

July 2022

Principal Service	Provider	
Service:		
Individual Waste P	ickers as	sociated: 30 IWCs

# **OPERATIONS**

Access to quality, reliable, sustainable, and resilient infrastructure (SDG 9.1)

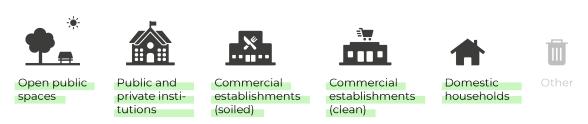
•		: Yes
•	: No	

## Plastic waste targeted

ABS, HIPS - engineering plastics | Polyethylene terephthalate (PET) | HDPE | LDPE | PP | PVC | e-plastics



#### Sourced from:

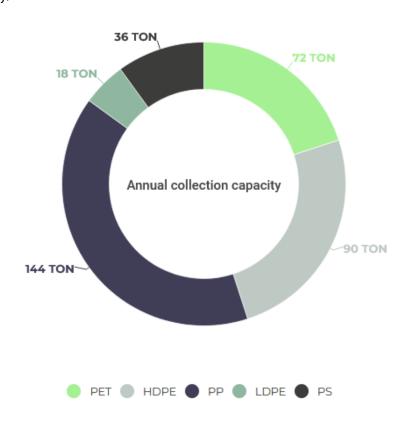


<sup>\*</sup>Number of households within collection area: 150 000



# **Annual capacity**

Collection capacity:



## Processing capacity:





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## Plastic waste treatment

Segregation and sorting, baling, and flaking

# Plastic waste final product



Flakes > 44 grades of HDPE, PP, LDPE rigid plastics



Bales > 3 grades of PET



**Films** Clean and dirty LDPE films



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## **ENVIRONMENT**

## Local Waste Management / Waste Value Chain



#### Baseline plastic waste disposal practice in the locality:



<sup>\*</sup>Other: unprocessed waste sent to the local municipality

# Climate Change / Carbon Emissions

Supply chains

Positive> shortened supply chains into domestic market

- LDPE films get sold in the local recycler market
- Flakes and PET baling is sent to other state for further processing
- Reduction in virgin plastic feedstock due to increased availability of recyclable materials in domestic markets

#### **Pollution**

- Transportation fuel type : Diesel
  - Carbon Monoxide (CO)
  - Hydrocarbons (HC)
  - Carbon dioxide (CO<sub>2</sub>)
  - Nitrogen Oxides (NOx)
  - Suspended Particulate Matter (SPM)
- Fuel consumption: 7 litres/100 km
- Frequency: 1 trip per week
- Average distances p/d or p/w: 30km/day

# **Energy Usage**

• Grid electricity for treatment processes



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Diesel fuel consumption for transportation

Energy Efficiency - Energy Conservation - Energy Reduction

N/A

Energy Alternatives (moving away from fossil fuels – solar etc.)

• No renewable energy use (SDG 7.2)

## Resource scarcity

Plastic Life Cycle

Level of competition for plastic waste materials in pilot locality is very high. Pilot deals with downstream operations only i.e., collection, simple plastic waste treatment. Downstream only i.e.,

- PET: Collection sorting/segregation bales
- HDPE, PP, LDPE rigid plastics: Collection sorting/segregation flakes
- LDPE films: Collection sorting/segregation

#### Service Provider Product(s) End use

- PET: bales
- HDPE, PP, LDPE rigid plastics: flakes
- LDPE films: clean / dirty

#### Service Provider Product(s) Impact on the environment and sector

- Avoided dumping in the environment
- Avoided uncontrolled burning of plastic waste
- Increased availability of recyclable material in domestic market
- Diesel emissions from transportation
- C02 emissions from grid electricity usage for treatment processes

#### Water - Private Use, Public Use - Water Discharge Practices





No process water consumption (SDG 6.4)





Sanitation services, including a hand-washing station with soap and water available at facility (SGD 6.2)





No Integrated Water Resource Management (IWRM) (SDG 6.5)

# Biodiversity/Deforestation

N/A

ValuCred testing month 1-4

July 2022
India

## SOCIETY

## **Community Relations**

Social / Societal Accountability

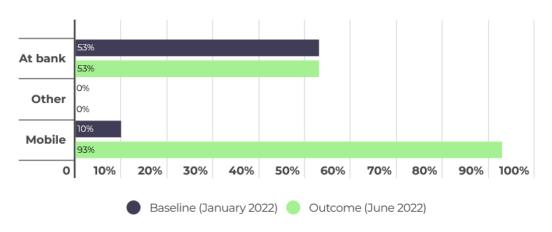
#### Participants' households with access to basic services (SDG 1.4)



## Human Rights - Domestic & Foreign Employees

Economic Fairness Issues (advocate concerns)

#### Participants with an account (SDG 8.10)



Participants with information and communications technology (ICT) skills (SDG 4.4)

0% of participating IWCs (no change)

Participants owning a mobile phone (SDG 5.1)

- 100% of participating IWCs: (+7% improve) [baseline: 93% of IWCs]
  - 100% of all participating women (+30% improve) [baseline: 70% of IWCs]
  - 100% of all participating men (no change)

Participation in formal and non-formal education in the previous 12 months (SDG 4.3)

• 0% of participating IWCs (-100% decrease) [baseline: 10% of IWCs]

Educational, employment, and training status of 15 - 24 years old involved in the program (SGD 8.6)

- 1 IWC participant in this age group:
  - Participation in training programs: N/A (no change)
  - Employment status: Employed (no change)

ValuCred testing month 1-4

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India

- Highest educational qualifications: College (no change)
- Currently enrolled in educational program: No (no change)

# Supply Chain Concerns - Labour General — Child Labour, Forced Labour - Gender and diversity

Supply Chain wages / non-salary compensation / pay-for-performance

#### KeepClean ReTec:

Contract employment

#### Recoja Scrap Shop:

• Pay for performance: Purchase / payment for delivery of recyclable materials

#### Healthcare and/or Insurance

Healthcare or insurance is not provided to staff

#### Child labour

Youngest participant is 24 years old (SDG 8.7)

#### Diversity - Workforce

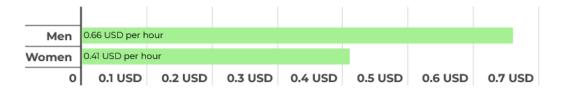
- Only 4% of IWCs perceive to belong to a specific minority or vulnerable group
- KeepClean ReTec supports/promotes equal rights and the inclusion of people with disabilities, women, and minority groups e.g., people with disabilities can work in sorting operations (SDG 10.2)

Pay Equity Issues (gender, foreign labour, contract labour etc.)

#### KeepClean ReTec' workforce:

• Women in managerial position (SDG 5.5): No (no change)

#### Unequal pay for women and men: 38% pay gap



#### Municipality:

#### **IWCs**

- 📩 33%
- ~ ~ 67%

### Unequal pay for women and men: 3.5% pay gap





Recoja Scrap Shop:

Women in managerial position: No (no change)

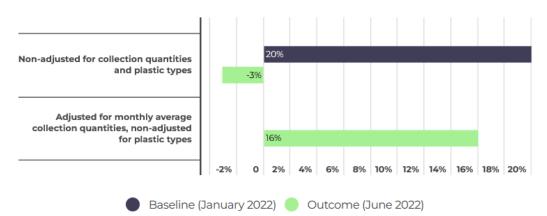
**IWCs** 

- 47%

## Unequal pay for women and men



#### Pay gap





## **GOVERNANCE**

# Access to Capital and infrastructure / Operations funding

KeepClean ReTec:







Publicly funded

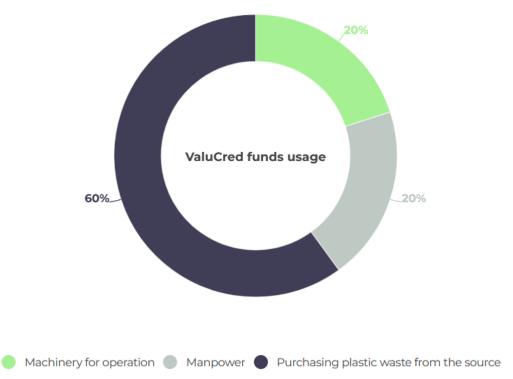


Foreign directions



Official development assistance

## ValuCred funds usage:



# Risk Management Policies & Practices

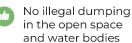
Environmental Risk - Track Record

- Identification of environmental impacts: no awareness
- Company rules:











Unprocessed and hazardous waste has to be handover to the local municipality

ValuCred testing month 1-4

July 2022

#### **Emergency preparedness**

India

- Emergency response plan (ERP) available
- · Periodic testing of ERP

# Contract Supply (includes direct / indirect employment) - Employee & Labour standards

New job creation (e.g., official employment contracts, employees of legally registered PROs) (SDG9.2)

KeepClean ReTec Workforce: Yes

- 12- workers
- 3- operators
- 3 load men

Weekly hours: 48 hours per week [48hrs/w] (SDG 8.5)

## **Operations Monitoring**

Bookkeeping:



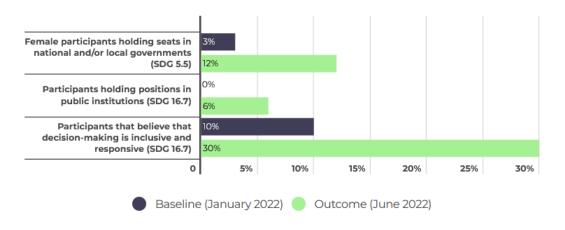
## Audit and oversight

Compliance with Local Laws / Third Party Verification - Oversight

Collection site approved by local municipality

# Impact on Public Policy

Lack of democracy / Political Contributions on Government Processes - Transparency - Contributions to Trade Association for Party or Individual demonstrated by Policies & Practices

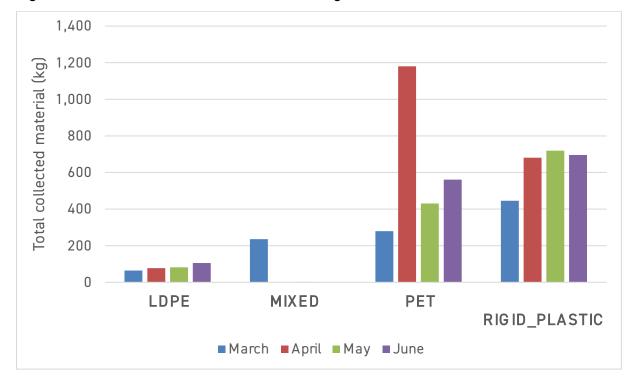


## Annex 1: Operational Data\*Summary - Recoja Scrap Shop (March-June)

## 1.1 Summary Report Collection (March – June)

<b>M</b> aterial	Collection in March (kg)	Collection in April (kg)	Collection in May (kg)	<b>C</b> ollection in June (kg)	Sums of total collected material (kg)
LDPE	65	77	82	105	329
MIXED	236	/	2	/	238
PET	279	1180	430	561	2450
RIGID_PLASTIC	445	680	719	696	2541
Total collected material (kg)	1025	1937	1233	1362	5557

Figure 1: Overview of total collected material (kg) for March - June





# 1.2: Sums of total collected material per collector in June

Collector-ID	LDPE	PET	RIGID_PLASTIC	Sums of total collected mate- rial per collector (kg)
VCCH001	5	15	23	43
VCCH002	4	7	25	35
VCCH003	3	16	28	47
VCCH004	11	11	18	41
VCCH005	1	20	37	59
VCCH006	6	7	36	49
VCCH007	3	12	27	42
VCCH008	7	21	14	42
VCCH009	6	32	28	67
VCCH010	6	28	24	58
VCCH011	2	18	15	35
VCCH012	4	16	31	51
VCCH013	7	12	24	43
VCCH014	1	13	32	45
VCCH015	1	12	14	26
VCCH016	3	19	25	47
VCCH017	6	33	30	70
VCCH018	4	27	22	53
VCCH019	1	18	14	33
VCCH021	3	24	25	52
VCCH022	4	44	48	96
VCCH024	1	4	18	23
VCCH026	3	20	11	34
VCCH027	3	21	17	41
VCCH028	3	42	30	74
VCCH029	2	25	27	54
VCCH030	4	20	31	56
VCCH20	1	23	21	45
Total collected mate-				
rial (kg)	105	561	696	1362





# 1.3: Sums of total cleared material (March - June)

Material type	
Data of material alarman	Sums of cleared material (kg)
Date of material clearance	(Buyer India`s)
19.03.2022	1480
PET	940
RIGID_PLASTIC	540
06.04.2022	435
PET	283
RIGID_PLASTIC	152
19.04.2022	577
PET	150
RIGID_PLASTIC	294
LDPE	132
11.05.2022	882
PET	301
RIGID_PLASTIC	535
LDPE	46
03.06.2022	880
PET	295
RIGID_PLASTIC	505
LDPE	80
22.06.2022	746
PET	265
RIGID_PLASTIC	400
LDPE	81
Total cleared material (kg)	4999