# LCA to support circular economy

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#### Context

New Philips sustainability program "Healthy People, Sustainable Planet" launched in June 2016



## Healthy people, sustainable planet – 3 pillars

Sustainable Solutions



70% Sustainable/ 15% Circular revenues **Sustainable Operations** 



Green KPIs, e.g. carbon neutral in 2020

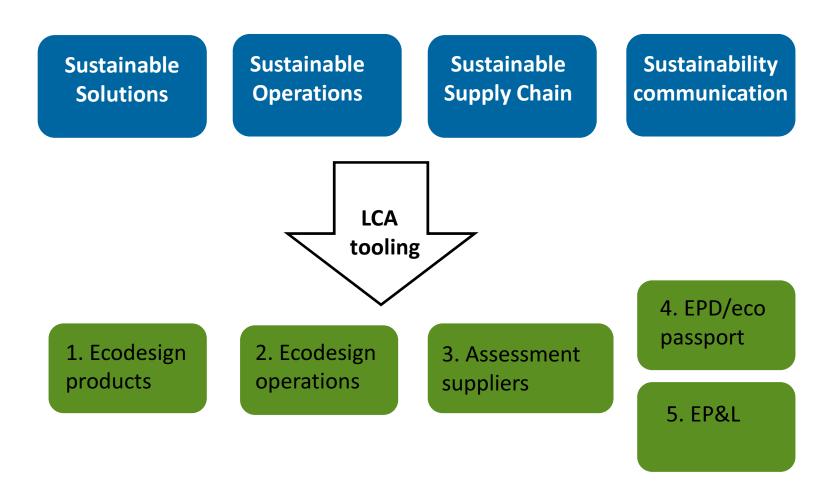
**Sustainable Supply Chain** 



Supplier sustainability assessment

Sustainable communication

#### Business purposes for LCA





#### Ecodesign approach

Life-cycle analysis



Green focal areas:













Green product requirements
- e.g. standby energy zero, no
brominated flame retardants



LCA check at regular intervals to validate the green product requirements



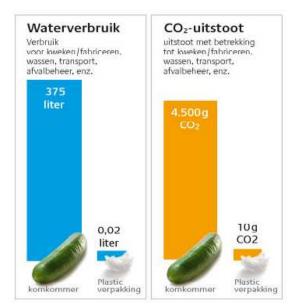
## Are these examples of circular economy?



Jeans with recycled plastic from the ocean



Bio-composite: 40% better LCA score compared to fossil composite



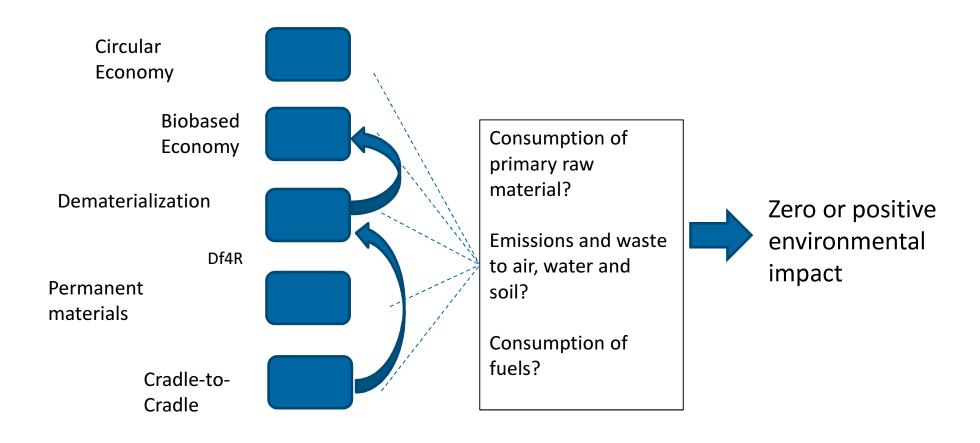
Plastic foil wrapped around cucumbers prevents spillage of food and saves CO2 and water compared to unpacked cucumbers



PVC recycling in Europe: 1M ton CO<sub>2</sub> savings per year



#### Circular economy, recycling, biobased etc. is not the goal





#### Circular economy

- System approach
- Context and location specific
- Substitution, recycling, biobased, longevity <u>can</u> be elements of a circular economy but not necessarily
- 100% closing of loops does not exist (material choice thus essential)
- Focus should not be on measuring circularity but on measuring the net environmental impact
- LCA can be valuable instrument for this: sanity check circular initiatives

But.....



## Standardization and harmonization important

