



European Association of Automotive Suppliers

# UNECE IWG A-LCA Status Alignment SG2 & 3

*17th Oct 2023*

# UNECE IWG A-LCA

## SG2 – SG3 ALIGNMENT



### Topics

- Handover points between subgroups
- Alignment of level concept.

# UNECE IWG A-LCA

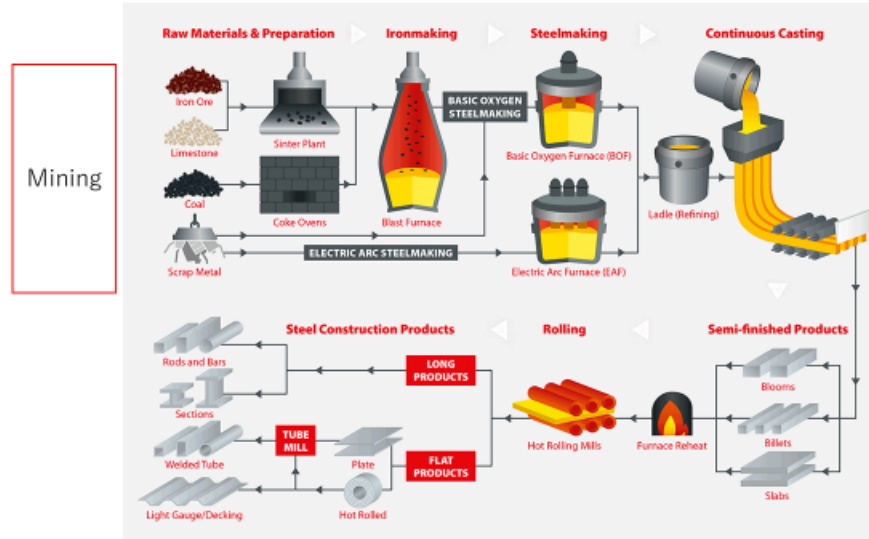
## SG2 – SG3 ALIGNMENT

### Handover SG2 to SG3

#### Example of Material weight for each segment



#### Example of Steel



Mining

Need to discuss system boundary of each material

24

➔ Very tedious to go material by material: Find generic definition!



VDA Classification	VDA Classification Name
1.1	Steel/cast steel/sintered alloys
1.1.1	Unalloyed/low alloy steel
1.1.2	high-alloy steel
1.2	cast iron
1.2.1	Gneissic graphite cast iron/ malleable cast iron
1.2.2	Spheroidal graphite cast iron/Vermular cast iron
1.2.3	high-alloy cast iron
2.1	Aluminium/ aluminium alloys
2.1.1	Cast aluminium alloys
2.1.2	Forged aluminium alloy
2.2	Magnesium, magnesium alloys
2.2.1	Cast magnesium alloy
2.2.2	Forged magnesium alloy
2.3	Titanium, titanium alloys
3.1	Copper (e.g. copper in harnesses)
3.2	copper alloy
3.3	zinc alloy
3.4	nickel alloy
3.5	lead (the metal)
4.1	Platinum/rhodium
4.2	Other special metals
5.1	thermoplastic resin
5.1.a	Thermoplastic resin (containing filler)
5.1.b	Thermoplastic resin (without filler)
5.2	thermoplastic elastomer
5.3	Elastomer/elastomer composites
5.4	thermosetting resin
5.4.1	polyurethane
5.4.2	unsaturated polyester
5.4.3	Other thermosetting resins
5.5	Polymer composites (e.g. laminated trim parts)
5.5.1	Resins in polymer composites.
5.5.2	Fibres in polymer composites(textiles)
6.1	painting material
6.2	Adhesives, sealants
6.3	underseal
7.1	Organic natural materials (e.g. leather)
7.2	Ceramics/glass
7.3	Other composite materials (e.g. friction linings)
8.1	Electronic component materials (e.g. PCBs, displays)
8.2	Electrical component materials
9.1	fuel
9.2	lubricant
9.3	brake fluid
9.4	Coolant/other glycols
9.5	refrigerant
9.6	Washer fluid, battery fluid
9.7	preservative
9.8	Other fuels and replenishers
	Tyre
	lead-acid battery
	Drive battery cell

VDA classification NOT sufficient to show effect of low CO<sub>2</sub> materials

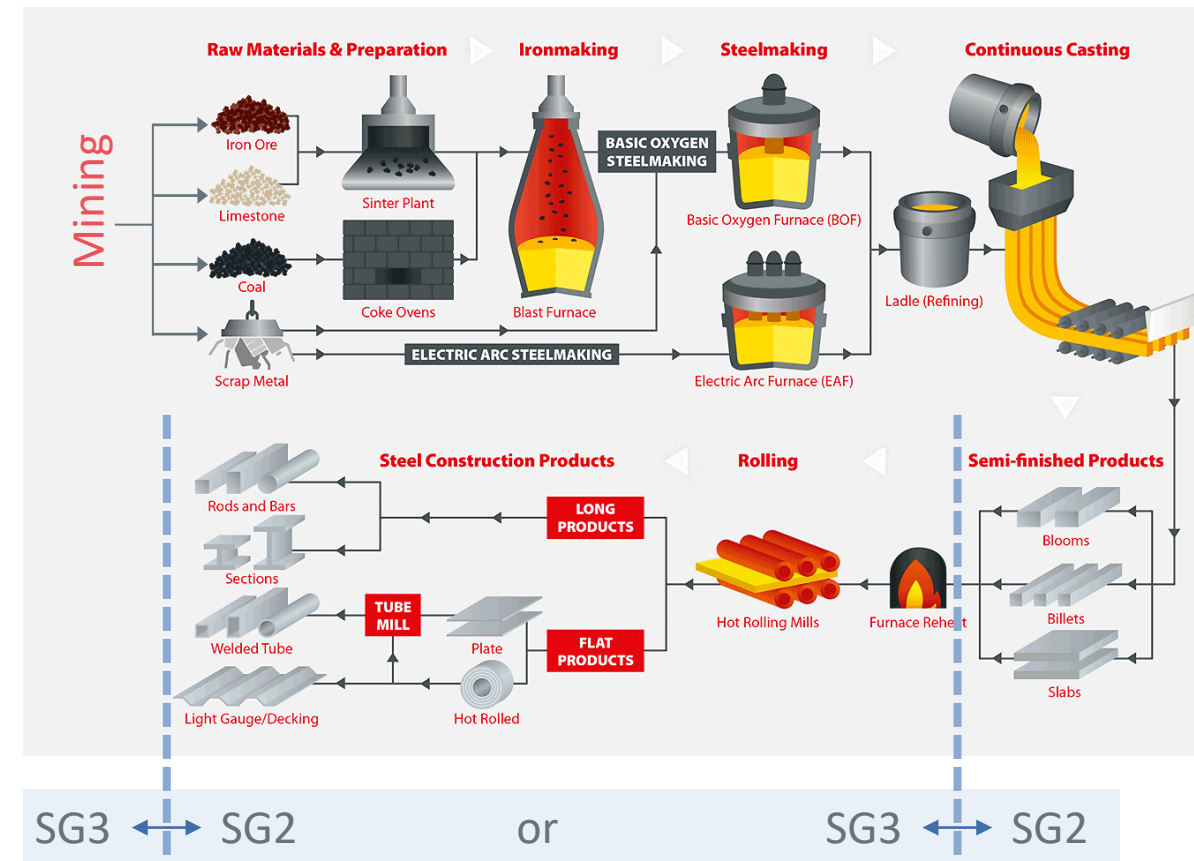
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## SG2 – SG3 ALIGNMENT



### Handover from SG2

- **SG3:**
  - ✓ SG2 will identify a small number of materials (focus materials) of particular importance to vehicle PCF
  - ✓ For focus materials SG2 will eventually define specific hand-over point to SG3
  - ✓ In general - for non-focus materials - a generic definition of the handover point to SG3 will be used:  
Outbound gate for the product of the first shaping manufacturing process for a homogeneous material, e.g. steel bar, aluminum ingot, plastic granulate.  
Outbound gate in that definition implies that a material is traded in the respective shape.
- **SG5:** touch point recycled material  
-> SG2 to align w/ SG5 first; check if definition is suitable for SG3 as well
- **SG6:** Energy at the inbound gate of production side.  
Electricity: Residual consumption mix -> identical for SG2



Focus Material

Non-Focus Material

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- **Alignment of level concept.**

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## SG2 – SG3 ALIGNMENT



	SG2 & SG3	SG2	SG3	SG3
LCA Level	Clipping, material losses & scrap rates	Material production process	Parts manufacturing process	Vehicle manufacturing process
Level 1	no clipping, material losses or scrap neglected	Generic footprint per kg of vehicle curb weight No differentiation by material, parts or production processes		
Level 2	Generic clipping, material losses & scrap rates accounted for (e.g. via markup)	Specific vehicle information from BOM & IMDS/CMDS (e.g. vehicle curb weight) Generic representation of production or manufacturing processes		
Level 3	Specific/individual clipping, material losses and scrap rates	Supplier individual primary data on production of hotspot materials*	Supplier individual primary data on production of hotspot parts*	OEM specific primary data for inhouse hotspot processes & hotspot parts*
	Generic clipping, material losses & scrap rates	Secondary information for materials of remaining parts	Secondary information for remaining parts	Secondary information for remaining parts & processes
Level 4	Specific/individual clipping, material losses and scrap rates	Supplier individual primary data on production materials*	Supplier individual primary data on production of parts*	Supplier & OEM-individual primary data*

\*alternatively secondary data to fill gaps in primary data

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## SG2 – SG3 ALIGNMENT



	SG2 & SG3	SG6		SG2	SG3	SG3	SG4	SG5	
LCA Level	Clipping, material losses & scrap rates	Energy provision	Logistics	Material production process	Parts manufacturing process	Vehicle manufacturing process	Use phase	EoL	Representativeness
Level 1	no clipping, material losses or scrap neglected	<i>to be filled</i>	<i>to be filled</i>	Generic footprint per kg of vehicle curb weight No differentiation by material, parts or production processes			<i>to be filled</i>	<i>to be filled</i>	Global average /regional average
Level 2	Generic clipping, material losses & scrap rates accounted for (e.g. via markup)			Specific vehicle information from BOM & IMDS/CMDS (e.g. vehicle curb weight) Generic representation of production or manufacturing processes					Global average /regional average
Level 3	Specific/individual clipping, material losses and scrap rates			Supplier individual primary data on production of hotspot materials*	Supplier individual primary data on production of hotspot parts*	OEM specific primary data for inhouse hotspot processes & hotspot parts*			Regional & individual supply chain for hotspots
	Generic clipping, material losses & scrap rates			Secondary information for materials of remaining parts	Secondary information for remaining parts	Secondary information for remaining parts & processes			
Level 4	Specific/individual clipping, material losses and scrap rates			Supplier individual primary data on production materials*	Supplier individual primary data on production of parts*	Supplier & OEM-individual primary data*			Individual supply chain

\*alternatively secondary data to fill gaps in primary data

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## SG2 – SG3 ALIGNMENT



Thank you