Working to reduce commercial food waste in Ireland

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About us

Run National Programmes
- Local Authority Prevention Network
- Stop Food Waste
- Green Business
- Green Healthcare
- Green Hospitality Award
- Smart Farming

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Clients
- Environmental Protection Agency
- European Union
- Bord Iascaigh Mhara
- Ibec
- Bord Bia
- Service Sectors
- Industry

Training
- Local Authorities
- Community Groups
- Pharmachem Sector
- Hazardous Waste
- Eco Innovation
- Teaching within CIT

Research
- 100+ Research Projects
- 120+ project partners
- 40 different countries

Services
- Wide variety of Sectors
- 300+ Clients
- Annual Reporting
- Waste Classification
- REAs

Introduction

- Food waste - 1.3 billion tonnes per year generated worldwide
- In EU estimated that 126 million tonnes of food waste generated at retail and consumer levels every year
- United Nations Sustainable Development Goal 12.3

*“By 2030, halve per capita global food **waste** at the retail and consumer levels and reduce food **losses** along production and supply chains, including post-harvest losses”*

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Food Waste Producers in Ireland

Production ~ 450,000 tonnes/year

Farming - ????

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Different Food Waste Producers

Commerce including wholesale, retail, service industries, hospitals, universities, canteens, etc *~ 340,000 t/yr*

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Different Food Waste Producers

And of course – at home *~ 300,000 t/yr*

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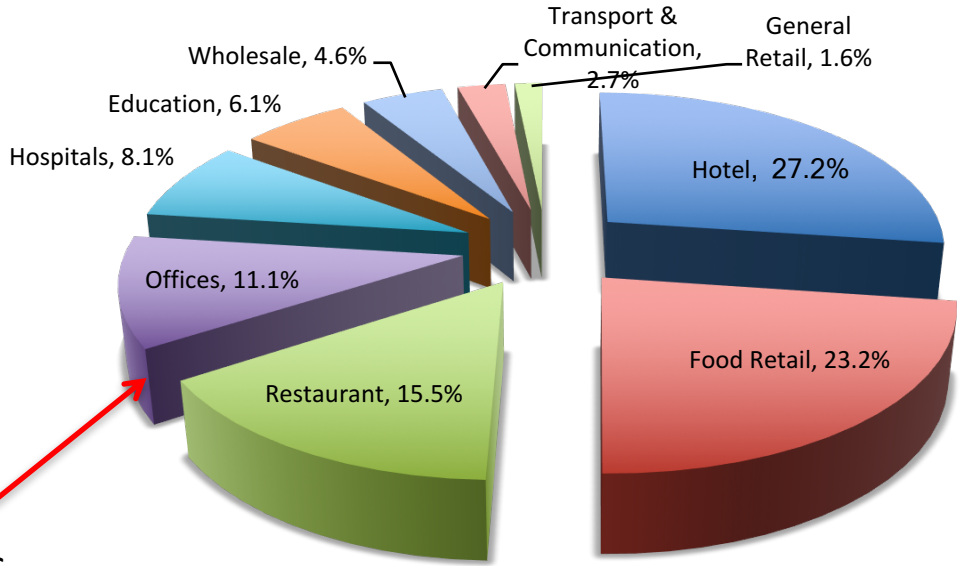
Main commercial food waste producers?

- Difficult to assess – every area is different
- Best estimate - extract data from the EPA National Waste Characterisation studies (2008)



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Overview of the Commercial Food Waste Project

- Getting data on ***wasted food***, as opposed to total food waste, is difficult
- However, in order to reduce food waste, we need to:
  - Have data on quantities produced
  - Know where within the business it came from
  - The causes as to “why” it is wasted
- This requires on-site assessments of waste food production patterns
- These can then be used to create:
  - Improvement plans
  - Sectoral indicators

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How much food waste does your business produce?

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Factors for estimating food waste

- If you have a restaurant with **10** full time equivalent staff then you could be generating:

  10 x 0.8 = **8 tonnes** of **food waste** annually

(factor is from the National Waste Characterisation report

- Your business may be better, or worse, than the norm
- Data set may be limited
- May not be the best actual factor)

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Hotels - Green Hospitality programme

- 0.3 kg food waste per cover (i.e. 300 grammes)
- Range: 0.07 - 1.01 kg food waste per cover

What is the cost?

- For majority of businesses – costs is the major driver for change
- When thinking about the cost of food waste most people just think about the disposal costs
- It has been estimated that each tonne of food waste can cost between €2,000 - €5,000
- This cost includes:
  - Costs to buy
  - Costs to cook & manage on site
  - Cost of disposal (~10%)

The purchase cost of wasted food

Average purchase cost of wasted food with value:

€2 - €5 per kg

60% food waste has value

40% is “value-less” (peelings, bones, teabags, etc.)

A 240 litre bin:

€150 - €360 in lost food purchases

This means every **1 tonne** of food waste is over **€1200 - €3000** in lost purchases

Food Waste Prevention

1. Identify amount of food waste being generated
2. Determine the types of food waste and amounts
3. Figure out the reasons ***why*** this is being generated
4. Come up with solutions to prevent this waste happening

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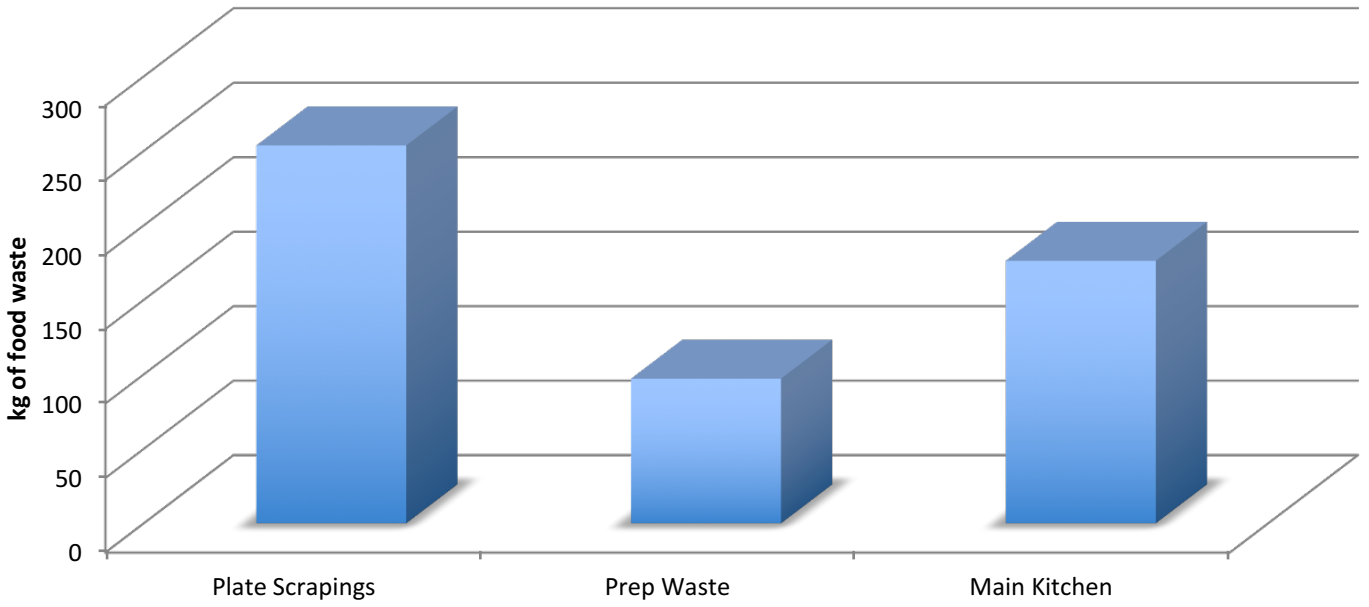
Food Waste Assessment

- Total weights of food waste generated?
- Where, when and why is it being generated?
- What does it consist of?

Summary Information



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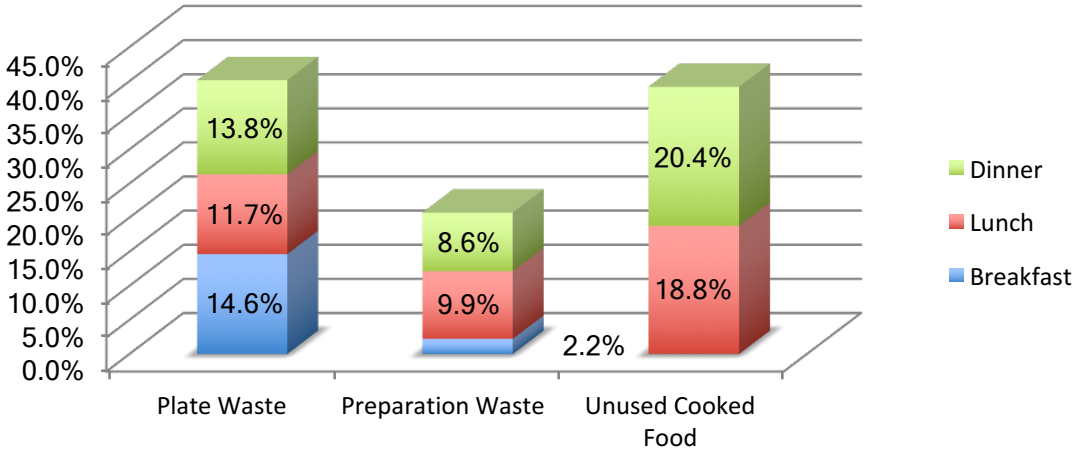
Examples of detailed surveys

- Food Waste Survey of on-site canteen:
  - Breakfast 17%
  - Lunch 40%
  - Dinner 43%



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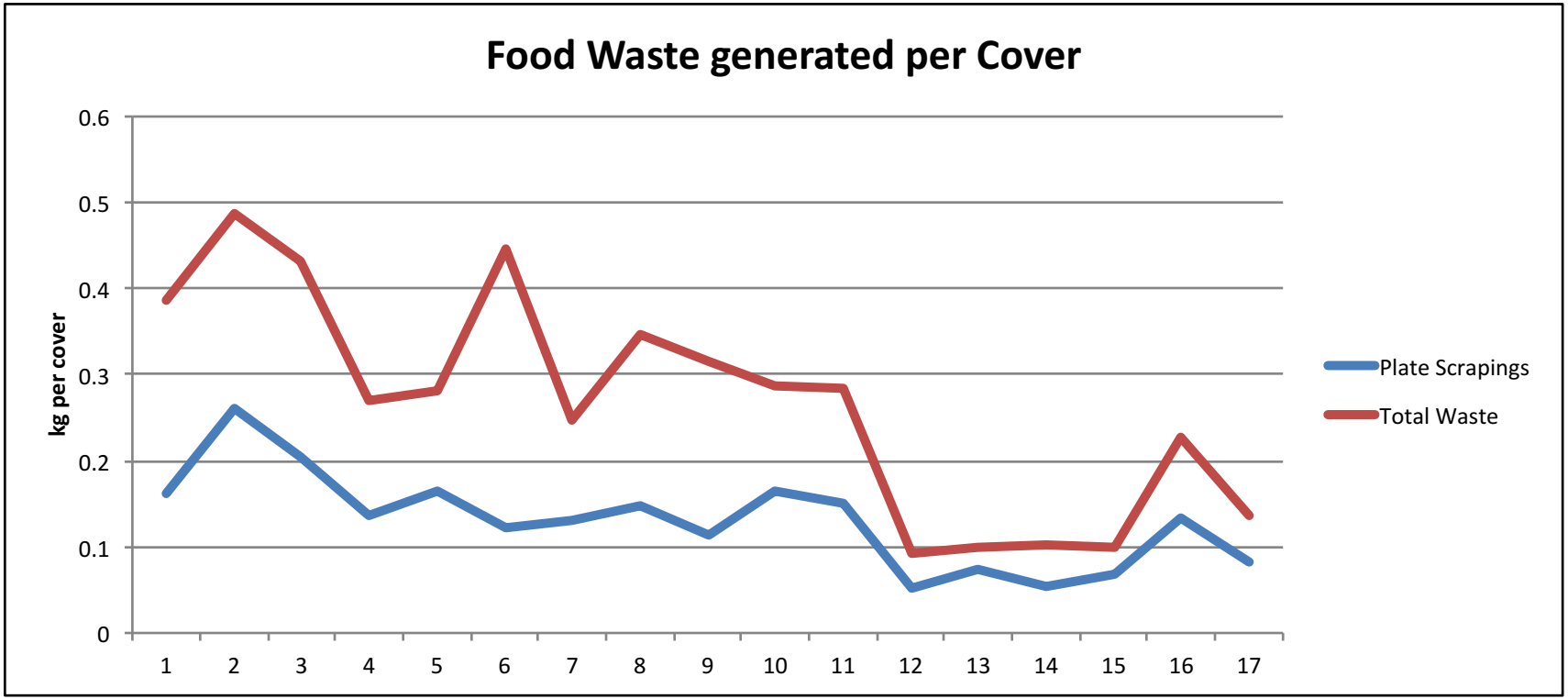
Food Waste per Cover



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What food is being throwing out?

60% Avoidable:

- plate scrapings
- unused cooked food
- gone off fruit and veg
- passed date items
- damaged stock which cannot be used due to H&S, etc.

20% Potentially Avoidable

- bread crusts or heels made into bread crumbs
- vegetable trimmings used for stock and soups
- meat and fish bones used for stock
- discarded butter for cooking
- old fruit for jams and smoothies, etc.

20% Unavoidable

- banana skins
- animal bones (before or after used to make stock),
- unusable prep waste (e.g. potato peels with soil on them), etc.

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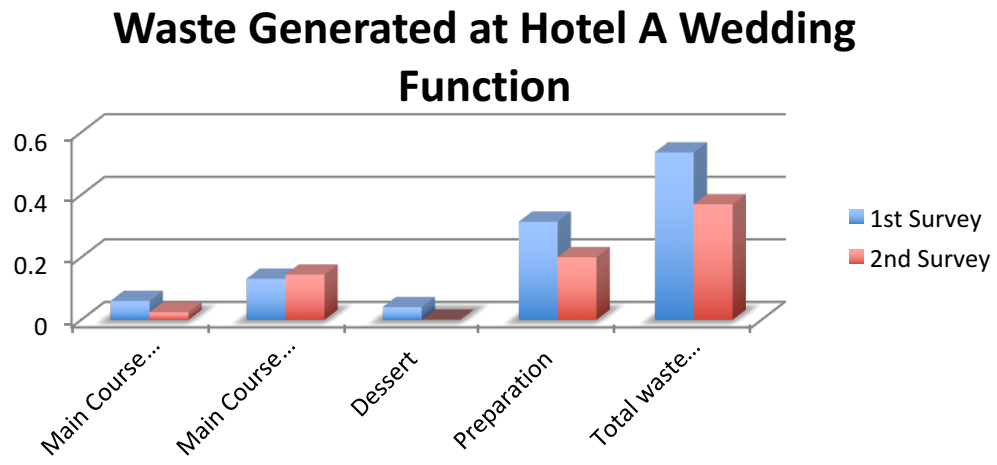
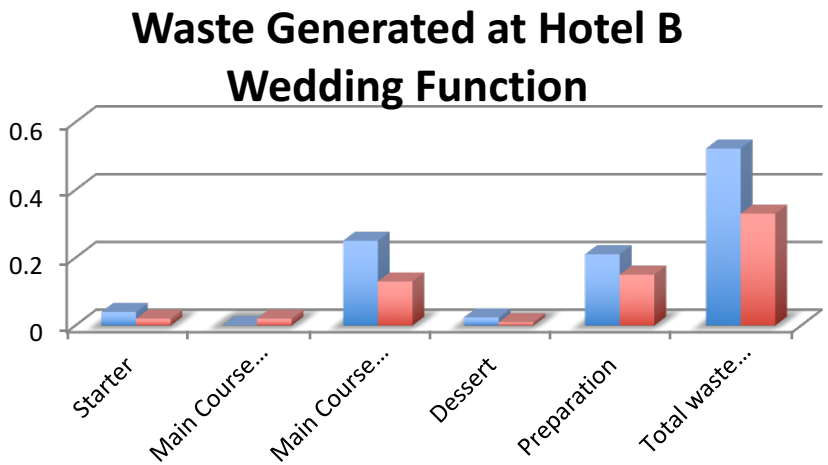
Wedding Functions in 2 Hotels





- Series of changes made between surveys including:
  - Training and awareness
  - Change serving process – central plates
  - Less trimming of veg and meats
  - Better portion control

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132 bed hotel - unserved scrambled egg from buffet breakfast
5 kg on day - equiv to 2.1 tpa or €4,200

Unserved food from breakfast - a 150-bed hotel

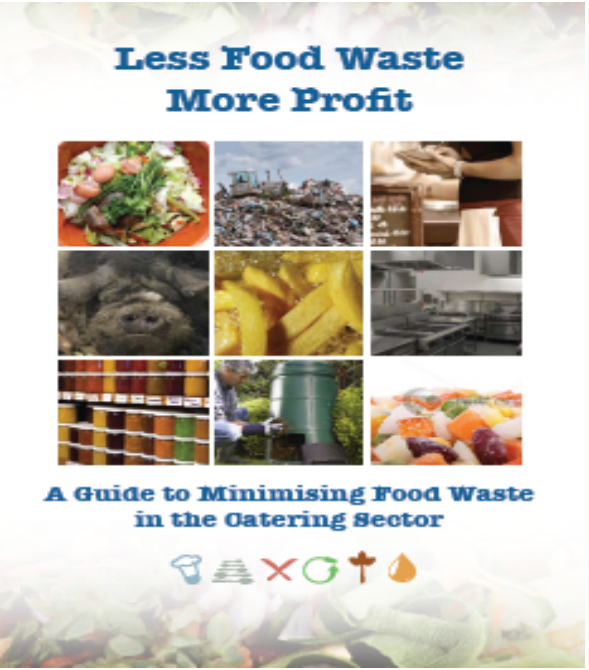
Of the order of **€12,000** un-served food per year at breakfast

Business hotel - fruit from bowls in meeting rooms,
discarded after being on display for the day

€1,200 per year

Same hotel - unserved food from a meeting room hot buffet for 9 people - ll kg food waste

A number of useful Guides



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Sources of information

- www.stopfoodwaste.ie
- www.localprevention.ie
- www.greenhealthcare.ie
- www.foodwaste.ie
- http://www.unileverfoodsolutions.ie/our-services/your-kitchen/wiseuponfoodwaste

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