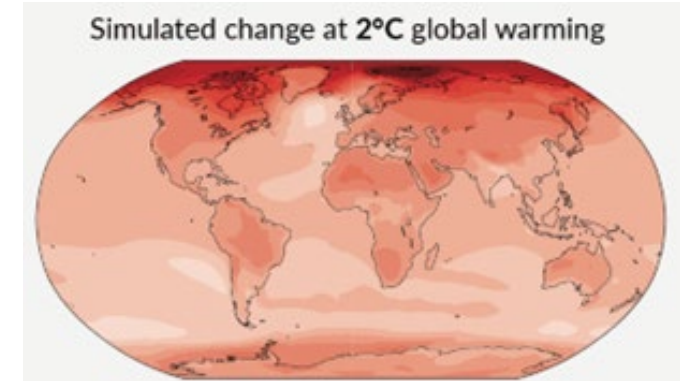




Personal Carbon Allowances or Budgets

- A mitigation policy proposed and developed in the UK in the 90s.
- The scope of the scheme covers household energy and personal travel.
- Individuals would be periodically given equal, free allowances.
- Defined as “a policy ahead of its time” in 2000s.
- Low social acceptability, technological barriers and high implementation costs





The Citizen Carbon Budget

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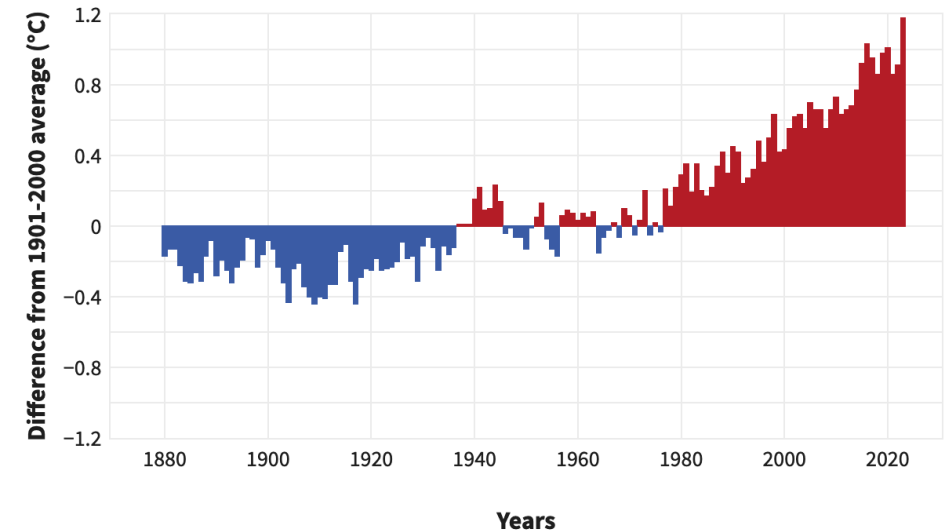




Pace and scale of current climate action are insufficient to tackle climate change

- Limiting global warming involves rapid, deep, and in most cases, immediate carbon emission reductions from both supply and demand sides.
- Potential areas for reduction of individual carbon emissions: food, transport, and household energy.

GLOBAL AVERAGE SURFACE TEMPERATURE



The Intergovernmental Panel on Climate Change (IPCC), Synthesis Report on Climate Change 2023; Climate Change Committee, 2021

The Citizen Carbon Budget (CCB)

- Large scale survey about views of a CCB and their relationship with personal values
- A workshop drawing from Responsible Research and Innovation (RRI)
- A one-month deployment of a CCB app
- A user study with a CCB recommender system

"Like rearranging deck chairs on the Titanic"? Feasibility, Fairness, and Ethical Concerns of a Citizen Carbon Budget for Reducing CO2 Emissions

**Under review. Submitted to the ACM Conference on Fairness, Accountability and Transparency (FAccT)*

"Like rearranging deck chairs on the Titanic"? Feasibility, Fairness, and Ethical Concerns of a Citizen Carbon Budget for Reducing CO2 Emissions *

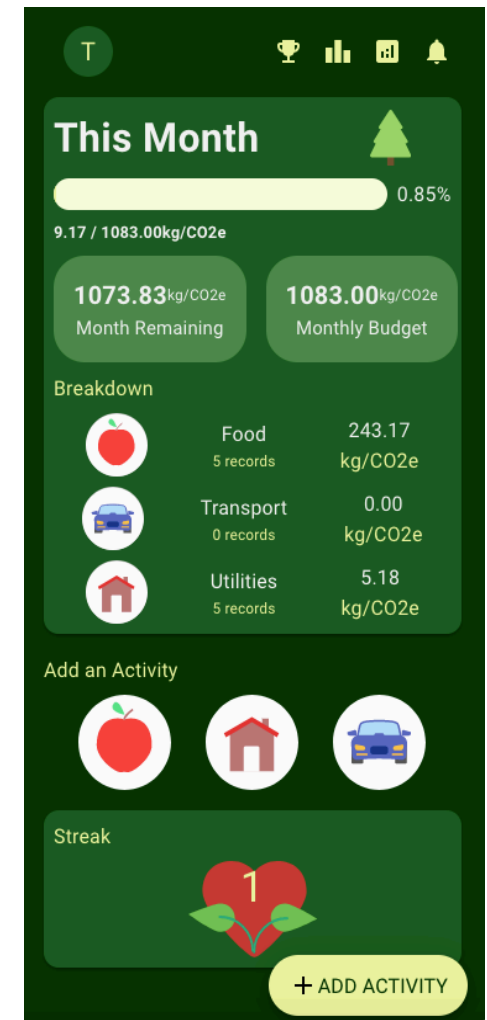
RRI workshop

- Project team
- External partners (charity, industry, policy making).
- Discussions and a card-based exercise, using a tool called the Moral-IT cards



CCB app user study

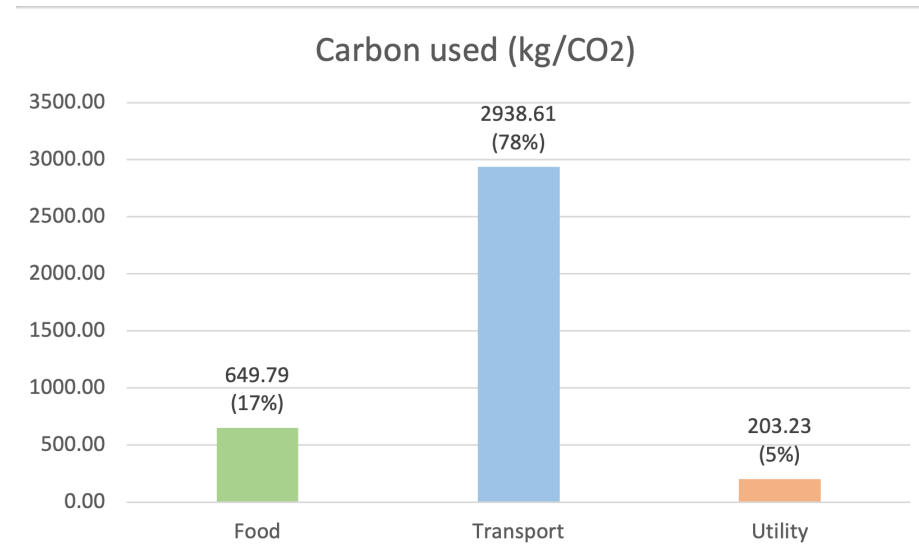
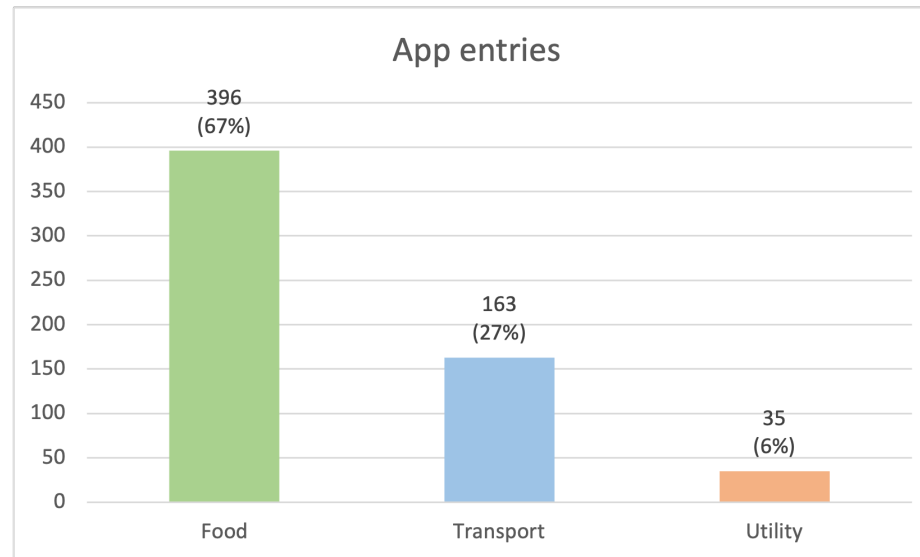
- One-month deployment
- Twelve members of the public based in the UK
- Asked to log a minimum of one record per day
- Entry and exit interviews



*Under review. Submitted to the ACM Conference on Fairness, Accountability and Transparency (FAccT)

594 app logs

- 396 food, 163 transport, and 35 utility
- Min value: 1 cup of coffee (0.05025 kg CO₂e)
- Max value: 5800 miles travelled by plane (1786.4 kg CO₂e).



Thematic analysis



Feasibility

- Purposes, responsibilities, and impact
- Supporting awareness of own carbon emissions
- Conditions for acceptability and uptake



Fairness

- Unequal opportunities for sustainable lifestyles
- It is unfair to treat all people equally
- Environmental justice



Ethical and legal considerations

- Fear of a restrictive or punitive system
- Data protection, privacy and surveillance concerns
- Unintended consequences

Key takeaways

- The need for increasing efforts to raise awareness of individual carbon emissions; a voluntary carbon budget approach could contribute to that goal.
- Diverse nature of individuals' commitments and carbon capabilities, as not everyone can commit to the same goals due to variations in lifestyles, living infrastructure, personal circumstances, and wider context.
- Value of combined approach: it provided both macro and micro perspectives, addressing systemic concerns (RRI workshop) and individual experiences (app study participants).
- Promoting individual behaviour change should be intertwined with fostering broader public engagement and collective action for mitigating climate change.



Thank You



Get in Touch

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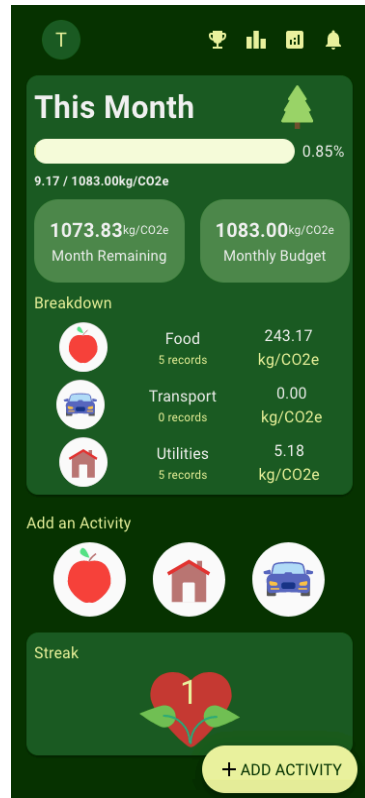
🐦 [@agiselarc](https://twitter.com/agiselarc)



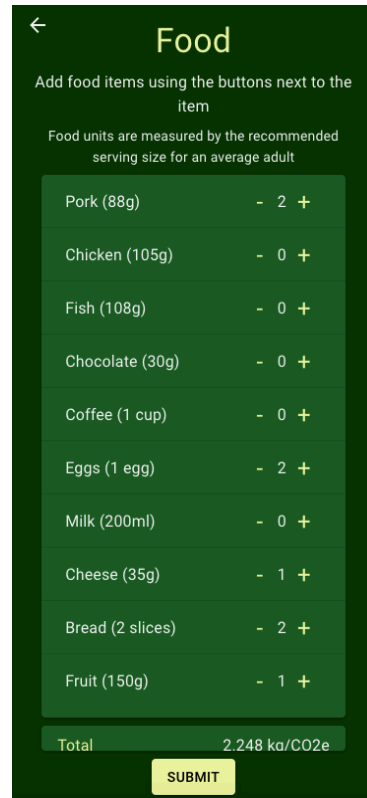
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The Citizen Carbon Budget (CCB) app

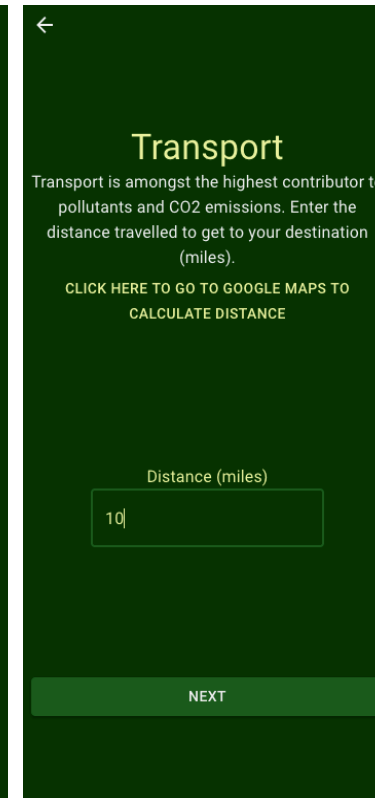
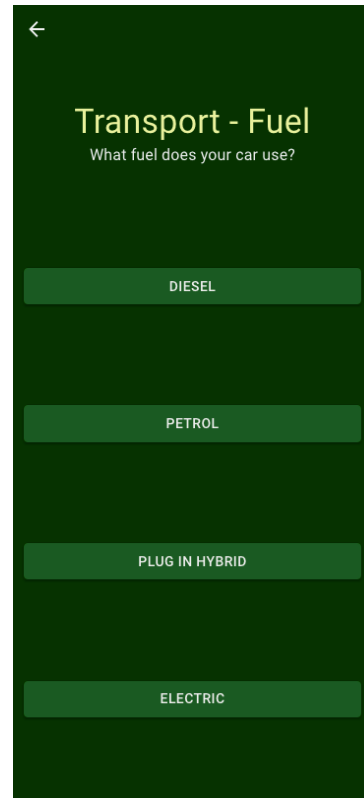
Home page



Add food



Add transport



Add utilities

