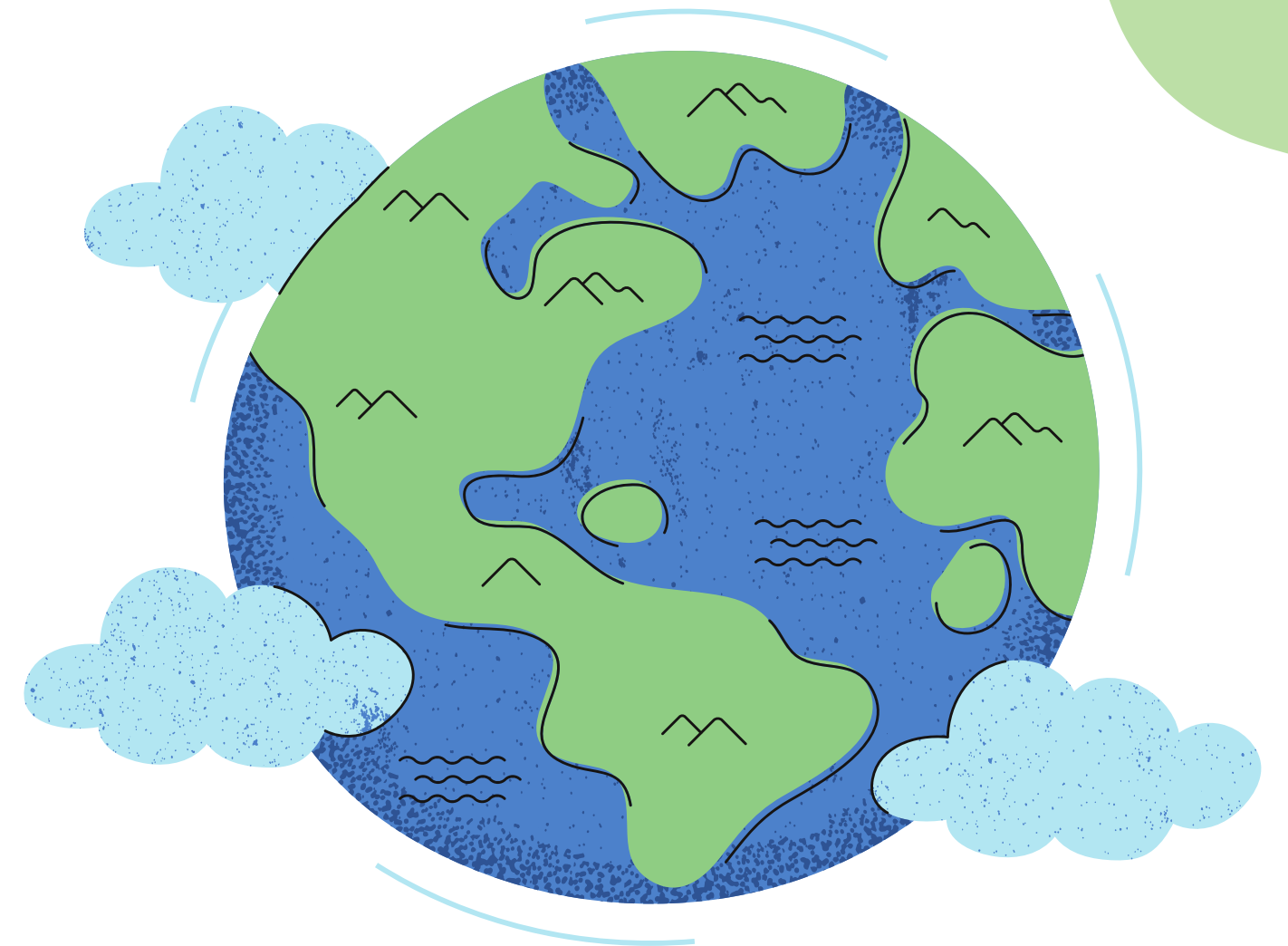


**RECYCLING
REVOLUNTION APP**

SaafPakistan

LETS PAINT PAKISTAN GREEN!



Ali Sher (F2020-158)

Nouman Ali (F2020-149)

Mian Faizan Munawer (F2020-148)

Problem

Pakistan lacks structured recycling system. Individuals and businesses indiscriminately dispose of all types of waste together, contributing to the worsening of environmental pollution and the accumulation of recyclables in landfills.



Statistics

Solid Waste Generation

- Pakistan waste generation grows 2.4% annually
- Lahore Generates 7700 tons of waste on a daily basis
- Only 27% of generated waste is being recycled in Lahore

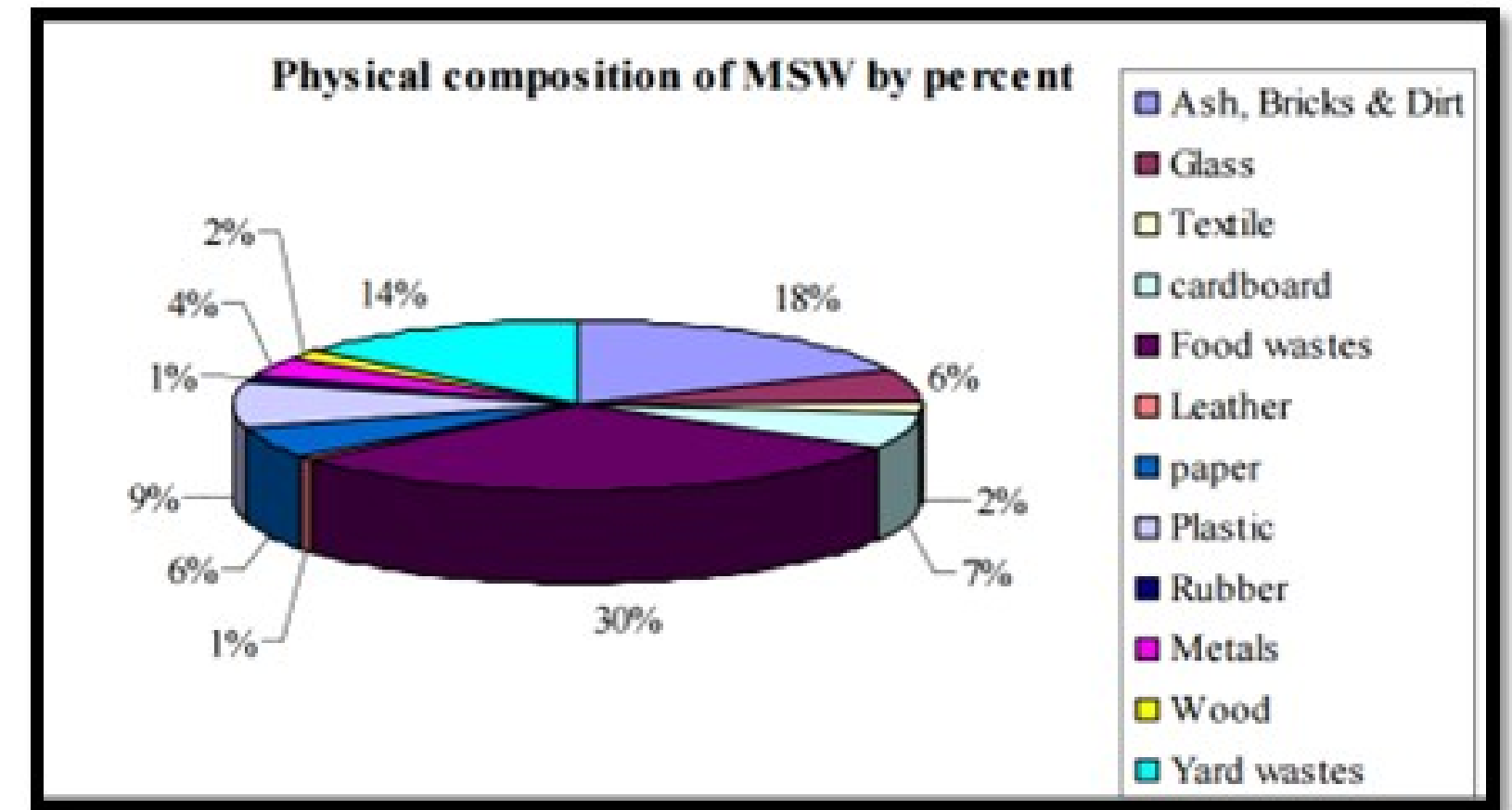
City	Recyclable Waste Generated Daily/ Tons
Karachi	16,500
Lahore	7,690
Faisalabad	5,017
Rawalpindi	4,500
Hyderabad	3,973

1. Waste Management, 2022, <https://www.trade.gov/country-commercial-guides/pakistan-waste-management>.
2. Azam, M., et al. (2019). "Status, characterization, and potential utilization of municipal solid waste as a renewable energy source: Lahore case study in Pakistan." ScienceDirect. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0160412019322986>.



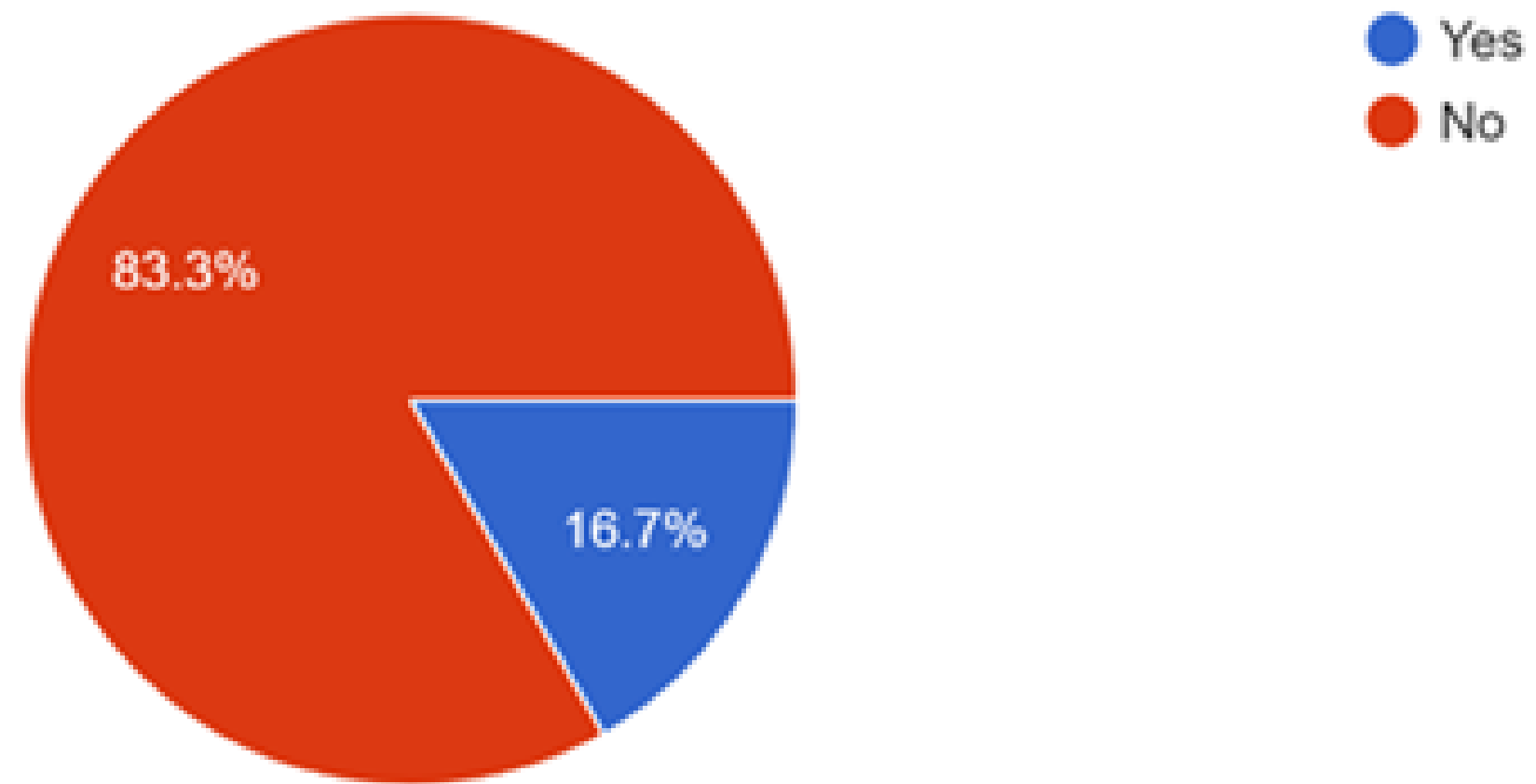
Solid Waste Breakdown

- 35% of the generated solid waste make up for the most valued recycling materials which equals to 2695 Tons
 - Plastic
 - Cardboard
 - Paper
 - Metals



Survey

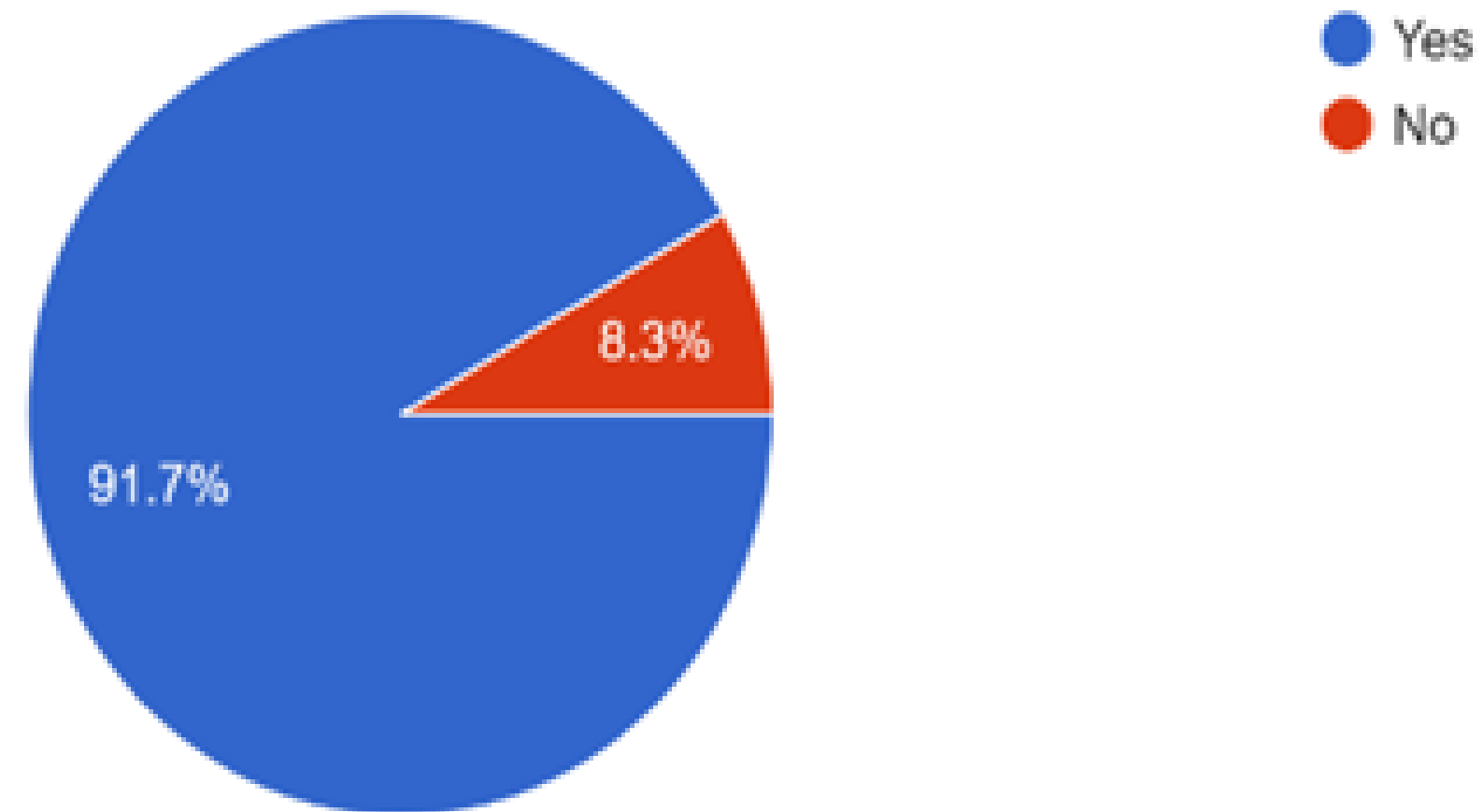
Do you Recycle
12 responses



Survey

If no, then would you start recycling if it became convenient to you?

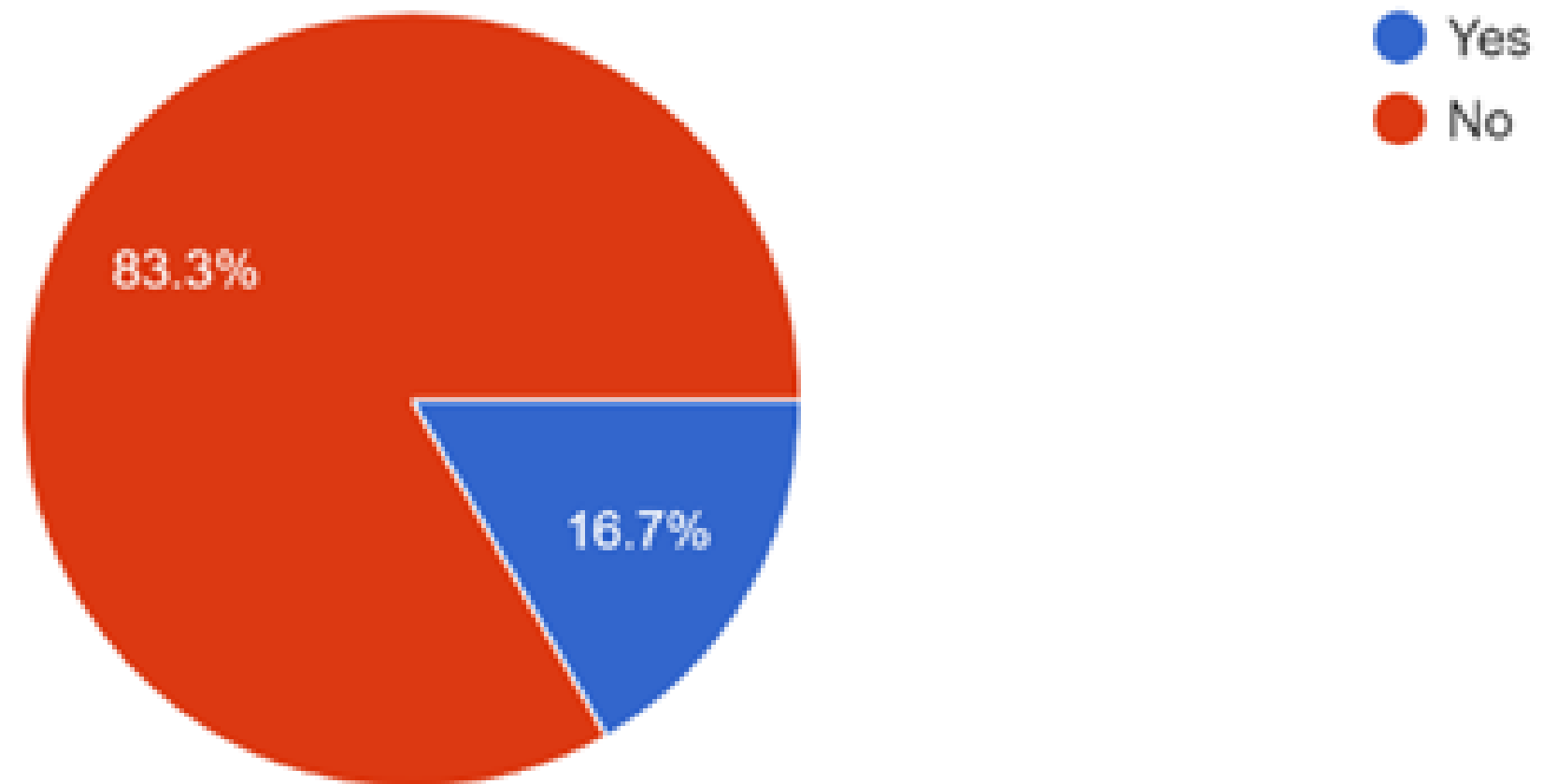
12 responses



Survey

Do you have a dedicated recycling bin in your home?

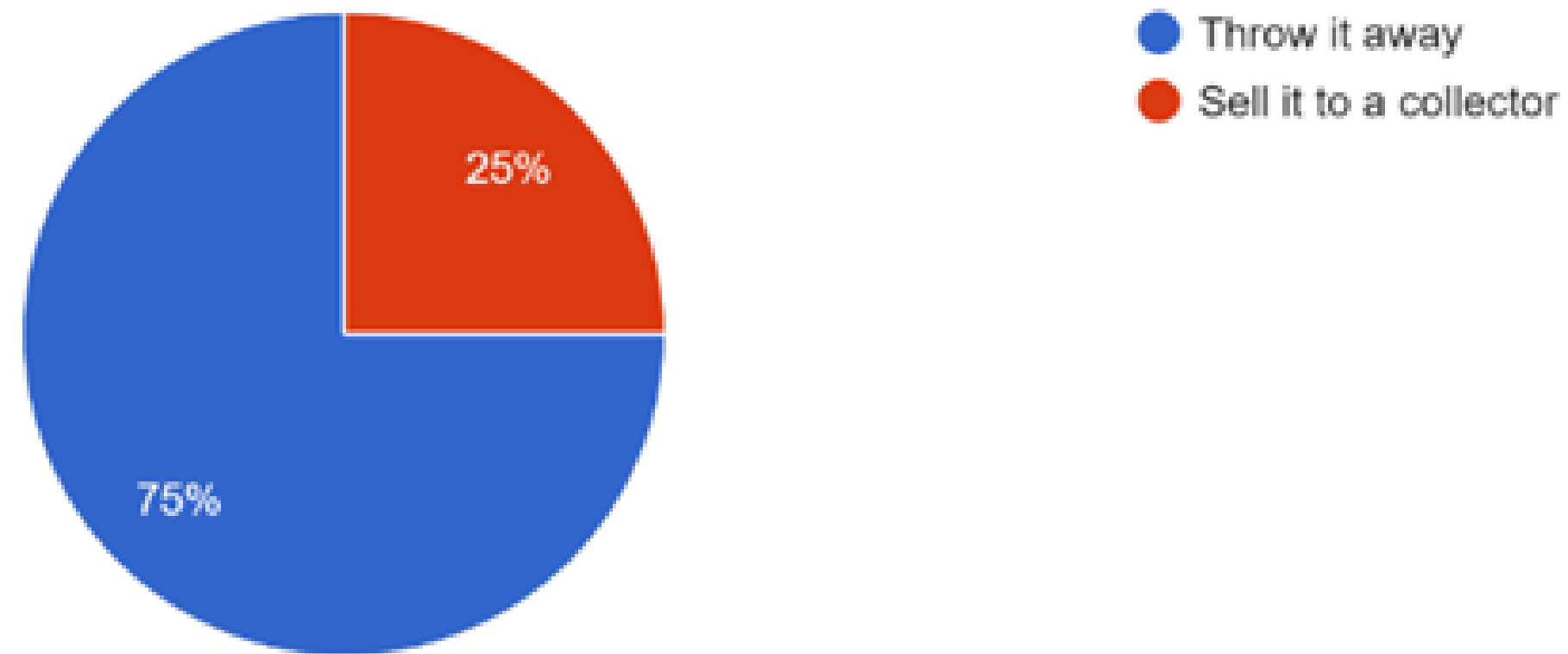
12 responses



Survey

How do you dispose of recyclable material?

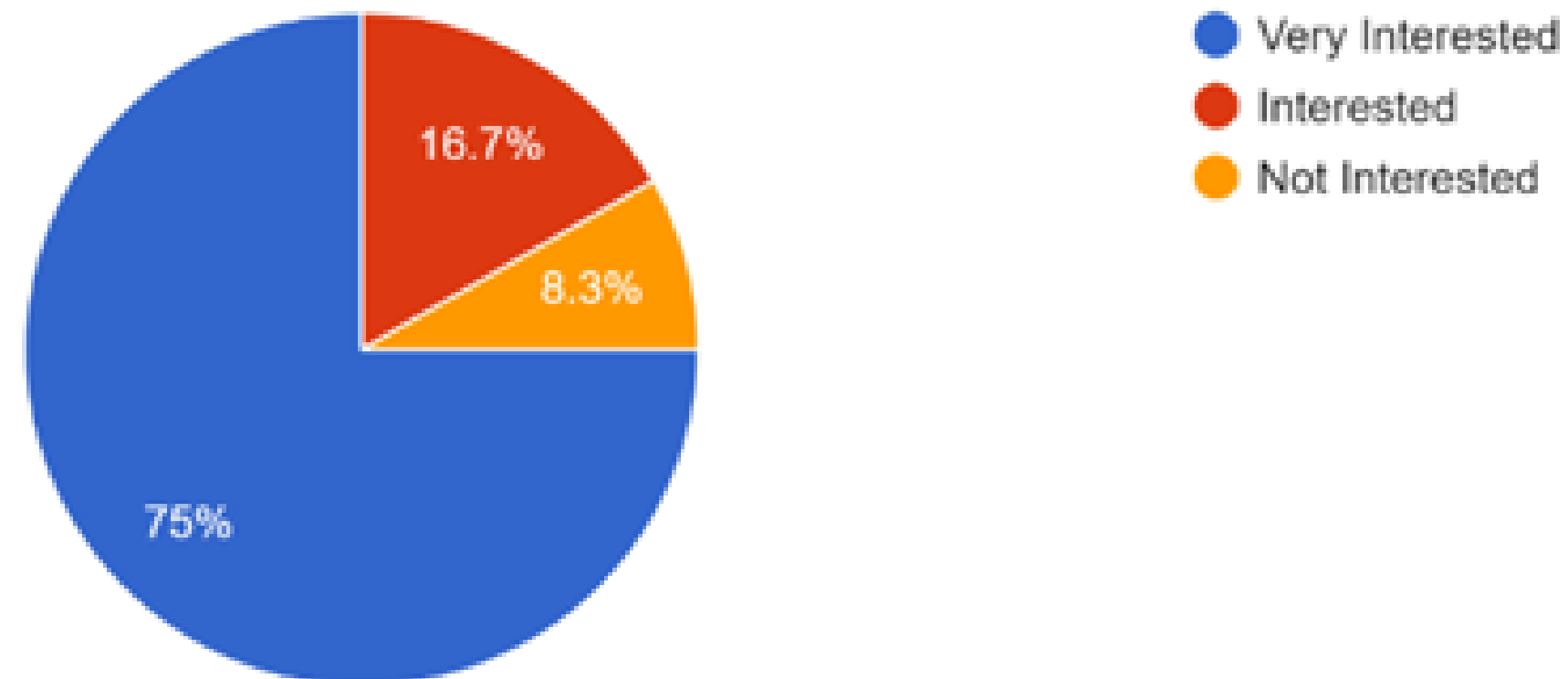
12 responses



Survey

How interested would you be in using an app to collect recyclables from your home and compensate you for it?

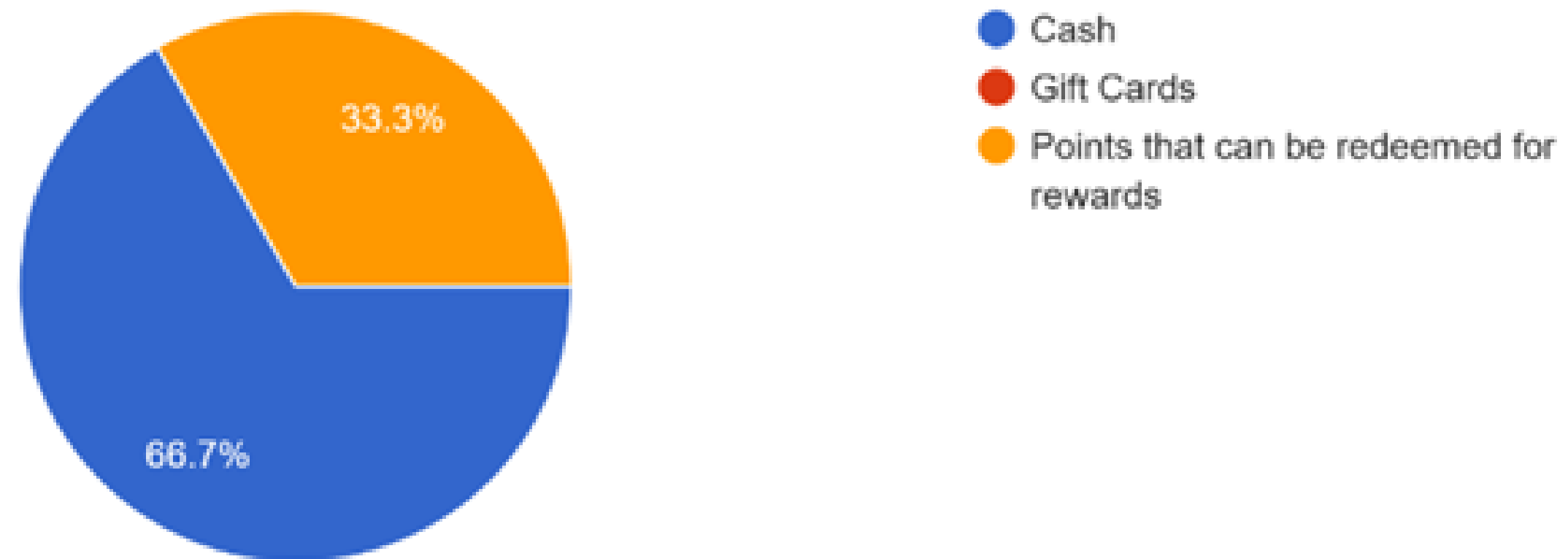
12 responses



Survey

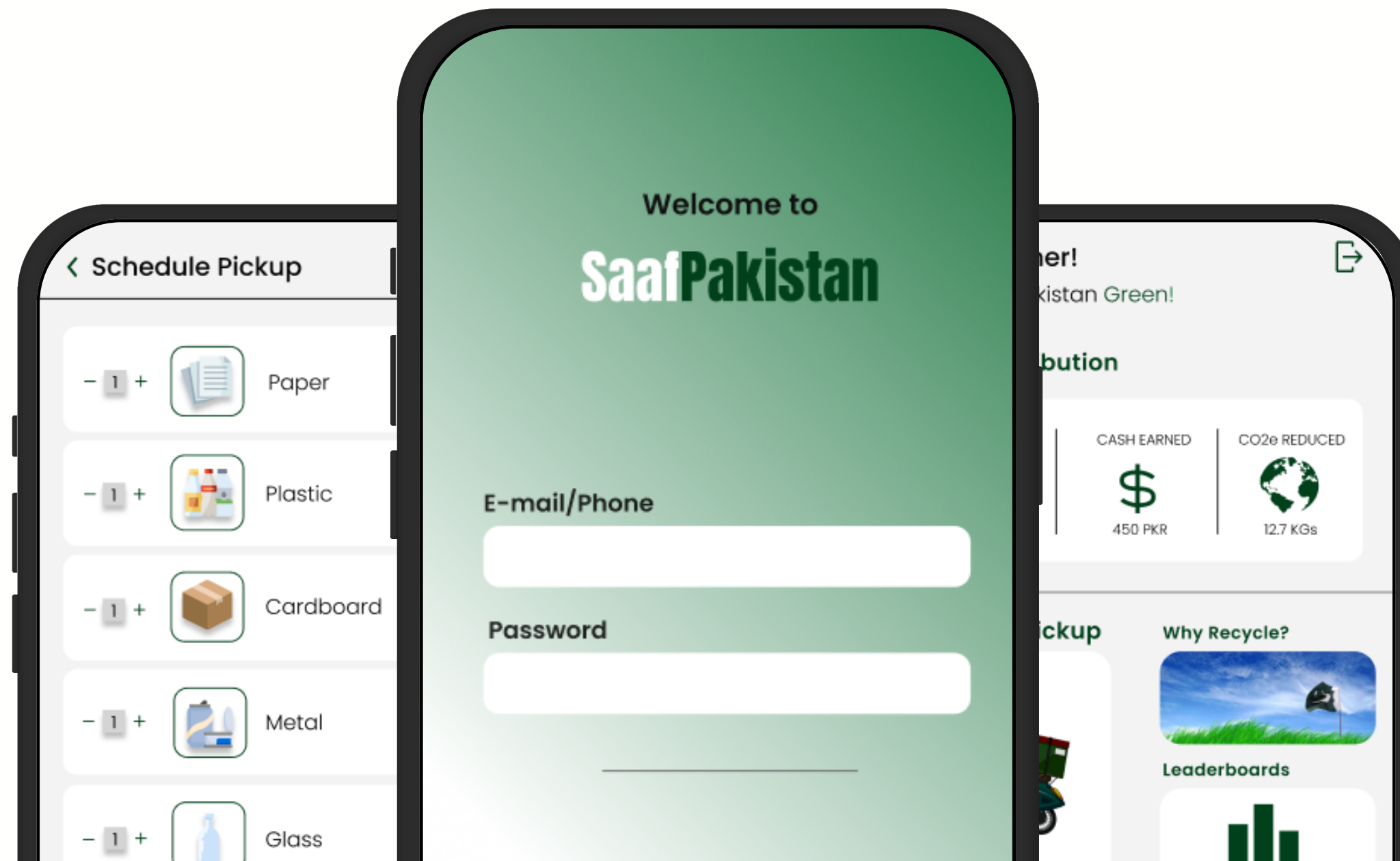
What kind of compensation would be most appealing to you?

12 responses



Solution

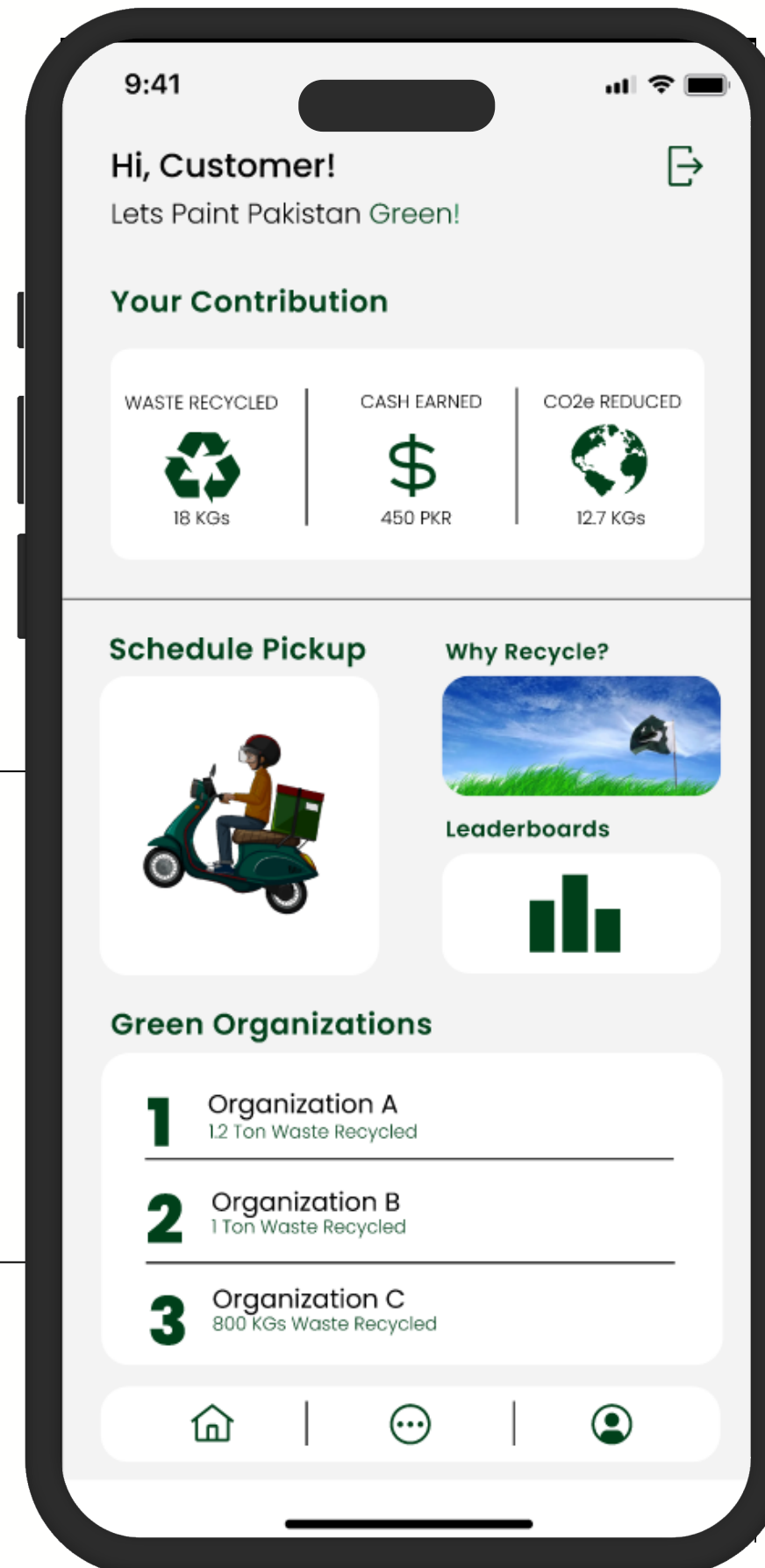
"Introducing SaafPakistan: Your App for a Cleaner, Greener Tomorrow!"



Features

- **Schedule Pickup for Recycling**

- **For Green Marketing**



- **Progress**

Get updated of your real-time progress

- **Educational Content**

- **LeaderBoards**

A dynamic leaderboard system for individuals and businesses, fostering a sense of competition.

Business Model

Item	Recycle Center Buying Rates	Consumer Selling Rates
Plastic	90	70
Steel	260	230
Paper	100	80
Cardboard	36	20

Source: Cheema Metal Scraps
Source: Warraich Scrap Dealers

Item	Recycle Center Buying Rates	Business/Industrie s Selling Rates
Paper	100	57
Fabric Waste	90	58
Paper Cones	50	32
L/Cut Pieces	150	117

Source: Active Apparels PVT LTD
Source: Three Stars Hosiery Mills PVT LTD

Business Model

Out of the 2695 tons only 27% is being recycled, leaving 1967tons of valuable recyclable waste up for grabs on daily basis

For Consumers side of the model 24rs per kg is the average gross profit

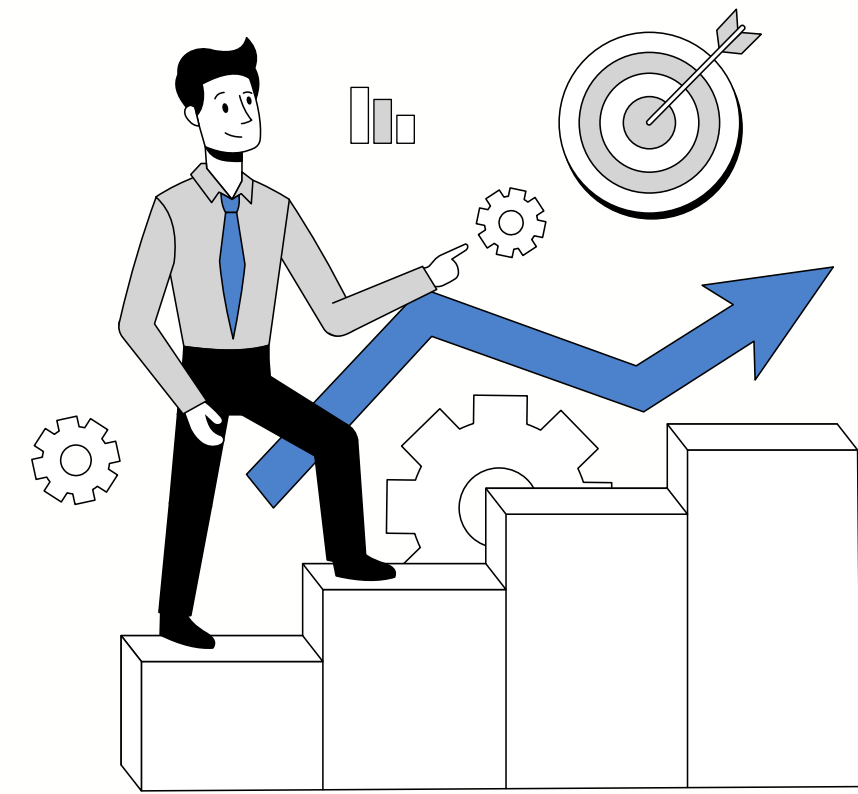
With just **50** tons monthly we expect to generate a revenue of **1.2 Million PKR**

For Businesses side of the model 31.5rs per kg is the average gross profit

With just **100** tons monthly we expect to generate a revenue of **3.15 Million PKR**

Average cost to run the business would be between 35-40% of the gross profit.

Leaving us with a net profit of **2.61 Million PKR** with just **150 Tons/Month**



Technologies

- Next.js (Front End)
- Spring Boot (Back End)
- React Native (Front End)
- Figma (Prototypes)
- Postman (API Testing)
- GitHub (Code Sharing)

Deliverables

- WebPage (Admin Dashboard)
- Mobile App (Consumer/Rider)

Now the Prototype