EG A-LCA
Automotive Life Cycle Assessment
SG3

Tuesday, 21 November 2023

10h00-12h00 (CET)

Online (ZOOM)

Primary Data Share (PDS) Data Quality Rating (DQR) Clepa EG A-LCA

Pierre Mulin

Following slides and data shared with courtesy of CX

Catena-X

Primary Data Share (PDS)

What for :   Create visibility on the share of primary data in PCF calculations,

Why :   PDS has been identified as one of the several data that can add value to a PCF single Data

How :   is it calculated through the supply chain (see below)
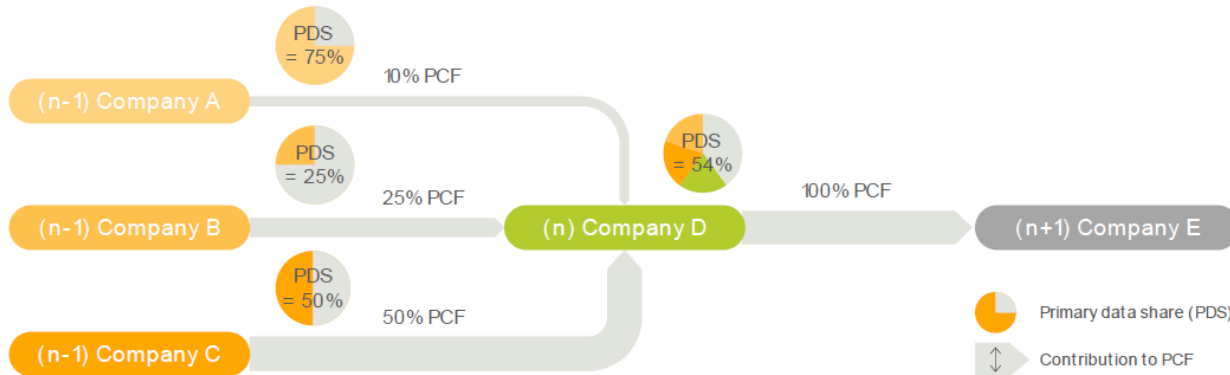

Figure 10: PCF cascade of primary data for an exemplary supply chain.

$$PDS = \frac{\sum(|PCF_i| \cdot PDS)}{\sum|PCF_i|}$$

Table 4: Primary data share of the example as in Figure 10.

	PDS input	PCF share	PDS output
Tier A	75%	10%	75% * 10% = 7.5%
Tier B	25%	25%	25% * 25% = 6.3%
Tier C	50%	50%	50% * 50% = 25%
Tier D	100%	15%	100% * 15% = 15%
Total		100%	7.5% + 6.3% + 25% + 15% ≈ 54%

Data Quality Rating (DQR)

What for : Highlight the ability to collect the appropriate data with a quantified KPI

Why : DQR has been identified as one of the several data that can add value to a PCF single Data

How : ❶ is it calculated at **each step of the supply chain** on 5 topics (technology, Time, Geography, Completeness, reliability) rated Good / Fair / Poor(see below) and flow downed like PDS

❷

❶

Data quality rating	1 – Good	2 – Fair	3 – Poor
Technology (TeR)	Same technology	Similar technology (based on secondary data)	Different or unknown technology
Time (TiR)	Data from reporting year	Data less than 5 years old (creation date of dataset)	Data more than 5 years old (creation date of dataset)
Geography (GeR)	Same country or country subdivision	Same region or subregion	Global or unknown
Completeness (C)	All relevant sites for specified period	<50% of sites for specified period or >50% of sites for shorter period	Less than 50% of sites for shorter time period or unknown
Reliability (R)	Measured activity data	Activity data partly based on assumptions	Non-qualified estimate

The data quality rating for activity data or an emission factor shall then be calculated from the five data quality indicators as an arithmetic mean.

$$DQR = \frac{TeR + GeR + TiR + C + R}{5}$$

❷ $$DQR_{total} = \frac{\sum(DQR_i \cdot |PCF_i|)}{\sum|PCF_i|}$$

❸ **Option :** (CX Baseline) 2 DQRs
(one for Primary data, on for secondary data)