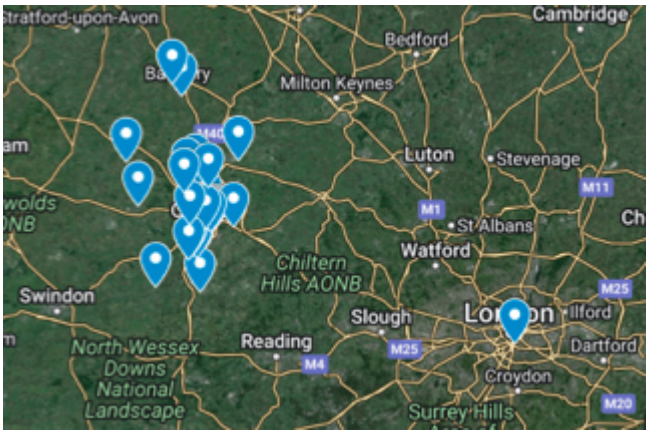
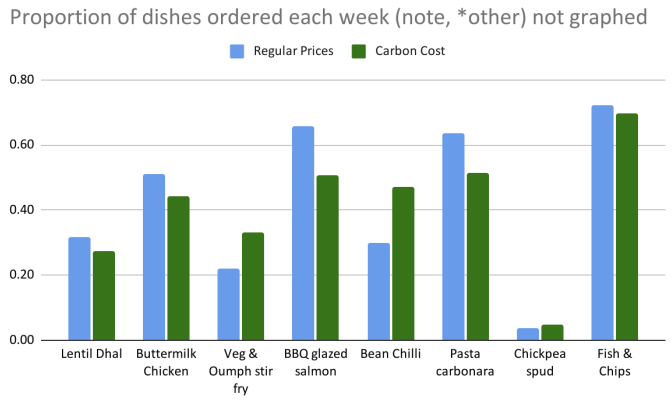
Case study: Changing consumer behaviour: Carbon Cost of Food Week

- **Summary**
  - **Our campaign again suggested you can influence consumer behaviour by using the Carbon Cost;**
  - **While enforcing a £1 per mile Carbon Cost in our cafe plant based meals nearly doubled and meat based meals decreased by about 90%. Similarly, at a test site at LMC plant based meals increased by 20% and meat based decreased by 10%;**
  - **We faced challenges around implementing the model, which met with consumer resistance in our cafe related to higher price points for red meat and we will consider how to engage people with the concept going forward;**
  - **We need to further understand the impact on plant vs meat based profitability of partner businesses to increase uptake of Carbon Cost long term.**
- Carbon Cost of Food Week seeks to help people make incremental changes in dietary decisions by lowering and teaching the Carbon Cost of the food choices. We provide a tool to help participants estimate the carbon footprint, or Carbon Cost, of their food choices in car miles and encourage local food businesses to increase transparency of the carbon footprints of their menus.
- This was a repeat campaign and we built upon learnings from 2023 to simplify the challenge and amplify the marketing and outreach. This resulted in **tripled participation**. People from all over Oxfordshire and into London participated.

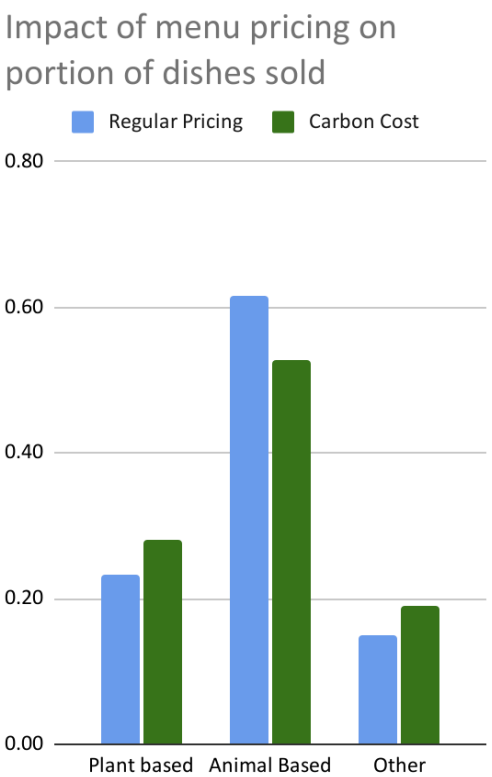


  - We produced simple, visual tools (including a new 'speedometer system' to help consumers quickly visualise high, medium and low Carbon Cost items), and ran a Carbon Cost Challenge.
  - 8 food businesses and university colleges across Oxfordshire participated, where 107 items were Carbon Costed over 19 cumulative days on site.
  - We also presented at 5 in person events with our travelling Carbon Cost of Food exhibit, including Cherwell District Council's annual Climate Summit, a climate brunch and free gift swap in central Oxford, a showcase in Witney, and a cook-off day at Oxford Brookes University. Hundreds of people ages 6-80 were reached in this way over the campaign week.
  - We reached 6,500 engaged community members on social media and asked over 130 people for their views.
- Cherwell Collective's Climatarian Kitchen, served over 200 dishes, and saved 1300 car miles of food waste during the campaign.
  - Climatarian Kitchen has used Carbon Cost to recommend suggested donation amounts for food since opening in 2020, but during the CCOFW campaign week we **enforced people paying the Carbon Cost of food** (£1 per car mile) rather than

running our typical pay-what-you-can service (with the facility for winter warmers soups and other food for those in need was still available at no cost).
    - We saw a change in purchasing behaviour, most significantly in **a decrease in animal-flesh based mains purchased** (only two meat dishes were sold, comprising 4% of total mains compared to typical 54-57% total orders where pricing is not enforced).
    - We also **saw an increase in plant based options** ordered, with **44% of diners ordering mushroom risotto (**vs**.** 24%-34% recent percentages of orders).
    - **We experienced significant push back with the enforcement of Carbon Costs**. Some people queried the costings for red meat and several people left the cafe without ordering. We also had feedback from several diners that they were encouraged to try a vegetarian dish because of the lower cost and appreciated the opportunity. We will be assessing how we can design the menu with our regular diners next year to engage people and prevent them leaving the cafe.
- Our findings from Lady Margaret Hall were equally promising. This Oxford University College served 1048 total dishes during Carbon Cost of Food Week. They then ran the exact same menu in March with their regular pricing scheme so that we could evaluate the impact of the Carbon Cost. Contact us if you would like to see detailed methods of this evaluation.
    - Animal-based meat dishes were always more popular than plant based dishes. But when the Carbon Cost was displayed, meat orders decreased by 10%.



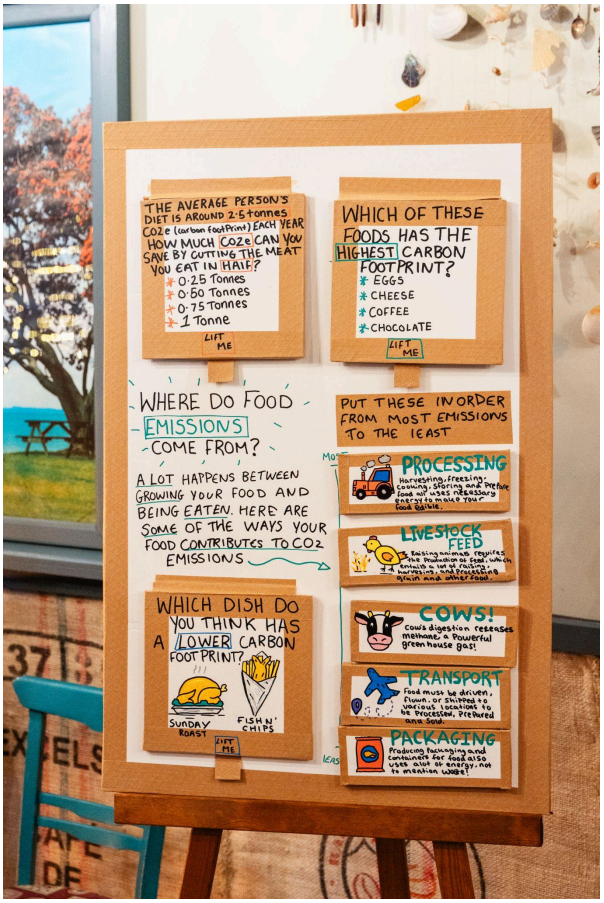
    - Orders for plant based dishes increased by over 20% when using the Carbon Cost.



- Lady Margaret Hall's very affordable dishes did not include red meat on either menu, so the average meal price was not substantially altered by Carbon Costing.

	Carbon Cost	Regular Pricing
Plant based	*£2.00*	*£2.75*
Animal Based	£3.75	£3.08
Other	£3.00	£2.54
Average	£2.92	£2.79

- A clear learning has emerged: You can immediately **change consumer demand by using Carbon Cost as a pricing tool.** This had significant impact above and beyond having that information readily available for people to read and consider when ordering (available in two of the studied food businesses year round). Businesses express great concern around implementing these changes and how it may impact profit, so the challenge we have is to reach out to our participants about their profit points and do an in depth analysis of whether these implementations change profit margins.
    - Gross revenue at Lady Margaret Hall slightly increased (Carbon Cost: £3490; Regular Price £2888). However, we do not have price points to determine if plant based foods make lower profit given they may take more staff prep, etc. We plan to look at financials more carefully to see how this tool can be used to allow consumers to change demand but also protect profitability.
- During this process we created a travelling exhibit (pictured below) explaining the Carbon Cost of food and how to lower it by making different choices.



- We also have compiled a Carbon Cost Toolkit for people to use who are interested in implementing similar approaches in their businesses or lifestyles. This toolkit is free for everyone to use but is copyrighted and under trademark review. Please make sure to credit/alert us when using, so we can inform you of any updates and keep track of our impact (cherwellcollective@gmail.com).
- Coming soon:
    - A hardcover and digital pdf cookbook/guide to lowering the Carbon Cost of your life.
    - An animation about food supply chains and how surplus distribution works locally.
    - A static page with this toolkit on our website, but while you wait, check out our blog!