricity production pathways in energy sectors which would vary among countries
- As there have been substantial advances of fuel technologies including renewable energy, more detailed and sophisticated approaches towards individual energy sources may have to be considered
- Thus, fuel cycle should be discussed in detail in a subgroup with external experts in this area, such as fuels/electricity production related industry
- Korea would like to recommend two experts of fuel cycle specialized in petroleum fuels as well as renewable fuels from SK Innovation in Korea.





# Thank you!!

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