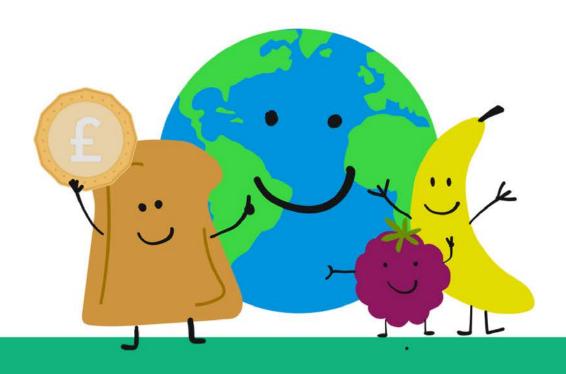
KITChe IMPACT REPORT



Kitche and Essex County Council

Home Food Waste Reduction Project

2022 - 2023









INTRODUCTION

As part of the BLUEPRINT to a Circular Economy project, Essex County Council has teamed up with Kitche to fight home food waste. The aim of the project was to encourage Essex residents to download and use the Kitche app to reduce their household food waste and save money. A range of different channels and messages were used to communicate with Essex residents. The learnings from the project shall help inform future food waste interventions and policy.

What is the BLUEPRINT to a Circular Economy?

The BLUEPRINT Project funded by the EU will help local authorities in England and France implement a circular economy, by developing a framework, mobilising social enterprises to provide necessary training and helping schools and households to change their behaviour. The model developed by the project will help local authorities create waste management strategies that also address social value and innovation.

Who is Essex County Council?

Essex County Council is a level of local government that governs the non-metropolitan county of Essex in England. They work together with their 12 district councils and the government to deliver services, including waste management and campaigning, to their 1,498,181 residents (Estimate, 2020).



What is Kitche?

Kitche Limited is a UK based business offering a One-stop Solution for Home Food Waste.

Kitche has developed a free mobile app that targets long term food waste behaviour change. By offering a range of features we support households in food waste reduction. Users can add their food products to the app, receive reminders, search recipes using food they have at home, track their spending, CO2 and water emissions, get awarded for positive behaviours and access a lots of exciting resources in our Explore section!





We capture a huge amount of app data on food waste behaviour which we share with our partners to help inform food waste policy, interventions and impact monitoring. Beyond the app we also have a huge offering as a brand and platform from marketing assets and Chef content to experiential events and research.

IMPACT AT A GLANCE



1,286 Essex Residents used the Kitche app to reduce their waste. A **511%** increase in users since the project launch.

Essex Kitche users reported that they waste 11.98% of their food, compared to the national average of 18.7% (WRAP, 2021*)





34 channels and over **80** messages were used to communicate with Essex residents from social media and digital marketing to magazine articles and library screens!

We have learnt **key insights** about Essex resident's food waste behaviour including district level differences!





We ran a competition over two weeks driving **237** app downloads. We awarded the lucky winner an air-fryer.

COMMUNICATIONS

81 different messages, posts and graphics were used during the project across 34 different channels.

- Love Essex Social Media Channels: Instagram, Twitter and Facebook
- Email Newsletters: Love Essex, Your Essex, local district newsletters + more
- Magazines (print): Basildon Our Borough Magazine, Friends at Broomfield Hospital Magazine, Harlow times, Essex Wildlife Trust + more
- Supermarket advertising: ASDA and Morrisons stores
- Library advertising: Library screens
- Internal Council Channels: Internal website and staff emails, Local Borough shares and BLUEPRINT socials
- Digital Marketing: Youtube and Twitters ads





COMMUNICATIONS

Library screens



Magazine Ads - Essex Wildlife Trust and WCA





COMMUNICATIONS

Social media - Instagram







Kitche took over Love Essex's Instagram for a week in August 2022, we ran a range of content from interesting facts and seasonal tips to fun Mini Food Waste Warrior activities! During the week we got over **50 likes** and over **603 views** on the video content!



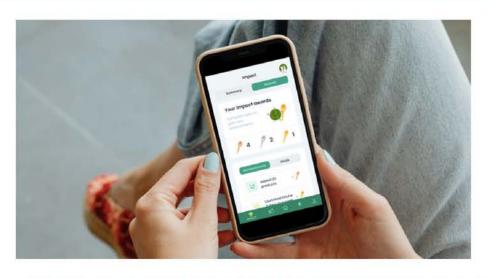


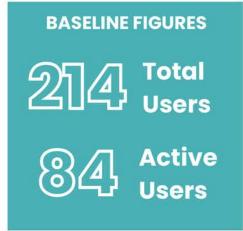


We also ran a giveaway competition on the Love Essex Instagram channel giving an air-fryer to a lucky winner who downloaded the Kitche app during the competition period. We also promoted the competition through Youtube ads. We received 237 downloads and sign ups for the app!

Check out our Instagrams @loveessexuk and @kitche

PROJECT LAUNCH

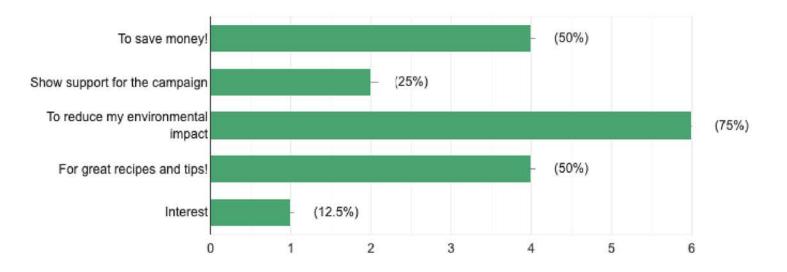




Prior to project launch Kitche had a small presence in Essex with a total of **214** app users and **84** active users. We define **active users** as users who have inputted food into the app and reportedly ditched a food in a given time period. For project launch we wanted to create brand awareness across the county to warm up the audience for a year of more targeted communications. We mainly used social media channels, newsletters and internal Essex County Council messaging for project launch.

Aligned with previous research on motives for reducing food waste we found that 75% of Essex residents wanted to download the app 'To reduce their environmental Impact', while 50% wanted 'To save money!'. 50% also talked about the great recipes and tips as a driver. Other reasons indicated by residents were 'To show support for the campaign' and 'Interest'.

Figure 1. Responses to 'Why did you download the Kitche app' in Essex



JOINERS OVER TIME

Pownloads slow

No newsletter features
Very little print during the summer (only Harlow times)

November- COMPETITON
We ran a competition giving away an air-fryer from mid-November, promoted across social media, paid advertising and newsletters

14 Mar 22

12 Sept 22

13 Mar 23

2nd May - PROJECT LAUNCH sharp increase

- Social media posting, Facebook, Twitter, Instagram
- Love Essex Newsletter
- Sharing amongst Essex internal channels

Total Users

Active Users

During the project we had a **511%** increase in app users. The initial project launch and the first 3 months saw the sharpest rise in users. During the summer months there was less marketing, mainly using social media, this period saw slower growth. There was also a spike in November when we ran a competition to incentivise Essex residents to download the app.

FOOD PRICE & QUANTITY

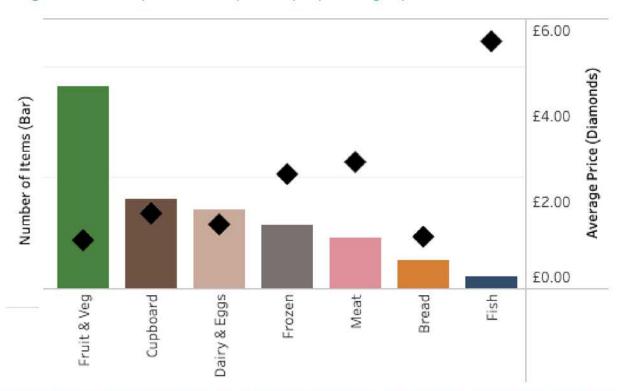


Figure 3. Food price and quantity by category, Essex residents

Figure 3, shows a breakdown of the number of items inputted into the app in by food category, as well as the average prices (.♠). Fruit & Veg foods were imported into the app significantly more than any other category. The second most popular category is Cupboard foods, while the least imported category is Fish. Bread, while being a staple food for many is often one of the least imported goods because people buy a single loaf to last over a week.



The Kitche app also collects product prices, as shown in **Figure 3**. **Fish** products are, on average, the most expensive food category at nearly **£6** per product. While **Bread** is the cheapest averaging at just over **£1** per item. We would expect more expensive foods to be more highly valued and therefore wasted less.

15,521

products were added into the app by Essex residents during the partnership.

FOOD USAGE TIMES

Examining food usage times (the time between a food being added and thrown away in the app) identifies food groups to be targeted by interventions as those with shorter usage times are more at risk of being thrown away.

Figure 4 shows that Fish had the shortage usage time, with a median of 3.5 days, Bread's was slightly longer at 5 days while Fruit & Veg was on average, kept for 17 days before it was ditched by Essex residents. Given that Fish has the shortest usage time and is the most expensive in terms of cost and emissions, it should be a focus food group of future messaging in Essex



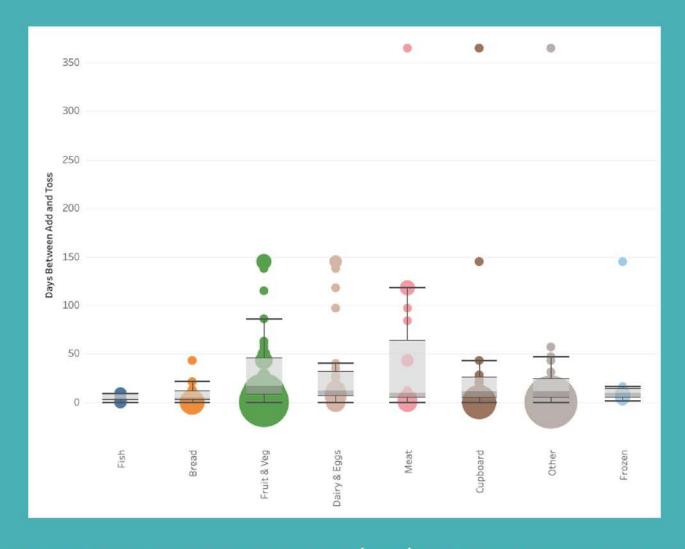


Figure 4. Food usage by category, time (days) between add and ditch, Essex residents

PERCENTAGE DITCHED

Average % Ditched Flag

111.789%

Average % Ditched

Level

4.02%

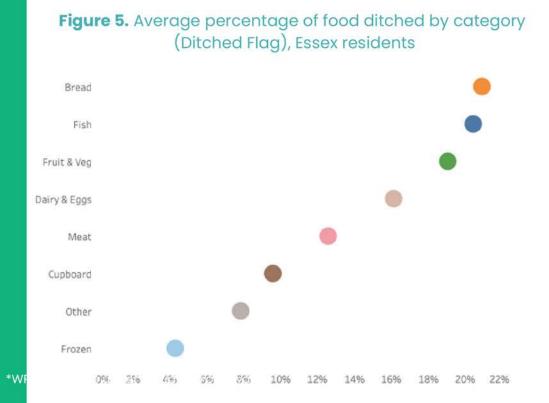
Ditched Flag measures
whether an item gets
thrown away or not
regardless of the proportion
ditched. For instance, if half
an apple is thrown it will be
flagged as a ditched item.



Ditched Level takes into account the percentage % of each food item that is reported ditched. For instance, if you throw a 1/4 of a tomato away then you can indicate that in the app and it will be recorded as 1/4 of an item ditched.

WRAP's research* (2021) found that **18.7**% of households' edible food ends up in the bin! We found that Kitche users in Essex ditched **11.78**% (ditched flag) of food items. When looking at what % of each item was thrown away we found that **4.02**% (ditched level) of food imported into the app was thrown away. Both of these figures are considerably lower than the national average, suggesting that the Kitche app has helped Essex residents reduce their food waste.

MOST WASTED FOOD CATEGORIES



The most wasted food category in the Essex area during the campaign was Bread, just over 21% of bread imported into the app was also reportedly wasted! WRAP also found bread to be one of the most ditched foods, in 2021* 20 million slices of bread were thrown away everyday in the UK. Essex residents also reportedly wasted a lot of Fish. According to WRAP only 6% of fish is wasted compared to over 20% of fish reportedly wasted by Essex Kitche users. It is important to take into account that fish was, however, the least imported food into the app. Therefore the results could have been skewed by a few user throwing it away. The least wasted foods were Meat and Frozen. Frozen foods stay fresher for longer and meat based foods are often considered more valuable due to their higher price which might account for them being thrown away less than other food groups.



APP USAGE



4万分3 Recipe events

My recipes events



We also looked at app usage in Essex during the project period to see what features Essex users were most engaged with. The recipes section was one of the most popular tab in the app with 4,773 recipes events and 403 my recipe events since August (Events count actions like saving, clicking, searching)

Since we have launched new features we have seen a shift in app usage towards these features, such as the Explore and Impact tabs.

When comparing the app usage of Essex residents to the rest of the UK we found that Essex users had higher average times spent on the app, while there was also more variation. This might be accounted for by targeted messaging and marketing across the period.

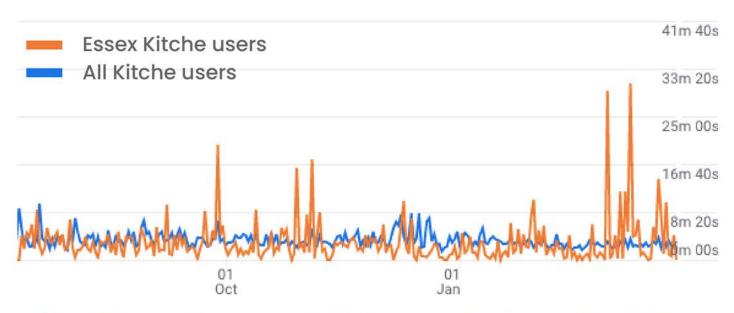


Figure 6. Average time spent on the Kitche app over time, Essex residents & All users

COMPARING TWO BOROUGHS

Chelmsford

Household composition:

- 48% Family
- 12% Single
- 38% Multi Person

9.41% of food was ditched (flag)



Most ditched

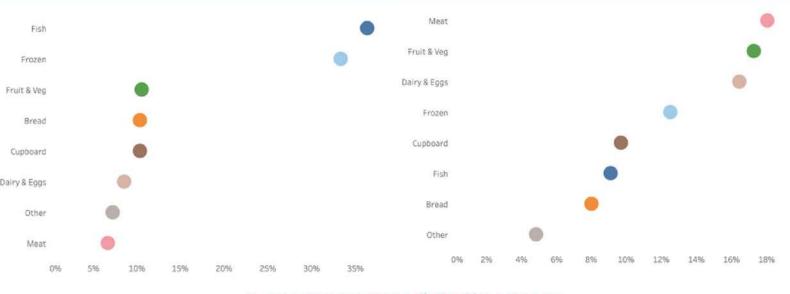
Braintree

Household composition:

- 44% Family
- 10% Single
- 43% Multi Person

10.98% of food was ditched (flag)





Average % percentage ditched by category

By comparing **Chelmsford** and **Braintree**, the districts with the biggest Kitche userbases, we can see they very similar household compositions with a high percentage of Kitche users being from families (48% and 44%) and a low portion from single occupant households. There was a variation in the food categories being ditched. While Chelmsford's least wasted food was **Meat**, Braintree reportedly wasted the most meat.

FOOD WASTE

Basildon

Population: 187,571 Active users: 78 % difference: 2.27% % food ditched: 12.75%



BY DISTRICT



Population: 155,268
Active users: 142
% difference: 16.52%
% food ditched: 10.98%
Most wasted food category:



stentWooo,

Population: 77,047
Active users: 28
% difference: -0.17%
% food ditched: 5.49%
Most wasted food category:



ostle Polis

Population: 89,587

Active users: 36

% difference: 0.85%

% food ditched: 10.71%

Most wasted food category:

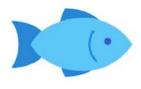


FOOD WASTE

BY DISTRICT

Population: 181,523 Active users: 137 % difference: 13.82% % food ditched: 9.41%

Most wasted food category:



% difference: 7.60% % food ditched: 11.81% Most wasted food category:



Population: 192,715

Active users: 108

Population: 134,980
Active users: 49
% difference: 0.29%
% food ditched: 8.76%



Most wasted food category:

Harlow

Population: 93,328
Active users: 32
% difference: -0.16%
% food ditched: 4.5%

Most wasted food category:

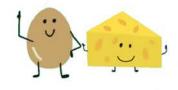


FOOD WASTE

BY DISTRICT



Population: 66,208
Active users: 80
% difference: 10.72%
% food ditched: 9.01%
Most wasted food category:





Population: 148,292
Active users: 61
% difference: 9.68%
% food ditched: 16.08%
Most wasted food category:



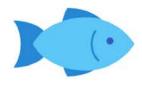


Population: 85,661
Active users: 54
% difference: 5.70%
% food ditched: 17.48%
Most wasted food category:





Population: 91,341
Active users: 123
% difference: 17.18%
% food ditched: 10.61%
Most wasted food category:



LEARNINGS

Kitche, Essex County Council and BLUEPRINT's partnership project showcased app based technology as a valuable tool in household food waste interventions and behaviour change. There were some key learnings from the project that can help inform future food waste campaigns and policy.

- It is important to use a variety of comms channels rather than rehitting the same social media channels and newsletters outlets. Audience overlap prevents comms reaching new people resulting in slowed user base growth
- Incentives were really effective in driving downloads as shown by the air-fryer giveaway (responsible for over 22% of Essex Kitche users during the project period)
- Some channels, such as Twitter, were really ineffective at engaging with the right audience and driving downloads
- Most wasted products varied from district to district, however, Bread was the
 consistently the most wasted product aligned with our UK wide findings
- Some districts found Meat and Fish, more expensive products, as the most wasted. This needs to be investigated further as these products have higher associated emissions and financial cost
- Fish also had the shortest usage time and therefore should be a target for early intervention
- The Recipe section of the app was popular and visited nearly 5,000 times in 8
 months. New app sections released in January were also popular in the last two
 months of the project.
- 41.14% of Essex users were actively using the app, that is importing food and reporting it ditched. This is a relatively high number for app usage. Essex users were also showing higher average usage times compared with UK wide users
- We also found that Essex users reportedly ditched 11.78% of their food, when taking into account portion of each item ditched then the figure drops to 4.02%, this is significantly lower than WRAP's reported national average.



DISCUSSION

The learnings from the campaign communications showed that there were big differences in the effectiveness of different channels used during the project. While the incentivised giveaway saw a spike in downloads which was promoted on Instagram and paid Youtube ads, Twitter ads were far less effective and more expensive (£250 was spent on Youtube ads compared to £400 on Twitter ads). The high spike in downloads at the beginning of the project coincided with initial posts about the partnership on social media and in range of Essex newsletters targeted a fresh audience. Repeated posts on these channels were far less effective later on in the campaign, suggesting that those who did not initially engage were unlikely to engage later on. As a unique first time partnership we were unable to track exact metrics as marketing was done via Love Essex comms channels rather than Kitche's own channels. While we are able to match time of downloads with time of communications, for future partnerships ad and comms monitoring should be set up throughout the campaign before launch.

We observed some really interesting food waste behaviours amongst Kitche Essex residents. From district to district we found differences in what food categories were being wasted. However, we should note that in areas where we there were very few users and therefore small samples, a small number of people can skew the results. Findings that were unique to Essex, that meat and fish were the most wasted category in Braintree and Chelmsford respectively should be further investigated as these foods have high financial and environmental cost and should be specific targets for intervention. Fish and Meat are also readily frozen foods and have, according to our findings in this project, low usage times.

We found that Essex Kitche app users reportedly less waste than the national average according to WRAP, suggesting that the app was effective at supporting residents in food waste reduction. However, it is important to note that while the app is more accurate than food diaries or manual food tracking it still relies on self-reported measures which are susceptible to bias.



NEXT STEPS

This partnership project showed that we are able to drive engagement through communications, with a 511% increase in users over the partnership period. Essex residents were responsive to the tech, app-based interventions, which provide a more dynamic and interactive tool for behaviour change than more traditional intervention materials and communications limited to messaging and knowledge sharing.

Furthermore the insights gathered from the partnership data are valuable for guiding future food waste policy and interventions and far more cost effective than alternative data collection methods such a compositional food waste analysis.

As app- based technology continues to improve, with AI integration at the forefront of future developments, the scope for food waste reduction, cost saving and environmental impact should not be underestimated.

We hope the findings from this project encourage other local authorities to embrace technology, in particular the Kitche app, as an effective tool in household food waste reduction and take the learnings from this project to design and implement future campaigns.



www.kitche.co, Follow our socials @kitche









TESTIMONIAL

Working with the Kitche team was a brilliant experience from start to finish. Tish, Lynsey, Alex and the team are all so passionate about reducing food waste at home and making a difference. We had frequent catch ups throughout our partnership to discuss how things were going and this really helped to keep the campaign activities on track. We received tailored designs and communications, and regular updates on Essex resident activity. We'd definitely recommend other councils to get in touch to consider a partnership with the Kitche team in their area.

Cathryn Wood
Senior Circular Economy Officer, Essex County Council

www.kitche.co

in

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Kitche it, don't ditch it!