

Food waste reduction in Finland: the role of households

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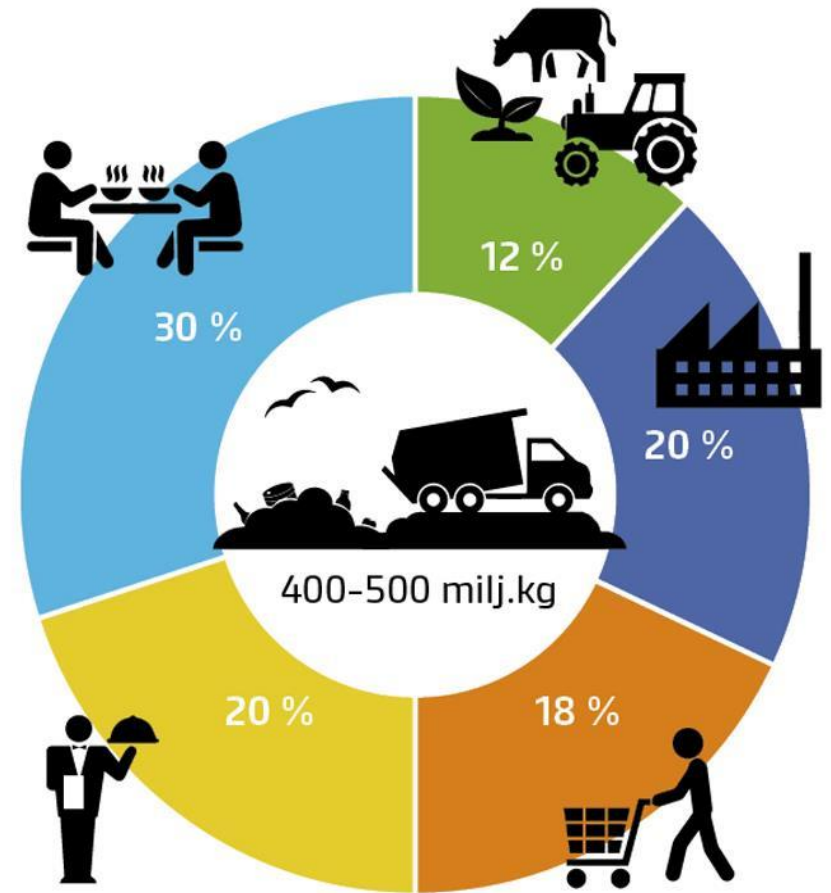
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Taking households food waste seriously – online conference






Food waste quantification in Finland

- First food waste quantifications already in 2008 (Luke)
- In Luke we have had several projects on food waste
- In Finland there is 400 - 500 million kilos food waste
 - Rough estimate, based on various quantification methods



Project: Monitoring and reducing food waste in Finland

- Aim:
 - To build a permanent food waste quantification system in Finland by 2020.
- A national project 2018-2020: Building the system to quantify food waste
 - Covers primary production, food industry, retail, catering sector and households
 - Funding:
 - 3 ministries: Agriculture and Forestry, Environment, Economic affairs and Employment
 - Associations of: food industry (ETL), retail (PTY) and catering services (MaRa)
 - Project webpage: <https://www.luke.fi/ruokahavikkiseuranta/en/>

METHODS	PLANNED SAMPLE SIZE	RESULT	NEW 2020-
 <ul style="list-style-type: none"> ✓ Questionnaires ✓ Statistical data: e.g. beef, pork ✓ Interviews: supplementary 	Q: 30 % volume S: 100 % 15 indicator products	Q: 30 % S: 100 % (5 indicator products)	Q: 7: cereals, vegetables S: 3: meat (10 indicator products)
 <ul style="list-style-type: none"> ✓ Questionnaire ✓ Interviews: supplementary 	Q: 30 % volume	Over 40 %	Medium scale companies
 <ul style="list-style-type: none"> ✓ Data collected by retail groups 	90 % volume (3 big chains)	Over 90 %	Over 90 %
 <ul style="list-style-type: none"> ✓ Food waste diary (D) ✓ Questionnaire (Q): supplementary 	D: over 140 food serving places Q: 500 food serving places	D: 78 Q: 900	??
 <ul style="list-style-type: none"> ✓ Online-questionnaire (Q): supplementary ✓ Waste composition analysis (W) ✓ Food waste diary (online) (D) 	Q: 1,000 households W: 5,000 households D: 200 households	Q: over 1,000 W: over 5,000 D: around 300	Q: 2000 D: 500 households



Date when waste occurred
Number of people attended
Special notes

<p>Kirjauspäivämäärä ⓘ</p> <p>29.11.2019</p>	<p>Lisätiedot</p> <p>Lisätietoja hävikistä...</p>
<p>Paikalla olleet henkilöt (kpl)</p> <p>1</p>	

Type of food waste
Amount estimate:
gram, pcs, dl, plate, spoon
Reason for waste

<p>Kategoria & ruoka-aine</p> <p>Tomaatti (Vihannes tai juur...)</p>	<p>Määrä: Lautanen (Iso) ⓘ</p> <p>Progress indicator with 8 circles</p>	<p>Poisheiton syy</p> <p>Valitse tai kirjoit...</p>
<p>Lisätiedot</p>		
<p>Lisää uusi ruokalaji</p>	<p>Tallenna</p>	

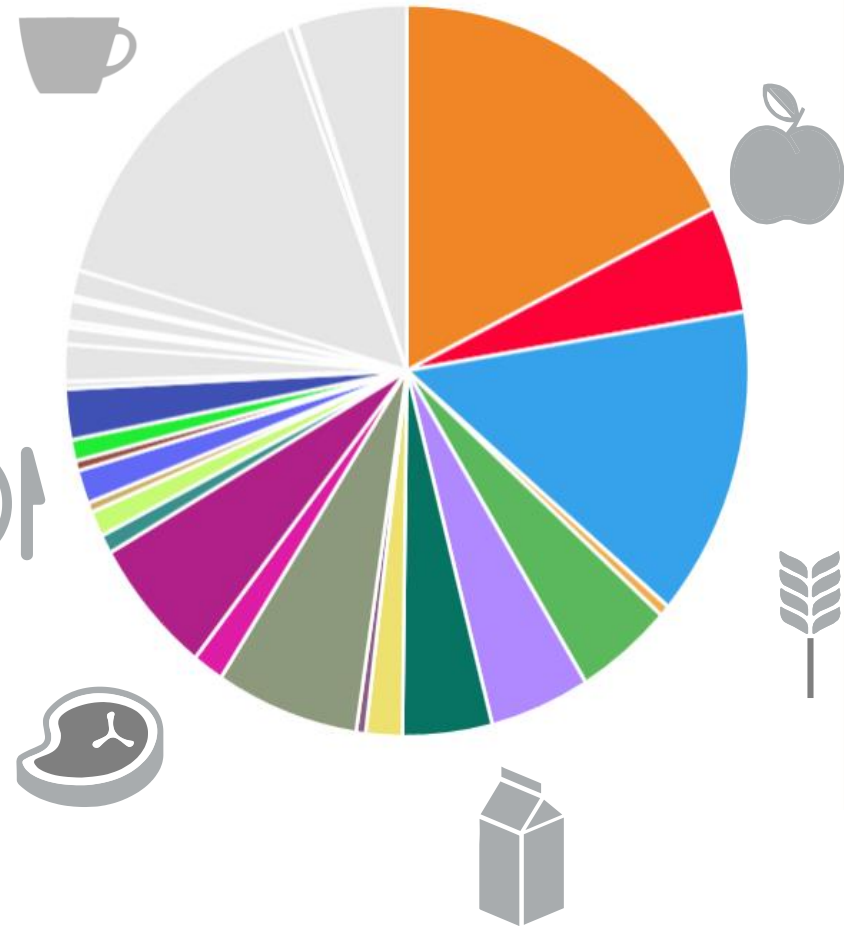


March 2019

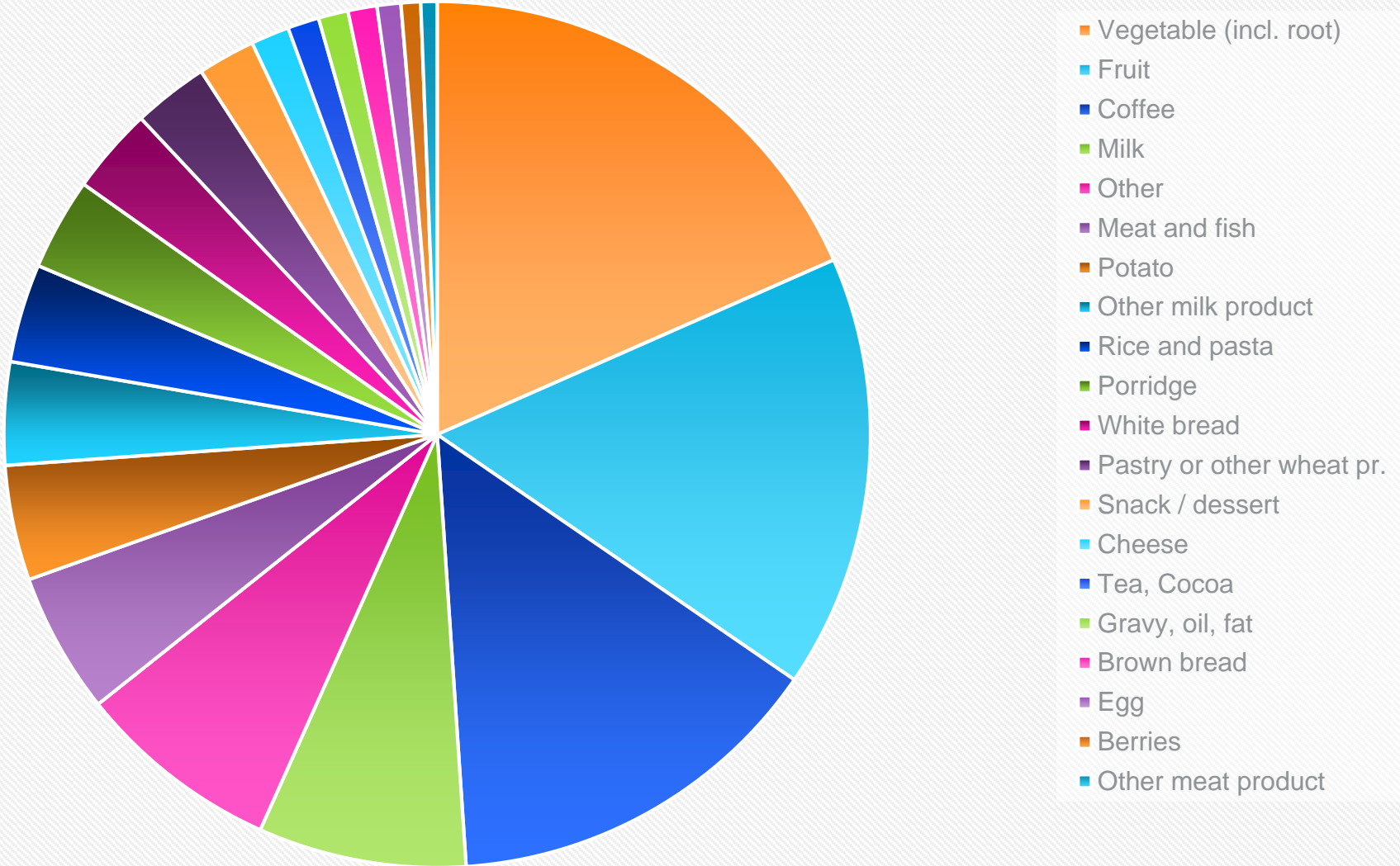


Ma	Ti	Ke	To	Pe	La	Su
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Total waste



Edible food waste diary study, 14 days, around 300 households



Analysis

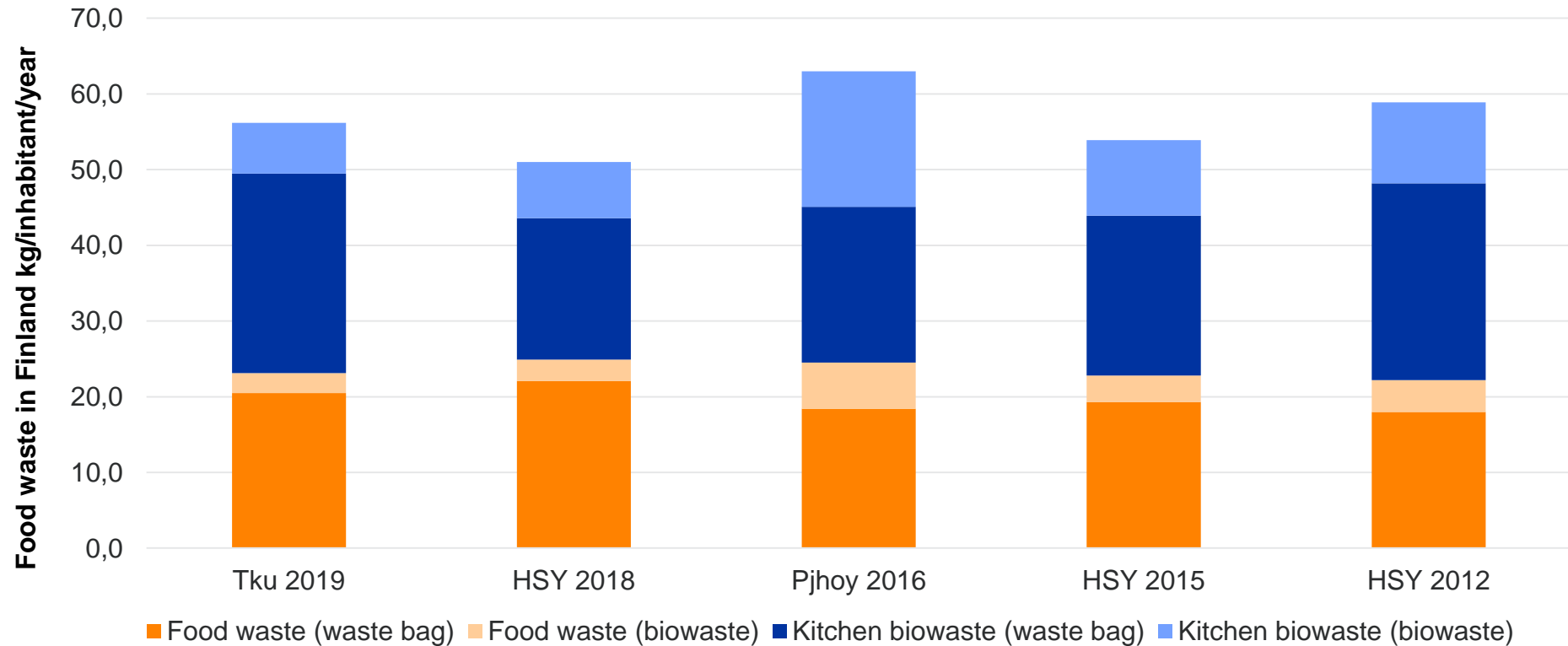
- Average food waste 19.2 kg/person/year
- 80:20
 - About 80 % of households: average food waste 13 kg/person/year and about 20 % of households: average food waste is between 45-105 kg/person/year
- The average amount of food waste of single women 27.5 kg/person/year
- When women are in charge of shopping, they buy a lot of vegetables and more food than needed

- Weakness of diary method: the waste estimates are under-representative





Waste composition analysis years: 2019, 2018, 2016, 2015, 2012



Finland's national food waste road map

Efficient regulation

Changing practices towards more sustainable

Strength from education and information guidance

Intelligence from technology, new products & business models

Evolving research and facilitating its integration

More together



Four main topics



Efficient regulation



Strength from education and information guidance



Changing practices towards more sustainable



Intelligence from technology, new products and businessmodels

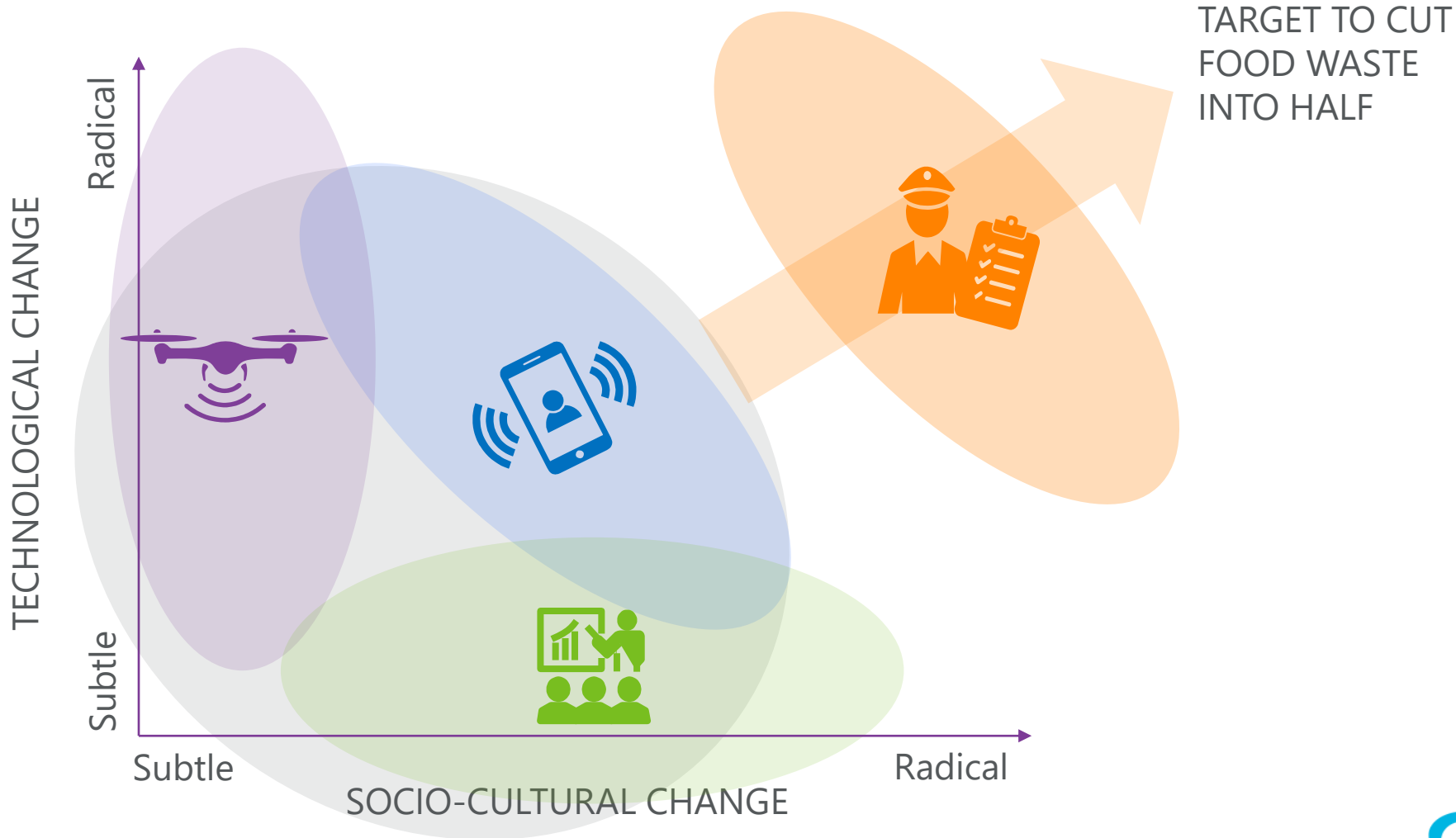
Subtopics

- ✓ Political agreements
- ✓ Voluntary acts
- ✓ Steering instruments

- ✓ Information steering
- ✓ Education
- ✓ Social and cultural norms
- ✓ Branding food waste

- ✓ Smart packaging design
- ✓ Technology assistance
- ✓ Product environment design
- ✓ Pricing

- ✓ Food waste management tools
- ✓ Improved ordering system
- ✓ Package innovation
- ✓ Product development
- ✓ New businesses around food waste



Examples

- Efficient regulation:
 - National government program & food waste road map
- Changing practices towards more sustainable:
 - Smaller portion and package sizes
- Strength from education and information guidance:
 - National educational programme and food waste campaigns
- Intelligence from technology, new products & business:
 - Clever fridges to help in reducing food waste

Thank you!