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The True Cost of Carpet

Environmental Product Declaration Natural Capital Valuation

Erin Meezan, Vice President, Interface

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Agenda

Interface Natural Capital Valuation

Why value natural capital and what is the value of this information?

Interface's EPD Valuation

Methodology Overview

Key Findings

Panel Q&A

Applying NCV to Interface products

ENVIRONMENTAL PRODUCT DECLARATION

Carpet Tile: GlasBac®, Type 6 Nylon

Interface
Modular Carpet Tile with GlasBac® Backing &
Solution Dyed Type 6 Nylon

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Modular carpet tile made with post-industrial content backing and 100% recycled content type 6 nylon, including post-consumer and post-industrial material.

- LCA data
- Public disclosure
- Third party verified
- Available for all products

Interface's EPD Valuation Project

What are the benefits of applying a valuation to an LCA?

Benefits of natural capital valuation as a weighting method

Provides a science based weighting for mid -point impacts:

- Aggregation of the results across impact category or LCA stage, into a single metric: $;
- Facilitates the identification of regional risk factors. In particular, impacts that are water-related are very regional.
- Integrate results with more traditional business metrics – e.g., product margin or retail price;
- Communicate results in a unit understood to non-LCA audience, such as business people or consumers;

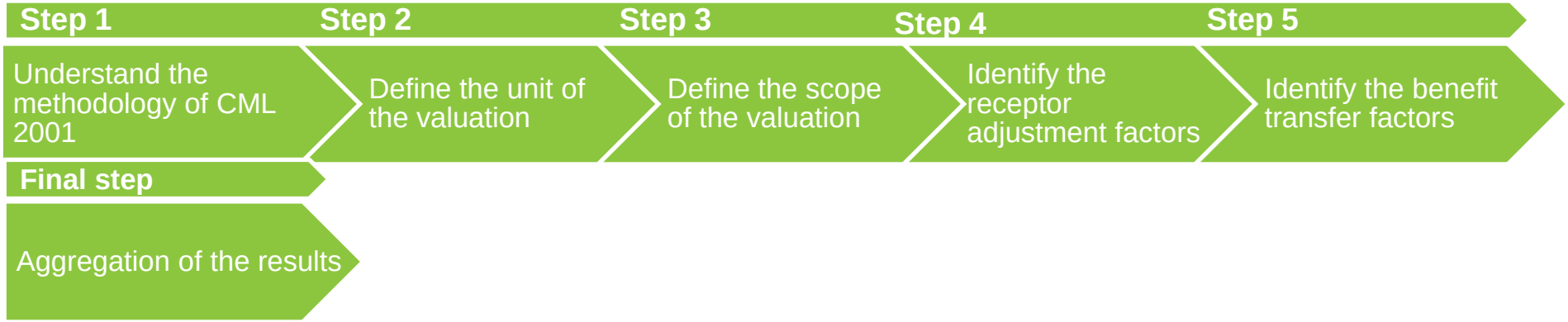
Uncertainty

- Endpoint methods rely on an extra modelling layer, which adds a degree of uncertainty, but are more easily understood;
- The results of Trucost's monetary valuation model should be interpreted relatively and not absolutely; and
- Uncertainties must be stated when applying such a complex methodology.

2. Interface's EPD valuation project

General EPD Valuation Approach

Trucost developed valuation methodologies using robust, scientific and quantitative approaches based on standard environmental economic practices. Below is damage cost coefficient calculation approach used.



Step 4 – Receptor adjustment factors

Impacted receptor	Receptor density (Adjustment factors)
Terrestrial ecosystem	Natural land surface %
Crops	Crop mix
Health	Population density
Water acidification	Water surface %
Forestry	Forest surface %

Step 5 – Benefit transfer factors

Damage cost	Benefit transfer factor
Water consumption	Water scarcity and Purchase Parity Power
Health	Income per capita

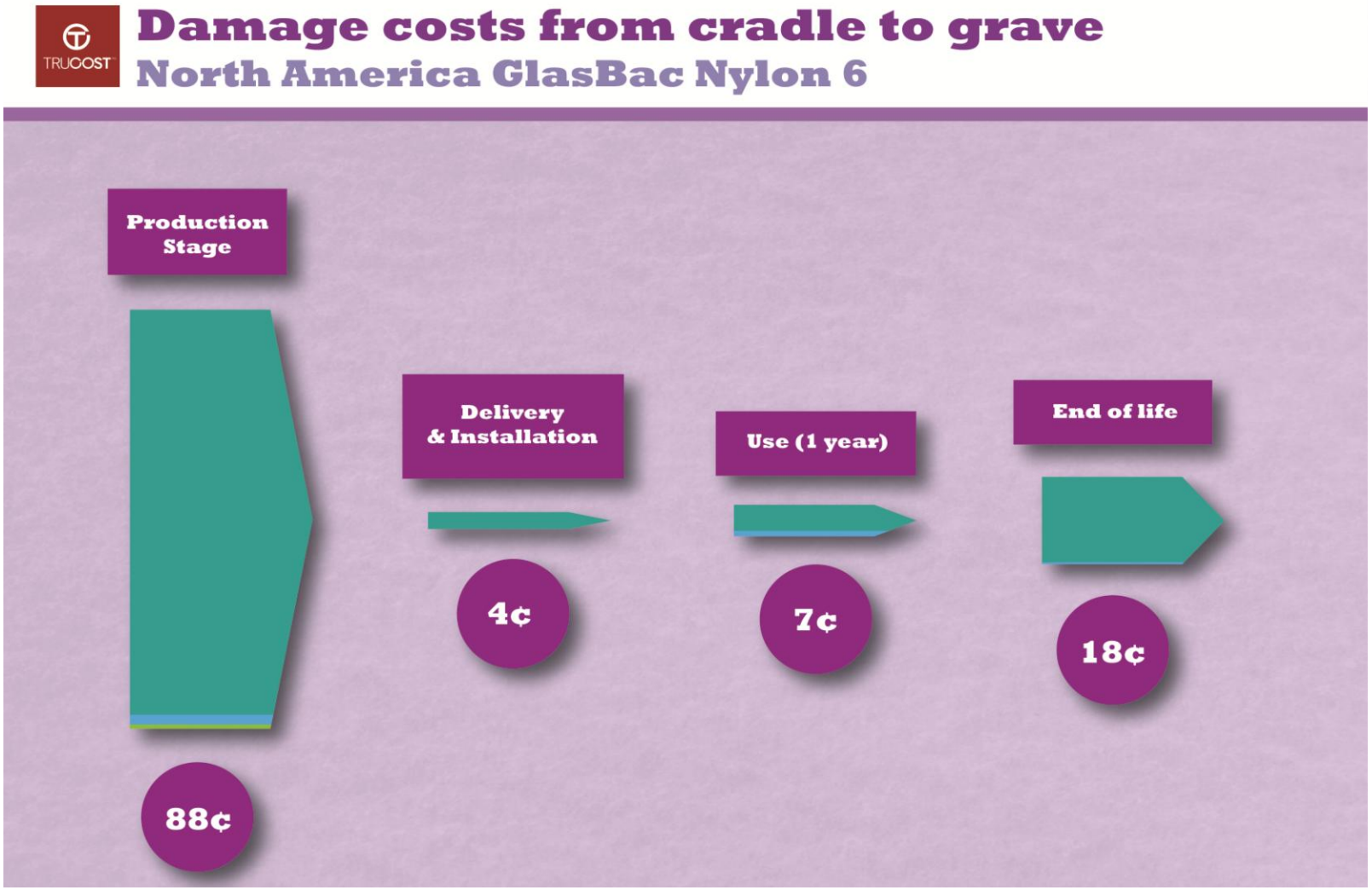
Example of damage cost application
Global Warming Cost: Production Stage

Impact		*Valuation coefficient*		*Impact Cost*
6.77 kg CO_2e/m^2 tile	x	\$0.121 /kg CO_2e	=	**\$0.82/m^2 tile**

EPD valuation project findings

Product level

1. Overall impact by LCA stage



Average retail price = $20/Square meter

EPD valuation project findings

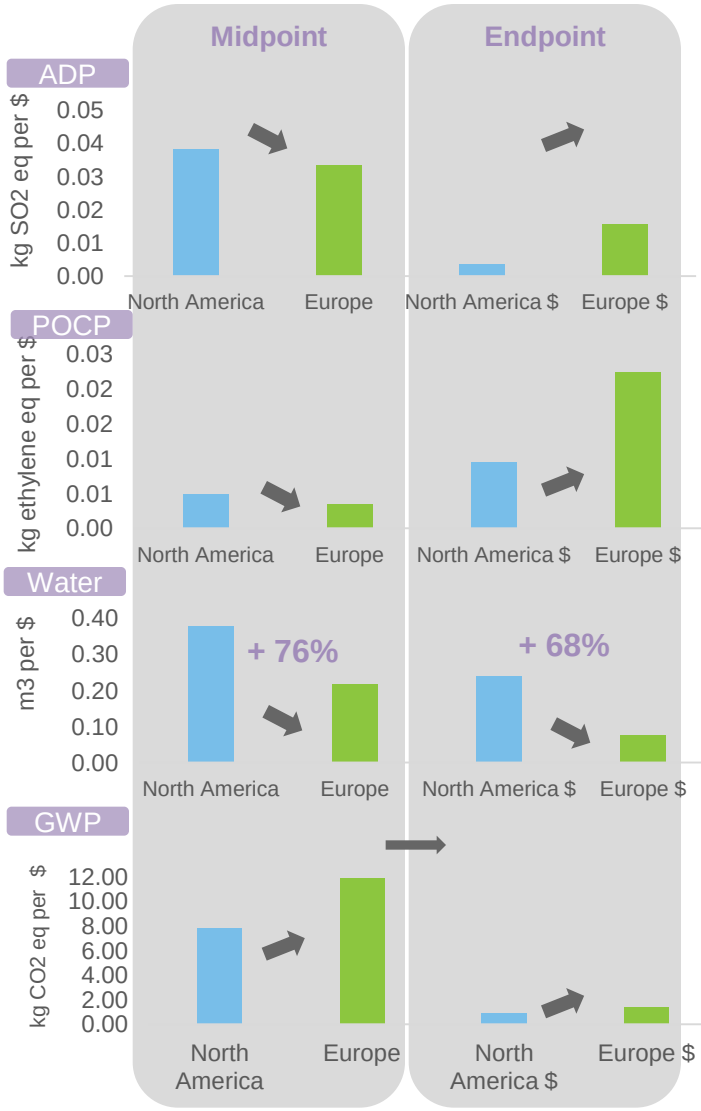
Product level

2. Regional differences in the costs of natural capital (e.g. water scarcity)

- Applying valuation to ADP and POCP changes which product is more exposed then is expected from quantities alone.
- The European carpet tile requires 76% more water than the North American tile. However, in terms of environmental damage cost, this **percentage is reduced** to 68%.
- The North American product has greater water consumption, but from regions that are less water stressed.

3. Neither product is better across all of the end point impact categories.

- Overall the North American carpet tile has a lower environmental cost than the European carpet tile. The environmental costs for the tiles are $1.20 and $1.56 dollars respectively.
- The **largest difference** in the damage costs associated with the two products **is in the product end of life**. The GWP of the EU product (55 vs. 4 U.S. Cents), is almost 3 times greater than the total cost of end of life impacts for the US carpet tile (19 U.S. Cents).

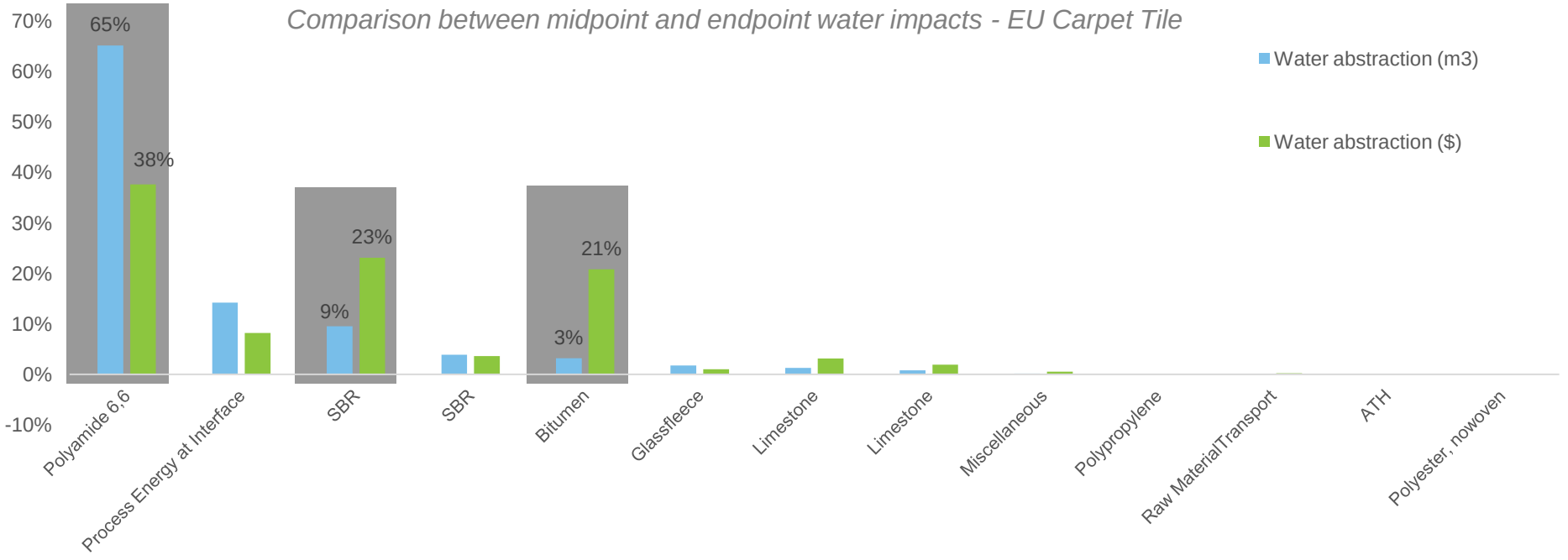


EPD valuation project findings

Material level

4. Regional risks can be included in material level assessments

- The figure below compares the differences between water use (in %) of the midpoint and endpoint for each material during the production stage for the European carpet tile product.
- Polyamide 6.6 represents 66% of water midpoint impact whereas it represents only 38% of water endpoint impact. This is due to fact that this material comes from United Kingdom, which has a lower water scarcity compared to the other countries included in the value.
- On the contrary, SBR and bitumen have a water endpoint impact much more higher than their midpoint impacts. This is due to the fact that these materials come from Germany and Belgium, countries with relatively higher water scarcity.



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Possible next steps - Interface

- Use NVC as an internal weighting method on our LCAs
- Additional impact categories and inventory items
- Additional products and manufacturing locations