

Assignment 6 - Prototyping
Team 7

Idea 1: Reward based system for proper **disposal** of recyclable materials

Prototype 1: Testing different types of reward systems. Participants were asked to choose a preferred reward system, either Immediate - Cuts on utility bills, taxes etc. or Long term - Federal credits for lower loan rates, mortgage relief etc.

Prototype 2: Testing relative reward redistribution. Participants were given rewards commensurate with their amount recycled directly or could opt in a relative system, where based on their performance relative to the community, the rewards were redistributed.

Learnings:

- People prefer immediate rewards over long term rewards, which is purely instinctive and includes no calculated decision making
- People do not want their rewards to be influenced by patterns of the community. Ideally competitive nature should foster better individual behavior, but seemingly is not observed in the testing.
- If people do choose relative rewards, they do not agree with “recycled amount” as a proper metric.

Idea 2: Punishment based system factoring in the waste **generation** aspect

Prototype 1: Testing 2 things. 1) Do people even read packaging and if so, does it impact their purchase decision concerning their environmental impact? 2) Will people agree to a mandatory program about logging waste generation of an individual at the source (purchase time).

Prototype 2: Testing penalty system based on waste generation metric of an individual.

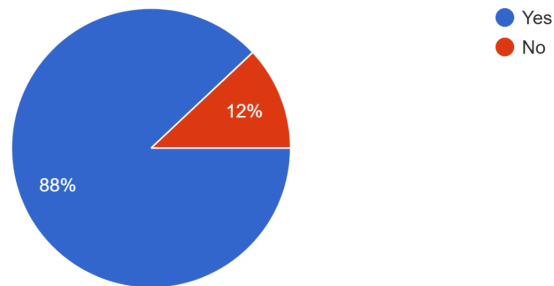
Learnings:

- Printing environmental impact on packaging is more or less irrelevant, as people tend not to make their purchase decisions based on those factors.
- Mandatory waste generation log for individuals does not seem to sit well with people.
- People do not want to get penalized for their purchases. Even if they agree to it as a part of a new tax regime, just the amount of waste generated is not a good metric if all of it just ends in landfill.

Public Survey for Prototype Designs

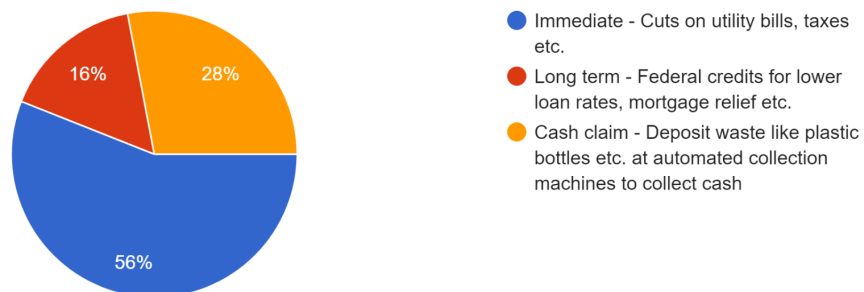
Do you think some sort of reward based system will compel you to recycle consistently ?

25 responses



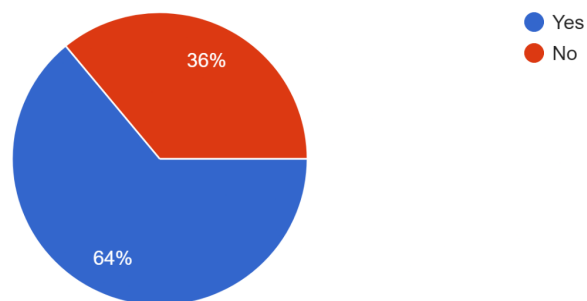
Given an option, what kind of reward are you more likely to choose ?

25 responses



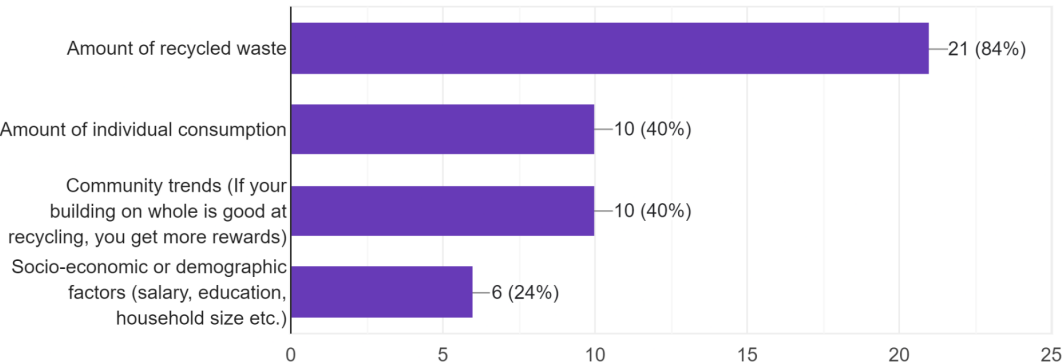
In absence of rewards, do you think shared community metrics can compel people to recycle more ? (e.g. : comparison of your vs community average recycled waste amount)

25 responses



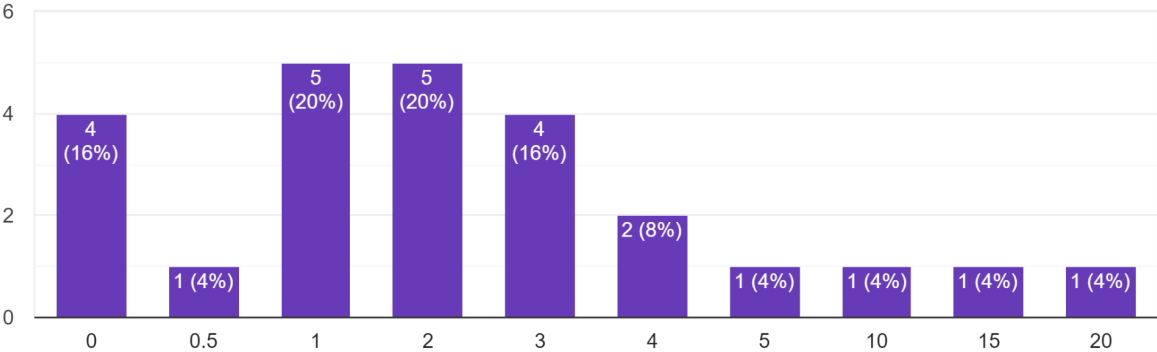
Rewards should be commensurate with which factors ? (select all that you think are appropriate)

25 responses



Approximately how many plastic bottles/wrappers worth of waste do you generate in a day ?

25 responses



Group Testing Overview

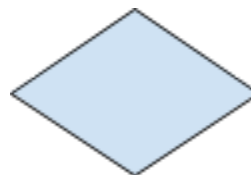
Prototype 1 and 2 for Idea 1

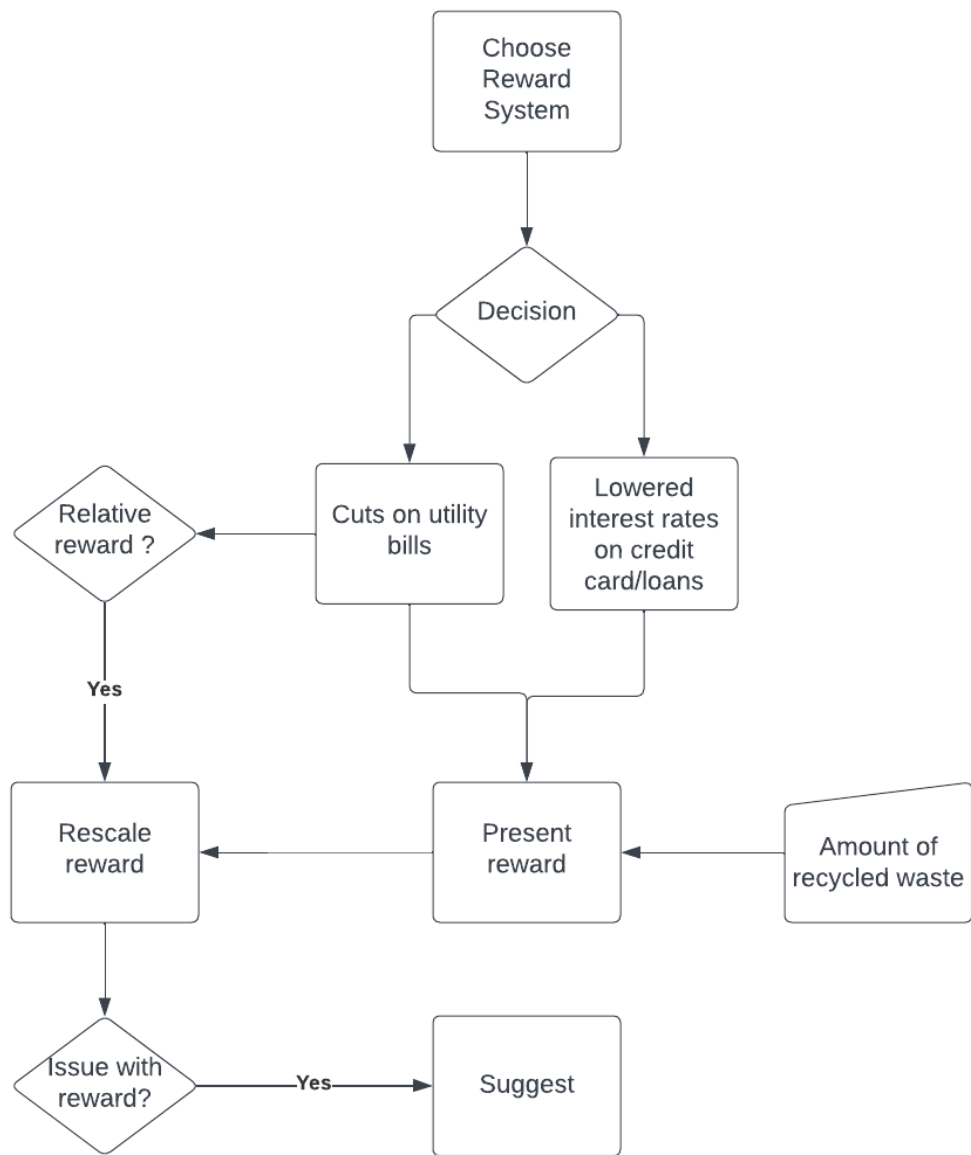
Assumption: People will prefer monetary rewards for recycling

Experience: Redistribution of reward based on recycled amount (Ask much they segregate)

Question 1: Which rewards system will you choose ?	Click to vote Cuts on utility bills A 0 Lowered interest rates B 0
Question 2: Will you choose to have relative rewards within your community ? If you recycle more than your neighbors, you get more rewards.	Click to vote Yes A 0 No B 0
Question 3: Assume your rewards are relative. Do you think it is appropriate or do you think there is an issue ? Type in the provided space to right	<div>It depends on how 'community' is defined. Will it be inequitable for me to compete in a small building vs a larger building? Will I be competing against others in my town? But overall, I don't see much of a problem with this issue. It also depends who is controlling the rewards program.</div> <div>I think it depends on the status quo – is the community recycling “sufficiently” with respect to global averages? If so, then I don't think it is appropriate to be compensated more if I recycle more than my community. However, this kind of gamification could encourage communities to improve their waste management practices.</div> <div></div> <div></div> <div></div>

This shape denotes the questions in the diagram:





Prototype 1 and 2 for idea 2

Assumption: People do read packaging, and are willing to participate in such policy

Experience: Add penalty for generating waste as environmental impact tax

<p>Question 1: Will writing environmental impact on packaging have a positive effect on people (increase awareness about recycling) ? Provide reason</p>	<p>Click to vote</p> <p>Yes A 0</p> <p>No B 0</p>
	<p>I think this doesn't hurt and could be beneficial for society.</p>
	<p>Yes – it is similar to the plastic number/type written on materials. If people are aware about the impact of their purchase and disposal habits, this could incentivize them to change</p>
<p>Question 2: Do you think a government policy mandating waste generation/recycling log system is feasible and will be accepted by people ? Provide reason</p>	<p>Click to vote</p> <p>Yes A 0</p> <p>No B 0</p>
	<p>This might infringe on people's privacy.</p>
	<p>I don't think it would be accepted by people based on the above reason. I think innovation, low-cost ways to encourage people to recycle and reduce waste are more impactful and accepted over mandates.</p>
<p>Question 3: Assume a system which logs only the waste generation on each product you buy. And you are given a tax penalty based on your waste generation. Do you think this is a good idea?</p> <p>Type in the provided space to right</p>	<p>I personally don't think punishment is the best route. This would infuriate me if I'm being honest. I'd prefer a reward for my positive behavior.</p> <p>I would argue that a tax penalty would be a last resort option if communities were not</p>

	receptive to other incentives, like curbside recycling and compost bins. A fiscal penalty could encourage better behavior if all else fails.

