

BPF Plastics Packaging Seminar

Packaging in Context

Jane Bickerstaffe

Director

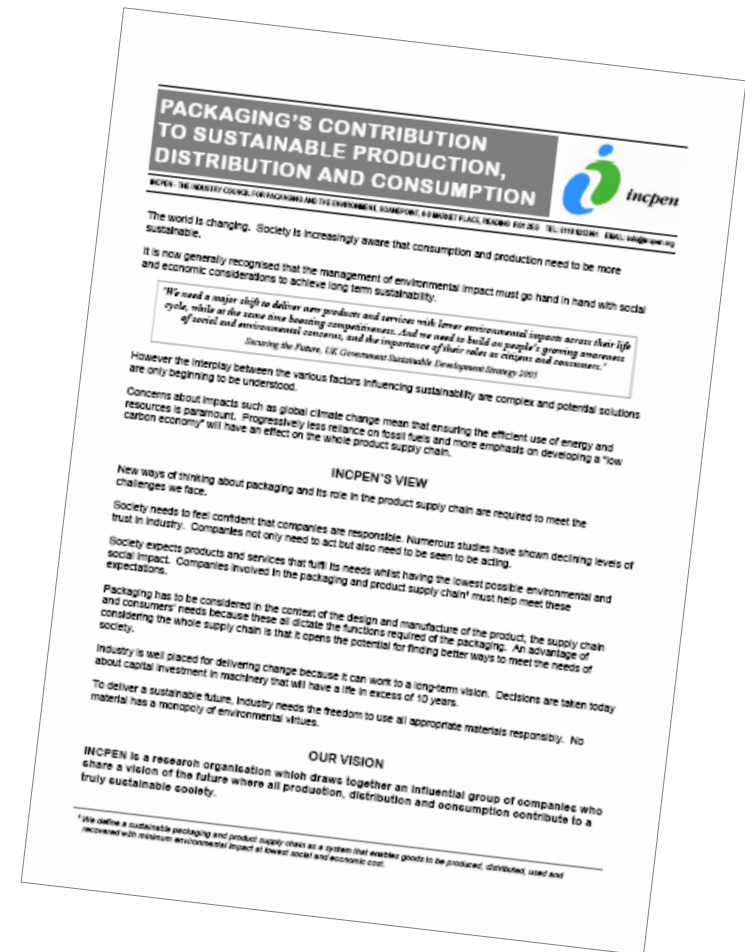
INCPEN

22 April 2015

The Industry Council for research on Packaging & the Environment



Research organisation which draws together an influential group of companies who share a vision of the future where all production, distribution and consumption contribute to a truly sustainable society.



The Industry Council for research on Packaging & the Environment



Major international companies from every stage of the supply chain



- The importance of food packaging
- INCPEN's work on litter in the environment

Circular Economy Package and Global Challenges



- scarcity of some raw materials
- increasing global trade
- emerging economies
- land-based and marine litter
- food waste in the supply chain and in people's homes
- growing obesity issue
- fewer people living together; more people eating on-the-go
- an ageing population – ease of opening, legible print
- multi-channel product delivery systems
- growing desire for fewer artificial additives in food – packaging needs to compensate to keep foods safe

One solution ... Packaging



Manufacturers and retailers need sufficient flexibility in order to contribute to a sustainable economy in terms of growth and jobs by innovating and developing new technologies.

They also need to be able to design packaging that responds to the demands of a rapidly changing society.

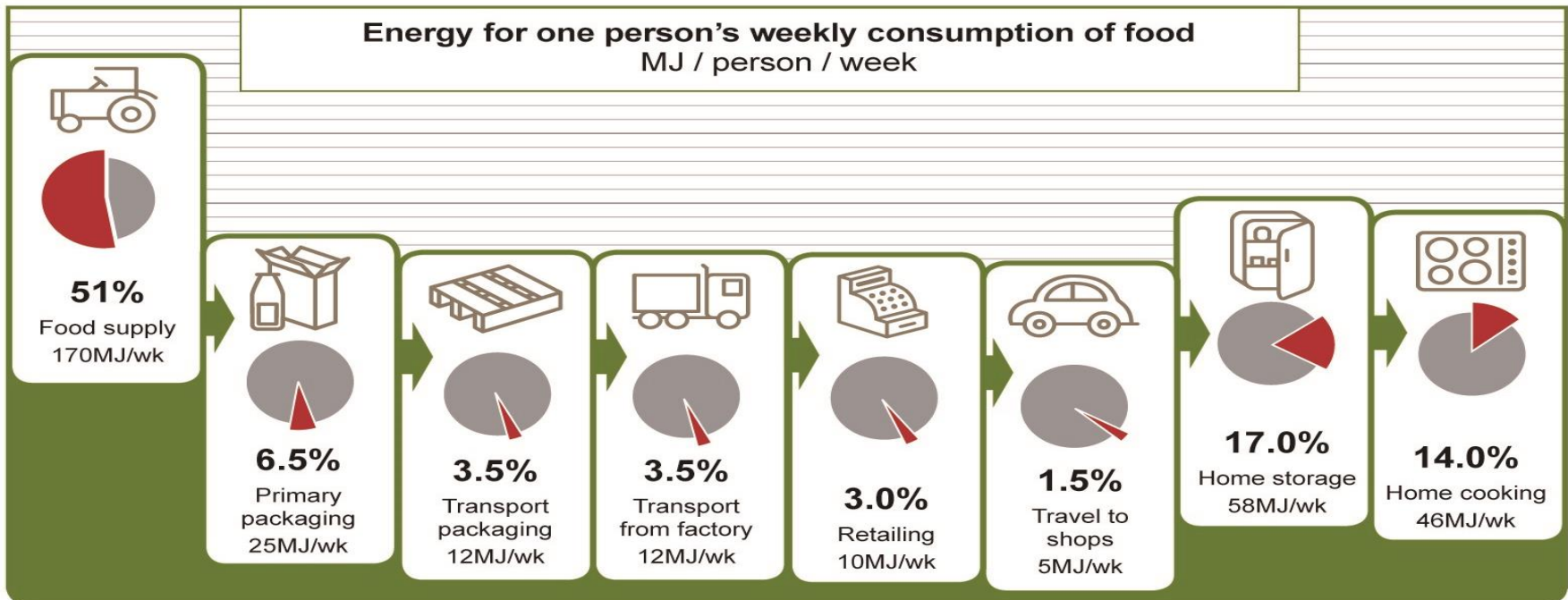
Packaging protects far more resources than it uses



Total Food



Energy for one person's weekly consumption of food
MJ / person / week



Packaging prevents far more waste than it generates



**PACKAGING
MAKES FOOD
LAST LONGER**

When damaged food is
unsaleable, 100% of the resources
used to produce it is wasted.
That's a lot of waste.

thepowerofpackaging.com

Inform consumers about packaging



PACKAGING: IT'S COME A LONG WAY

Lorry side

 My journey → to the supermarket has involved ❄ temperatures from -15°C up to 26°C, ⇄ 12 conveyor belts, 🕸 300 potholes, 🛤 46 dodgy country roads, 🏔 256 speedbumps, 🔄 75 roundabouts and one very swift ! handbrake turn to avoid 🐾 a kamikazee badger. But I'm still in one piece.  📦 Packaging: It's come a long way.

Wasting food wastes all the
resources invested in producing it



Innovative packaging – environmental and social



Vacuum skin pack



Calorie-portion



Pigment replaces label



Reclosable pack



Dip & squeeze – reduced packaging



Single-use portions for developing markets



BUT ... innovation may be restricted
by single issue approach



Recyclability of packaging is being required
instead of resource-efficiency in the supply chain

Measured by recyclability - which is the greenest?



recyclable



not recycled

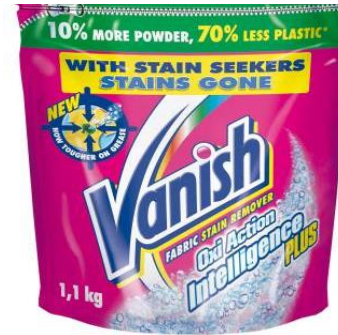
Source: Arno Melchior, Reckitt
Benckiser plc, UK

Measured by weight

- which is the greenest?



78g



18g



Source: Arno Melchior, Reckitt
Benckiser plc, UK

Measured by residual waste

- which is the greenest?



Even if 100% of tubs
recycled, lid 22g,
label 4g remain



18g



Source: Arno Melchior, Reckitt
Benckiser plc, UK

Measured by filling energy

- which is the greenest?

Line speed



80/min



16/min

So ... which is greenest?



No packaging has a monopoly of environmental virtues

Provided it is fit for purpose and prevents more waste than it generates all packaging makes a positive contribution to sustainability

Packaging for ready-meals/fresh olives



Recyclable

- Single polymer: PET pots, trays
- Chilled storage
- Shelf life few weeks

Not recyclable

- Laminate structure: PP/EVOH/PP
- Ambient temperature
- Shelf life few months

BUT ... innovation may be restricted
by a single issue approach



To make recycling easier the number of polymer
types could be restricted BUT

it will then be more difficult to tailor a pack to the
exact needs of a product and more material will be
used.

Explain what packaging does



Explain what packaging does



Explain what packaging does

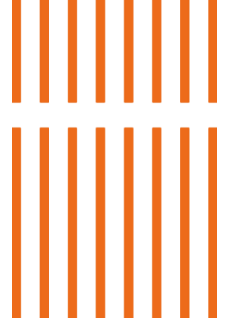


Be realistic about recycling



- Best case scenario:
- 95% of households have collection facilities
- 90% of those households participate and contribute 90% of recyclables
- 90% material is left after removal of contamination
- **maximum** amount of material that can be recycled is **69%** (90% of 90% of 90% of 95%)
- Optimise recycling, increase quality and quantity

LITTER: A NEW APPROACH HUBBUB AND INCPEN



FIND THE TUNE

1

We are creating a new way to fight litter in Westminster, testing the impact of the latest thinking on behaviour change and awareness raising.

THE CHOIR

2

We will bring together key representatives in the community to get their ideas and support. We will create a compelling campaign using ideas from the best international initiatives and concepts developed by leading design students in London.

CREATE A NOISE

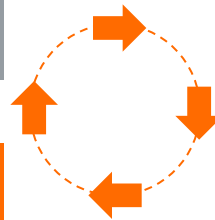
4

We aim to ensure that the campaign generates wider impact. We will do this through media campaigns (national press and social media), engaging with policy makers and creating a 5 point litter manifesto calling on organisations to act.

CREATE A NOISE

3

We will create a 'Delivery Kit', sharing results, lessons and experiences from the pilot that will be freely available to interested organisations and will enable replication of the scalable model.

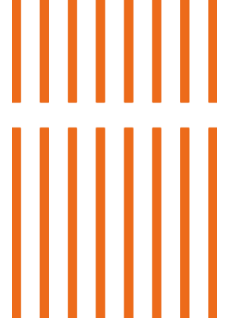


TESTING INITIATIVES

- **GAMIFICATION:** Neighbourhood competitions and prizes promoting positive behaviours eg. Basketball bins
- **VISUALISATION:** Visual demonstrations highlight the scale of the issue.
- **FUN THEORY:** Fun and playful approaches addressing serious issues eg. the world's deepest bin. (www.youtube.com/watch?v=tcrrhp-IWK2w)
- **SOCIAL NORMS:** Making desired behaviours seem 'normal', e.g. through social media.
- **EDUCATION:** Working with schools to engage and inform eg. Litter Angels (www.litterangels.org)



WHAT'S WORKED WELL



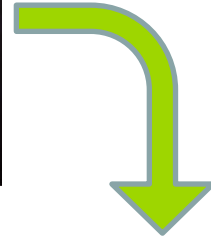
DON'T MESS WITH TEXAS:

- Creating a sense of community and civic pride is crucial for successful long-term anti-litter campaigns.
- Targeted at young male adults who are the highest likely group to litter.
- The Litter Cube - people are rewarded for catching 15 pieces of litter from within the cube during an allotted time.

www.youtube.com/watch?v=s9FAmuzjG5M



Litter breeds litter



SMALL ITEMS LIKE
CIGARETTE STUBS & CHEWING GUM
MAKE UP OVER 50%
OF LITTERED ITEMS

THESE SMALL ITEMS
OF LITTER ARE SEEN
AS AN INVITATION TO DROP
LARGER ITEMS OF LITTER.

LITTER **BREEDS** LITTER
BREEDS MORE LITTER.

Thank you



jbickerstaffe@incpen.org

44 118 9255992

incpen.org