

Fachgespräch „Schließung von Kreisläufen durch recyclinggerechte Gestaltung von Verpackungen“

Dr.-Ing. Christian Detrois,

Corporate Packaging Manager,
Nestlé Deutschland



Nestlé

Good Food, Good Life



Design for Recycling is important



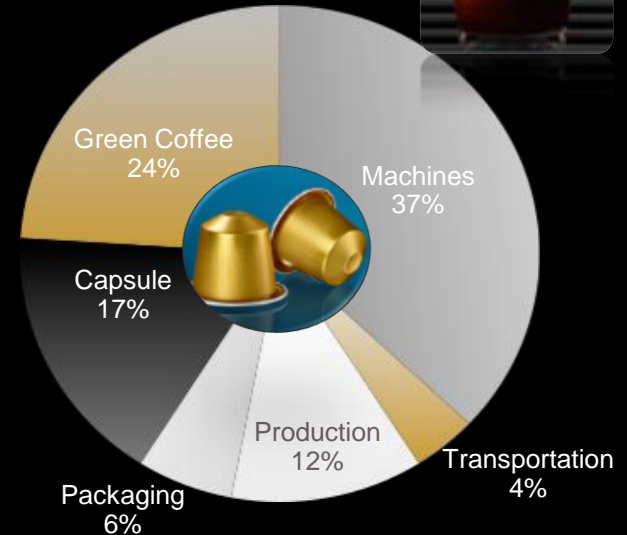
Example: Maggi “5 Minuten Terrine”:

- Change colour of PP cup from white to black for ASIA range by using appropriate black masterbatch that is detectable by Infrared Sorting to enable recyclability.
- Detectability of different black masterbatches was tested in a sorting plant in Leipzig.
- Cups with white and one of the black masterbatches were detected as PP via NIR.

Life Cycle Assessment takes into account the entire product life cycle...



Greenhouse Gas Emissions of a Cup of Nespresso

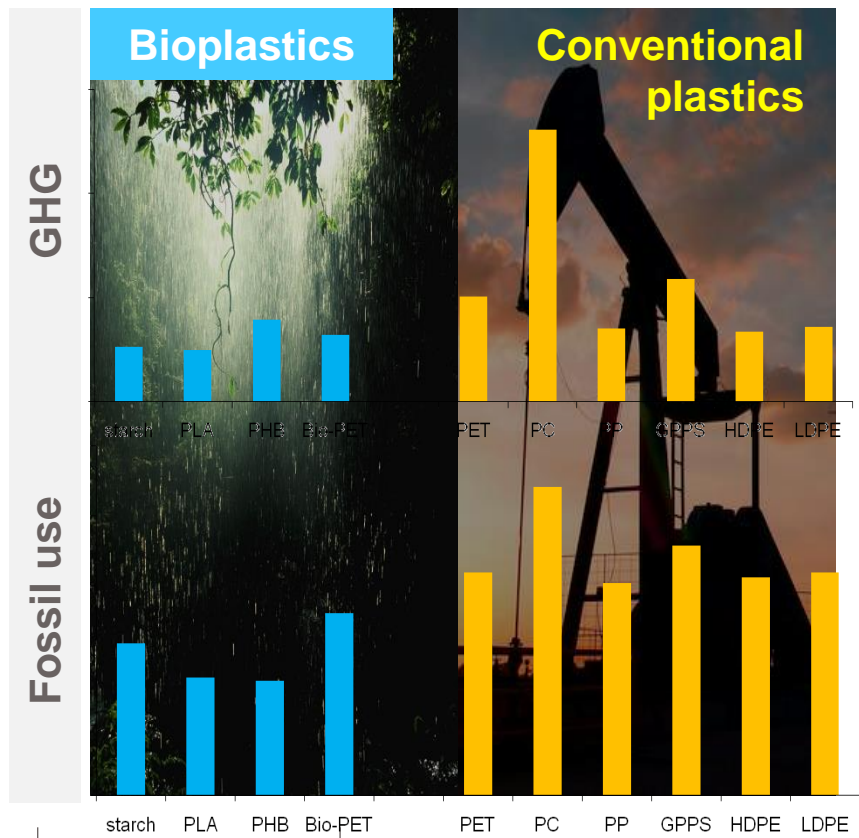


...and a comprehensive set of environmental indicators

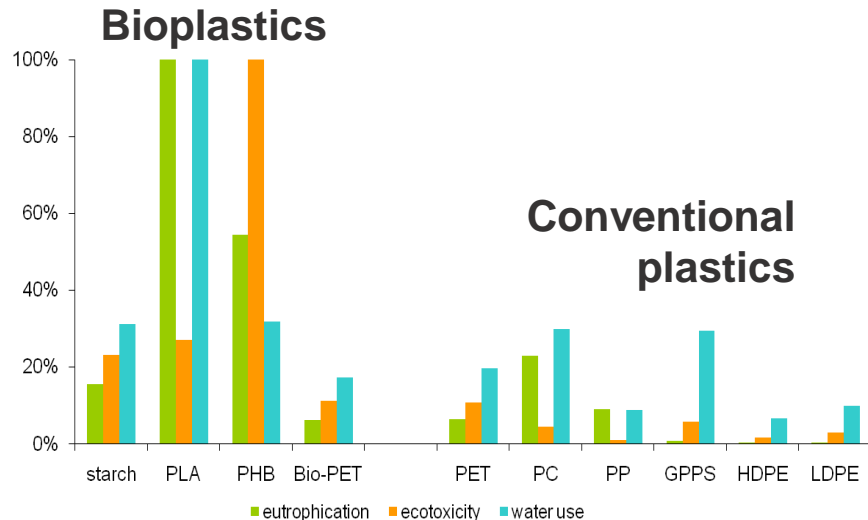


Harmonized LCA Methodology
(ISO 14'000ff, EU Food SCP Rt, Sustainability Consortium)

Bioplastics can reduce GHG emissions and save non-renewable resources – at the cost of biodiversity, land and water use



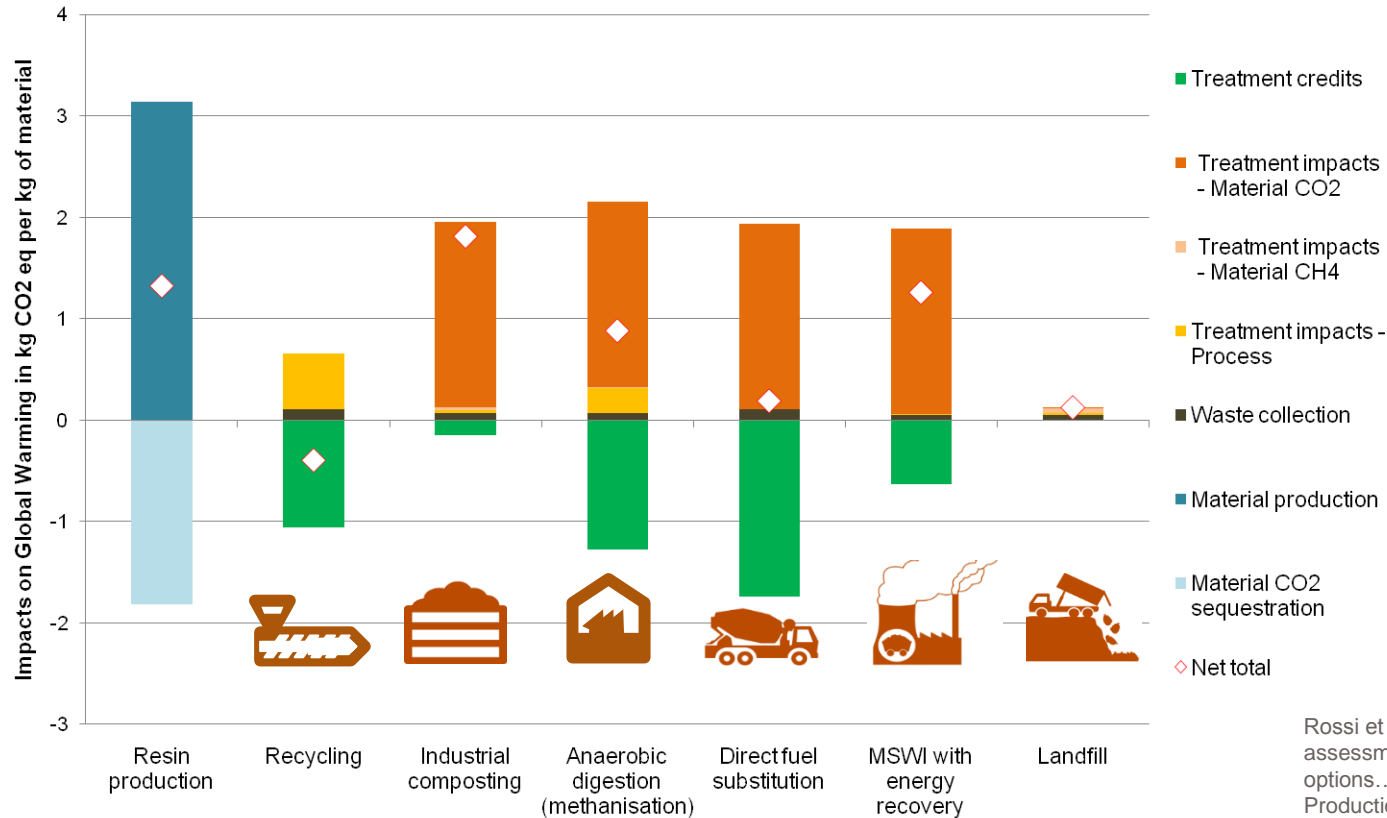
- Eutrophication - Fertilizer use
- Ecotoxicity - Pesticides impact animals
- Water use



Cradle-to-Gate estimated LCA data based on Vink et al, 2010 (PLA), Harding et al 2007 (for PHB), and ecoinvent 2.2 – water use adjusted for avg. corn irrigation in Iowa/Nebraska



End of Life Impacts for a Gen. 1 Bioplastic (PLA)



Rossi et al.: "Life cycle assessment of end of life options...", Journal of Cleaner Production 86 (2015) 132-145



