

# Nespresso commissioned Quantis for the environmental assessment of its capsules

## Context

Which solution has the lowest environmental impacts among the Nespresso espresso and the alternative espressos?

- Our peer reviewed Life Cycle Assessment study finalized early 2011 highlights that, amongst all compared capsule options to make an espresso with a Nespresso machine, the system where the aluminium capsule from Nespresso is sent to recycling after use is today the best alternative from an environmental perspective.
- A complete set of indicators has been evaluated and corroborates these conclusions.

**Quantis**

## Quantis Solution



Comparison of the environmental life cycle impacts of different espresso systems made with a Nespresso machine



Evaluation of various end-of-life routes for coffee grounds and packaging systems



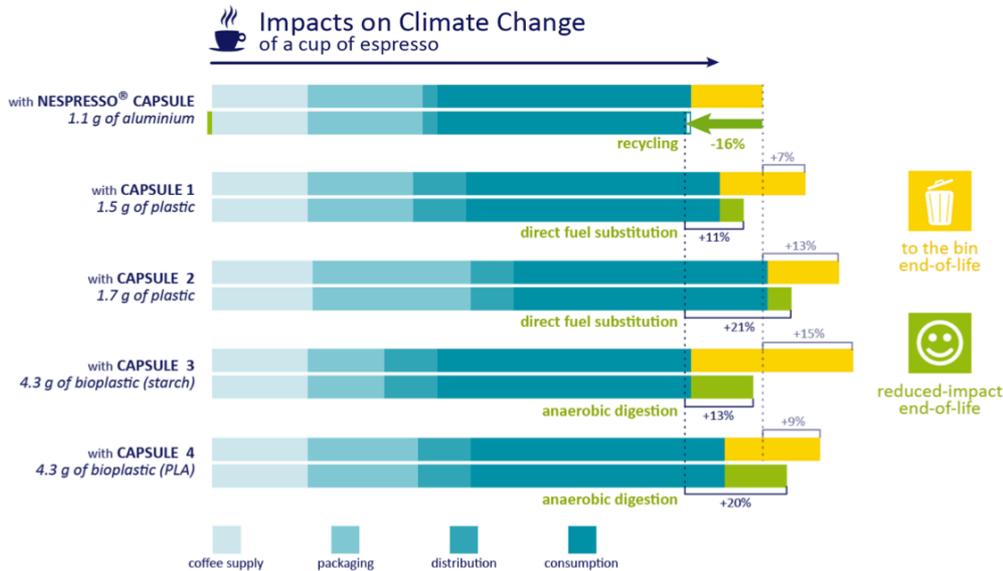
Identification of key parameters and evaluation of their influence on the conclusions

“To ensure we have a complete understanding of the environmental impacts of our capsules, we commissioned Quantis, specialist environmental consultants and world-leading experts in that field.”

**Guillaume Le Cunff**  
International Marketing  
& Strategy Director  
Nespresso

**NESPRESSO**

# Results



- Among all studied scenarios on French and Swiss markets, the best option in terms of carbon footprint is the espresso made with the Nespresso capsule sent to recycling. When comparing the scenarios where the capsule is put in the bin, a Nespresso capsule is the best alternative.
- While only carbon footprint is presented here, other environmental indicators have been assessed and corroborate these conclusions

## Key findings

- Consumption, coffee supply and packaging are the dominant life cycle stages
- End-of-life includes, by order of importance, capsule, coffee grounds and other packaging
- Aluminum capsules are airtight, so no surpackaging is needed, which compensates for the greater impact of aluminum production
- End-of-life solution has a significant influence on final conclusions
- Aluminum capsule recycling allows a significant benefit
- Plastic emits carbon at end-of-life but direct fuel substitution allows high energy recovery that partly compensates for these emissions
- Carbon stored in bioplastics is released during degradation