

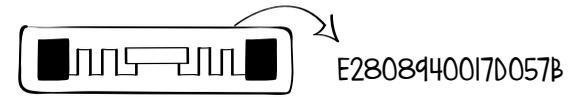


collector

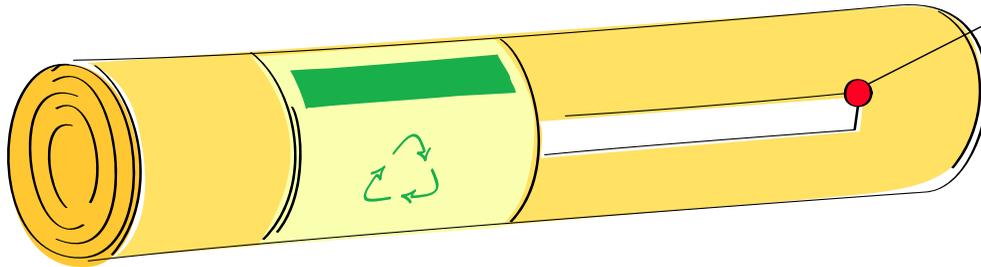
LESS WASTE -> MORE FUTURE



collector
BY CARGOTRACK

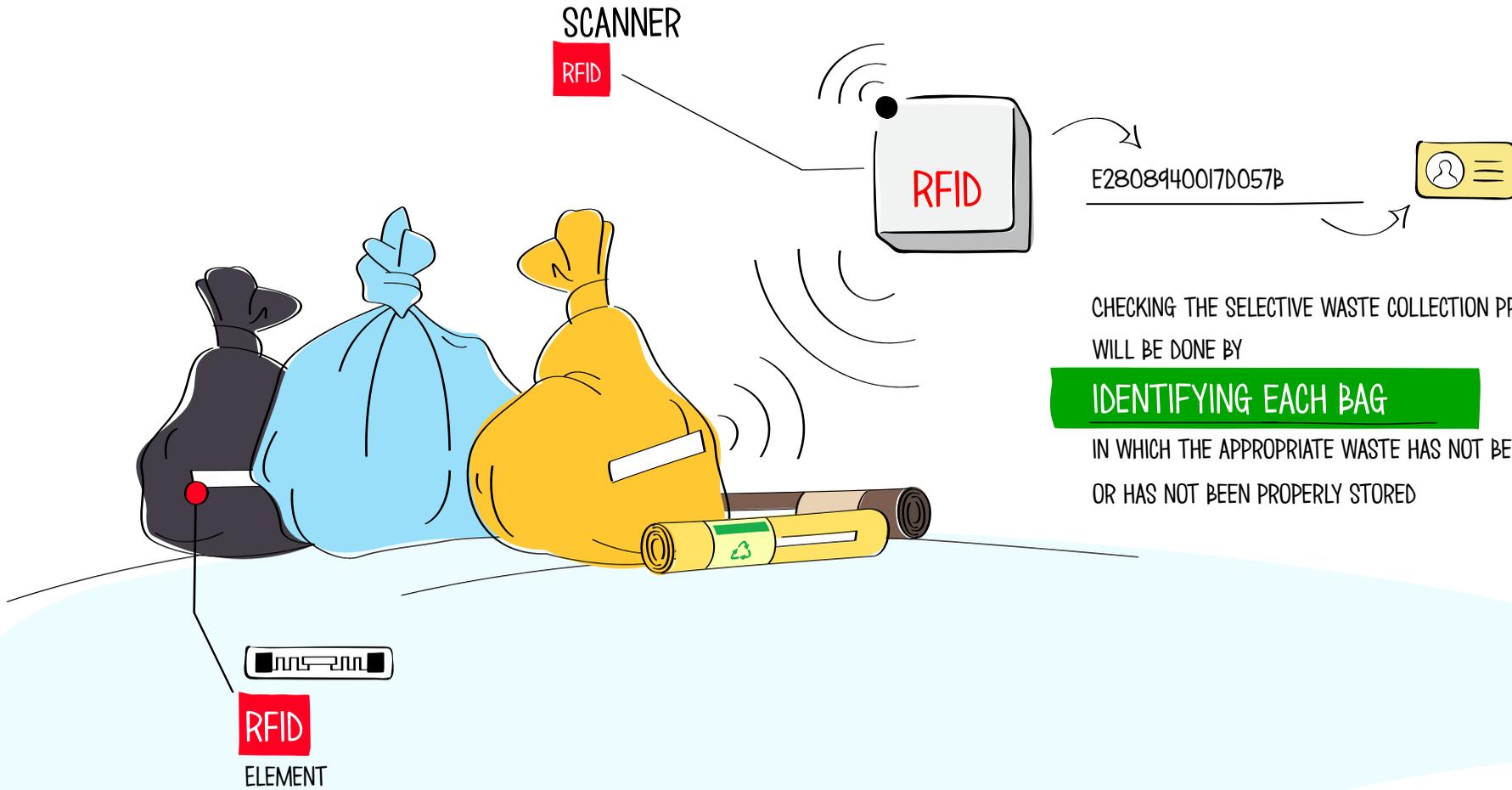


WASTE BAGS
WITH **RFID ELEMENT**
DISTRIBUTED TO THE POPULATION
/ WASTE GENERATORS



- HOUSEHOLD WASTE BAGS
- RECYCLABLE (60L) 
 - BIODEGRADABLE (15L) 
 - RESIDUAL(35L) 

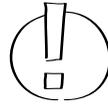




CHECKING THE SELECTIVE WASTE COLLECTION PROCESS
WILL BE DONE BY

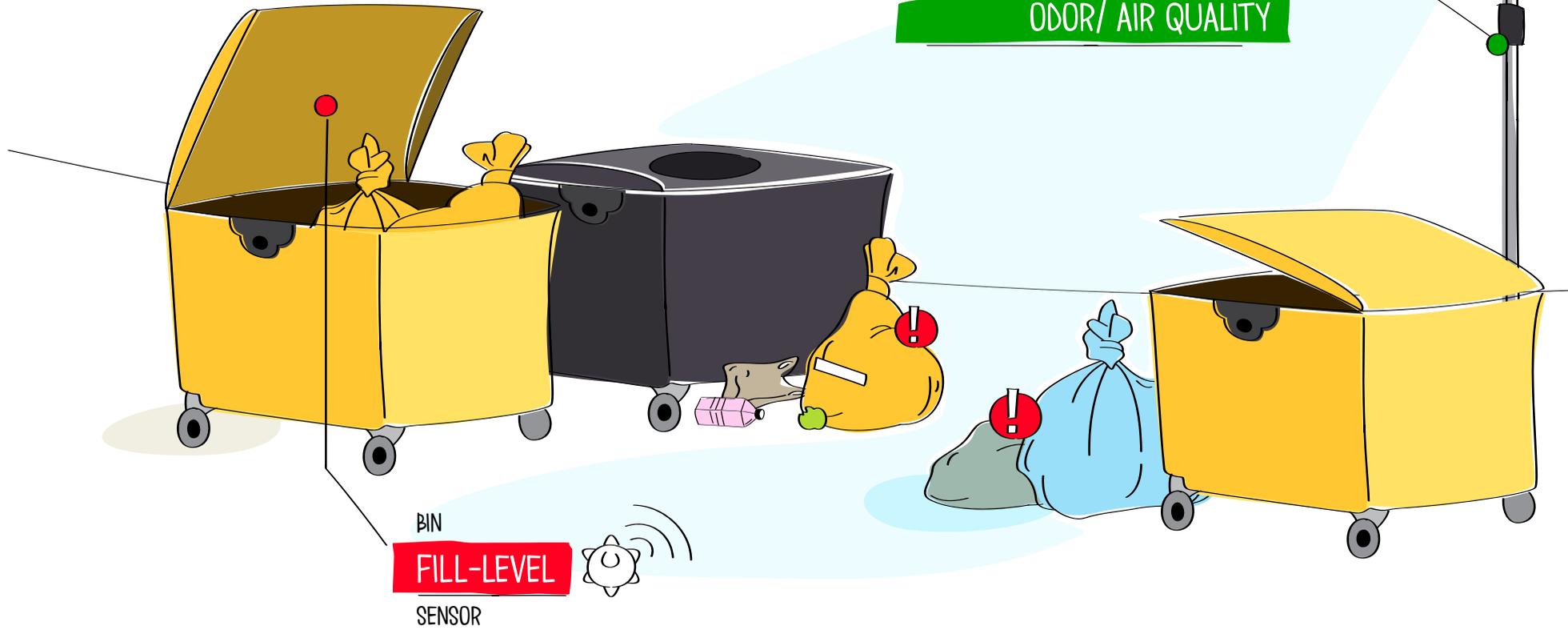
IDENTIFYING EACH BAG

IN WHICH THE APPROPRIATE WASTE HAS NOT BEEN COLLECTED
OR HAS NOT BEEN PROPERLY STORED



SURVEILLANCE CAMERA WITH
ARTIFICIAL INTELLIGENCE ALGORITHMS
AUTOMATICALLY CREATES AN INCIDENT WHEN IT DETECTS
IMPROPERLY STORED WASTE

SENSOR FOR
ODOR/ AIR QUALITY



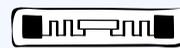
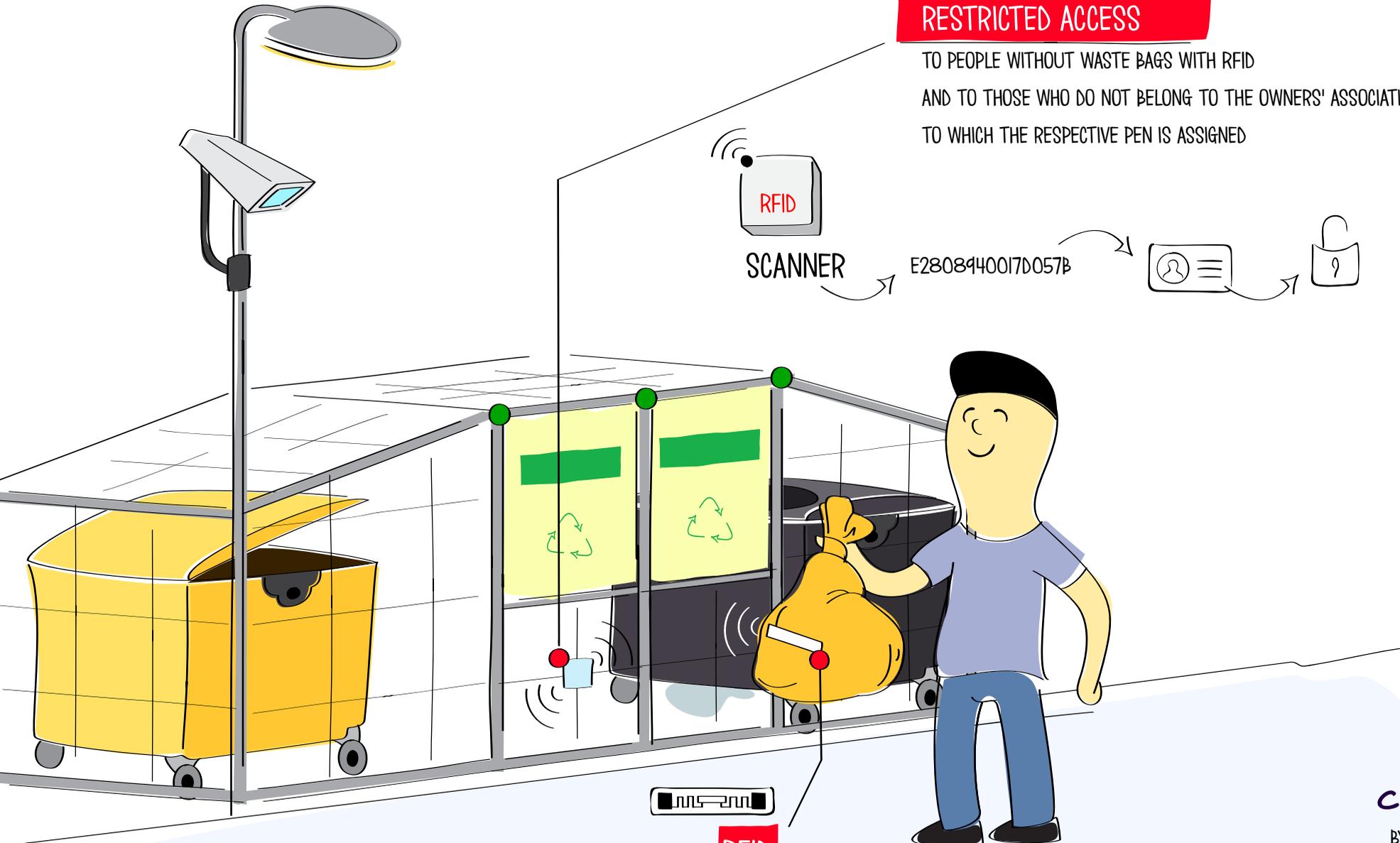
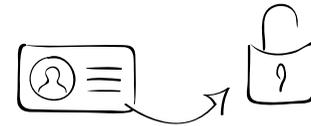
RESTRICTED ACCESS

TO PEOPLE WITHOUT WASTE BAGS WITH RFID
AND TO THOSE WHO DO NOT BELONG TO THE OWNERS' ASSOCIATION
TO WHICH THE RESPECTIVE PEN IS ASSIGNED



SCANNER

E2808940017D057B

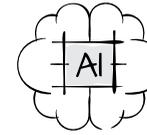


RFID

ELEMENT



collector
BY CARGOTRACK



THE VIDEO CAMERA WITH ARTIFICIAL INTELLIGENCE ALGORITHMS WHICH
FACILITATES THE IDENTIFICATION
OF PEOPLE THROWING WASTE WITH OR WITHOUT RFID BAGS

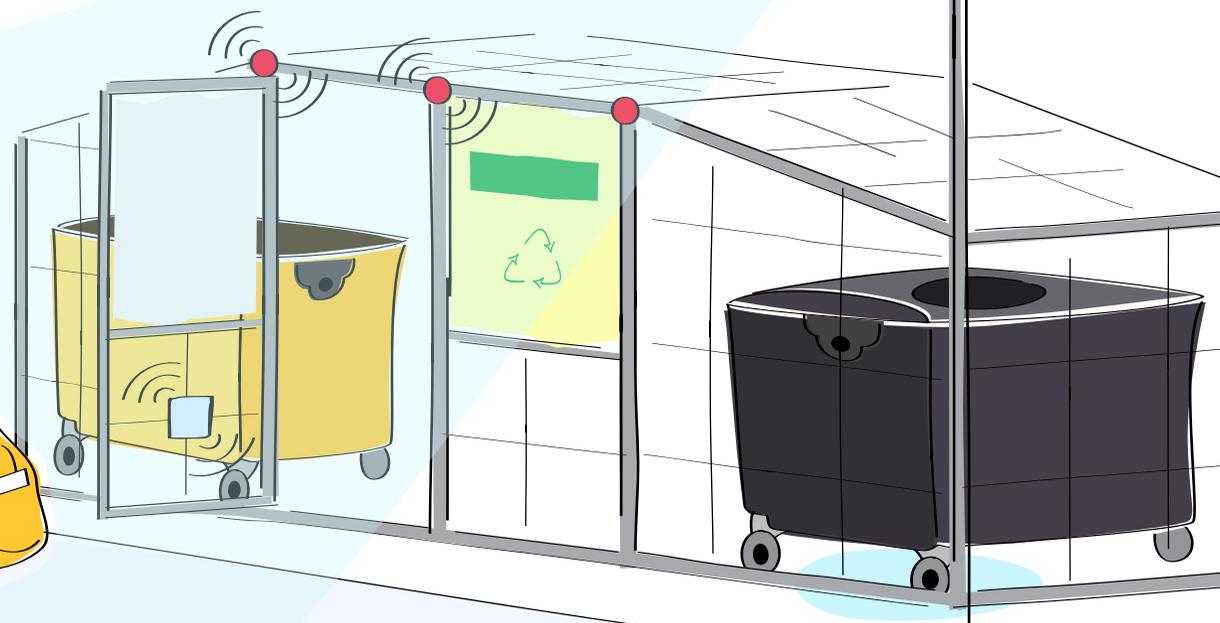
! BAG
WITHOUT IDENTIFICATION ELEMENT



WASTE BAG



WITH IDENTIFICATION ELEMENT





collector
BY CARGOTRACK



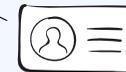
24/7 VIDEO SURVEILLANCE

WITH ARTIFICIAL INTELLIGENCE ALGORITHMS



SENSORS FOR REAL TIME NOTIFICATION

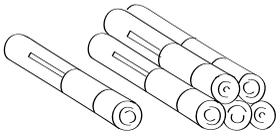
IF THE DOOR REMAINS OPEN FOR MORE THAN A PREDETERMINED PERIOD



ACCESS SYSTEM WITH IDENTIFICATION

OF THE PERSON RELATED TO THE RFID CODE OF EACH BAG





X 60L

% FILL-LEVEL

CALCULATED BY THE NUMBER OF BAGS SCANNED
RELATIVE TO THE VOLUME OF THE BINS



AUTOMATIC NOTIFICATION

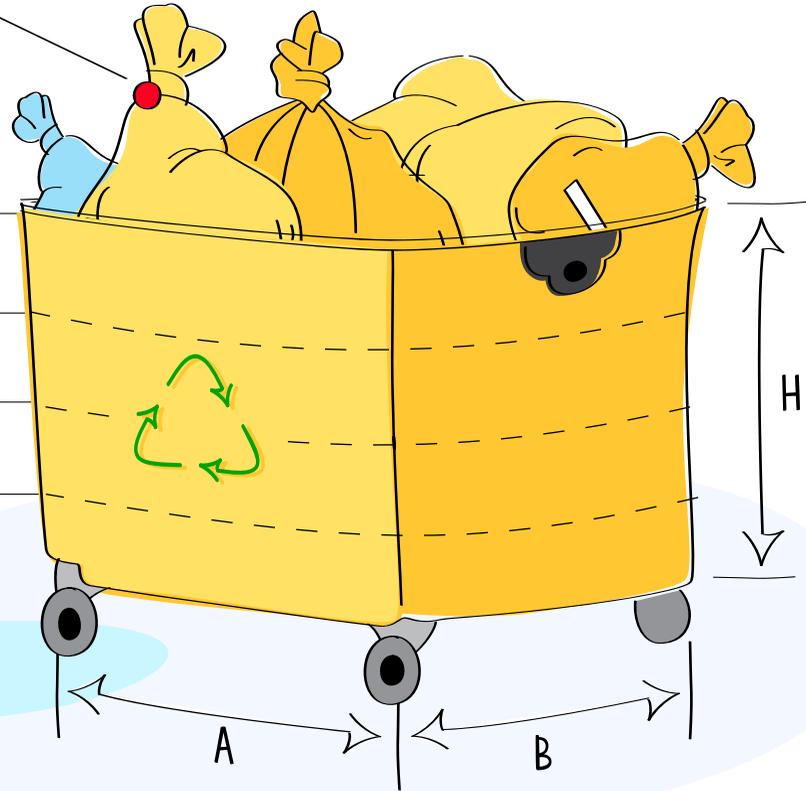
WHEN THE DEGREE OF FILLING REACHES
AN OPTIMALLY SET LEVEL

100%

75%

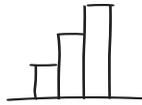
50%

25%



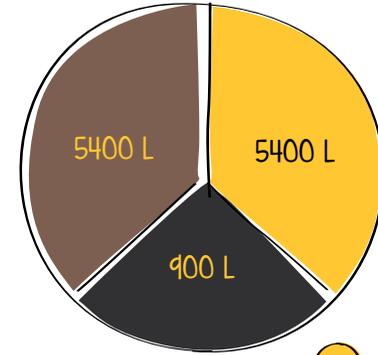
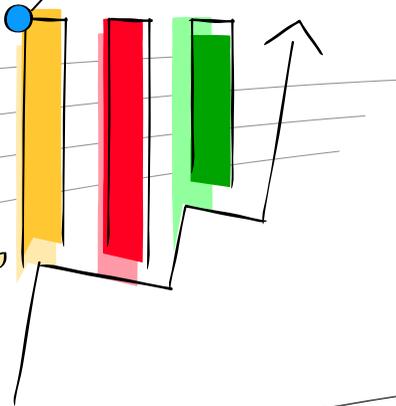


collector
BY CARGOTRACK

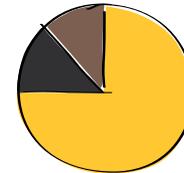


ACCURATE STATISTICS

OF THE QUANTITIES OF WASTE GENERATED, EXISTING AND COLLECTED
AT THE LEVEL OF TOWN, NEIGHBORHOOD, ASSOCIATION, PEN AND PERSON



WASTE
● 90 BAGS (37.5%)
● 60 BAGS (25.0%)
● 90 BAGS (37.5%)



WASTE
● 40 BAGS (66.6%)
● 10 BAGS (16.6%)
● 10 BAGS (16.6%)



● RECYCLABLE ● BIODEGRADABLE ● RESIDUAL



SECURITY SYSTEM

TO PREVENT PEOPLE GETTING TRAPPED
INSIDE THE PEN



MOTION / PERIMETER

SENSORS



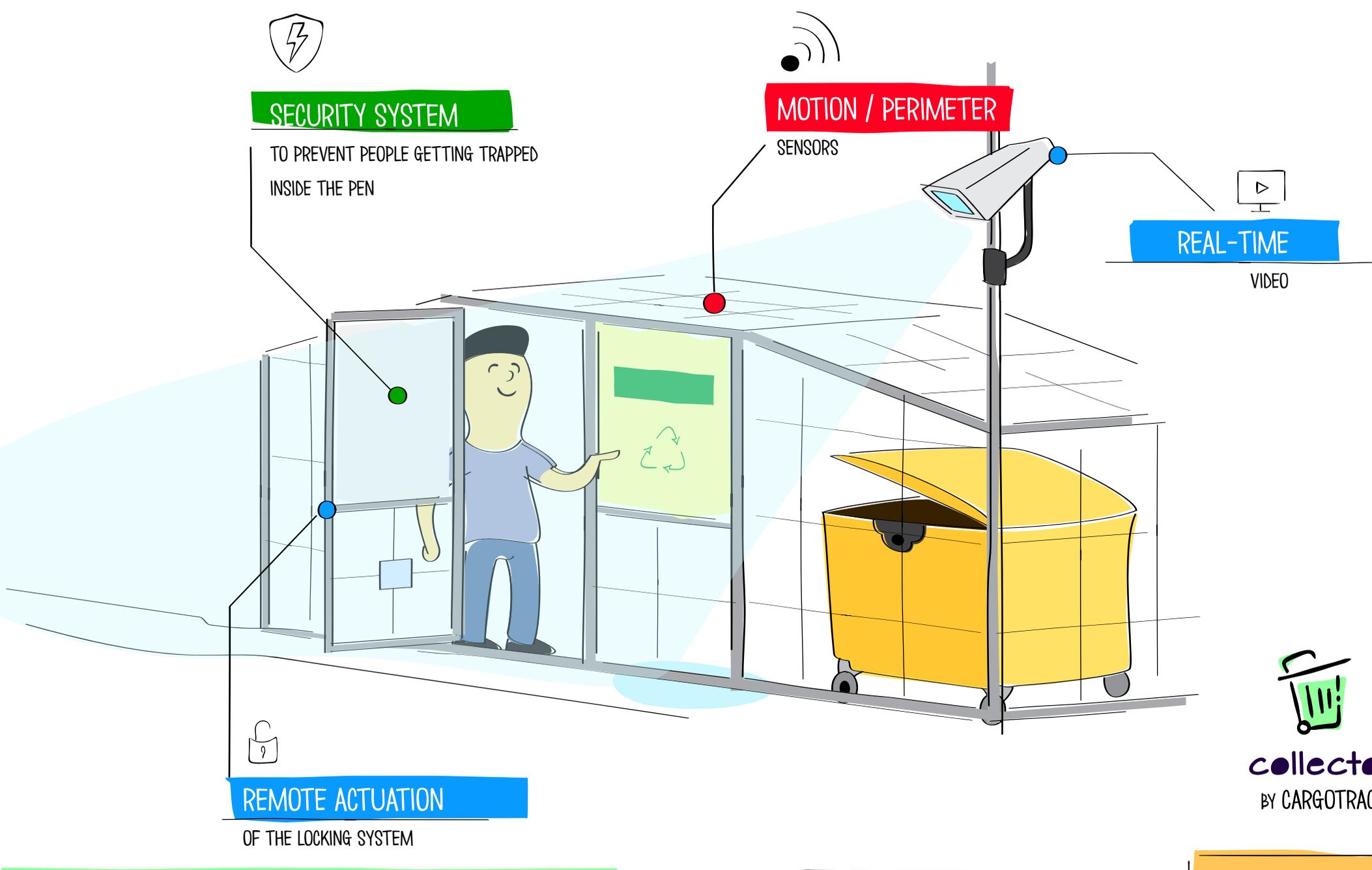
REAL-TIME

VIDEO

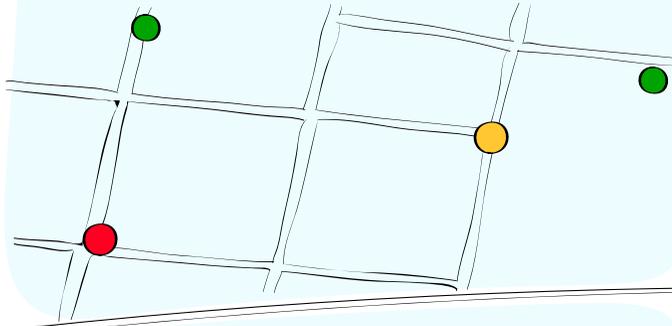
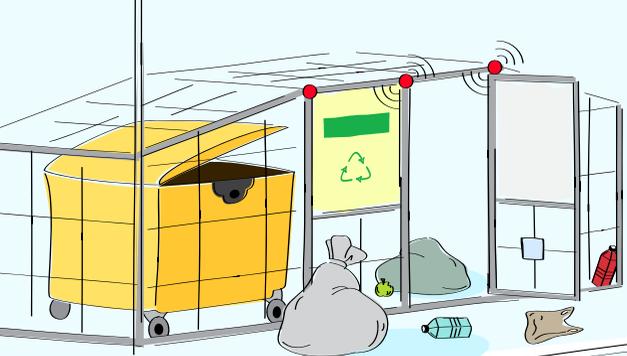


REMOTE ACTUATION

OF THE LOCKING SYSTEM



collector
BY CARGOTRACK



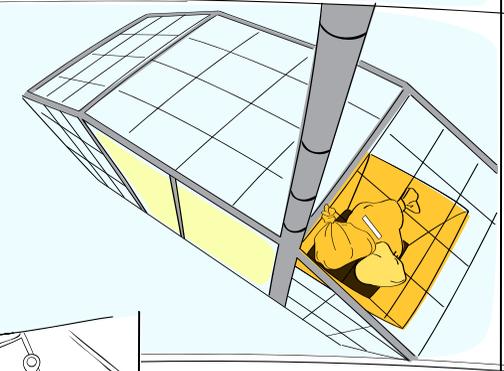
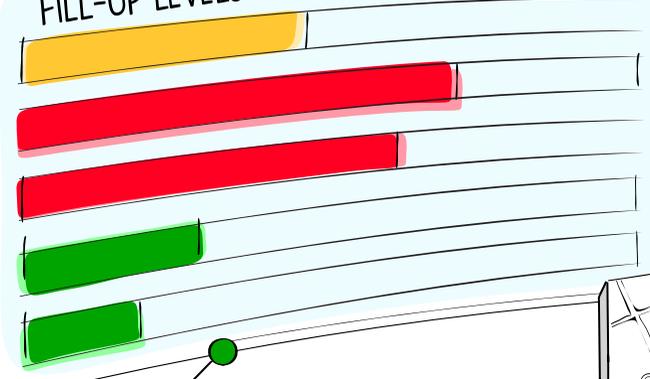
GENERATED WASTE 22-11-21



INCIDENTS

- A1 INCIDENT 221121-4.20PM
- B2 INCIDENT 221121-10.40AM
- C3 INCIDENT 221121-9:57AM

FILL-UP LEVELS

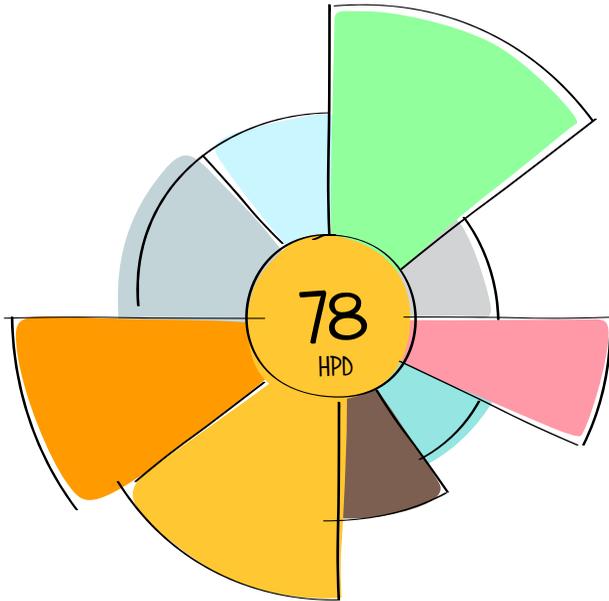


DISPATCHER
REAL-TIME MONITORING

collector
BY CARGOTRACK



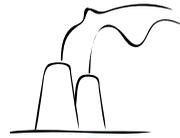
collector
BY CARGOTRACK



22-11-2021
1:40PM

SMART CITY

MONITORING



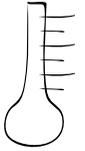
2/10

AIR QUALITY



72DB

SOUND POLLUTION



7°C

TEMPERATURE



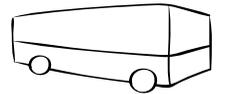
57%

TRASH BINS



+24.2L/H

WATER CONSUMPTION



87 BUSES / 56 TRAMS

PUBLIC TRANSPORTATION



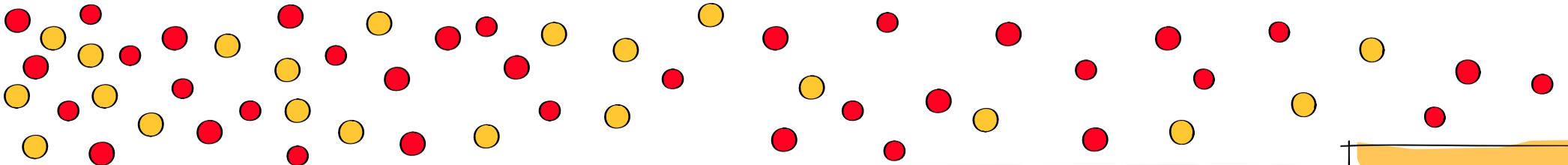
-3.8MWH

POWER USAGE

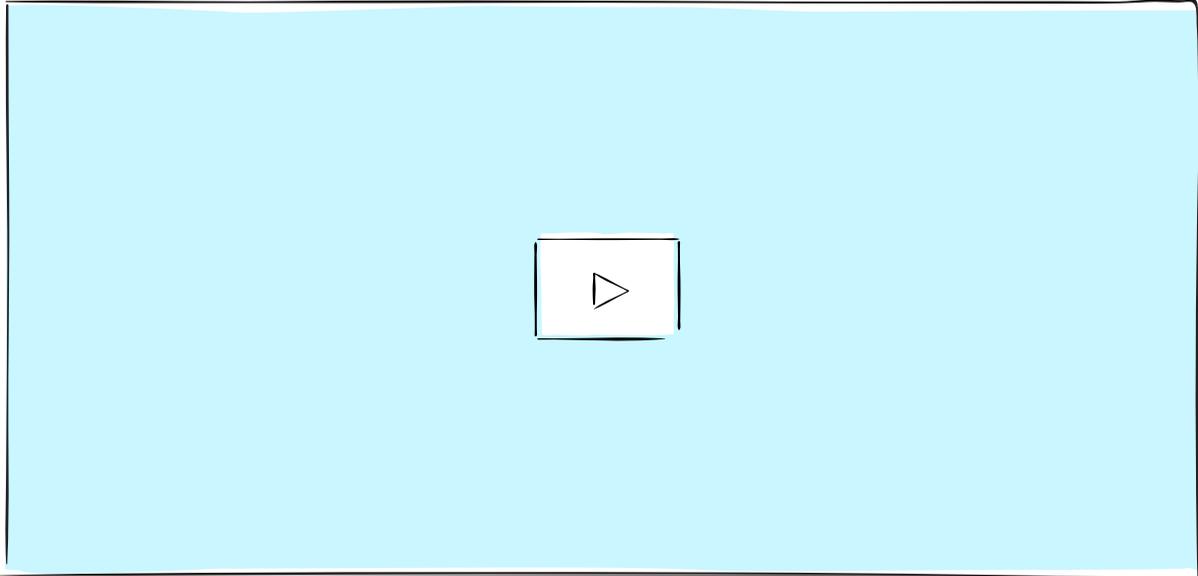


88/116

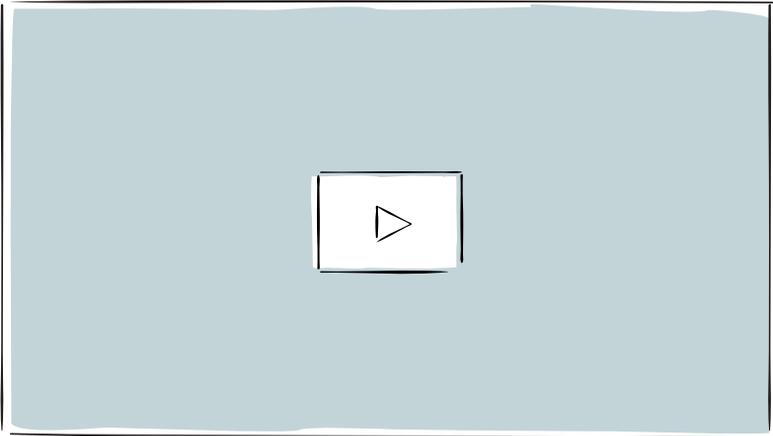
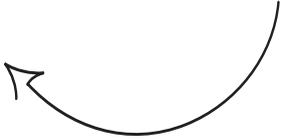
SMART WIFI



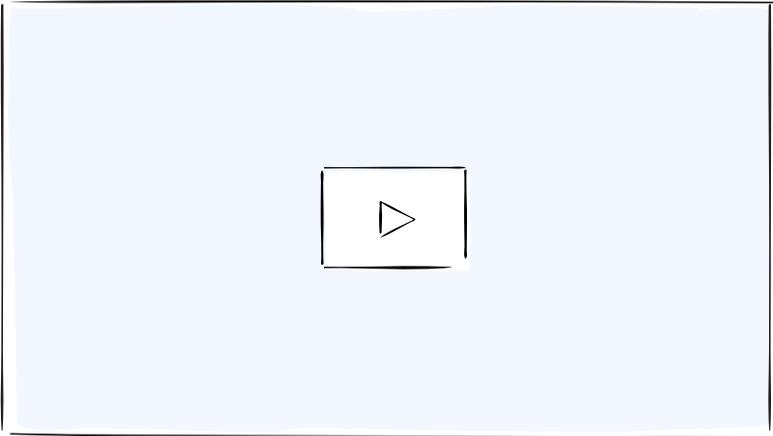
VIDEO EXAMPLE



ONLINE PLATFORM



VIDEO CAMERA
INSTALLED ON THE GARBAGE PEN

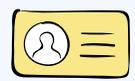
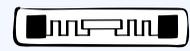
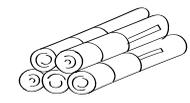
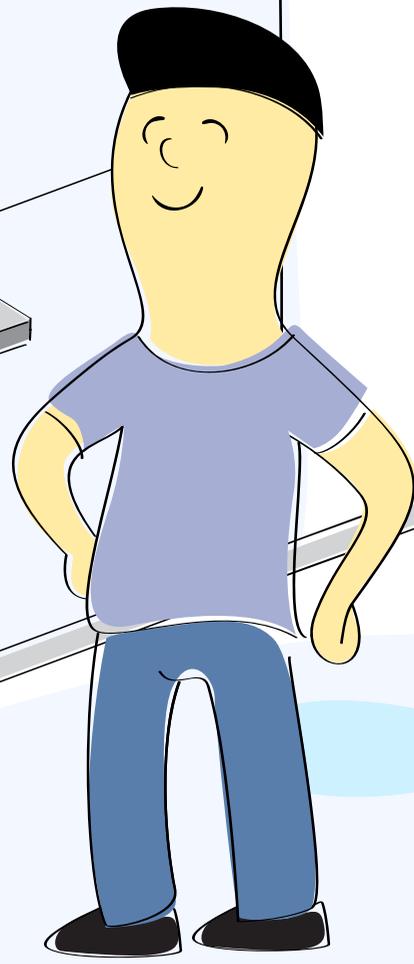


RFID WASTE BAG
OPERATION



ASSOCIATION

DISTRIBUTION OF RFID WASTE BAGS
THROUGH
OWNERS' ASSOCIATIONS



ID CHECK

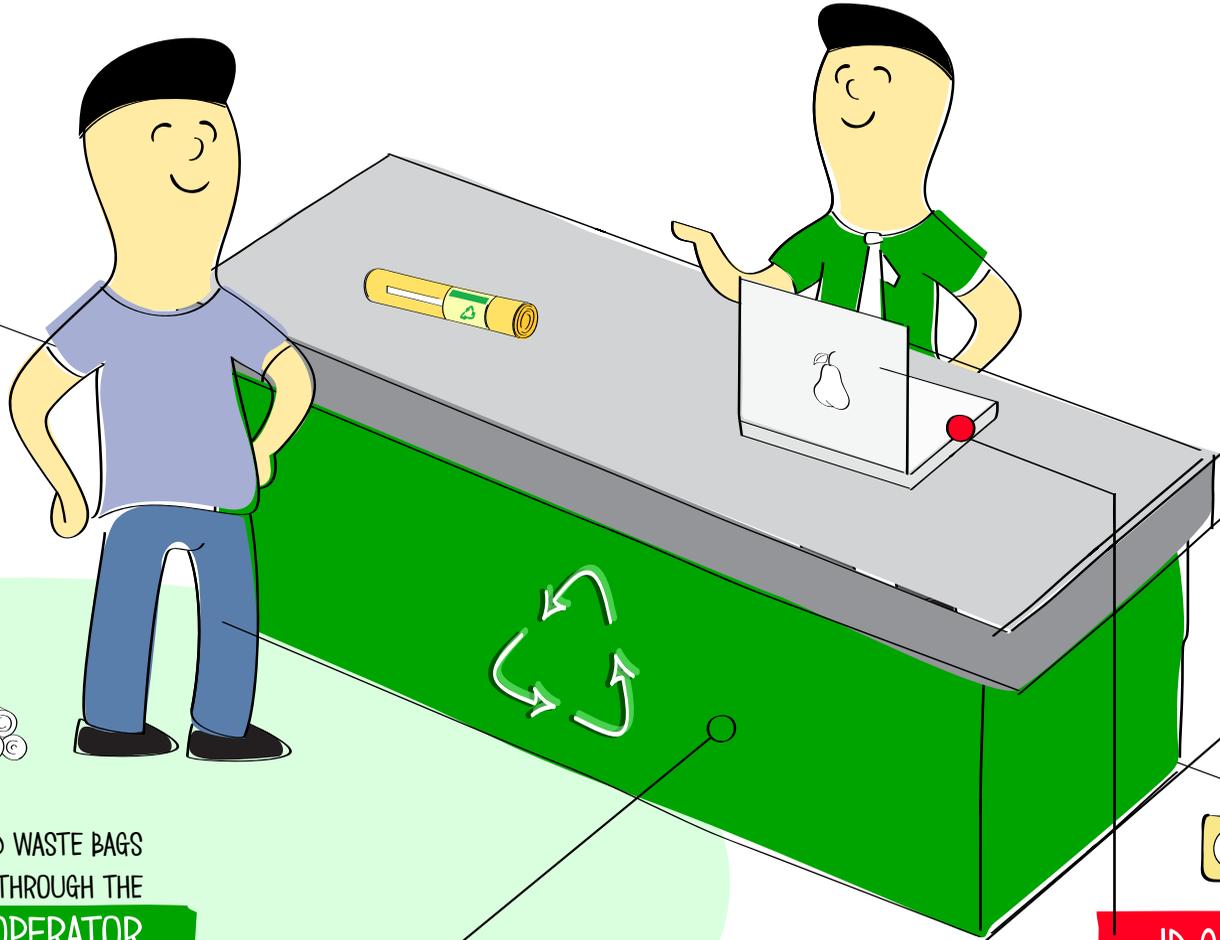
AND ASSIGNING OF RFID CODES
FOR THE BAGS DISTRIBUTED



collector
BY CARGOTRACK



collector
BY CARGOTRACK

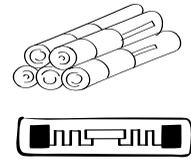


DISTRIBUTION OF RFID WASTE BAGS
THROUGH THE

SANITATION OPERATOR

ID CHECK

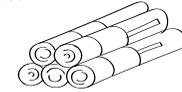
AND ASSIGNING OF RFID CODES
FOR THE BAGS DISTRIBUTED



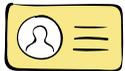
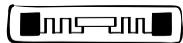
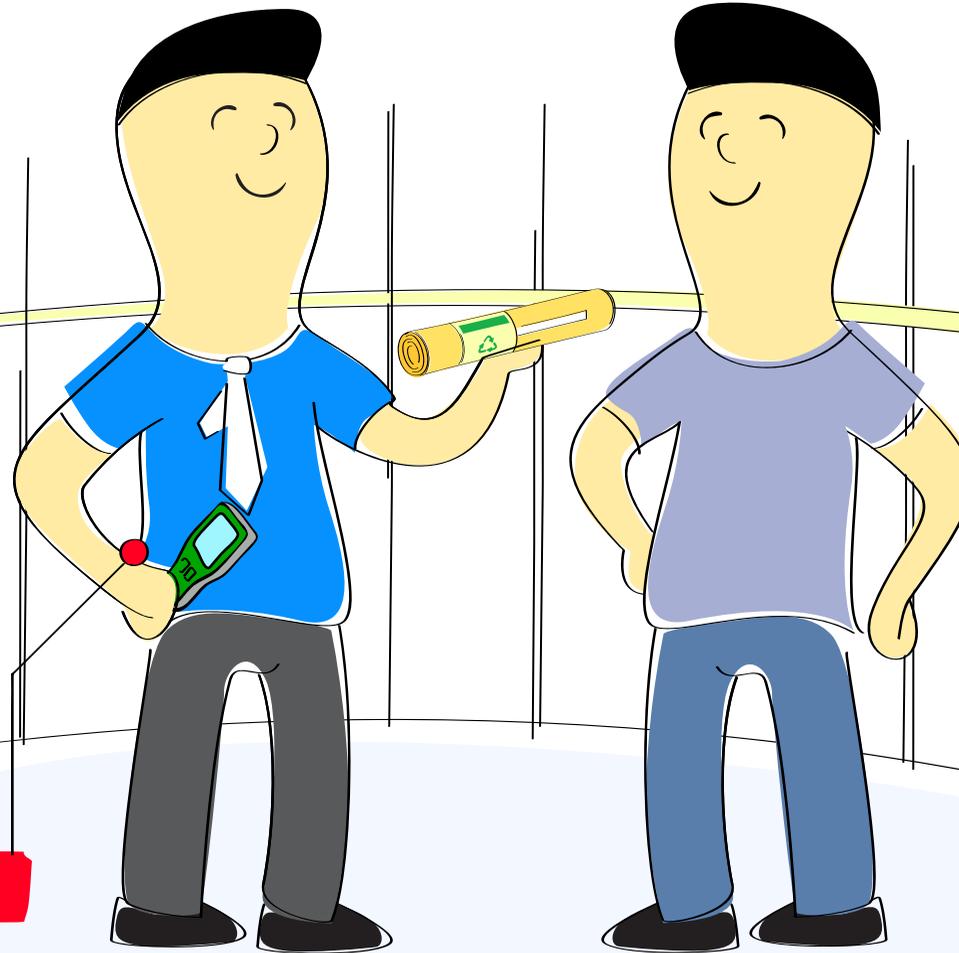


collector
BY CARGOTRACK

DISTRIBUTION OF RFID WASTE BAGS
THROUGH THE

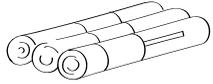


DISTRIBUTION OF RFID WASTE BAGS IN
FIXED POINTS WITH OPERATOR



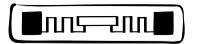
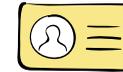
ID CHECK

AND ASSIGNING OF RFID CODES
FOR THE BAGS DISTRIBUTED



RFID WASTE BAGS DISTRIBUTION

IN STRATEGIC LOCATIONS



ID CHECK

AND ASSIGNING OF RFID CODES
FOR THE BAGS DISTRIBUTED



collector
BY CARGOTRACK

COST ESTIMATION

« COLLECTOR » SYSTEM



 HARDWARE	COMMAND AND DATA TRANSMISSION UNIT	€1500
	RFID SCANNER	€300
	PRESENCE AND DOOR FAULT SENSORS	€75
	5MP 4G WIFI VIDEO CAMERA	€350
	ELECTROMAGNETIC DOOR LOCK UNIT	€100
	AUTOMATIC DOOR CLOSING UNIT	€100
 SOFTWARE	SOFTWARE DEVELOPMENT	€40 / ORA
	DATA TRANSMISSION SUBSCRIPTION (4G)	€25 / LUNA
	DATA TRANSMISSION SUBSCRIPTION (CABLE)	€4 / LUNA
 WASTE BAGS	BAGS WITH RFID ELEMENT	€0.11 - 0.16 / SAC
DISTRIBUTION	EQUIPMENT FOR DISTRIBUTION / SALE OF HOUSEHOLD WASTE BAGS	€3600 / BUC



collector

LESS WASTE -> MORE FUTURE

A PROJECT BY



2021

[HTTPS://CARGOTRACK.RO](https://cargotrack.ro) | 0374 430 060 | OFFICE@CARGOTRACK.RO

24P EPISCOP IGNATIE DARABANT SQUARE

410235 ORADEA