

# Towards quantification of food waste in cities: from “complete speculation!” to “it will be measured”

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# Research questions and objectives

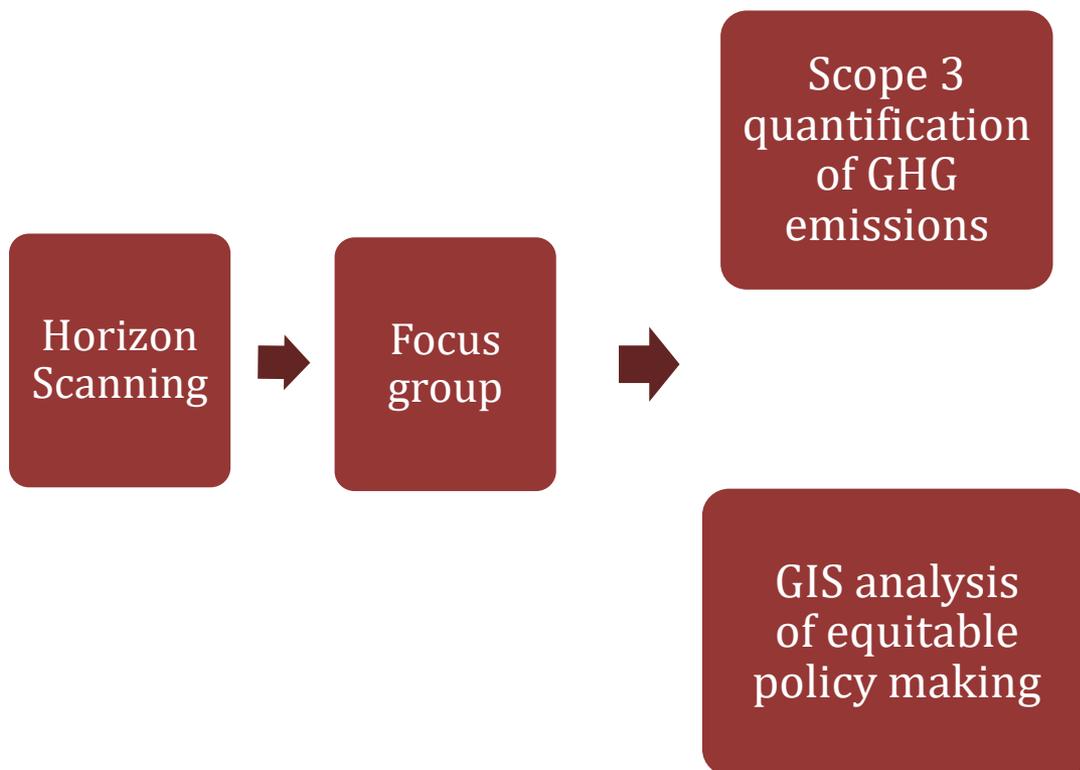
## QUESTIONS:

- How to reduce carbon footprint of food waste at the urban scale?
- How to implement food waste policies in equitable way?

## OBJECTIVES:

- To facilitate cross-sectoral partnerships, learning and decision making;
- To gather in one place those who traditionally design, manage and evaluate local actions and those who are affected by them;
- To quantify environmental and social impact of innovative food waste solutions currently rolled out across the city.

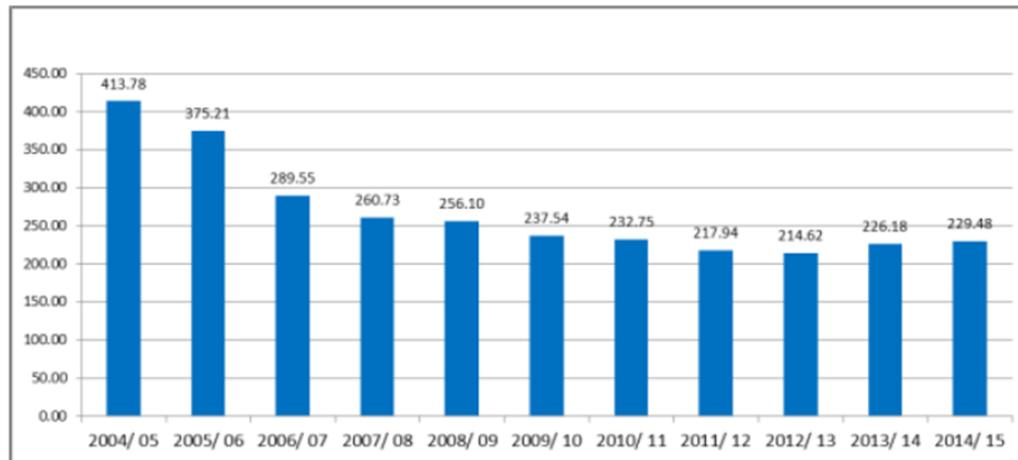
# Methodological framework



# Horizon Scanning

- City-wide weekly free collection of residential organic waste in Bristol (with few exceptions, e.g. some flats) since 2006;
- Landfill amount of waste per person decreased dramatically since policy rollout in 2006 but stalled after 2009 - are there barriers to participation? Barriers to policy implementation?
- Waste composition analysis suggests that organic waste comprises on average 39% of residential landfill bin (BCC, 2016, data from 2014)

Kilograms of Residual Waste Per Person Per Year 2004/05 to 2014/15



(BCC, 2016)

# Horizon Scanning

- No specific food waste policies were implemented in the UK. The issue of food waste was included in the waste-to-energy (AD) or reduction of waste policies;
- UK government currently favours voluntary approach, e.g. there is no policy obligation or incentive to limit food waste. (HoC, 2016)



Fare Share – Surplus Food Redistribution Charity



Poo bus – fuelled by methane derived from organic waste



Skipitchen – Food Waste Cafe

# Focus group- Results 1/4

## Theme 1: Ways of seeing the world through food waste

“I spoke to some manufacturers about that...they say for their brand, the **customers expect** a certain taste“

“I think if they’ve been incentivised, and whether it’s genuinely impacted them on an individual level (...); otherwise they’ve got no sense of responsibility to do it. **Humans are selfish and they just care about what suits them”**

“I think **supermarkets dominate the market, they have so much power, so that they could actually start to change behaviour,** the way we consume, the way we cook...”

“Sustainability, it shouldn’t be a luxury, but **it is kinda be easier for people in the middle class,** because they have time and resources to think about it”

# Focus group- Results 2/4

## Theme 2: Ways of knowing

“I don’t have any figures but you know – the **colloquial evidence** we’ve been given is that it’s making potentially big changes”

“Since we switched to compost on site, **we're not really recording exactly what's going on...**cause it's such a small team... it's **very little data...** “

“Obviously, **we record** the tonnage of Bristol. We also do **waste composition analysis** every 6 months...”

“We have **case studies on behavioural change**, we have resources for people looking to minimise their waste”

# Focus group- Results 3/4

## Theme 3: Direction of movement

**“Everybody knows and talks about food waste now.** You know, when we started 10 years ago in Bristol, trying to talk to people about food waste, they would think that we were diving in the bins and getting food from there!”

“I think it’s a bit of an issue when governments change or mayors change and therefore the whole focus shifts. **And all the good work that might have been done beforehand is rewritten.** I find it so frustrating...”

“Researcher: So can you give me an update of how does the flat policy look like in Bristol?  
Participant: It’s tricky...”

# Focus group- Results 4/4

## Theme 4: What works and what doesn't

"I think I'd also be tempted to say – **legislation** is the main one. I know that's ironic, cause I work in the education and engagement side, so I should say it's all about changing values (...)"

"**The behaviour change advice** is out there and there's lots of options if businesses have the time and capacity to do it, but...**there has to be a push...**"

# Next steps

## Research priorities:

- Food waste recycling in flats
- Measuring food waste as opposed to reliance on “colloquial evidence”



## Potential data issues:

- Privacy
- Short term licensing
- Varying data resolution
- Quality of secondary datasets
- (Over)reliance on external stakeholders for data provision
- **...or simply the reality of practice-based, inter-disciplinary, “real world” research?**

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