



Take It or Leave It

**A Simple Solution to Reducing Plastic Bag
Consumption in Edinburgh**

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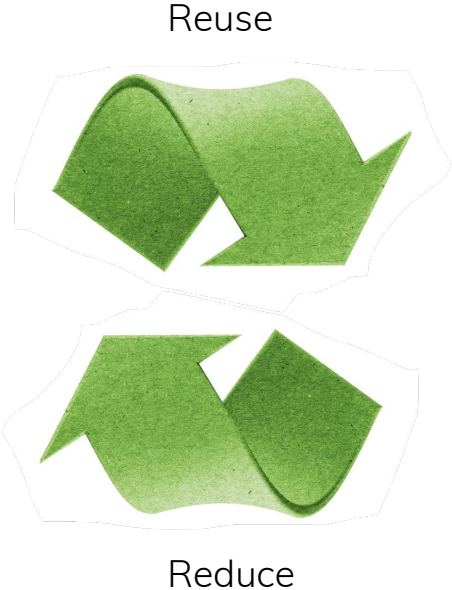
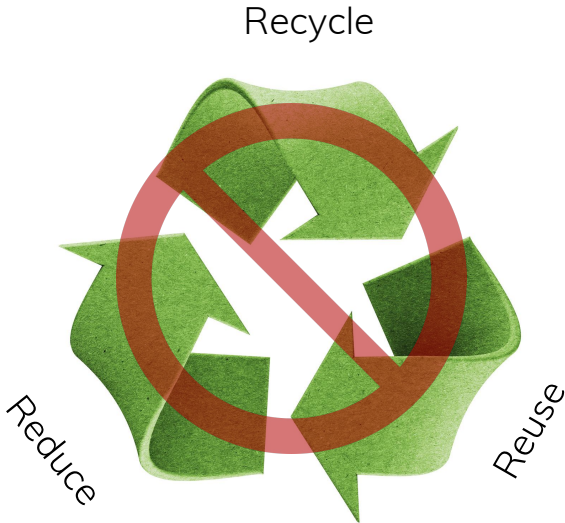
Step 1. Identify The Problem



Problem Area



Our Goal



Step 2. Empathise

Understanding Community Attitudes



Survey

121 Responses

37 University of Edinburgh
Visiting Students

84 Members of *The
Meadows Share*
Facebook Group

Survey to Help Edinburgh Go Green!

*Required

How often do you bring a reusable bag with you when you shop at supermarkets? *

1 2 3 4 5
Never Always

Have you ever shopped at a supermarket, like The New Leaf Co-Op, that doesn't use plastic packaging? *

Yes
 No

On a scale of 1-5, how important do you think recycling is? *

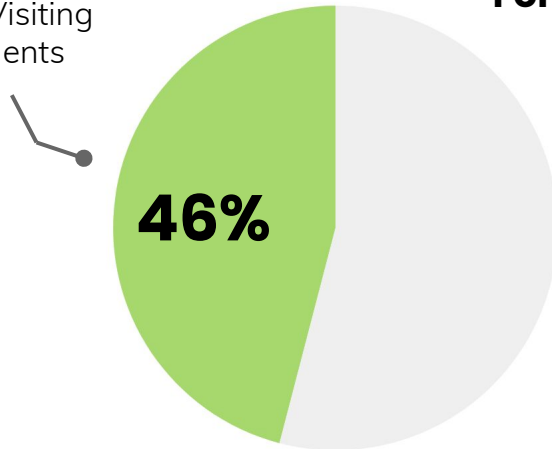
1 2 3 4 5
Not important Very important

Findings on Plastic Bag Usage in Edinburgh

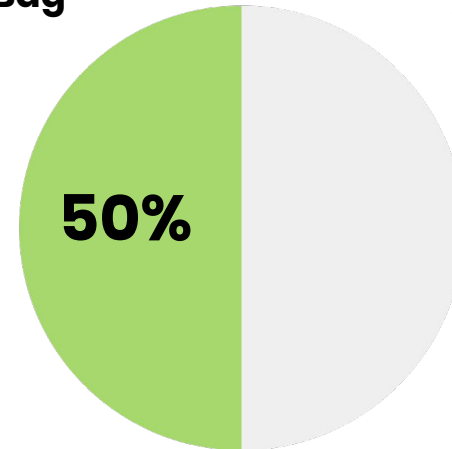
Question: How often do you bring a reusable bag with you when you shop at supermarkets?

Percentage of People Who Report That They Sometimes Forget A Reusable Bag

UofE Visiting Students

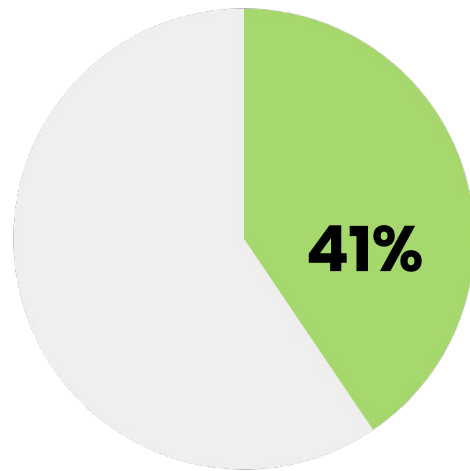


The Meadows Share

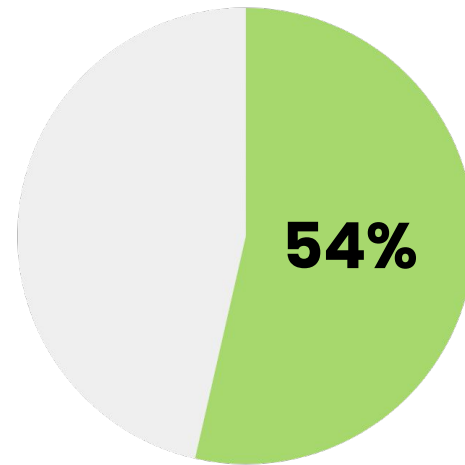


Findings on Plastic Bag Usage in Edinburgh

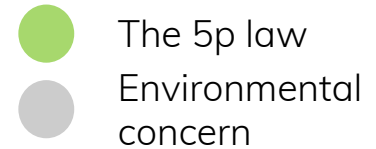
Question: Which do you think is a more significant motivator of decreasing plastic bag usage in Edinburgh?



Results from The Meadow Share

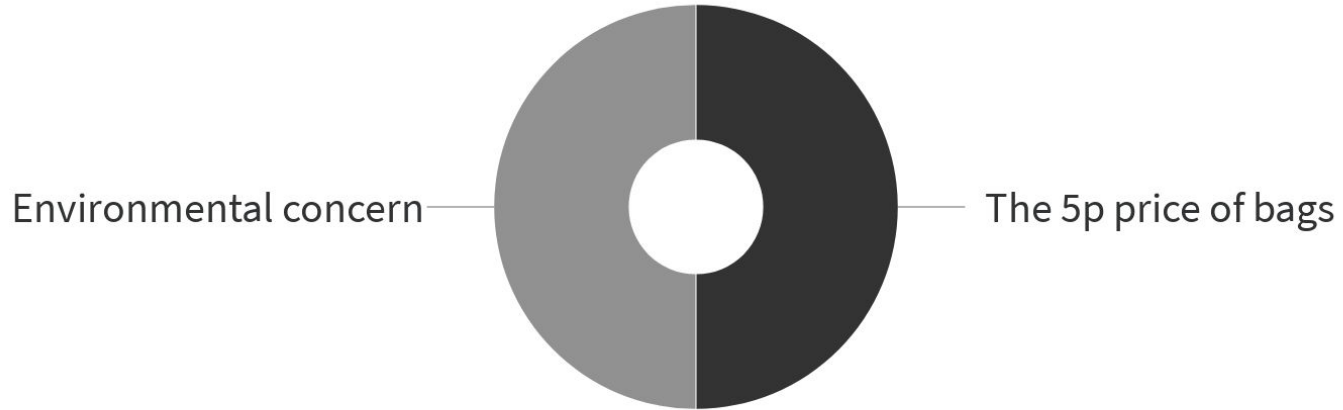


Results from UofE Visiting Students



Which do you think is a more significant motivator of decreasing plastic bag usage in Edinburgh?

 The 5p price of bags **A**  Environmental concern **B**



Focus Group



Q: How would you define sustainability?

“Sustainability is... anything that you do that, if you keep doing it for the length of your life or the length or several generations, still works.”

Focus Group



or



?

Q: Do you make an active effort to participate in sustainability initiatives? Do you find it easy to be environmentally friendly in Edinburgh?

“The focus on the individual consumer to reduce climate change is a ridiculous and bogus idea.”

“Edinburgh is the kind of place where if you forget your satchel when you go to the grocery store, you will be shamed for it. But that misses the whole point that the individual consumer is not responsible for most of the climate change that goes on.”

Key Takeaway

The solution needs to be easy for the consumer for it to work, and it needs to work consistently for it to create long-term change.

Step 3. Define The State of Plastic Bags



Plastic Bags in Scottish Supermarkets

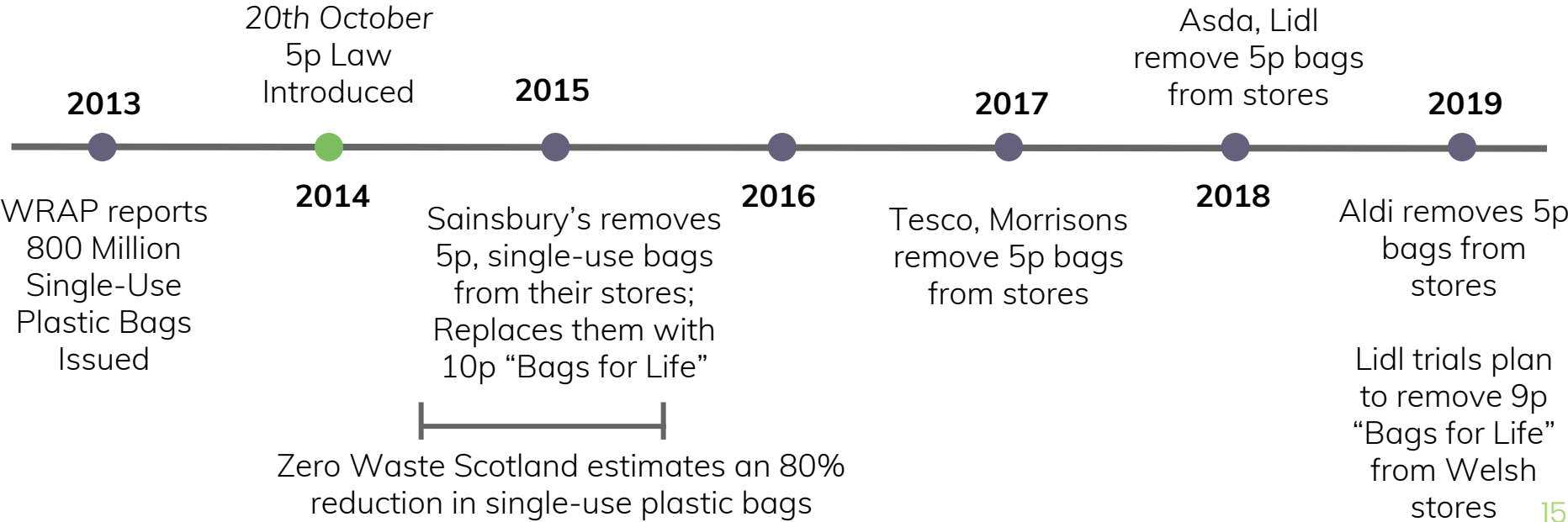


Figure 3. Baseline and 80% reduction scenario for the 7 major grocery retailers

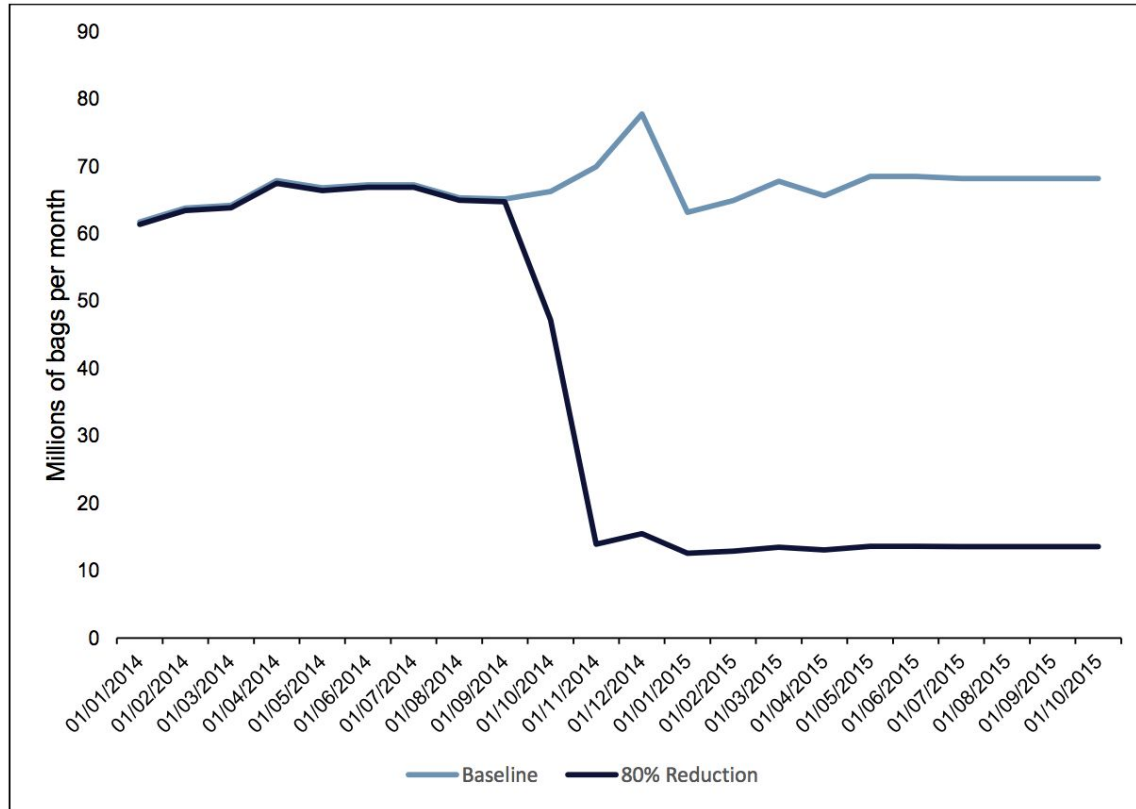


Figure 3. Baseline and 80% reduction scenario for the 7 major grocery retailers. From Carrier Bag Charge 'On Year One', Zero Waste Scotland, 2015

Making the Switch



- HDPE = single-use carrier bag
 - Mandated cost of 5p
- Sales must be reported to gov.

- LDPE = 'Bags for Life'
- Most retailers charge unmandated 10p fee
- Reporting is voluntary

Relative Environmental Impact

1x



HDPE
Single-Use
Plastic Bag

4x



LDPE
'Bags
for Life'

11x



Paper Bag

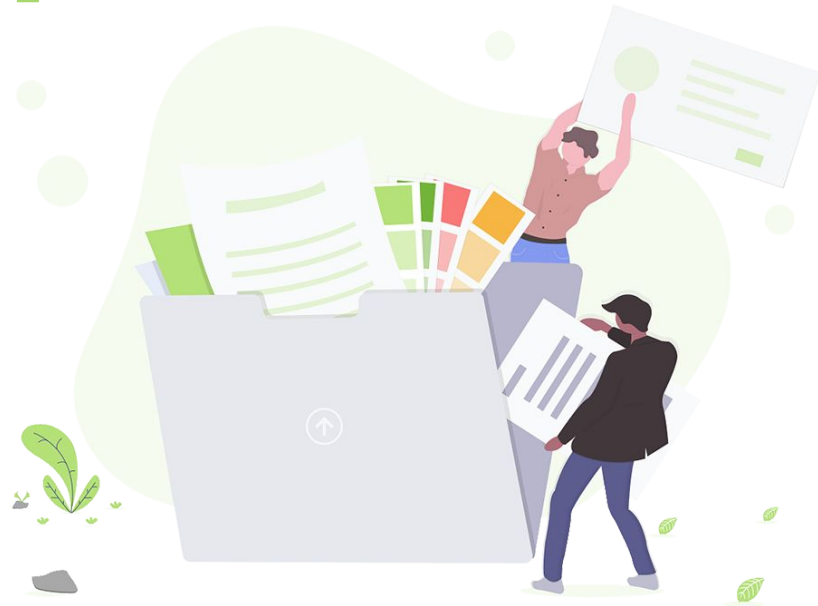
131x



Cotton/Canvas Bag

“Whatever type of bag is used, the key to reducing the impacts is to reuse it as many times as possible...”

Step 4: Prototype Solving the Problem



Our Idea: Take It or Leave It

Plastic bag deposit bins

- **Reduce** the purchase of new bags.
- **Reuse** previously owned bags.



Business Model

- Supermarkets are increasingly aware of the advertising value of eco friendly initiatives:



Sustainable fish - selling fish that would otherwise be thrown back into sea



Partnership with WWF - aim to reduce environmental impact of UK shopping bag by 50%



2020 target to reduce packaging by 50% compared to 2005

Reaching users

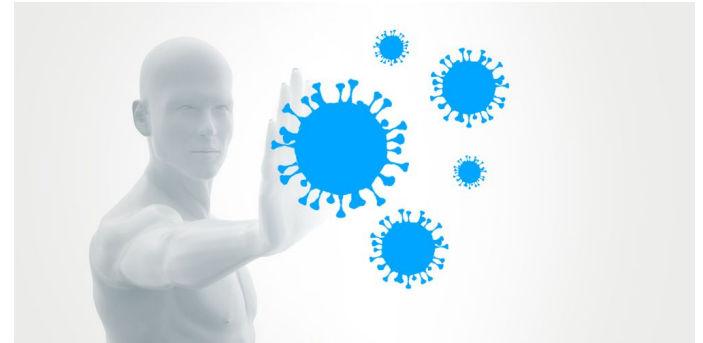


- Transparent, users will want to know what they're reaching their hands into
- Twin recycling bin, for dirty or broken bags
- Clear signage, make the purpose of the bin obvious
- Brand the bin with supermarket logo, marketable

Insights from Participatory Design



- Most people are willing to use second-hand bags
- Hygiene problem- cross contamination



- High marketability for corporations



Barriers to adoption



1. Hygiene fears
2. Extra work for employees

Solutions

1. Twin recycling bins
2. Low maintenance design



Step 5. *Evidence & Projections*



Similar examples



Plastic bag deposit scheme in Sweden



Similar design in The New Leaf Co-op in Edinburgh ²⁷

Feasibility



Tangible symbol of the supermarkets' environmental concern.



**LOW
MAINTENANCE**

Easy to maintain

Taking it from here...

- Fundraising
- Get Circular Edinburgh and Zero Waste Scotland on board
- Create an online petition
- Implement in stores across Scotland and the UK!

“ If everybody can [make] these small sustainable [changes], that makes all the difference.”

References

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