# ARUNEO

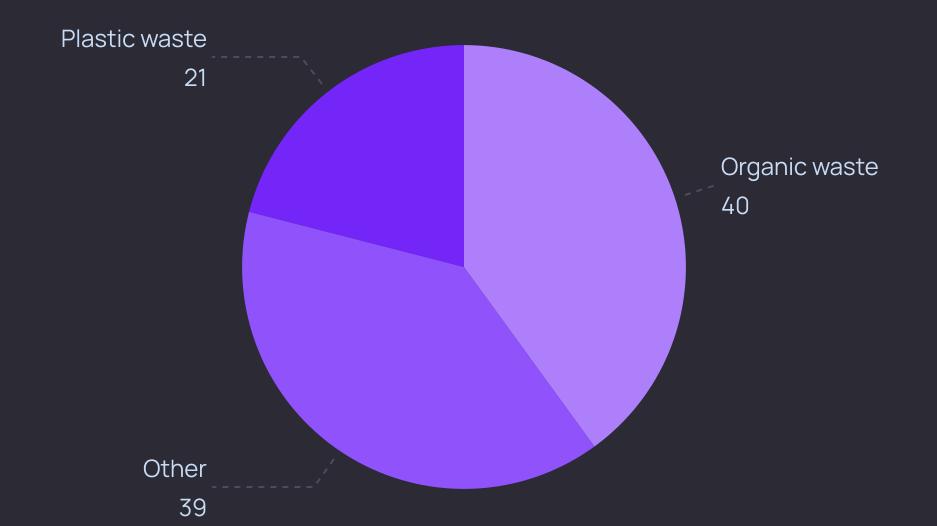
WHAT CAN BE MEASURED
CAN BE MANAGED
BY PHOENIX



### Problem

# LACK OF AWARENESS OF WASTE COMPOSITION ON AN INDIVIDUAL LEVEL IS LEADING TO UNDERUTILIZATION OF WASTE PRODUCTS AND THE ENVIRONMENT DEGRADATION

Current estimates on landfill waste:



of people is unsatisfied with current waste management system

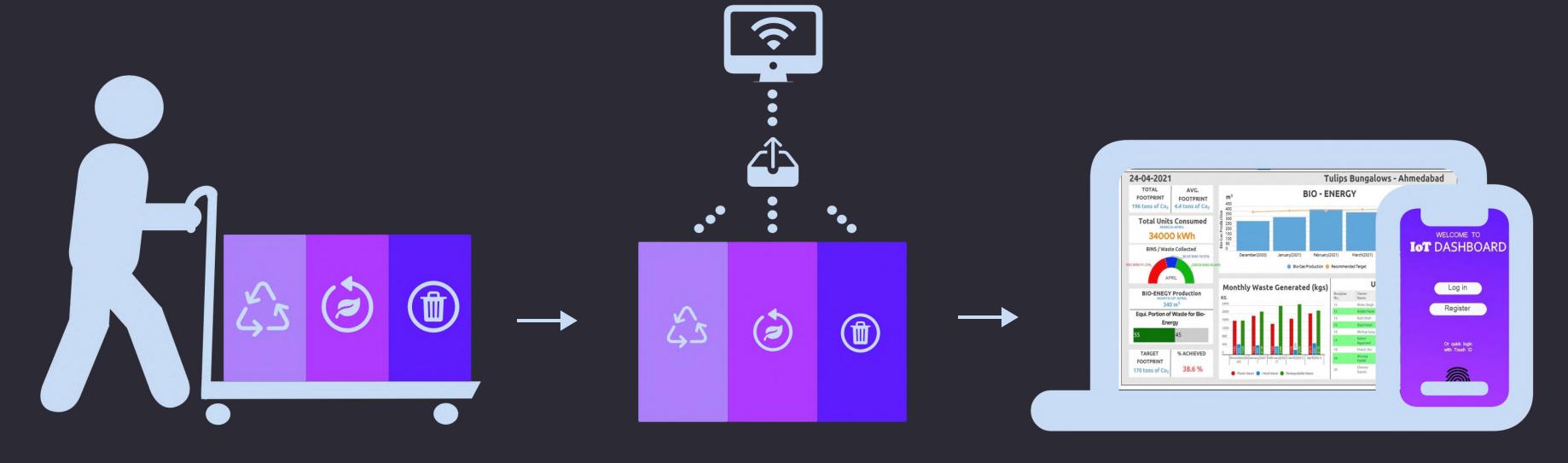
70%

of people does not have knowledge regarding waste treatment

90%

of people have no idea about their carbon footprint

### Replace estimates with hard data



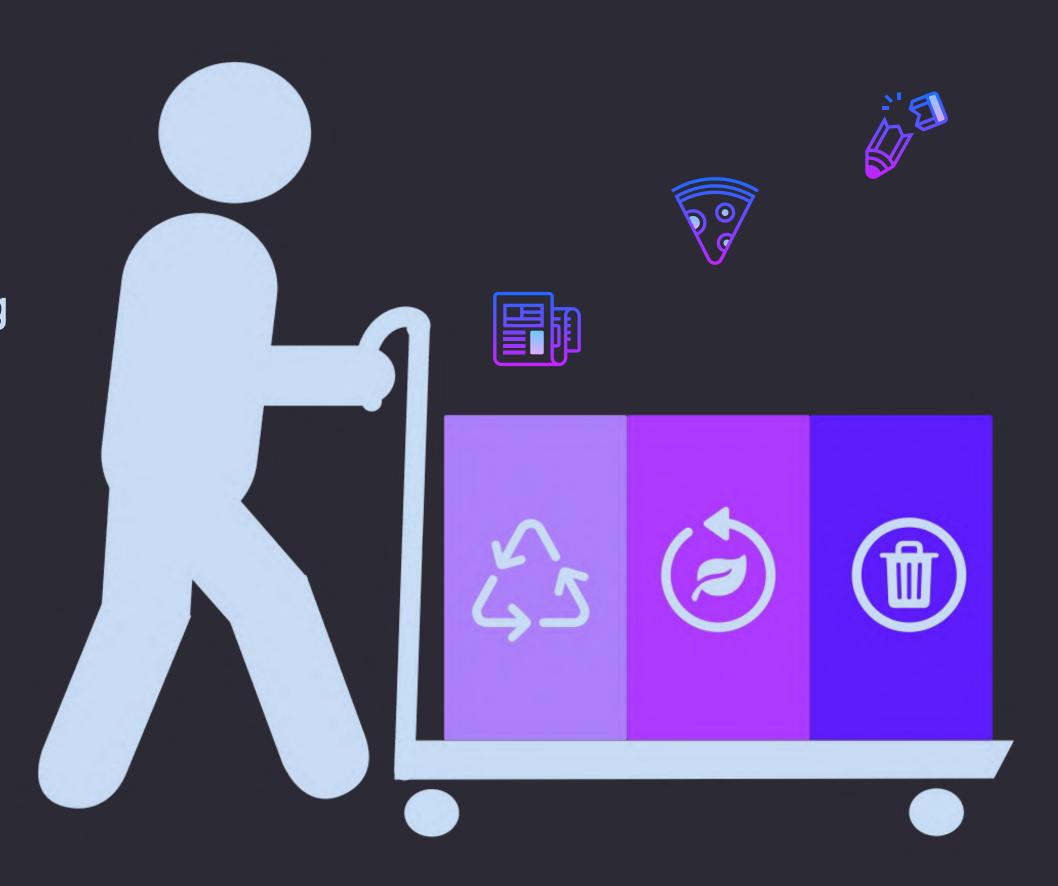
1. Waste data is gathered during collection

2. Data is sent directly to the main server

3. Users and admins view trends through personalized dashboard

#### Collection

- waste is collected in 3 separate bins:
   garbage, organic waste, and recycling
   each containing a load cell
- Households will be assigned a unique serial number to be entered at waste collection by the collector
- Dump Data (in Kg) is collected by household and organized in the IoT dashboard

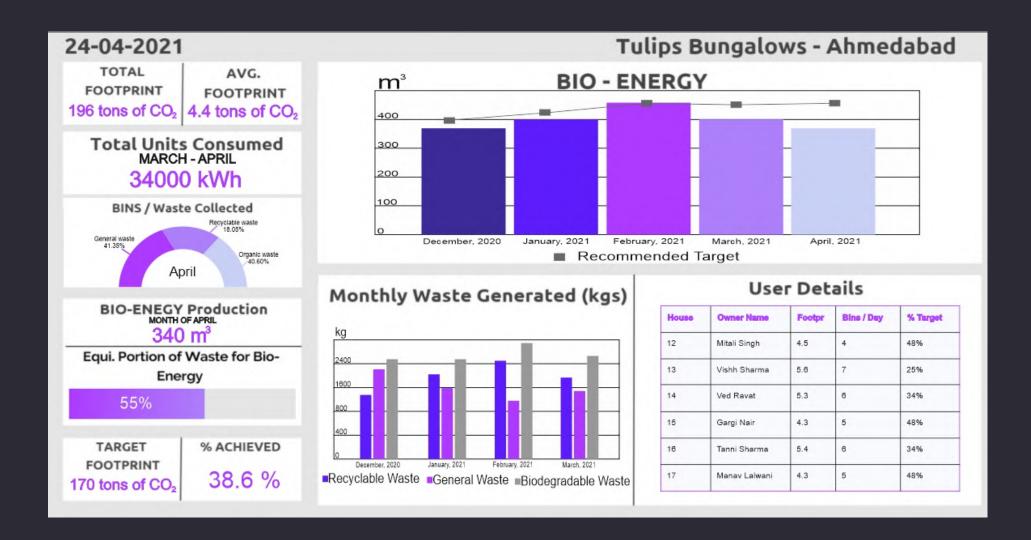


# Gathering and presenting the data

#### Data includes:

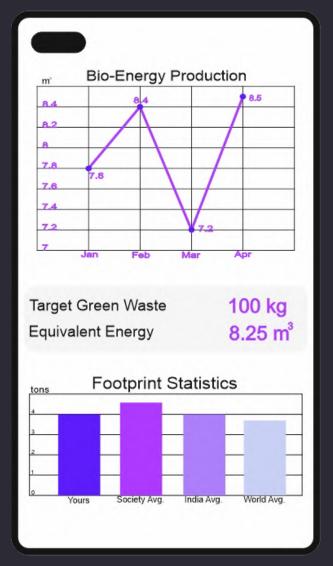
- estimated energy produced from waste
- total wast collected per category
- trends in waste collection
- Annual carbon Footprint

#### **ADMIN VIEW**



#### RESIDENT VIEW





#### Using the Data

Waste treatment will continue to be the responsibility of the municipal government

Based on collected data best waste treatment options can be selected

Organic Waste sent for Bio-electricity or Bio-gas treatment

Plastics Waste and other recyclables for the treatment process & other waste using innovative startups

Participating Societies can be incentivized by the local governing bodies according to their waste production

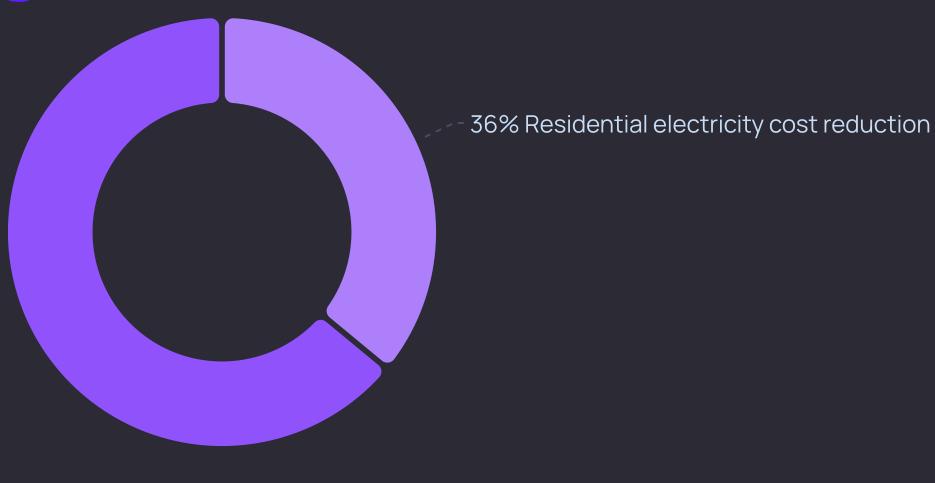


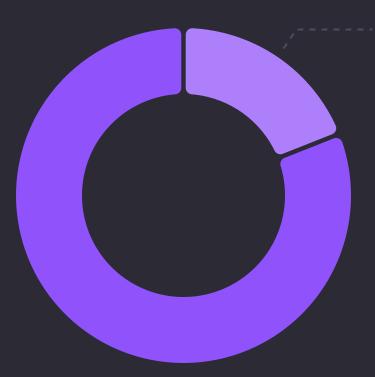
### What can using this data lead to?

By using the data to show the benefits of Bio-Energy

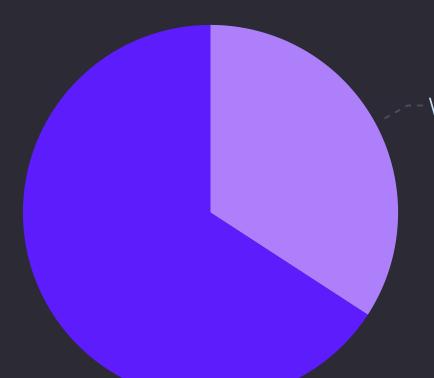


60 % Residential gas cost reduction





Up to 19% carbon footprint reduction per capita each month



Waste Diverted from landfills 41%

## Why us?

- Low cost for adoption:
  - we use existing infrastructure
- Calculate potential **revenue** and growth
  - Turn waste management into revenue rather than a cost
  - Use data to incentivize unregistered recycling plants and rag pickers to work legally
- Personalized approach:
  - Empower local co-op communities to control their waste
  - Save money by focusing on problem areas using individualized data





Low Cost



Personalized

# Social Impact

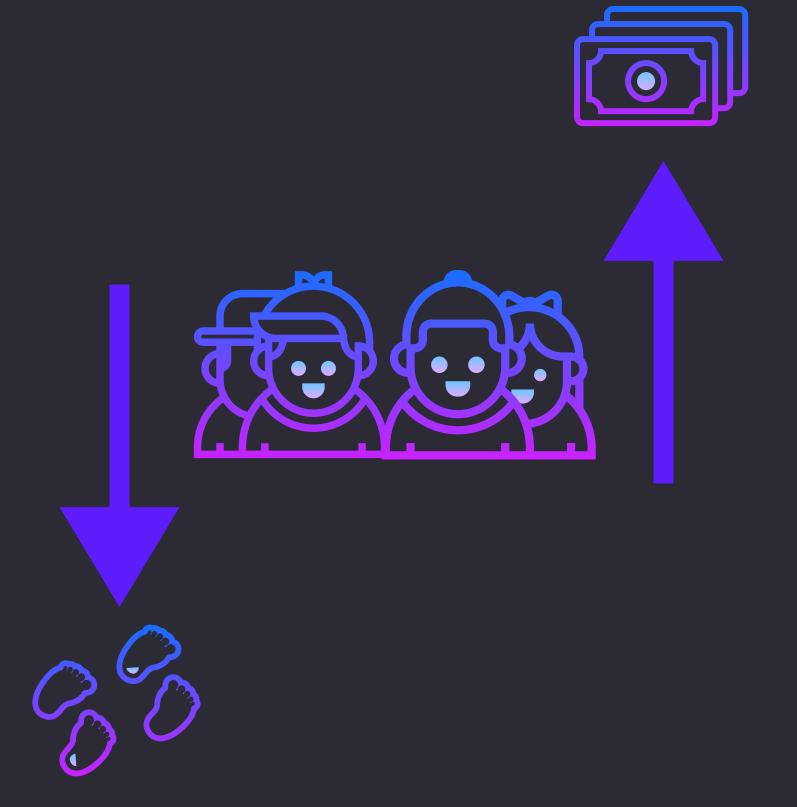
#### COMMUNITY AND INDIVIDUAL EMPOWERMENT

- Rewarding Communities
- Set personal goals
- Educate and motivate residents

#### **GREEN ENVIRONMENT**

Data used to motivate communities to:

- Reduce their carbon footprint
- Switch to BioEnergy
- Create their own environmental initiatives



## Our Edge

#### POSSIBLE COMPETITORS





#### **CUSTOMERS**

We're targeting a different audience Cities and communities VS Companies and industries

#### COMPLEXITY

We support individual accountability and government level data transparency using simple additions to existing infrastructure

#### **FINANCE**

We are empowering communities and local governments.

We do not take revenue from data or waste sales. Revenue is driven by program subscription costs.

#### **VALUE**

Creating individual responsibility among communities so their contributions towards a green environment feel rewarding

### Revenue



(200 House -> 2 pushcart)

Project Cost - Collector & Dashboard

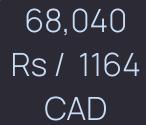
• Material Cost & embedded electronics @ 2 pushcarts/ 200 houses

Design Consultancy

• IoT dashboard, app and server setup



CAD





Return on Investment





- Operation know-how
- Routine check
- Monitoring and Reporting



• Spares / materials cost extra at actual



## Roadmap

- PROJECT TESTING AND REVIEW
- GOVERNMENTINVOLVEMENT
- PILOTING INITIATIVE IN CO-OP COMMUNITIES
- LEVARAGING AND UPGRADATION

**EXPANSION** 

#### IDEAL CUSTOMER

Government allied institutions (Municipal Co-corporation, Nagar Palika) and co-operative societies under government agreement.

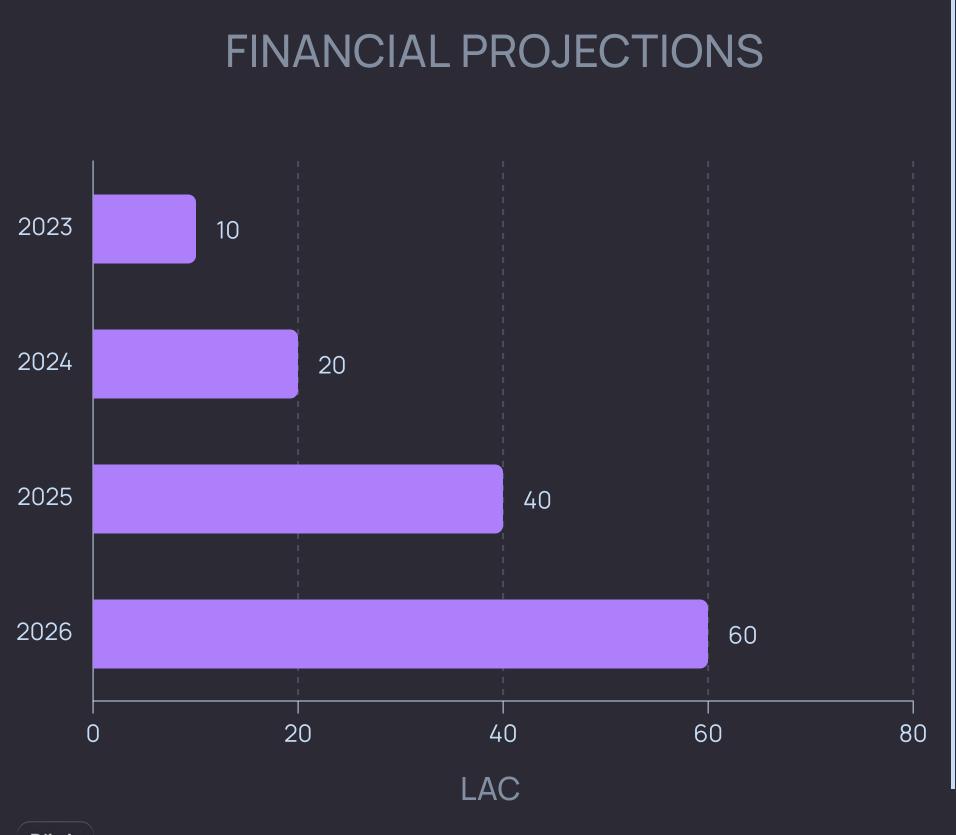
#### **ACQUISITION**

Use pilot data to convince other communities to join. Run initiative in schools so recycling becomes built-in behavior for next-generation citizens.

#### SCALE

From the participation of one to many co-op communities. Implementing features that allow us to connect between different recyclers and communities. Incorporating waste-to-energy ecosystem.

### Projections and Database





After verifying project performance

### KEY ASKS





Aid for piloting our idea starting with neighboring co-operative



Future venture advice

Aid in improving and venture model

### **TEAM**



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Founder



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