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The **ABCs** of PCRs



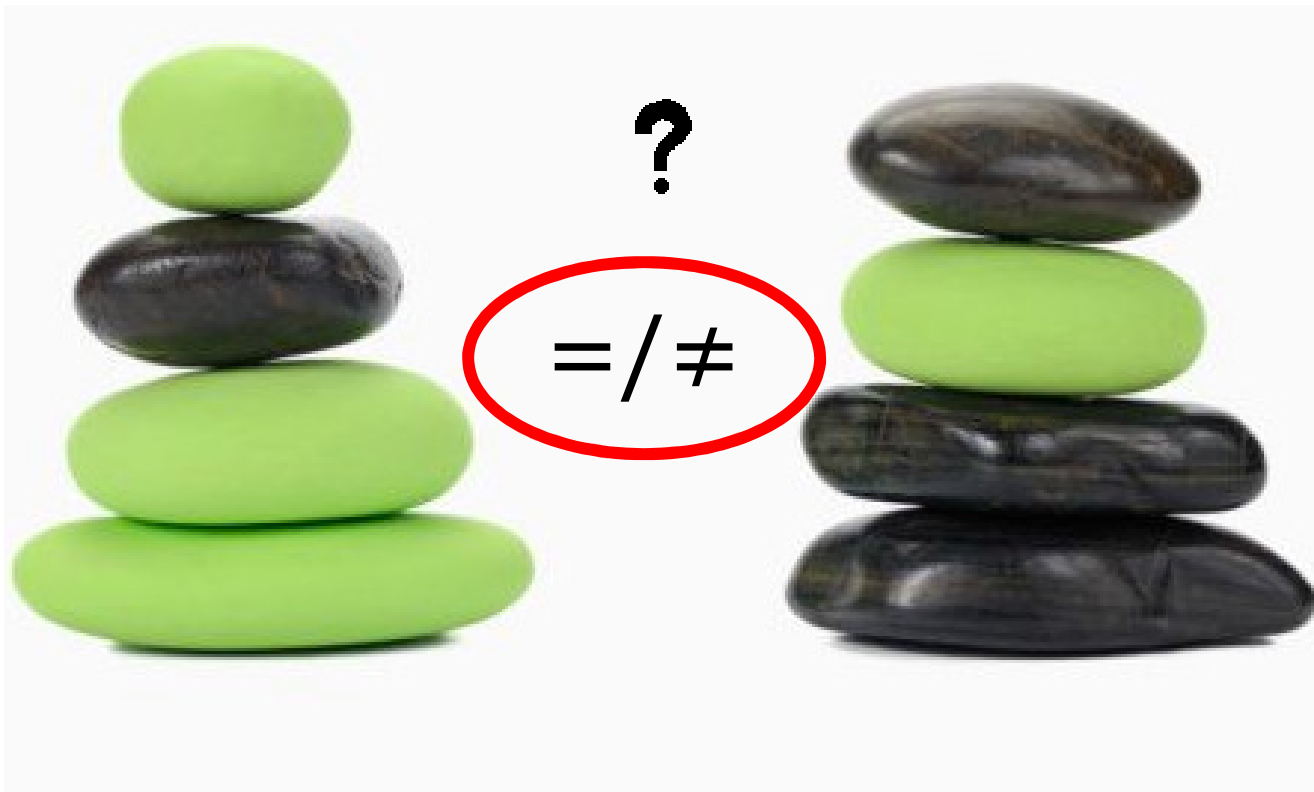
What is a PCR?

Product Category Rules

Set of specific rules, requirements, and guidelines for developing type III EPDs.

Product Category

Group of products that can fulfill equivalent functions.



Product Category Rules

Separate PCR for each functional unit

Also scoping of EPD-specific issues such

as:

The format of the label

Information about the program and the verifier

Created by the Program Operator

LEED® Facts
[Your Project Here]
[City, State, County]

LEED for New Construction

Platinum 110*

Sustainable Sites	26
Water Efficiency	10
Energy & Atmosphere	35
Materials & Resources	14
Indoor Environmental Quality	15

**Out of a possible 100 points + 10 bonus points*

Innovation & Design	6
Regional Priority	4



Need for PCR

The ISO standard is not prescriptive enough.

Requirements

Modularity

Flexibility

Verification

Comparability





Modularity

LCA data for materials/parts should 'stack up' into products

Boundaries should be cradle to grave

Information modules supported by ISO 21930





Transparency

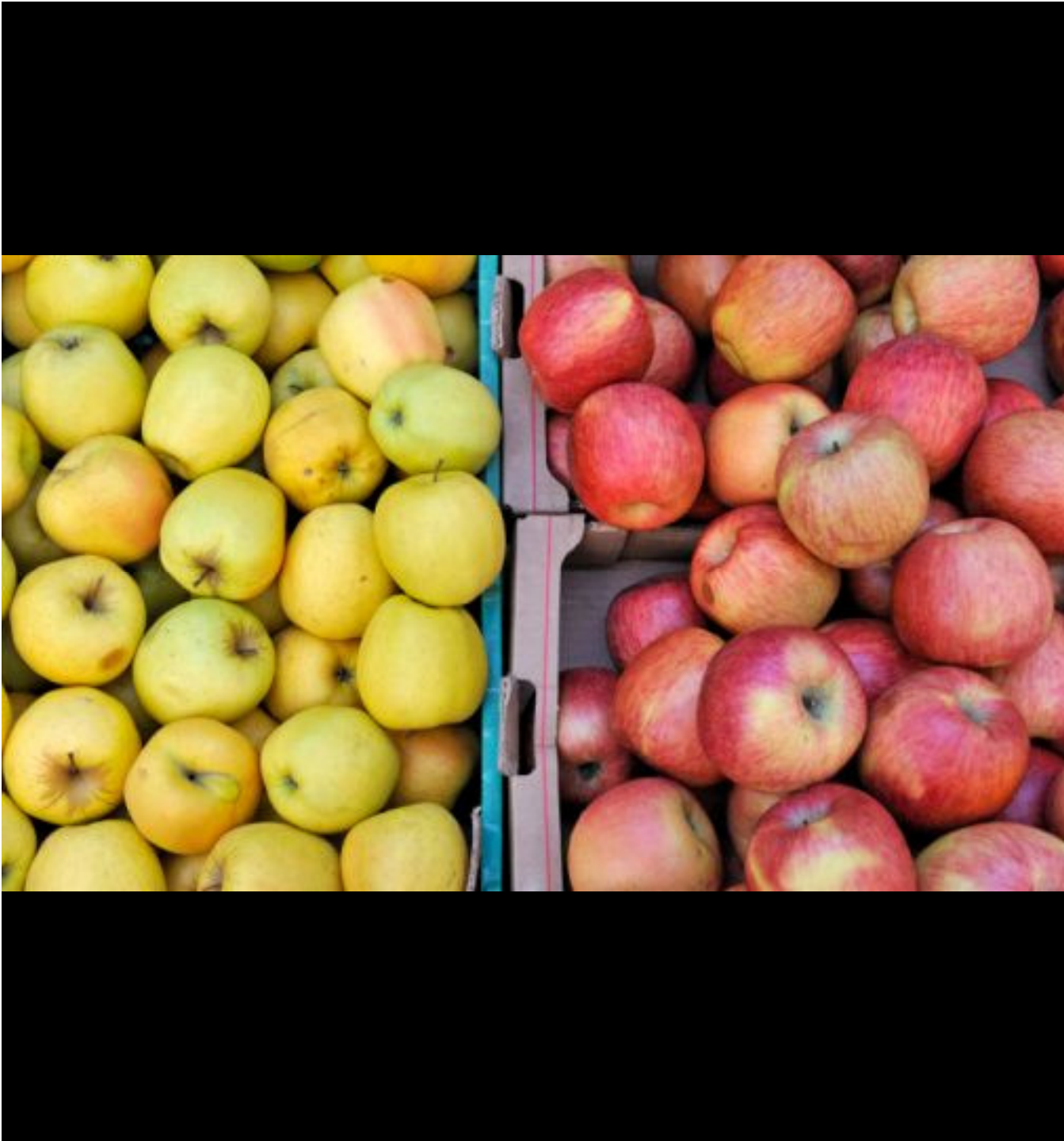
- Program procedures
- Engagement of interested parties
- Review existing PCRs
- Open consultation
- Publicly available PCRs



Flexibility

Supports multiple
Program Operators
Allow additional
information to be
communicated like
chemicals of concern





Comparability

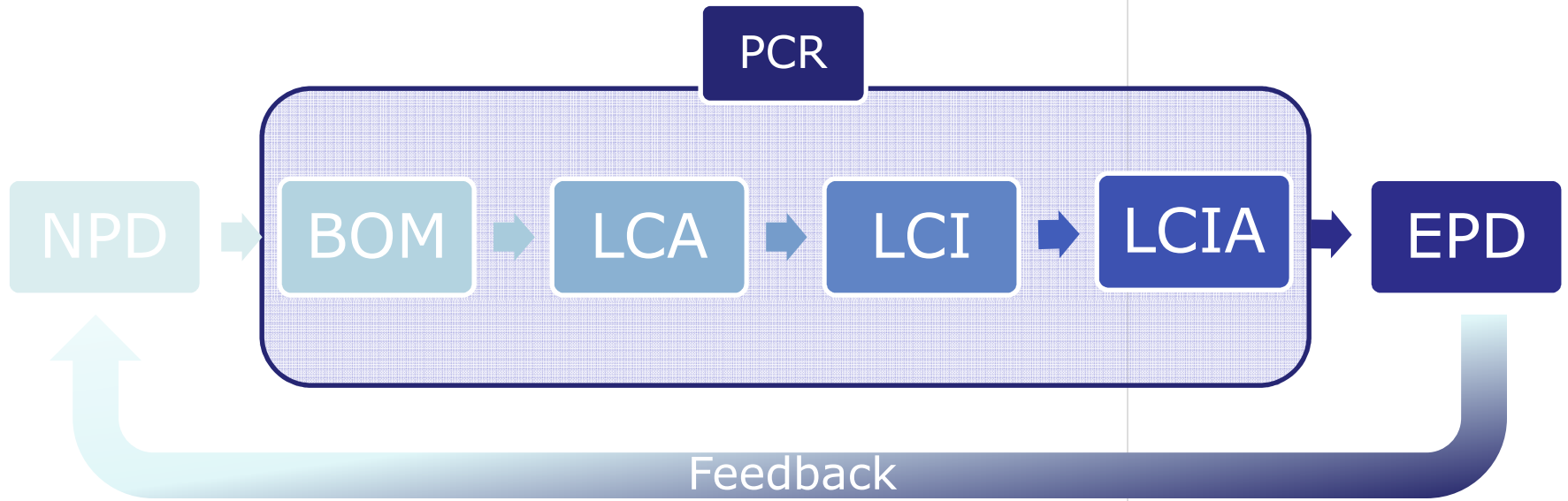
Desired outcome is compare products based on life cycle data

Must include same life cycle stages

Requires uniform assumptions

Can't do this today!





Program Operator Requirements

Can be a Company, Association, or 3rd Party

Solicit open participation in the PCR development

Ensure balanced PCR committee

Maintain conformance to relevant ISO and other relevant standards

Qualified critical review panel

Create, maintain and publish the final PCRs

May verify EPD conformance to PCR



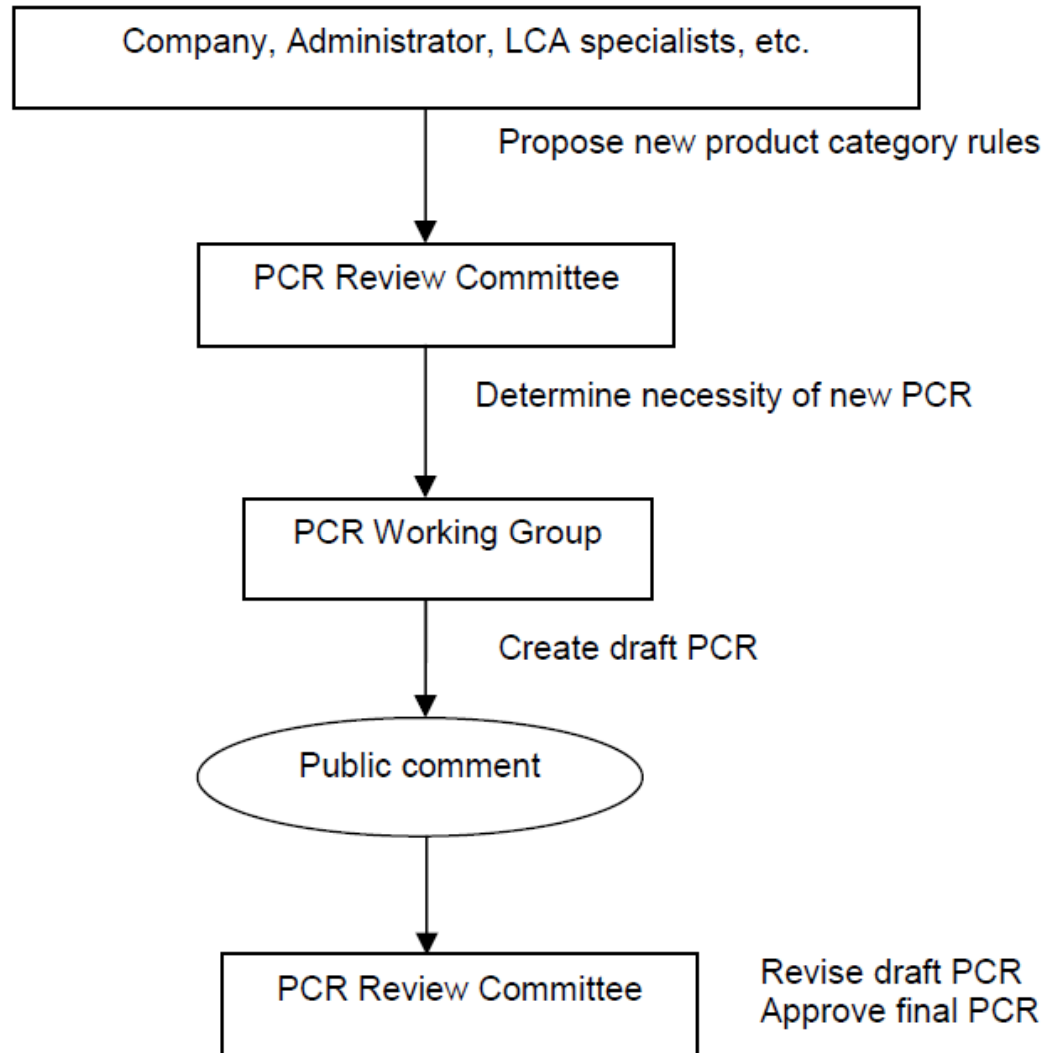
Japan Environmental
Management
Association for Industry



**From Draft ASTM standard*



Developing a PCR



Draft BIFMA Seating PCR Elements



Product category definition

BIFMA has approximately 15 product categories

Globally, over 40,000 unique product categories

Goal & Scope

Shall not be of a comparative nature

Conduct LCA to meet Type III requirements

Functional unit

Chairs required to meet the service life of 10 years

Report chemicals of concern

Based on e3 Annex B List

Cut-off criteria

99%



PCR Elements

System boundaries

What needs to be included and modeled?

Transportation

End of Life

Primary/secondary data

US/EU data

LCIA methodology

How do I calculate the impacts?

Global warming potential (IPCC)

Acidification potential (TRACI)

Photochemical ozone creation potential (TRACI)

Eutrophication potential (TRACI)

Human health impact (USETOX)

What inventory to I report?

Water consumption/depletion

Land Use and Habitat Alteration

Energy Use

Resource depletion (fossil & nuclear fuels)



PCR Elements



Allocation rules

How do I assign the relative impact from my processes?

Economic allocation

Mass allocation

Recycling

Types and sources of data

Primary data

Secondary data (GaBi, Simapro, US LCI)

Calculation rules and data quality requirements

Data freshness (10 years)

Parameters to be declared

Life Cycle Inventory

Life Cycle Impacts

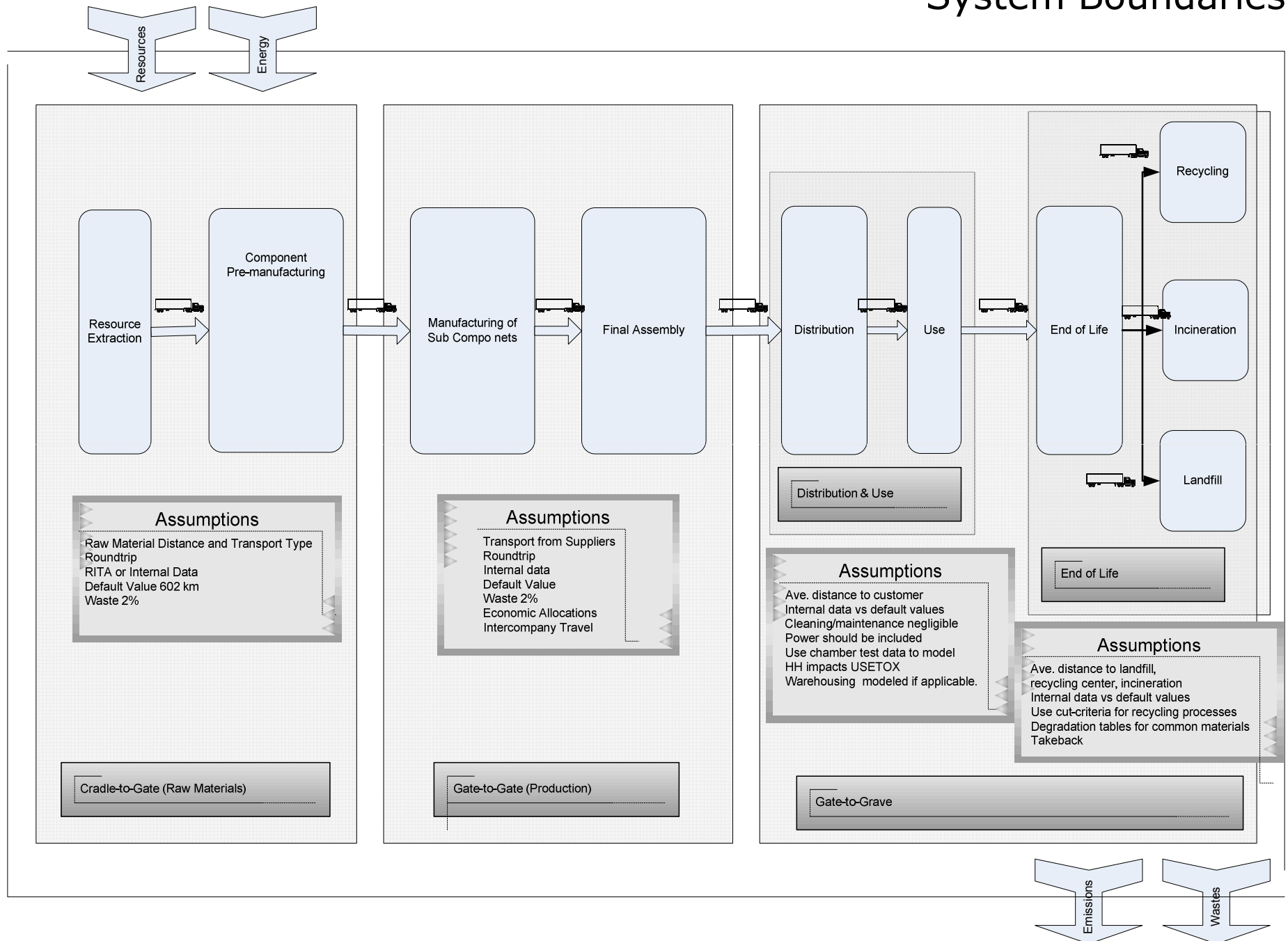
Chemicals of Concern

Recycled Content

Recyclability



System Boundaries



Current PCR Status

Do not compare products

Reasons:

Transport

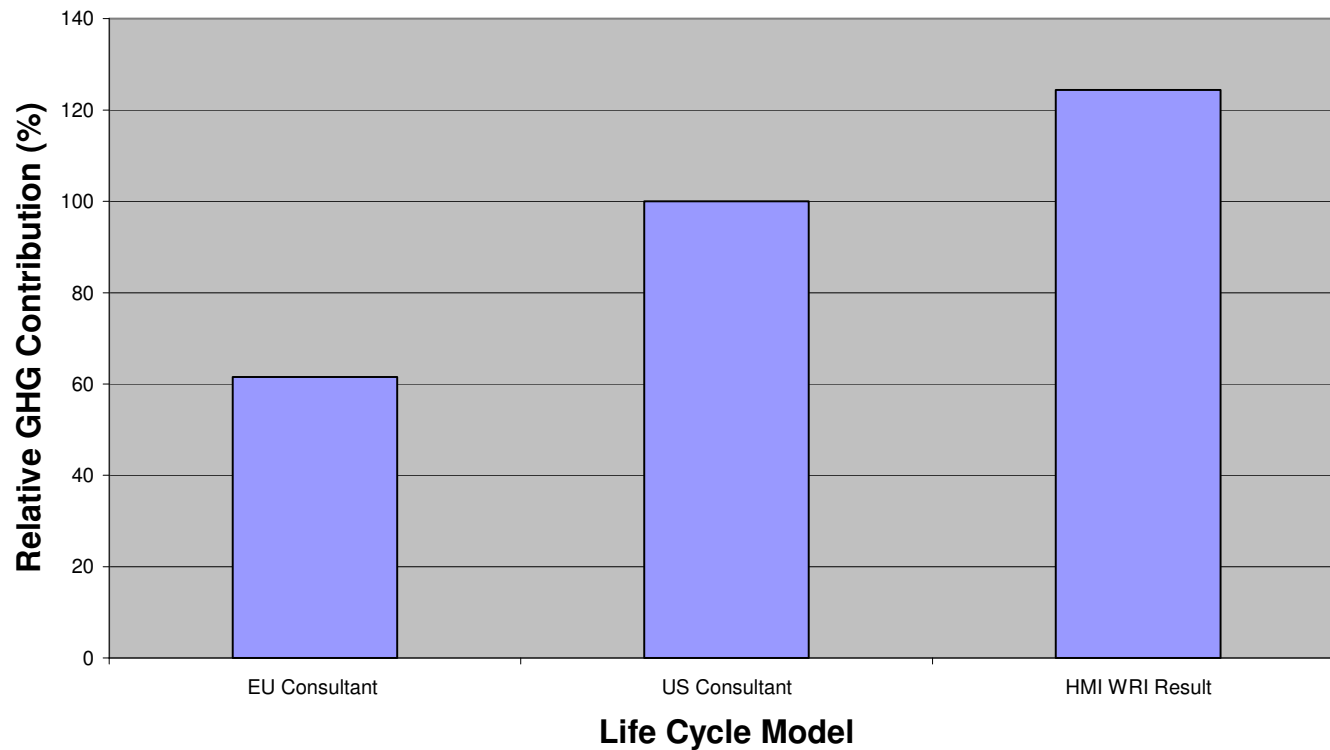
EOL

Primary/Secondary Data

Dataset Source

Data Uncertainty/Variation

Relative Greenhouse Gas Potential for Three Life Cycle Models





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