

Data Commons Scotland

25th February 2021
PROJECT UPDATE



UNIVERSITY of
STIRLING



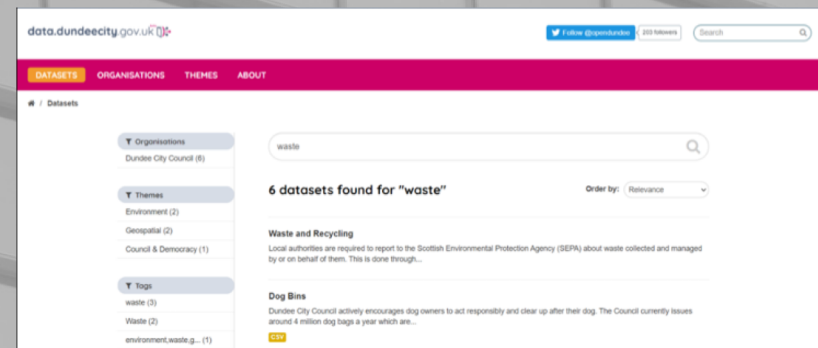
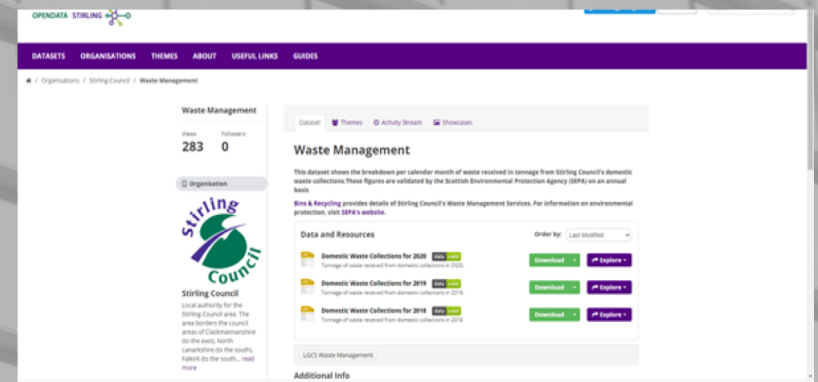
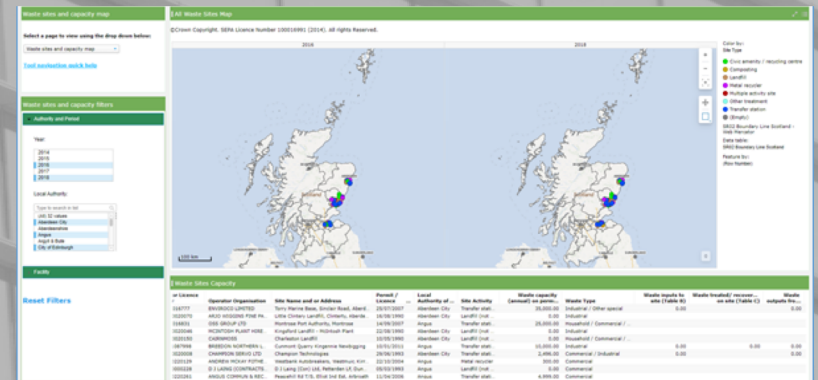
DCS Project Goals

“...working towards the delivery of a platform that helps users access, explore and utilise Scotland’s waste and resources data.”

To discover user needs we talked to many individuals about open data, waste and resources. This helped us to understand things that help and hinder different users finding, exploring and using the data they are interested in.

At the same time we have been looking at the websites of organisations who currently provide waste and resources data to see how they align with our users interests, lifestyles and data literacy.

- **What datasets are out there on waste and resources?**
 - What are they about?
 - Who manages these?
- **What is missing?**
 - Is this currently collected?
- **What open source solutions are there for data storage, presentation, and reuse?**
- **Who are the potential users?**
 - What might they be accessing the data for?
 - What helps and hinders their experience?



Data collection & analysis

Collection

Semi-structured interviews, open questions, diversity of individuals

- Waste practitioners
- General public
- Activists
- Government
- Business

+ Waste Practitioners Workshop
("The DCS Game")

Analysis

Phenomenographic analysis: Exploring variation in the ways people experience something or think about something. Leading to:

An "Outcome Space"

- *Agency and change*
- *Aims/values*
- *Quality/availability/transparency of data*

Personas and scenarios

- **Available**
at: <https://campuspress.stir.ac.uk/datacomm/onsscotland/resources/>

Findings

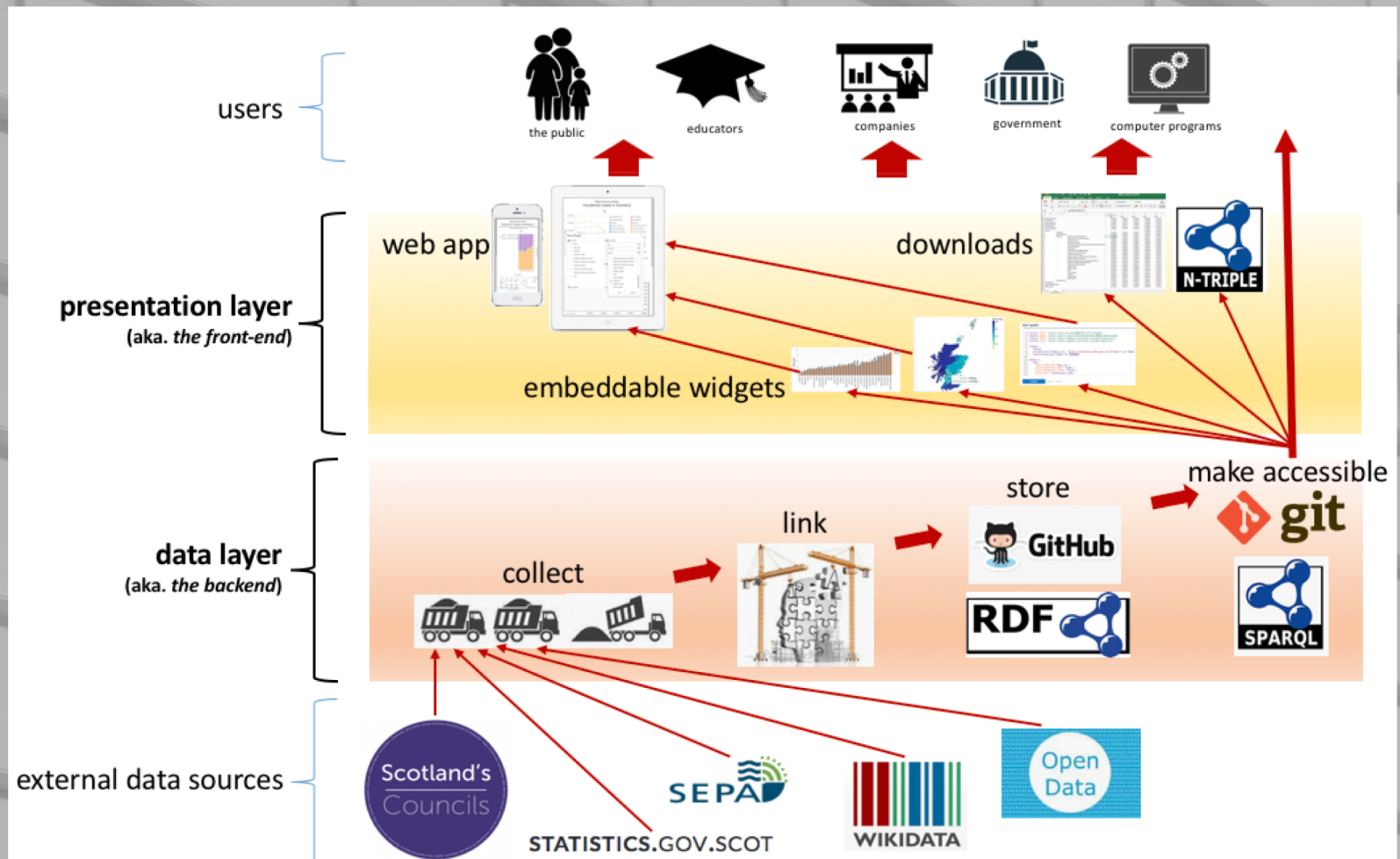
Data ...

- Can be hard to find
- Can be difficult to interpret
- Provision and presentation is often geared towards higher levels of data literacy
- Benefit from clearer terminology and more standardisation
- Benefit from more contextualisation
- Very little data on reuse
- Not much available below LA level

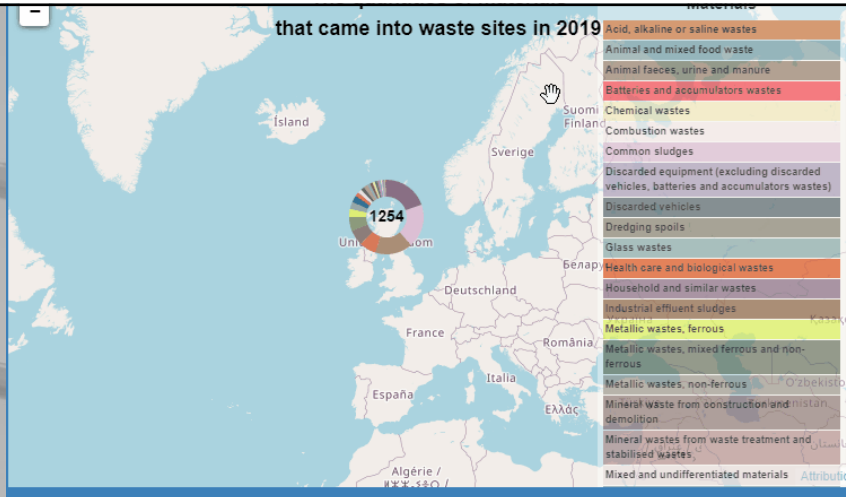
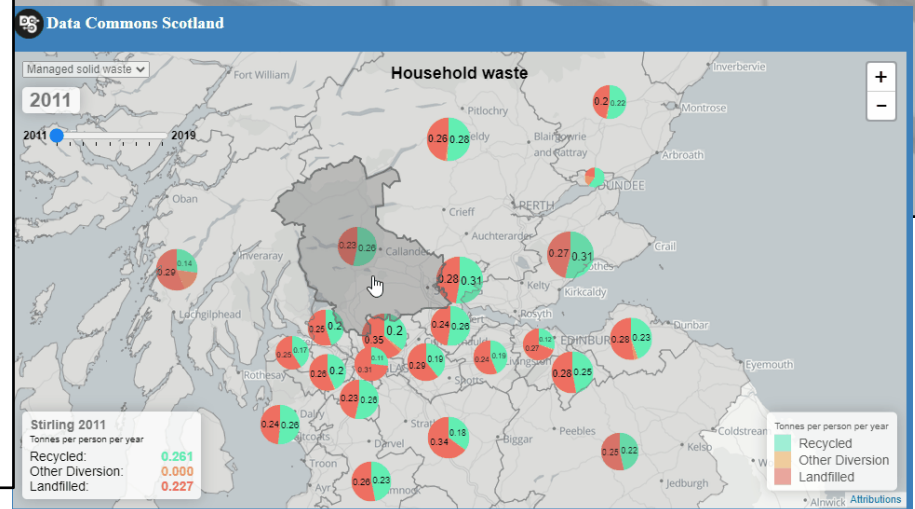
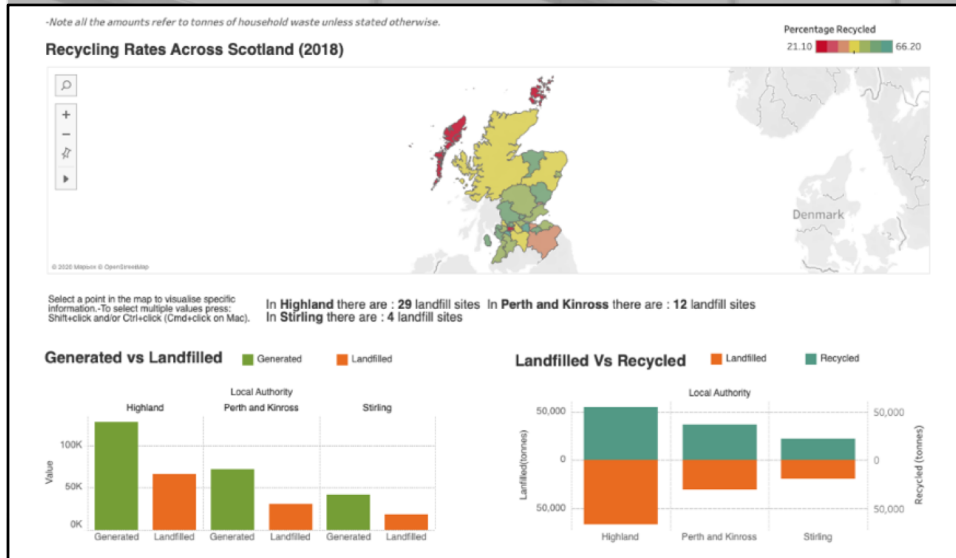
Motivations for use ...

- ***Commitment***: wanting to be environmentally responsible at the individual level
- ***Education***: finding and sharing data to improve understanding of waste and resources
- ***Identifying opportunities***: looking for business or creative opportunities
- ***Community activism***: finding and sharing data to encourage reuse/recycling
- ***Political activism***: Holding organisations / authorities to account

Technical architecture



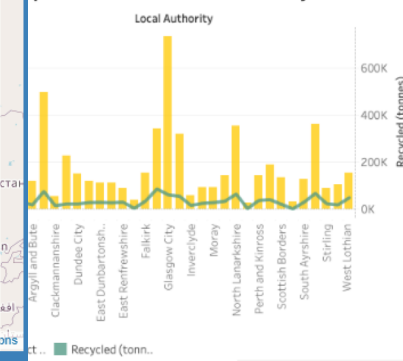
Widget prototyping



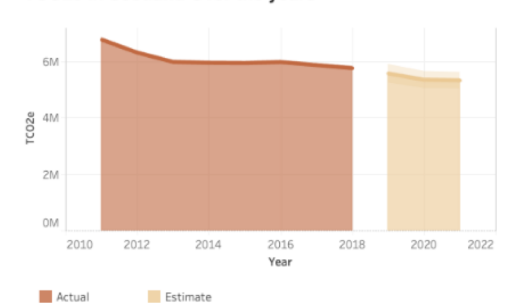
the map to visualise specific information. To select multiple values press: Shift+click and/or Ctrl+click (Cmd+click on Mac).

The Carbon impact of Scottish household waste generated and managed between 2011 and 2018 is of **48,529,203 TCO2e**.

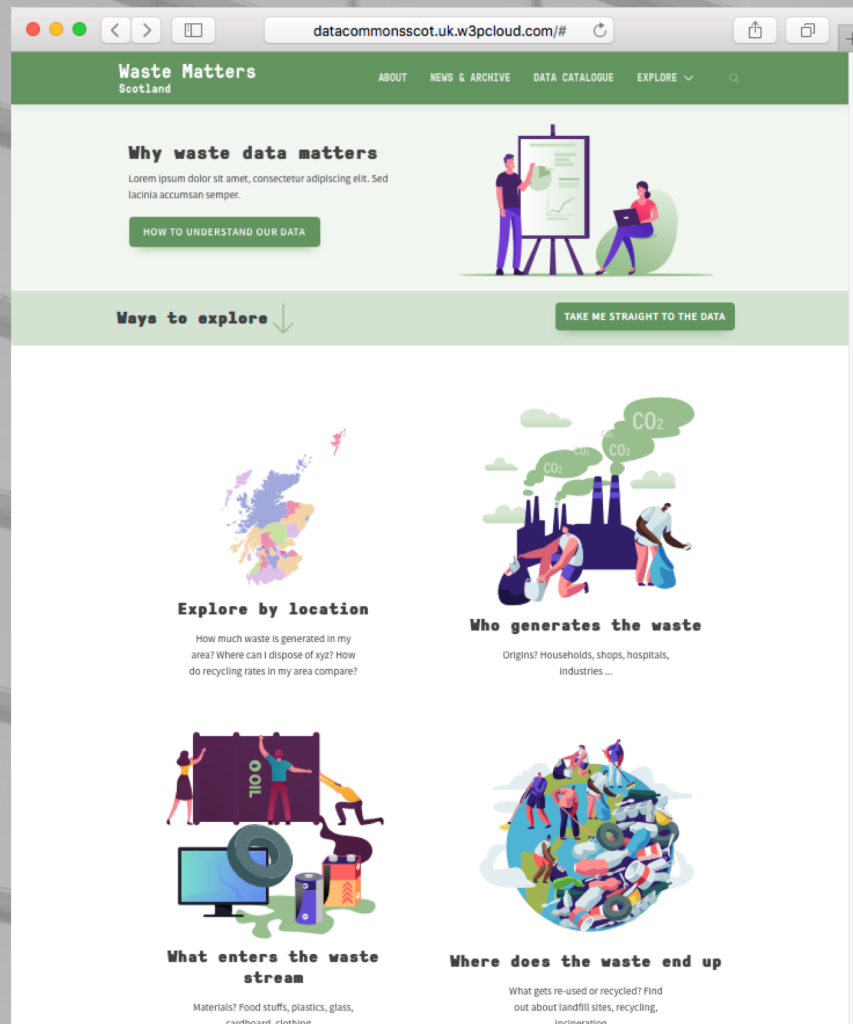
Impact and Household waste Recycled



TCO2e in Scotland Over the years



Website prototyping

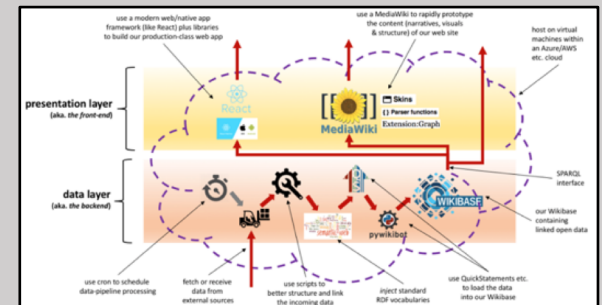
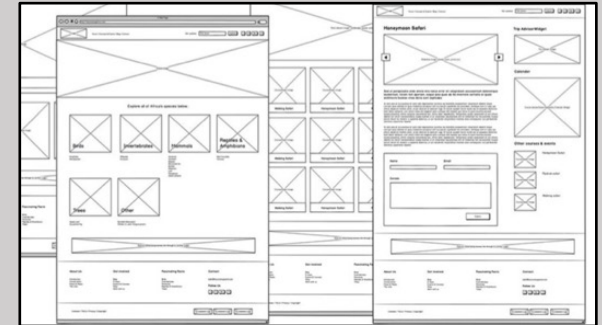


An early stage
look'n'feel prototype

<http://datacommonsscot.uk.w3pcloud.com/>

Next steps

- Data storage and hosting solutions
- Development of a "data reliability indicator"
- Development of prototype ethical recommender system design
- Development of front end system and user testing
- Content development and testing
- Storyboarding for data stories and tutorials



How you can help (AND HOW WE CAN HELP YOU)

- User testing (when the first Web iteration is running): dcx@stir.ac.uk
- Working with further organisations to open up more data on waste and resources:
 - Is there any waste data that you have that you would be interested in making Open?
 - If so, the DCS team can help to open data through resources, expertise and time.
 - In turn, this can help us to develop our tutorial/learning resources for the site.

