

# Challenges for LCA Uptake, and Role of Universities In the New Zealand LCA Landscape

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# NZLCM Centre



**Partnership:** AgResearch, Landcare Research, Massey University, Plant and Food, Scion

**Mission:** to build capability for Life Cycle Management (LCM) in New Zealand

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# Challenges for LCA Uptake

## **Political levers**

- Lack of drivers

## **Barriers**

- Ignorance about its role
- Agenda driven by focus on single issues
- Misuse of LCA
- Vested interests against using a life cycle approach
- Pre-determined outcomes

## **Practical aspects**

- Time and cost of undertaking LCA studies
- Data availability

# Lack of Drivers

## Rethinking Plastics



# Lack of Drivers

## Rethinking Plastics Food Miles

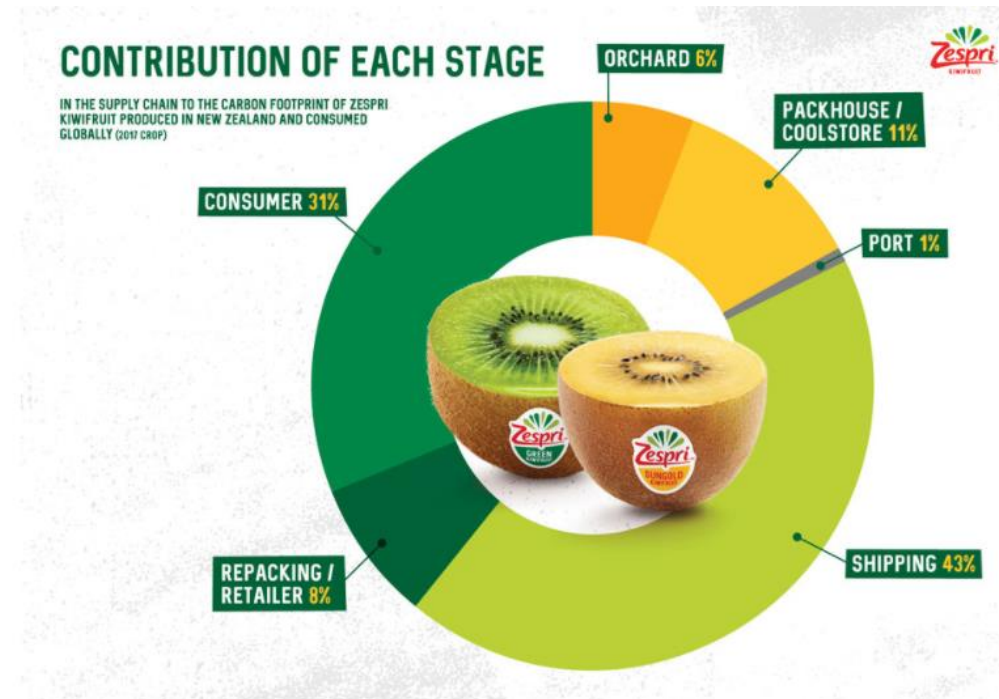


Figure 2. Contribution of each stage in the supply chain to the carbon footprint of Zespri kiwifruit produced in New Zealand and consumed globally.

Compared to many other common food products, the carbon footprint of Zespri's New Zealand supply of kiwifruit is relatively low even though it is cool-stored for long periods and shipped all over the world (see Figure 3).

# Lack of Drivers

Rethinking Plastics  
Food Miles  
Building for Climate Change



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# Lack of Drivers

Rethinking Plastics  
 Food Miles  
 Building for Climate Change  
 Planetary Boundaries

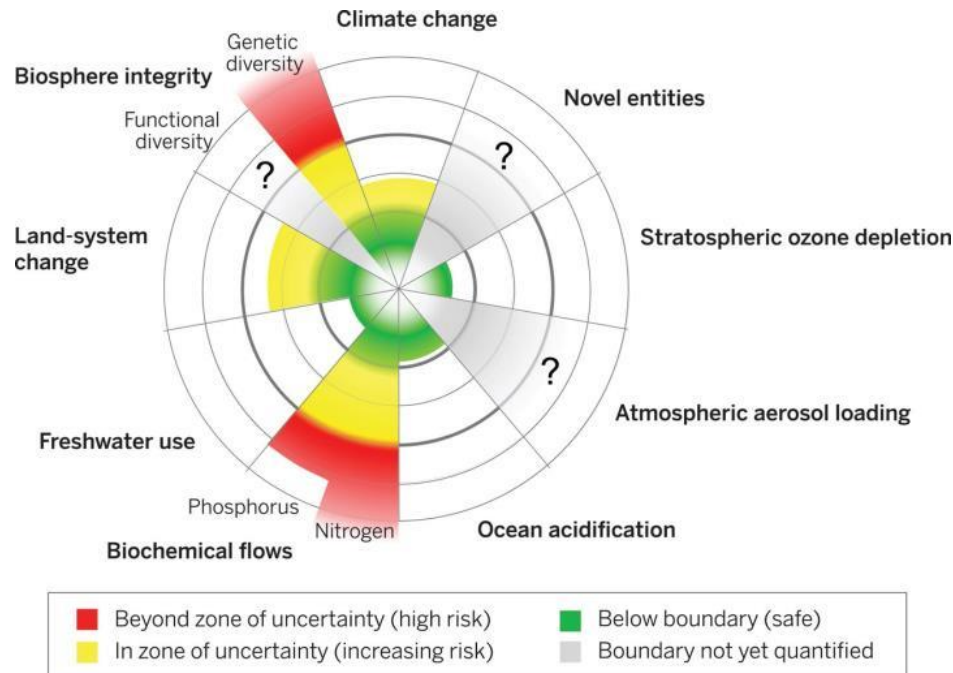


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# Enablers for Barriers - NZ LCM Centre Courses



## **Undergraduate:**

- Bachelor of Engineering: Design With Constraints (3<sup>rd</sup> year)
- Bachelor of Science (Environmental Science): Environmental Issues (2<sup>nd</sup> year), Environmental Solutions (3<sup>rd</sup> year)

## **Postgraduate qualifications:**

- Courses on LCA/M plus research project for Master's (90 or 120 credits)
- Master's programmes in Environmental Management, Engineering Studies, Food Technology

## **Continuing Professional Development courses:**

- Short introductory LCA course



# Enablers for Barriers - Role of Universities

Under [Section 162\(4\) of the Education Act 1989](#) a university is defined as having the following characteristics:

- (i) They are primarily concerned with more advanced learning, the principal aim being to develop intellectual independence
- (ii) Their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge
- (iii) They meet international standards of research and teaching
- (iv) They are a repository of knowledge and expertise
- (v) They accept a role as critic and conscience of society.