

Breakout Session 1

Question 1



Question 1

- When considering impact categories and impact assessment:
 - How much regionalization is needed to address specific needs?
 - Might impact categories differ for different categories of road within a region?
- What are some regional examples (from your group)?

Group 1

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Group 1 Response:

The feasibility of implementing regionalization when ...

- Regionalization is important, but difficult to implement.
- Implementation is impact category specific, e.g.:
 - GWP and ozone depletion not regional
 - Eutrophication is regionally sensitive
- Need methodology to prioritize the impact categories
- Start with easiest categories or categories that have the most impact, e.g. eutrophication & toxicity, respectively
- Industry average EPDs should possibly be regionalized
- Limited regionalized inventories/factors have already been developed

Q1b (rephrased): Which impact category should we spend time on to optimize, considering different types of road (high volume highways versus low volume roads) ?

- Spend extra time/energy getting better, available and cost-efficient data
- Include sensitivity analysis
- High level traffic highways are more likely to have greater human and noise impacts
- Low volume traffic roads usually have more impacts on ecosystem

Q1c: Examples of regionalized applications

- Illinois Tollway
- City of Boulder has limited application of LCA
- Regionalized end-of-life impacts, particularly related to toxicity, is helpful, e.g. State of CA

Group 2

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Question1: Localization and Impact Categorization

- Examples

- Global Warming Potential Versus Air Pollution

- Global Warming Potential Versus Acidification (SO₂)

- Examples of GHG vs SO₂ for increased truck loading (Horvath presentation)

- Storm Water Runoff can be a regional problem that may have different significance (City of San Jose example)

Q1: Do We Need Different Impact Categories for Different Regions and Roads

- YES!
- City needs can be different than the state needs. GWP may not be as important as air pollution.
- Many of the impacts have different significance in different regions
- Initial sustainability objectives will govern what kind of impact categories are needed
- How will the EPDs be affected by local impact categories?
- Inventory data collection may be affected for local categorization
- How will the system boundaries be affected by local impact categorization or should they be affected?
- Local impact categorization is more of an interpretation problem and LCA should be done transparently following rules and specifications
- For example, the impacts associated with the materials acquisition phase can have different significance regionally than the impacts associated with the construction and use-phase
- Upstream versus downstream separation can help seeing some of the local effects

Q1: How much regionalization?

- Agency vs state
- State vs city
- Urban vs. rural
- Too specific categories can complicate the data collection and dissemination of results