



NNFCC

# London 2012

## A Case Study for Bioplastics

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[www.biopolymersummit.com](http://www.biopolymersummit.com)

October 15-17, 2012  
**San Antonio, TX, US**  
**The leading U.S. bioplastics conference**



## London 2012 Targets



- NO WASTE TO LANDFILL
- 70% REUSE/RECYCLE/COMPOST
- Recyclable PET Bottles
- Compostable food waste, eventware & packaging



# UK Landscape

## Emerging UK Policy

- Growing the green economy
- Towards zero waste
- Tackling climate change
- Increasing emphasis on waste prevention
- Growing focus on food and materials security
- New policy in England on:
  - Water
  - Natural environment
  - Waste

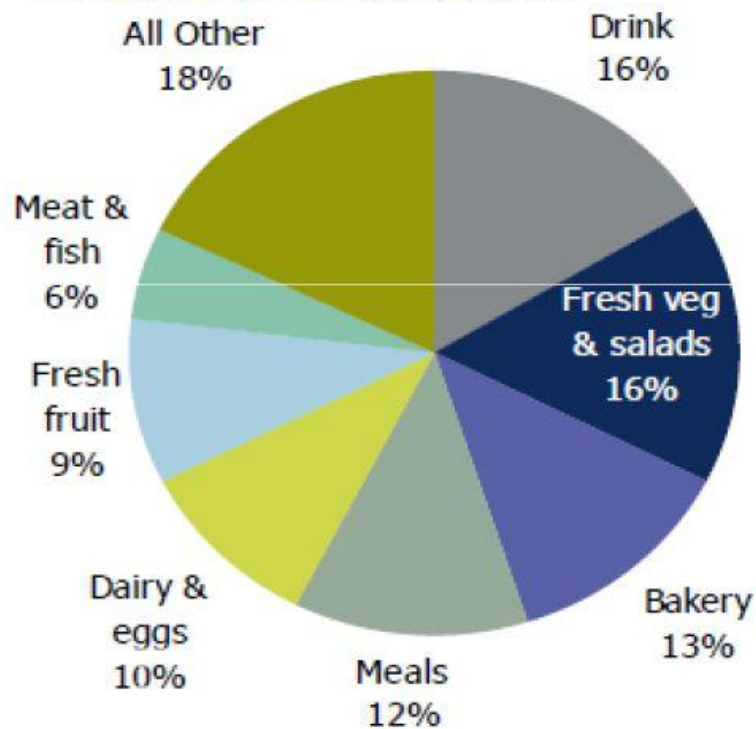


# UK Food Waste



## Waste by Sector

### What's Wasted?



Avoidable food and drink waste, by category, % by weight (total: 5.3mt)

- Worth > £12 billion
- Includes 17 billion "5 a day" portions
- Responsible for the equivalent of 20Mt of CO<sub>2</sub>e
- Is associated with 5% of the UK total water footprint



## Why ?



### Why food is thrown away:

Planning

Buying

Storage

Preparation

Use

- Habits, attitudes, values, motivations, skills, knowledge
- Food & packaging properties & availability; tools



## Drive Towards Communication

### Biodegradability - material function

- Plastic products can provide proof of their compostability by successfully meeting the harmonised European standard, EN 13432



Is origin of material is important?

How do we communicate





## Easy Wins

### 'Most-suitable' current applications

- Fresh Produce – Shelf-life extension
- *'What grows up from the ground should be packaged in something that grows up from the ground'*
- Other short shelf-life foods
- 'closed-loop waste' situations  
e.g. In store cafes, event management,
- Hygiene (flushable) Applications
- Non-moisture sensitive products  
e.g. pulses, pastas
- Garden & Kitchen waste-bags
- Carrier bags
- Organic, Fairtrade, & Natural product lines



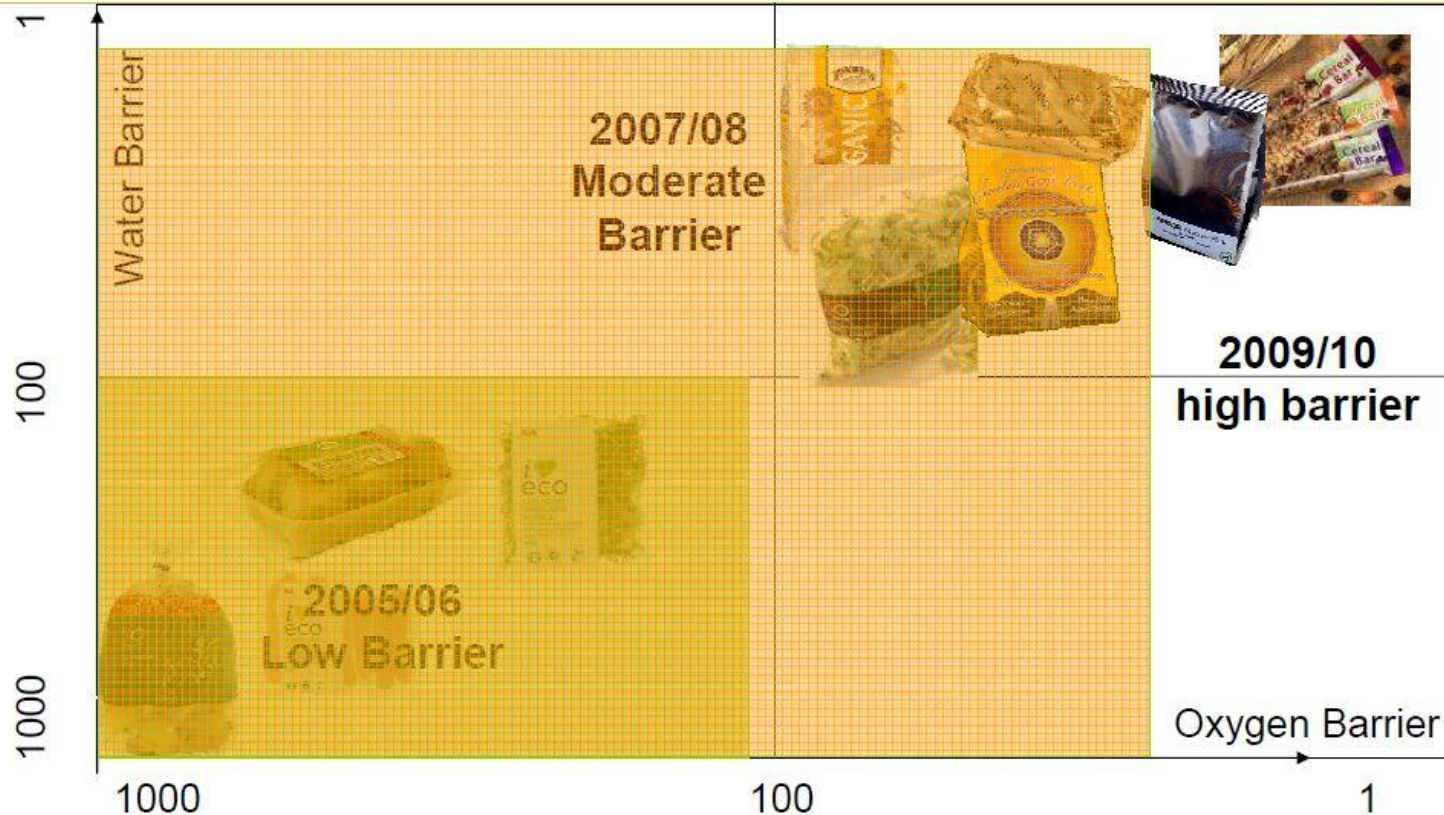
Images courtesy of Innovia, Novamont and Amcor





# More Functionality

## Spectrum of compostable packaging applications





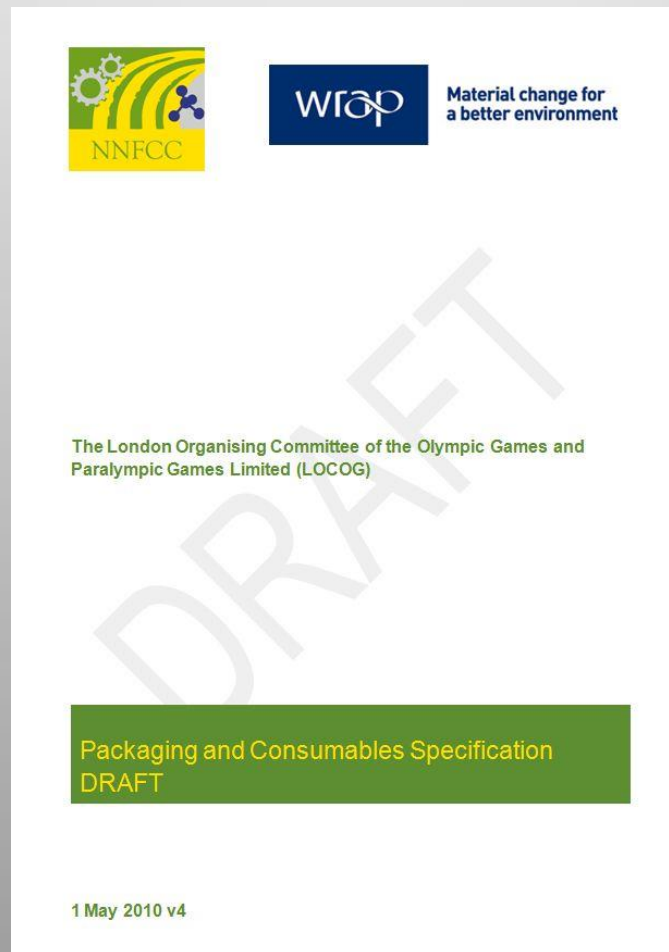
# Event Management





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# 2012 Packaging Specification











The UK's National Centre for Biorenewable Energy, Fuels and Materials





The UK's National Centre for Biorenewable Energy, Fuels and Materials





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# Supply Chain





## Leadership Team



**Lucy Hopwood**

*Biomass & Biogas*

- Anaerobic digestion
- Farming, forestry & waste
- Feedstock planning

Contact Lucy at  
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**Dr Geraint Evans**

*Biofuels & Bioenergy*

- Biofuels
- Biomass combustion
- Adv conversion processes

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**Dr Adrian Higson**

*Biorefining*

- Bio-based chemicals
- Biorefinery development
- Sustainability assessment

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**Dr John Williams**

*Renewable Materials*

- Bioplastics
- Renewable materials
- End-of-life options

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