Reducing Food Waste – REFRESH (H2020)

Visit H.E. Ambassador of the United Kingdom to NL
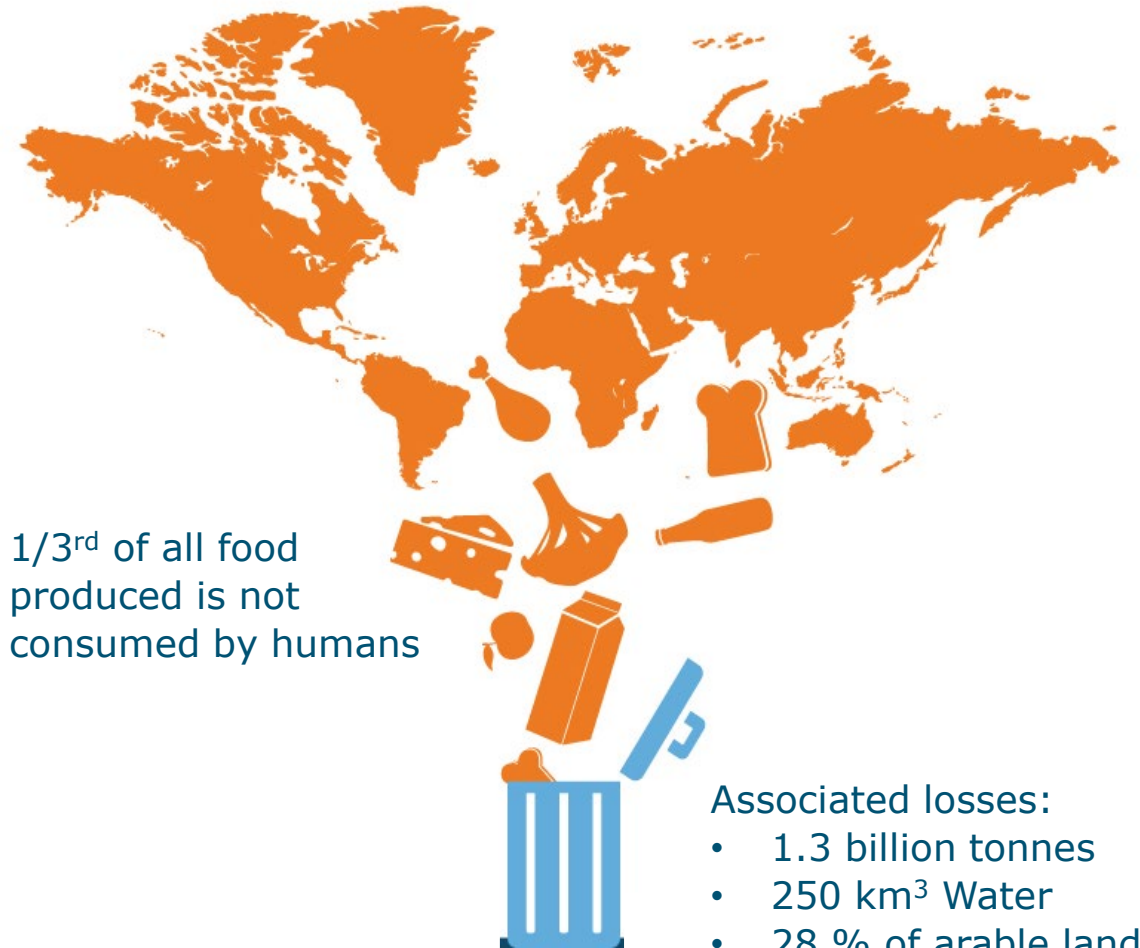
5 June 2018, Wageningen

Food Waste Introduction

Food Waste in numbers

EU-28 PRODUCES

88 MILLION TONNES of food waste per year

amounting to an estimated

143 BILLION EUROS

70% of EU FOOD WASTE

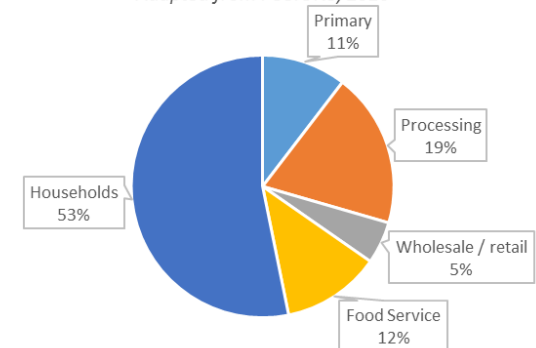arises at **household, foodservice, & retail** sectors

The **HOUSEHOLDS SECTOR** contributes the most, with **47 MILLION TONNES**

1/3rd of all food produced is not consumed by humans

Associated losses:
- 1.3 billion tonnes
- 250 km^3 Water
- 28 % of arable land
- 750 billion $$

EU Food waste per sector

Adapted from FUSIONS, 2016

- Primary 11%
- Processing 19%
- Wholesale / retail 5%
- Food Service 12%
- Households 53%

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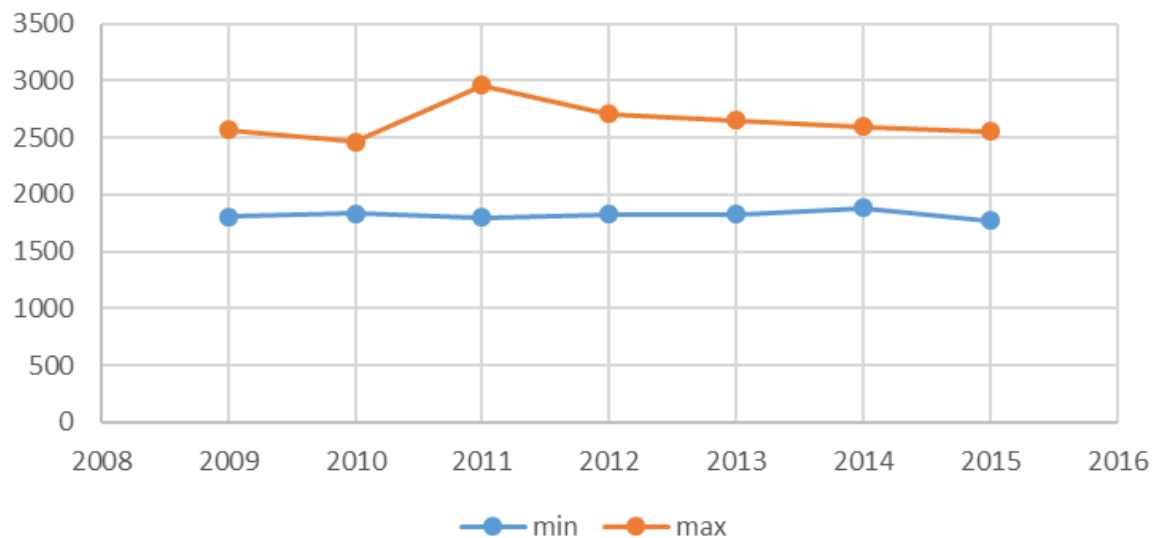1918 — 2018

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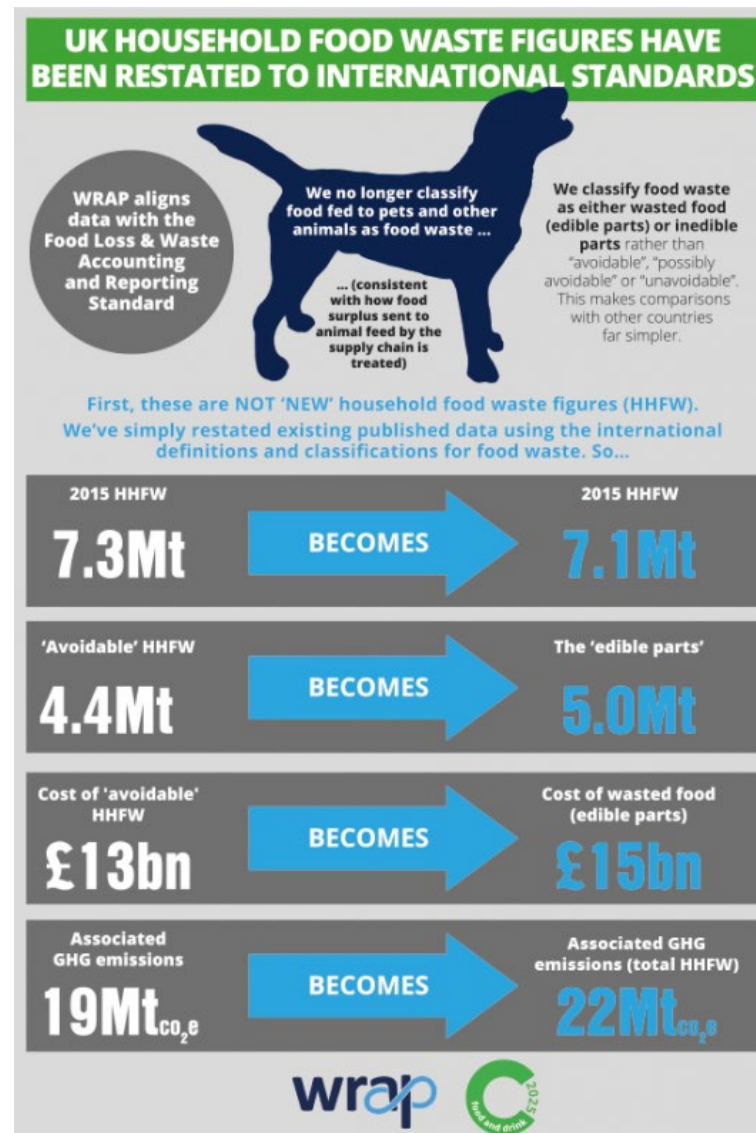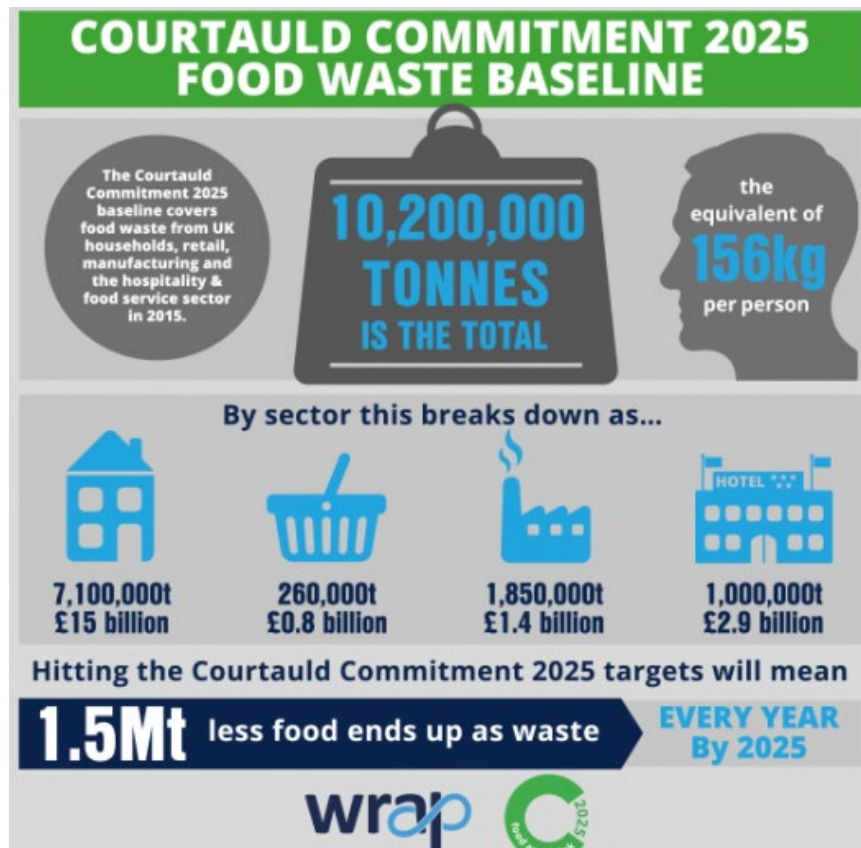
Food Waste in UK

Published 22 May 2018 by WRAP

Food waste in the Netherlands

Voedselverspilling NL 2009-2015
Bron: Wageningen, 2016

Food waste in NL is between 1,77 – 2,55 Mtonnes (2015).

Per capita, this means between 105-152 kg/yr.

Consumers waste approx. 47-50 kg/pp.yr

Source: WUR 2017

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WASTE IS A LACK OF IMAGINATION

European & global initiatives

■ **Sustainable Development Goals**

Target 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"*

■ **EC Circular Economy Package**

- Common EU Methodology
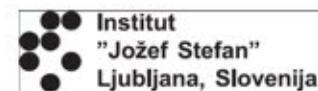- Clarifying leglislation re. feed, donation, and former foodstuff
- Date marking

REFRESH

Resource Efficient Food and dRink for the Entire Supply cHain

"To contribute towards Sustainable Development Goal 12.3 of halving per capita food waste at the retail and consumer level and reducing food losses along production and supply chains"

- Develop strategic agreements to reduce food waste with governments, business and local stakeholders in four pilot countries (Spain, Germany, Hungary, and the Netherlands).

- Formulate EU policy recommendations and support national implementation of food waste policy frameworks

- Design and develop technological innovations to improve valorization of food waste and ICT-based platforms and tools to support new and existing solutions to reduce food waste

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www.eu-refresh.org

Project Consortium

Insights on consumer behaviour - REFRESH

- Consolidating existing Pan-European consumer understanding

- Quantified food waste diversity across Europe

- Food waste measurement methodologies at household level

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- ICT tools for food mgt & waste prevention

- On-pack information consumer understanding

- Acceptance of by-product valorization streams by consumers

Business engagement

- 5 Piloting **Working Platforms** (NL, GE, HU, ES and China)

- 10 **'live' projects** covering valorisation, consumer acceptance, packaging & shelf-life.

- **Success Factors** for Frameworks of Action

- Community of Experts (**CoE**) www.refreshcoe.eu

- Development prototype **tool** to aid Decision Making processes in the FSC

- Interest from other MS in **adopting** the FA approach

Pilot project „ugly but tasty" tests market options for low-quality produce in Hungary

Food waste quantification in Spanish pilot project at Gastrofira

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Measure → Target → Act

www.refreshcoe.eu

Policy

REFRESH Policy Workshop Series

Briefs · Review · Consult → Recommendations

Socio-economic modelling

- **Economic and behavioural factors** affecting <u>consumer food waste decisions</u> and <u>business innovation patterns</u> identified

- **Data protocol developed to manage data** on consumers (WP1 pilots) and on businesses (WP2 pilots)

- <u>Strategies</u> identified to integrate statistical and computational models, and approach chosen

- Relevant **consumer drivers and interrelationships** identified

- **Consumer model** elaborated, preliminary simulations are ongoing

- **Retailer innovation model** elaborated, scenario selection ongoing

- **Future activities**:

  - testing of policy interventions in the models; elaboration of food waste reduction scenario and roadmap

Environmental impact

- Valorisation routes LCA & LCC methodologies

- Literature review on current practice Methodology for evaluating environmental sustainability" and "Methodology for evaluating LCC"

- Guidance document for LCA and LCC focused on prevention, valorization and treatment of side flows from the FSC: Generic Strategy LCA and LCC.

- Case studies (peaches, feed, apple pomace & tomatoes)

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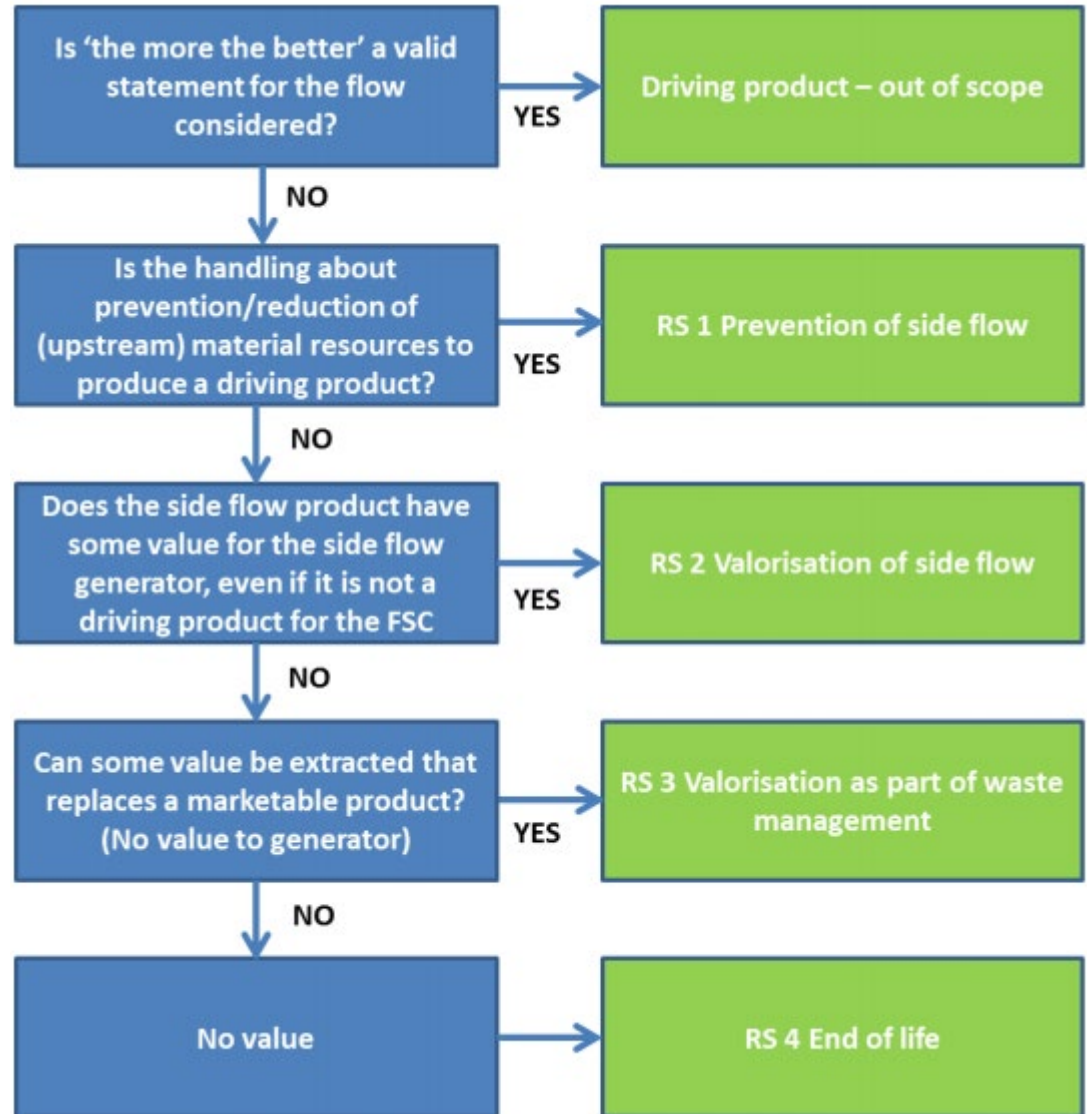
Valorisation

- **Top waste streams & co-products identified**

- **Food waste compositional database**

- **New (fibre-based) food ingredient streams developed**

- **New animal (pig and chicken) feed products tool**

- **Expert workshop** safe use of meat-containing food waste in non-ruminant feed

EU panel of experts concludes that feeding treated surplus food to pigs is viable provided certain safety measures are enforced

Awareness raising & dissemination

- REFRESH website, social media channels, bi-annual newsletter, & print materials

- **REFRESH Food Waste Solution Contest**

- **REFRESH Food Waste 2017 Conference** (May 2017) https://youtu.be/GQkVMrdGVgM

- **Incubator Day** (May 2017) and **Policy Workshop** (Nov 2017)

Vytenis Andriukaitis — European Commissioner for Health and Food Safety

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