

Recycling WEEE System Using the Intelligent Bin and Mobile App

EU H2020 project 'CIRC4Life – A circular economy approach for lifecycles of products and services'

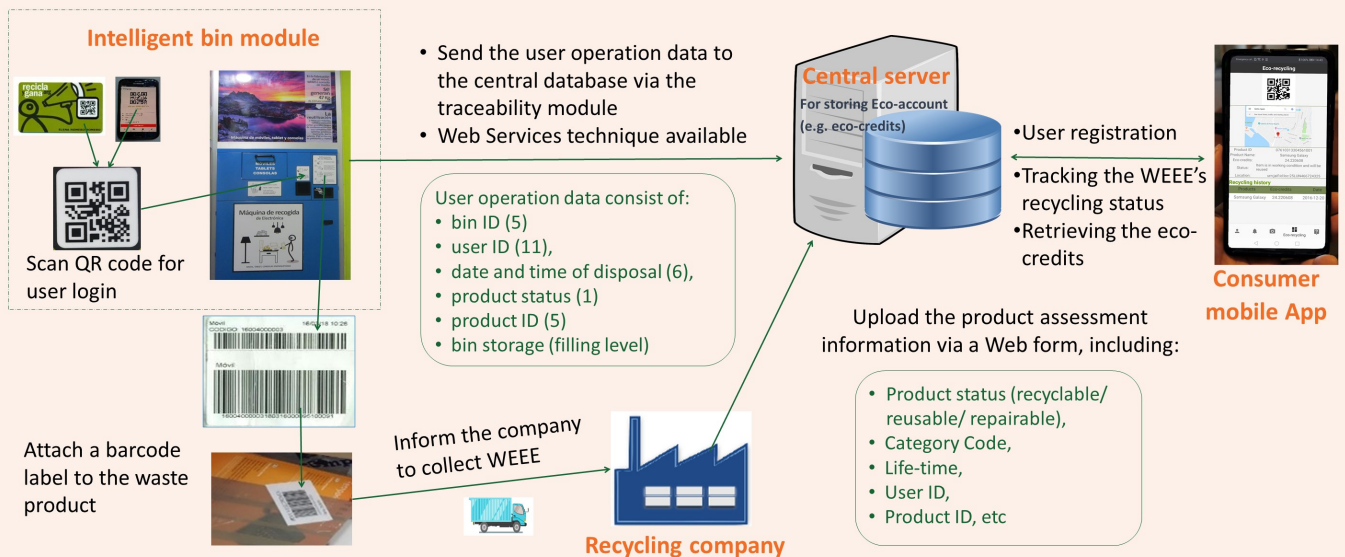
Advanced Design and Manufacturing Engineering Centre, Nottingham Trent University, UK

Aim:

To develop the ICT-based system for recycling/reusing waste electronic and electrical equipment (WEEE).

Research Contents:

- The End-of-Life electronic/electrical products (e.g. computer tablets) are recycled through the intelligent bins located at the self-service collection points.
- Eco-credits are awarded to reflect consumer's positive behaviour in reducing environmental impacts. They can be used as a voucher for getting a discount in products.
- The mobile app is developed for consumers to track online the product status (or recycling process) and earn eco-credits.



Implementation Flow of the Recycling WEEE system



1. The intelligent bin system



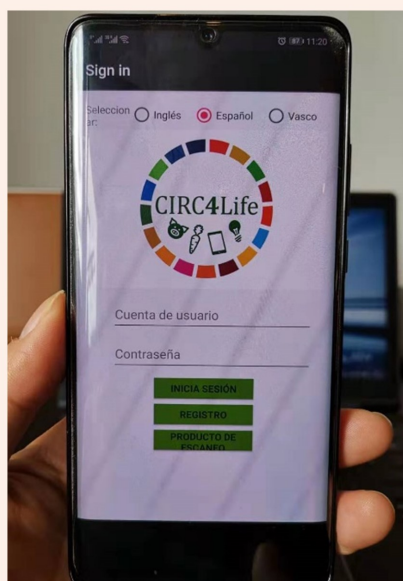
2. Scan user's ID



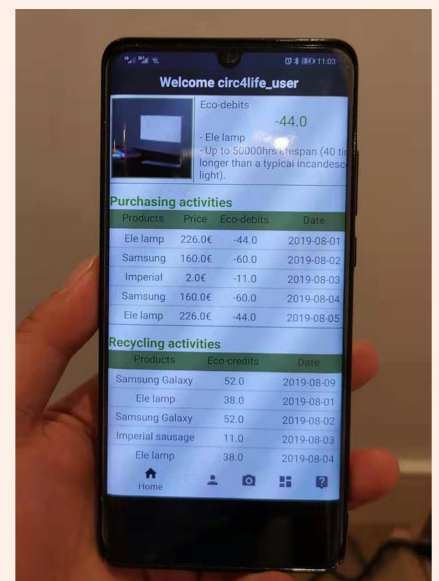
3. Select the status of e-waste and open the bin door



4. Print the barcodes of the recycling



CIRC4Life mobile App



Retrieving the eco-credits earned

Operation of the intelligent bin