

Envirofy your Shop: Development of a Real-time Tool to Support Eco-friendly Food Purchases Online

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Envirofy is the first eco-friendly e-commerce grocery tool for real shoppers. Envirofy was developed using both behaviour change theory (Behaviour Change Wheel) and multidisciplinary evidence.

Problem Domain & Motivation

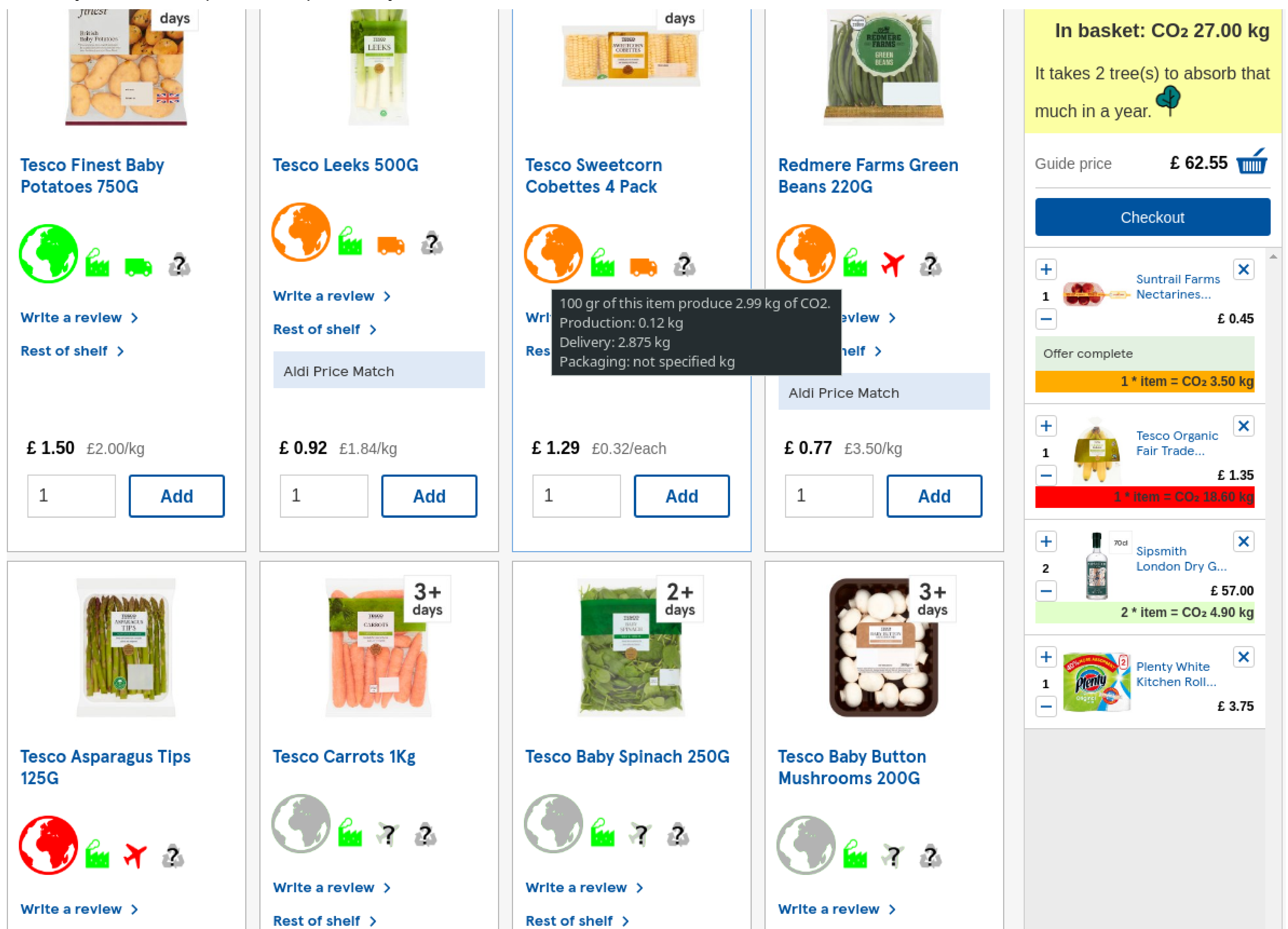
A **third** of global greenhouse gas emissions are **attributable to the food sector**, however **dietary change** could reduce this by **49%**. Many people intend to make eco-friendly food choices, but fail to do so at the **point-of-purchase**. **Educating consumers** on the environmental impact of their choices during their shop may be a **powerful approach** to **tackling climate change**.

The Main Features of Envirofy

- **traffic light colour coded icons** to convey the food product's overall, production, transport, and packaging carbon footprints;
- **reordering the items** on the website **from environmentally friendliest** (at the top of the page) **to unfriendliest**; and
- a **running total** of the shop's impact.

The Envirofy Web Browser Extension

Envirofy works on top and independently of the standard website of Tesco and Waitrose & Partners.



The screenshot displays the Envirofy web browser extension interface overlaid on a Tesco website. It shows a grid of product listings, each with a traffic light icon indicating its carbon footprint. A tooltip for 'Tesco Sweetcorn Cobettes 4 Pack' shows: '100 gr of this item produce 2.99 kg of CO2. Production: 0.12 kg, Delivery: 2.875 kg, Packaging: not specified kg'. The right sidebar shows a shopping basket with a total CO2 of 27.00 kg, a guide price of £62.55, and a checkout button. The basket items include Suntrail Farms Nectarines (1 item, £0.45, CO2 3.50 kg), Tesco Organic Fair Trade... (1 item, £1.35, CO2 18.60 kg), Sipsmith London Dry G... (2 items, £57.00, CO2 4.90 kg), and Plenty White Kitchen Roll... (1 item, £3.75).

Conclusion

HCI researchers have an **important role** in designing, developing and evaluating novel behavioural interventions that target sustainable food choices, intention-behaviour gaps in other domains, and ultimately **in reducing GHG emissions**.