



UNIVERSITY OF EDINBURGH
Business School

Catering for Climate Change: From Evidence to Action



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www.strength2food.eu



A Changing (Policy) Climate...

 HM Government

Environmental Report
Including streamlined
reporting guidance

March 2019 (Updated Introduction)

Catering for Change


Buying food sustainably
in the public sector

Scottish Procurement Directorate
Scottish Food and Drink Industry

Guidance


Government Buying
and catering services

Updated 18 August 2021




So you've declared a climate emergency: what next?





APSE Energy Climate Emergency Survey Report





**SCIENCE
BASED
TARGETS**

AMBITIOUS CORPORATE CLIMATE ACTION

**Our food and drink
businesses to net zero with
by 2030**

10 February 2022
The Courtauld Commitment 2030
Annual Conference 2022
9-10 February



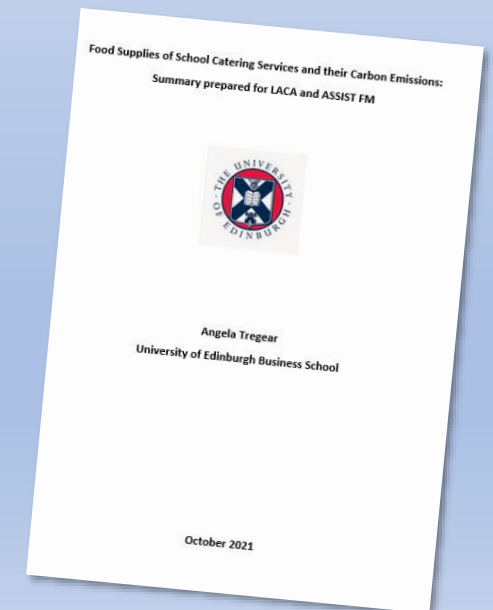




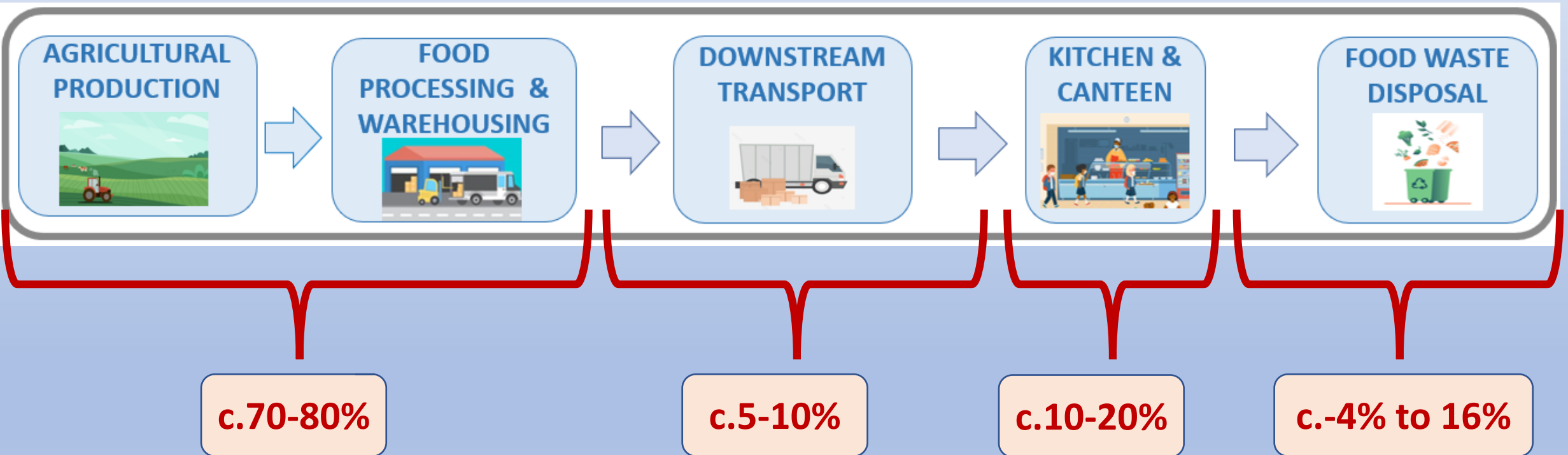
**GREENHOUSE
GAS PROTOCOL**

Research Evidence...

- **Strength2Food** (www.strength2food.eu)
- Investigated carbon emissions from different models of school meal procurement in Europe
- **Food supplies of school catering services and their carbon emissions: Report for LACA/ASSIST FM**
- Measured and compared carbon footprints of school meal services in UK



Carbon Emissions in Public Catering: What do we know?

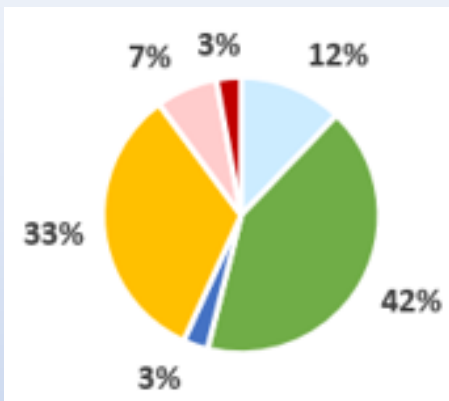


So therefore...

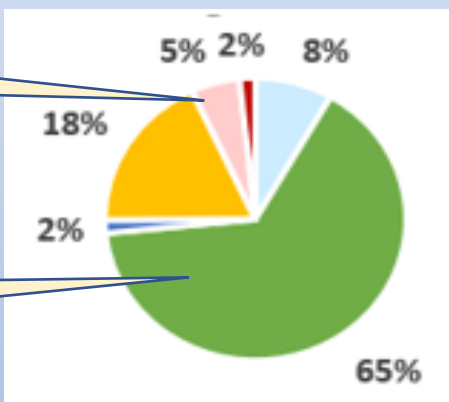
- The carbon footprint of a school meals service depends most on **which types of foods are on the menu**
- **Food waste disposal method** and **kitchen/canteen** = moderate contribution
- **Transportation of foods** (“food miles”) = quite modest contribution

So Which Foods DO Schools Buy? What are the Emissions?

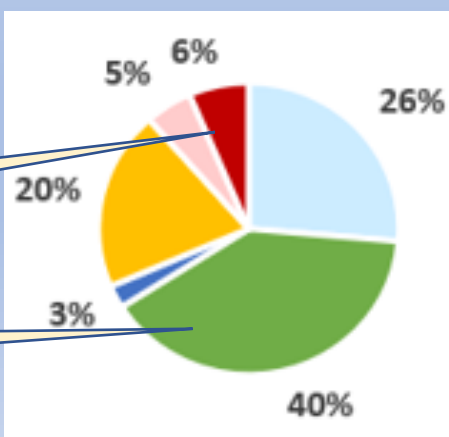
Foods purchased (kgs) and their emissions (kgs CO₂e per kg food)



Average **2.51**



Lowest case **1.59**



Highest case **3.82**

High % poultry

High % raw f&v

Conundrum!

High % pure-bred beef

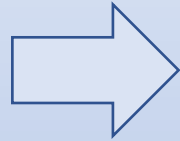
Low % raw f&v

Dairy Fruit&Veg Fish Grocery Other Meat Red Meat

Implications for Achieving Net Zero?

Example: local authority serving 25,000 meals per week, using AD for waste disposal

If LA serves 'AVERAGE' menu (2.51 kgsCO₂e/kg food)

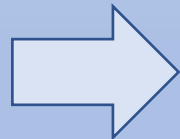


Total annual emissions = 1,170 tonnes CO₂e



~195 ha woodland
COST = ~£23,400 p/a

If LA serves 'LOW CARBON' menu (1.59 kgsCO₂e/kg food)



Total annual emissions = 740 tonnes CO₂e



~123 ha woodland
COST = ~£14,800 p/a

Actions? (operational)

- Increase fruit and veg (esp. fresh, seasonal, non air-freighted)
- Shift to pork, poultry and plant-based alternatives
- When buying meat → quality, British, “carbon lowering”
- Promote energy efficiency in kitchens & canteens
- Food waste → reduce and shift to anaerobic digester/composting

	kgs CO2e per kg	Data Source	
Beef, UK, chilled	18.6	CIEL (2020)	
Pork, chilled	7.52	Agribalyse (2020)	
Poultry, chilled	5.47	Agribalyse (2020)	
Plant-based, chilled	2.20	Quorn (2019)	
Milk	1.49	Agribalyse (2020)	
Cheese, cheddar	6.26	Agribalyse (2020)	
Carrots, raw	0.29	Agribalyse (2020)	
Potatoes, raw	0.58	Agribalyse (2020)	
Chips, frozen	0.96	Agribalyse (2020)	
Tomatoes, canned	1.01	Agribalyse (2020)	

Actions? (strategic)

- Measure your emissions → benchmark and compare
- Engage with suppliers to encourage emissions reduction
- Take part in Courtauld's 2030 initiative (developing a common Standard for how carbon emissions will be measured and reported in UK food and catering) [Ramping up action on greenhouse gas emissions in the food supply chain: the Courtauld Commitment is setting the standard again | WRAP](#)

About your Food Procurement

In order to measure the carbon footprint of your procurement, we need to know about which foods for your meals service. Please estimate the percentages falling into each of the categories below.

Currency

Red Meat	
Other Meat	2
Dairy	5
Fruit And Vegetables	8
Fish	
Groceries	

1 Week 1



MEAL ANALYSER





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Thanks for your attention!

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