

SOLUTIONS TO WASTING LESS FOOD DURING TOKYO2020

2R IN THE OLYMPIC GAMES - TO REDUCE THE
FOOD LOSS AND TO BUILD THE FRAMEWORK OF
THE RECYCLE LOOP

3 AUGUST 2016

Dr Mervyn Jones
Sustainable Global Resources



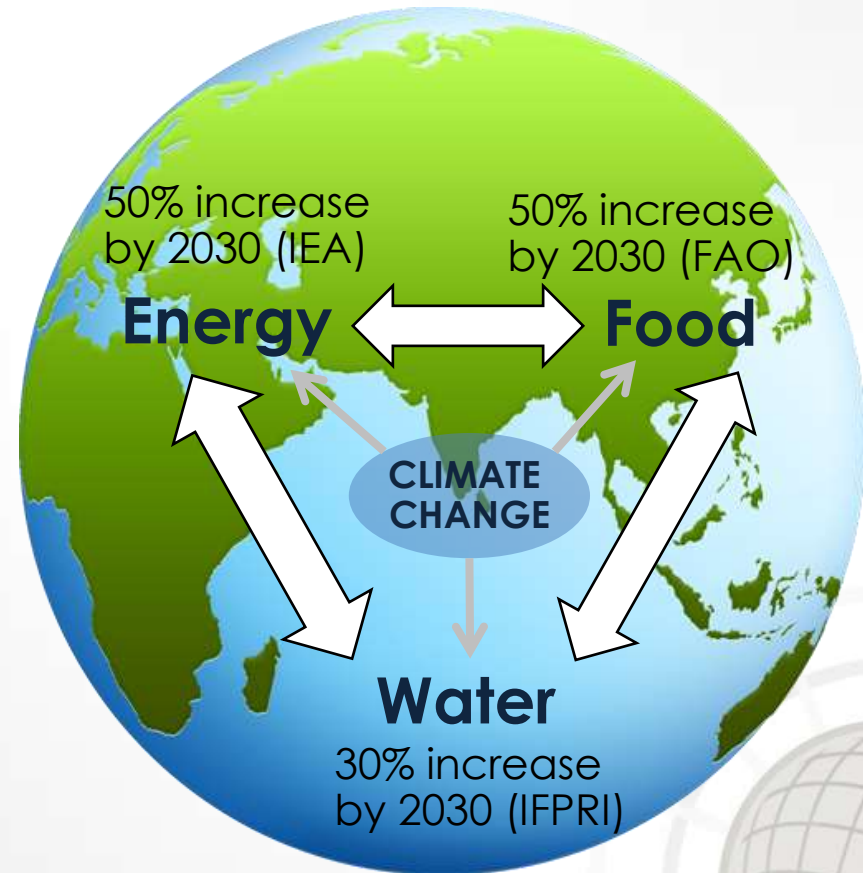
FOOD WASTE

- FOOD THAT IS OF GOOD QUALITY AND FIT FOR HUMAN CONSUMPTION BUT THAT DOES NOT GET CONSUMED BECAUSE IT IS DISCARDED BEFORE OR AFTER IT SPOILS
- IT CAN BE UNINTENDED OR AS THE RESULT OF DELIBERATE OR A CONSCIOUS DECISION TO THROW FOOD AWAY.



THE CHALLENGE FOR FOOD

- One third of food waste is wasted
- 1.3 billion tonnes (UN FAO)
- 1 in 4 calories wasted globally (WRI/UNEP)



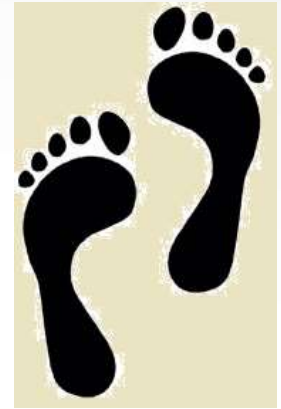
1.3 BILLION TONNES

OF ALL **FOOD PRODUCED**
GLOBALLY IS **WASTED**



3.3 BILLION TONNES

ESTIMATED ANNUAL
CARBON FOOTPRINT
OF FOOD WASTAGE GLOBALLY



650,000

OLYMPIC SWIMMING POOLS



IMPACTS

■ Social

- e.g. sustainable lifestyles



■ Environmental

- CO₂, water, soil loss



■ Economic

- savings, resilience



FOOD WASTE IN THE SUPPLY CHAIN



Harvesting

10%



**Handling &
transport**

50%



**Distribution
centres & retail**

30%



Consumer

10%

TYPES OF FOOD COMMONLY WASTED IN THE SUPPLY CHAIN



50%



45%



40%



40%



40%



40%



35%



30%



30%



26%



25%



20%

TYPES OF FOOD WASTE



AVOIDABLE FOOD WASTE

FOOD THAT WAS AT SOME POINT
EDIBLE, PRIOR DISPOSAL



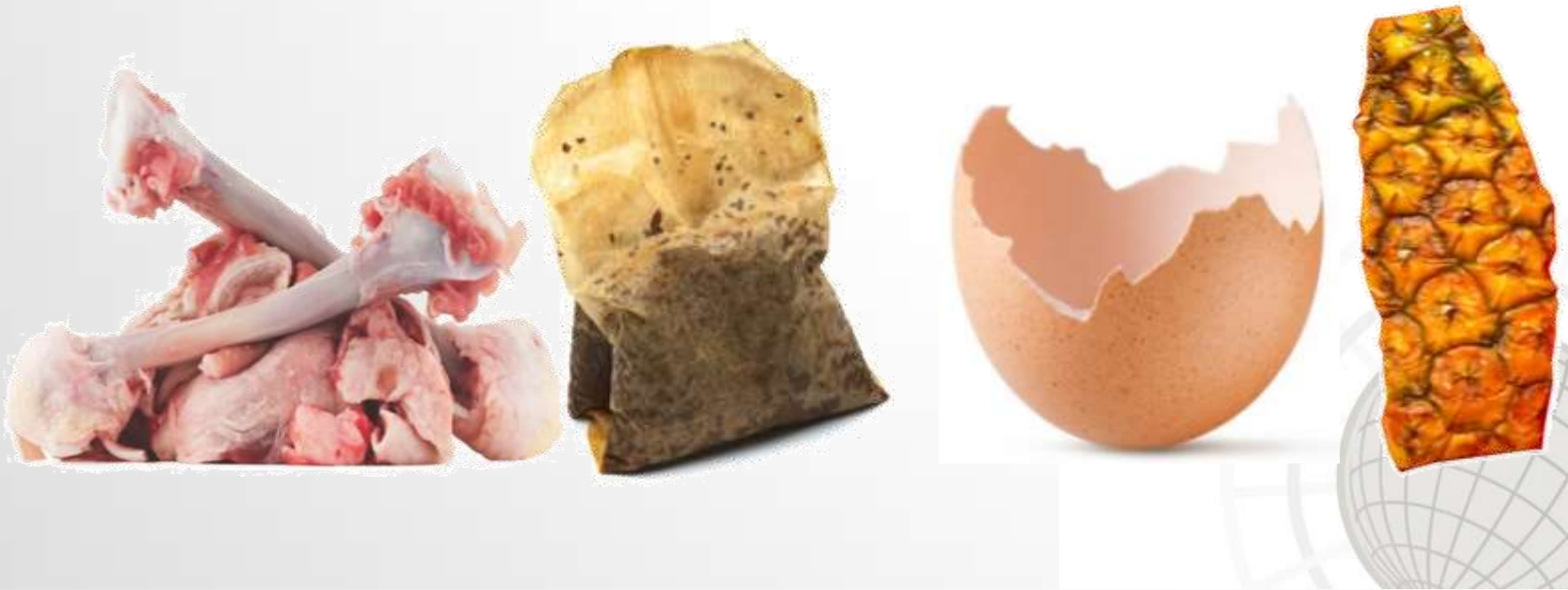
POTENTIALLY AVOIDABLE FOOD WASTE

FOOD THAT SOME PEOPLE EAT AND OTHERS DON'T OR
THAT CAN BE EATEN WHEN A FOOD IS PREPARED IN
ONE WAY BUT NOT IN ANOTHER

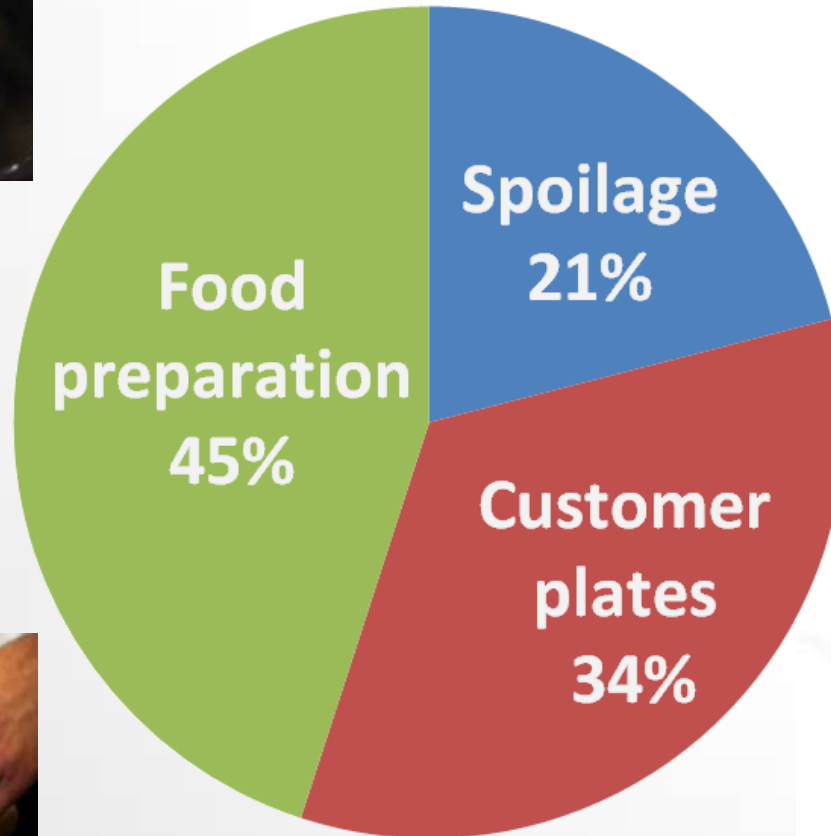


UNAVOIDABLE FOOD WASTE

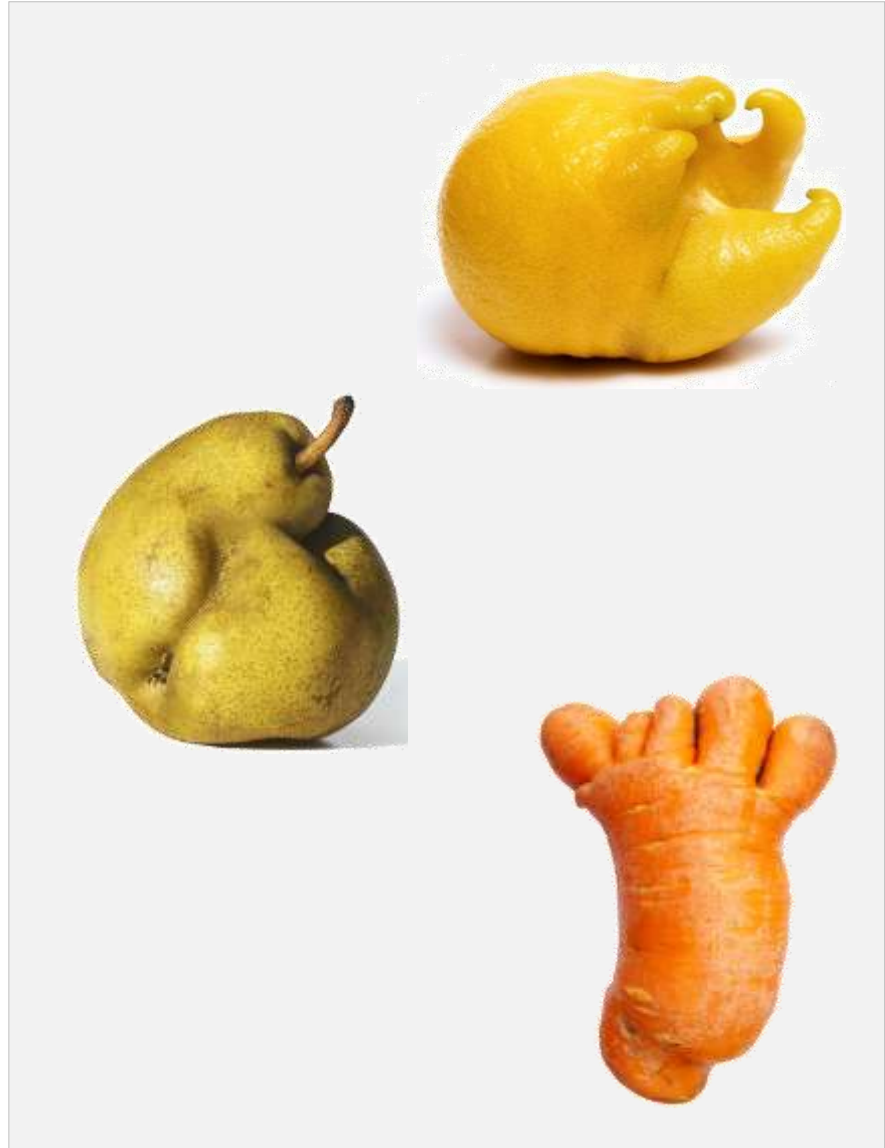
WASTE ARISING FROM FOOD PREPARATION THAT IS NOT, AND HAS NOT BEEN, EDIBLE UNDER NORMAL CIRCUMSTANCES



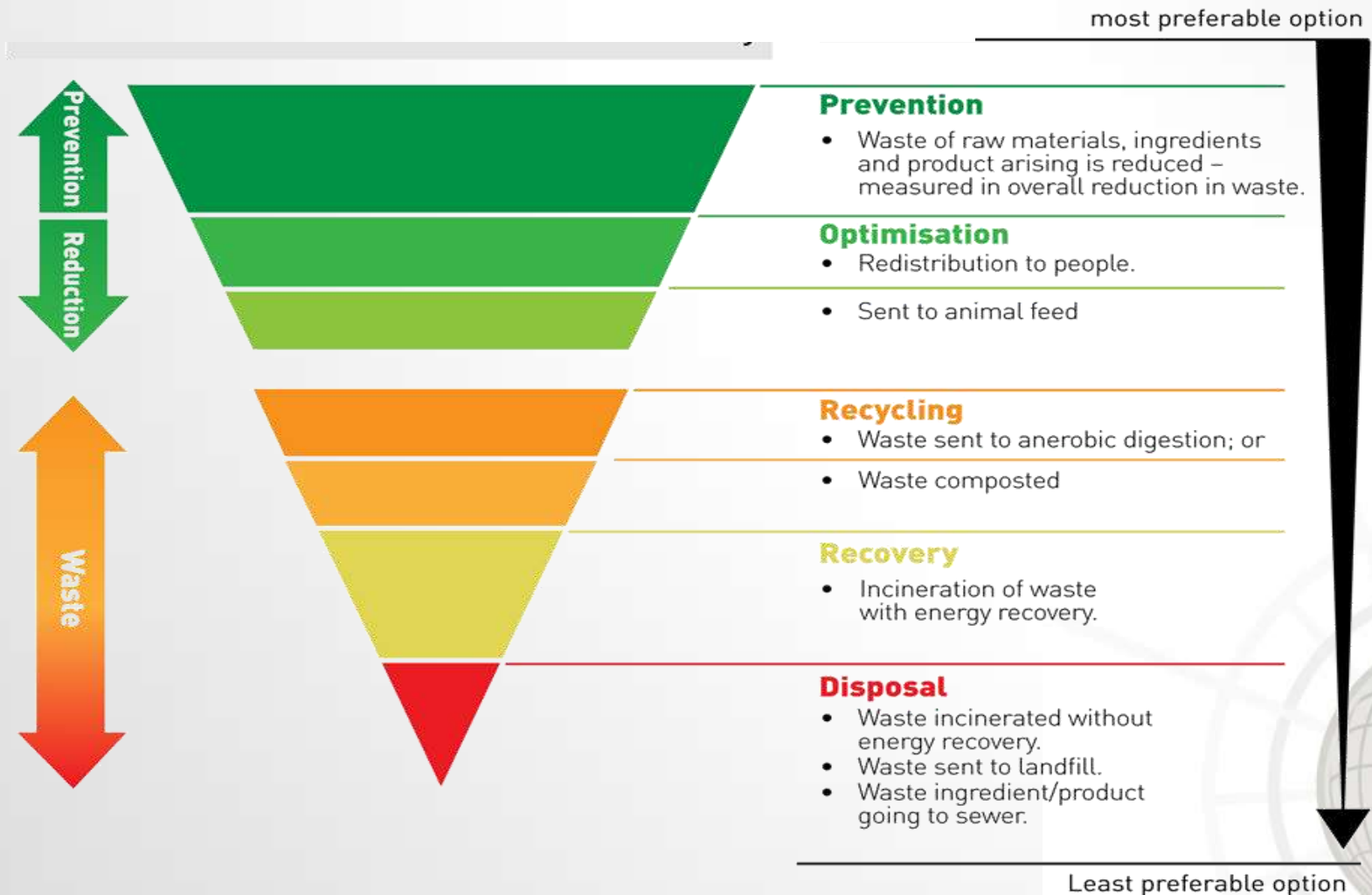
CATERING FOOD WASTE SOURCES



FOOD WASTE MEASURES



FOOD & DRINK MATERIAL HIERARCHY



COST OF FOOD WASTE



Cost of food waste
10% of it is avoidable waste

PLATE WASTE



34%

PORTION SIZE

Zhaoxu Zhang

(Basketball,
China)

2.21 m, 110 kg



2.25m

2m

1.75m

1.5m

1.25m

1m

Asuka Teramoto

(Gymnastic,
Japan)

1.41 m, 30 kg



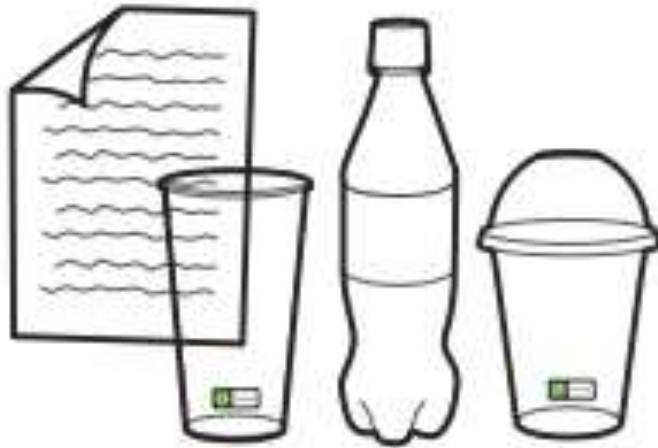
PORTION SIZE

*“The menu must be **designed creatively to optimize the portion size** of the meals to **avoid food wastage** – Rio 2016”*



PRIMARY PACKAGING – FRONT OF HOUSE

Recycling



Composting



low flexibility

COMPOSTABLE PACKAGING



PRODUCT LIFE



BOH - IMPROVING SEGREGATION



BOH - SIGNAGE



What can I put in the food waste bin?

 bread & pastries	 dairy	 fruit & veg
 tea & coffee grounds	 meat	 fish


yes please

X no thanks

 packaging of any sort	 plastic bags	 liquids	 oil or liquid fat
--	---	--	--

www.wrap.org.uk/recyclingfood

get signage right – be prepared to change

EFFECTIVE COMMUNICATIONS

Targeting:

Business supply chain

Retail interface

consumers

Two elements:

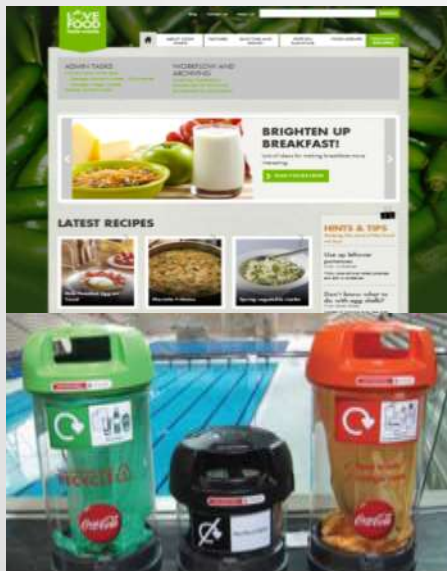
- **National** awareness raising
- Give clear instructions on how to recycle **locally**

key is to link increase in awareness to increases in people recycling



BEHAVIOUR CHANGE

- Food waste prevention – Love Food Hate Waste
- WRAP developed Recycle Now – 'what to recycle and where'
- Communication materials for local authorities and partners (e.g. London 2012)
- 'On pack' labels for packaging in partnership with retailers and brands



FOOD REDISTRIBUTION

- Future opportunities



INFRASTRUCTURE

Ensure quality and capacity by:

- Addressing technical barriers
- Determining capacity requirements
- Providing financial support to leverage private sector investment
- Obtaining clarity on end market requirements for outputs (e.g. quality requirements)

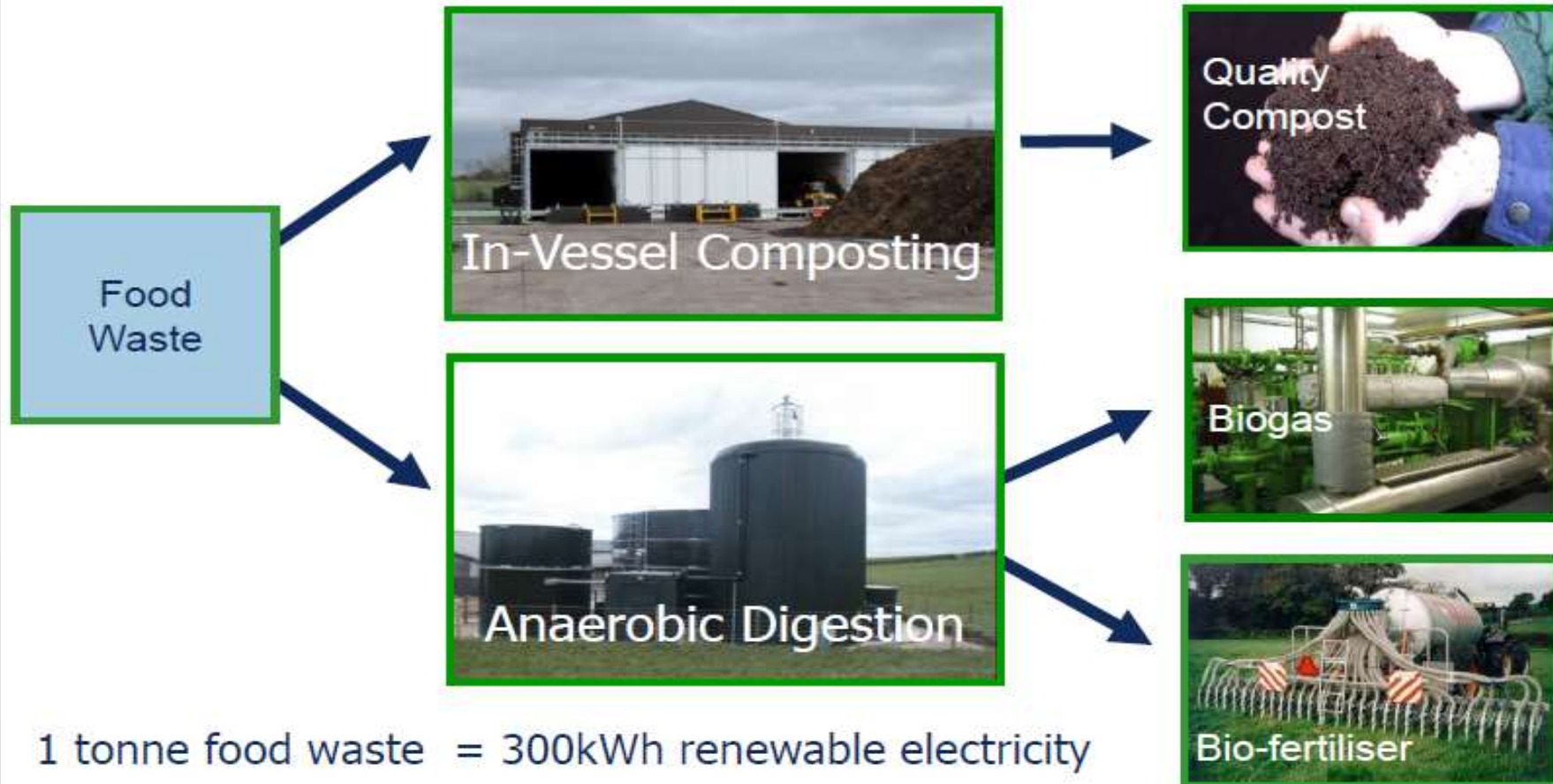


MARKET DEVELOPMENT

- Encouraging demand for recycled materials and products in new & existing markets
 - retail e.g. packaging
 - agriculture e.g. food waste
- Addressing barriers to market entry
 - Quality protocols
- Encouraging new business and retail models
- Public sector procurement, e.g. leadership

MARKET DEVELOPMENT EXAMPLE

Food Waste Recycling Options



MICRO SYSTEMS



THANK YOU



Dr Mervyn Jones

Sustainable Global Resources, UK

mervyn@sustainableglobalresources.co.uk