Guidance for
Allocating Burdens and Benefits of Materials Shared Across Product Systems

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Problem
The method of allocation of burdens for materials which cross product system boundaries (i.e., recycled or reused materials) can vary based on subjective value choices. A harmonized method of allocation will: enhance comparability of EPDs; improve consistency across value chains; and avoid twice counted or uncounted environmental burdens.

Solution
PCR committees shall consider allocation protocols used by related adjacent product categories in the value chain. For example, a concrete PCR would consider any allocation rules specified in an existing cement PCR as well as a steel products PCR. If a steel PCR considers slag to be a co-product and allocates a portion of environmental burdens to the slag while a concrete PCR considers slag to be a recovered material with no incoming burdens to the concrete system, then the environmental burdens of slag will not be included in either the steel or concrete EPDs, resulting in a significant gap in information to EPD audiences. Such a situation should be avoided. The PCR shall cite any adjacent PCRs considered and state whether a consistent allocation rule was adopted. If the PCR does not adopt a consistent allocation rule, a justification shall be given along with a statement of what inputs or outputs, which taken together with an EPD produced with the other PCR, might be twice counted or uncounted.

PCRs shall not allow the inclusion of avoided burden credits to be applied within the system boundary. Such credits may be separately disclosed as supplementary information, such as Module D, as defined in ISO 21930. For example, if a product is expected to be recycled at a rate of 90% at the end of its life, it might avoid the production of primary material by an equivalent amount. That benefit of decreased burdens happens outside the system boundary of the current product, but it may be disclosed separately in Module D.

PCRs shall not allow the inclusion of avoided burdens that might have occurred from a recycled or reused material entering the product system. For example, if a product uses recovered biomatter as an input that might have broken down and released methane emissions were the biomatter not recycled, those avoided methane emissions are not within the product system boundary.

Definitions

Co-product: any of two or more products coming from the same unit process or product system (ISO 14044, 3.10)

Secondary material (a.k.a. recycled material): material recovered from previous use or recovered from waste derived from another product system and used as an input in another product system (ISO 21930, 3.6.4)

Reused material: material or product recovered from previous use and used as an input in another product system without significant modification (small adjustments and cleaning may be necessary to prepare for the next use) (adapted from the Ellen MacArthur Foundation)

Waste: substances or objects which the holder intends or is required to dispose of (ISO 14044 3.35)