Individual Waste Segregation System

Pay as you throw. Save as you sort.

less
waste

About us
Who we are?

T–Master S.A. is a Polish company specializing in modern and comprehensive solutions for municipal waste management. T-Master S.A. originates from the T4B Group, a leader in critical infrastructure solutions in Poland. The team has over 20 years of experience in developing and implementing electronic and ICT systems, gained through projects for the public sector in Poland.

Since 2017, the company has been providing its proprietary **Individual Waste Segregation System**, effectively supporting cities in organizing selective municipal waste collection in multi–family housing areas, in compliance with the Act on Maintaining Cleanliness and Order in Municipalities.

The company has developed a range of solutions dedicated to:

↘ cities and municipalities,

↘ municipal companies,

↘ real estate developers,

↘ housing cooperatives and associations.

T–Master's business model includes:

↘ free consultations and advisory services,

↘ needs–based system analysis and design,

↘ delivery of devices and software,

↘ post–warranty service and maintenance,

↘ user training.

T–Master S.A. has a nationwide network of partners responsible for installation and local servicing of delivered devices to ensure maximum user satisfaction.

All **T–Master** devices are designed and manufactured in Poland. They meet EU requirements for safety, health, and environmental protection, confirmed by a CE Declaration and two independent audit reports supported by laboratory testing. The company's operational and production activities are conducted in line with the highest quality standards, in compliance with ISO 9001 methodology, as confirmed by annual certification.

Process compliance and a qualified team have enabled **T–Master** to obtain a Type Examination Certificate for the automatic weighing system used in its devices, which legally weighs waste. This means the solutions are technologically ready to introduce individual billing of residents based on the type and weight of their waste. Additionally, the company has been authorized by the Regional Office of Measures in Łódź (JN No. 1446) to perform conformity assessments, further confirming the high standard of service and technical expertise.

From the very beginning, **T–Master** has continuously conducted **R&D activities**, improving existing products and swiftly responding to market demands with new solutions.

The company is a laureate of the prestigious **GreenEvo – Green Technology Accelerator** program, implemented by the Ministry of Climate and Environment, supporting the promotion of Polish technologies both domestically and abroad.

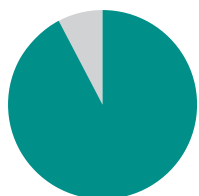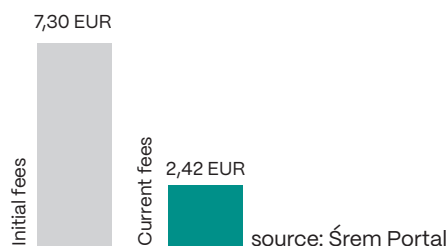# Effects of T-Master System Implementation in Numbers

↘ 22 locations
↘ over 20,000 users across Poland!

35%
cost reduction in waste collection and management just 5 months after system implementation in Śrem
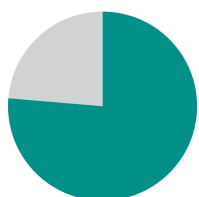
7,30 EUR

Initial fees

Current fees

2,42 EUR

source: Śrem Portal

95%
of households satisfied with the change

4x
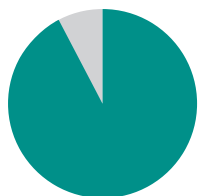an increase in the amount of selectively collected waste compared to a decrease in mixed waste

68%
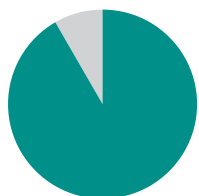less mixed waste in Zamość

2x
fewer collection trips for mixed waste in Zamość

95%
of households sort their waste

92%
positive results in waste sorting quality inspections

35%
reducing the number of mixed waste containers in favor of segregated ones in Rumia

*data sourced from the Less Waste system

Individual Waste Segregation System

The T-Master **Individual Waste Segregation System** is a proprietary solution that streamlines the waste sorting process and ensures everyday convenience for users. Thanks to its modular design, our devices seamlessly fit into and complement both urban and residential environments, eliminating clutter and improving the aesthetics of existing waste collection areas.

The system replaces collective responsibility in apartment blocks with individual accountability for non–compliance.
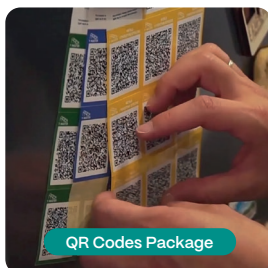
About the system

| Apps | QR Codes | Devices |

Less Waste mobile
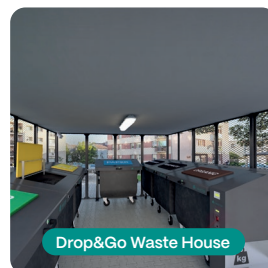

QR Codes Package

Drop&Go

Drop&Go Light

Drop&Go Waste House

Less Waste web

e-Collection Point 247

mini Collection Point 247

Drop&Go Textile

Waste Sorting Quality Control

Waste Control App

Benefits of Implementing the System

↘ **Fair waste billing** – residents are individually accountable for waste sorting; the system eliminates collective responsibility and prevents people from paying higher fees due to others' non–compliance.

↘ **Higher level of waste sorting** – the very implementation of the system encourages residents to start sorting their waste.

↘ **Convenience and hygiene** – touchless waste disposal.

↘ **Increased safety** – monitoring helps prevent illegal dumping and disorder.

↘ **Aesthetic design** – a modern solution that blends into residential architecture.

↘ **Clean and orderly environment** – closed containers prevent access by pests and unauthorized persons.
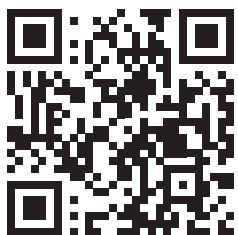
Drop&Go

Aesthetics and functionality in your neighborhood.

Drop&Go devices are smart containers designed for collecting all types of municipal waste.

All **Drop&Go** modules are equipped with QR code readers, a certified waste weight measurement system, and touchless lids. They also feature voice and light signals to assist users in operating the device.

Drop&Go
Scan the QR code
to explore the device up close ↙

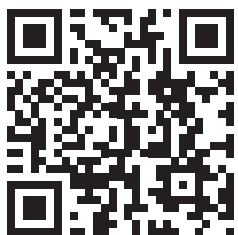# Drop&Go Light

A device with a single point for waste identification and weighing.

Drop&Go Light is a touchless container designed for collecting all types of municipal waste.
Its key feature is the MicroMaster Drop&Go module, which, after scanning a QR code, weighs the waste bag and opens the appropriate waste bin.

Drop&Go Light
Scan the QR code
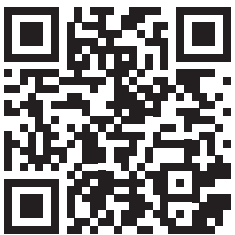to explore the device up close ↙

Drop&Go Waste House

A solution dedicated to external waste enclosures and indoor waste rooms, as a complement to traditional waste collection points in apartment buildings.

Drop&Go Waste House is a solution adapted to traditional waste enclosures—without the need to remove them—and to indoor waste rooms located within buildings. Thanks to integrated weighing and single-use QR code stickers, the device enables assigning the type and weight of the deposited waste to a specific household.

Drop&Go Waste House
Scan the QR code
to explore the device up close ↙

T-Master SA – Pay as you throw. Save as you sort.

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Drop&Go
Selected device functionalities

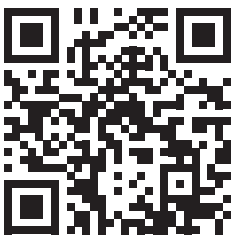| Functionalities	Drop&Go	Drop&Go Light	Drop&Go Waste House
Hardware and software production	Poland	Poland	Poland
Service and repair of devices	Poland	Poland	Poland
Technical specifications of devices			
Modular construction of the device	YES	YES	YES
External installation	YES	YES	YES
Installation inside apartment blocks and garbage sheds	NO	NO	YES
Height of the device – waste throwing flaps	1, 38 m	1, 28 m	1, 28 m
QR code reader	in every device	1 for all devices	1 for all devices
Scales	in every device	1 or 2 for all devices	1 or 2 for all devices
Legalized weight measurement	YES	YES	YES
Oświetlenie instalacji LED	YES	Optional	Optional
Container full sensors	YES	YES	YES
LED signaling of container availability	YES	YES	YES
Automatic container flaps	YES	YES	YES
The method of waste collection by a municipal company	each container individually (short handling time)	each container individually (short handling time)	each container individually (short handling time)
QR Codes – Disposable Stickers	YES	YES	YES
CCTV monitoring	YES	Optional	Optional
Automatic detection of drops and dimensions	YES	Optional	Optional
Fire detection system	YES	NO	NO
Unauthorized device access detection system	YES	YES	YES
Power Supply	230V	230V	230V
Device compatibility with containers:	1x1100l; 2 x360l	1x1100l; 2 x360l	1x1100l; 2 x360l
Less Waste Software			
Profile for the Ordering Party/Owner	YES	YES	YES
Profile for a waste collection company	YES	YES	YES
Profile for a Real Estate Manager	YES	YES	YES
Profile – individual account for a user/resident	YES	YES	YES
Mobile application for residents	YES	YES	YES
CRM system (user management, communication, service)	YES	YES	YES
Electronic service notification system	YES	YES	YES
Statistics			
Number of drop box openings	YES	YES	YES
Number of residents/users	YES	YES	YES
Number of drops	YES	YES	YES
Waste mass	YES	YES	YES
Container fill level	YES	YES	YES
Detection of abnormal waste weight	YES	NO	NO
Waste segregation rate (%)	YES	YES	YES
Waste segregation quality control (application)	YES	YES	YES
Facilities for disabled people			
Voice messages	YES	YES	YES
Automatic lifting of the device flaps	YES	YES	YES
Guarantee			
Devices	12–60 months	12–60 months	12–60 months
Software License	12–60 months	12–60 months	12–60 months

e–Collection Point 247

Computerization and automation of Municipal Selective Waste Collection Points.

e–Collection Point 247 is a modern Municipal Selective Waste Collection Point designed for fast and convenient service for residents.

How does e–Collection Point 247 work?
↘ Residents are identified using a resident card or a mobile app
↘ The system weighs and directs vehicle traffic within the facility
↘ All data about the vehicle and the waste is recorded in the resident's individual account in the Less Waste app

e–Collection Point 247 Walk360
Scan the QR code
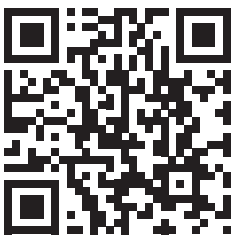to explore the device up close ↙

T–Master SA – Pay as you throw. Save as you sort.

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mini Collection Point 247

Collection points for non–standard waste closer to residents.

mini Collection Point 247 devices are a modern solution for the selective collection of non–standard waste (e.g. textiles, small household appliances). These containers can serve residents as a supplement to traditional Selective Waste Collection Points, available at any time of day and conveniently located throughout the city.

mini Collection Point 247
Scan the QR code
to explore the device up close ↙

Drop&Go Textile

Support for the collection of clothing and accessories that can be given a second life. Conveniently located, it engages the local community in charitable activities.

Drop&Go Textile is a smart container for clothing, shoes, and accessories, allowing residents to quickly donate unwanted items for reuse. The device features voice and light signals that assist the user in its operation. It opens using an electronic key — a QR code obtained from a smartphone app. After scanning the code, the container's lids open touchlessly, and the donated items are weighed.

Drop&Go Textile
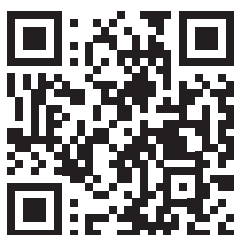Scan the QR code
to explore the device up close ↙

Less Waste web + mobile

The Less Waste app is part of the Individual Waste Segregation System and features dedicated profiles for different types of users.

Benefits for property managers and municipalities:

↘ Record of the type and weight of discarded waste
↘ Record of residents who sort waste and those who avoid doing so
↘ Record of dates/times and types of waste collected by the municipal company

Less Waste App
Scan the QR code
to learn more about the app
using Drop&Go as an example ↙

QR Codes

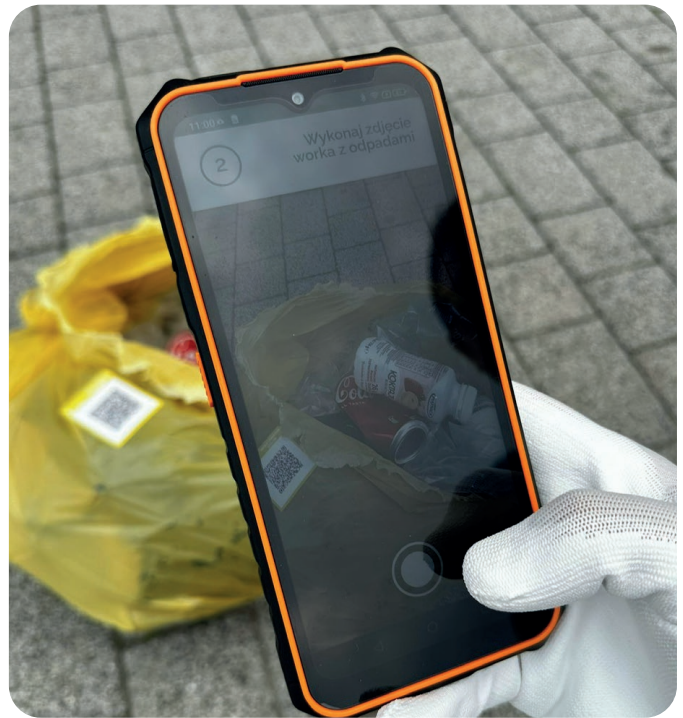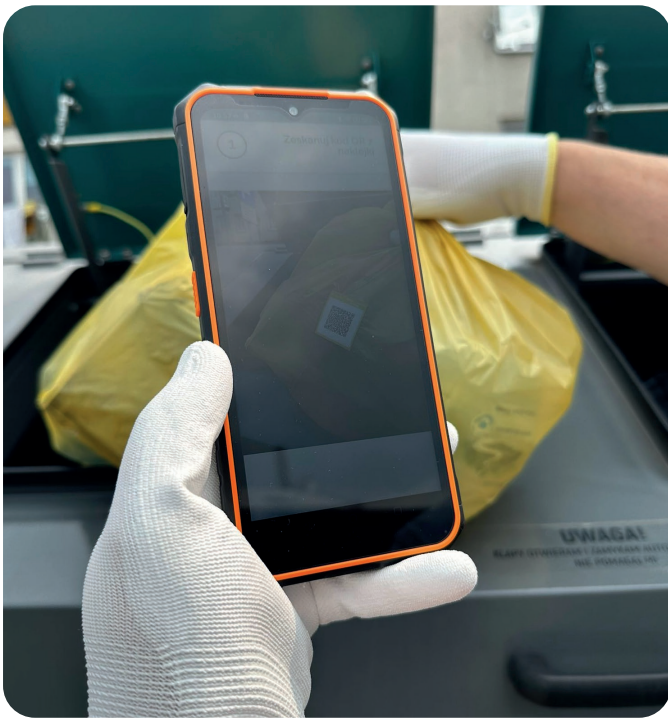## Electronic keys for residents covered by the system.

QR code stickers are electronic keys that open the containers. The codes for residents are single–use and individually assigned to each household covered by the SISO system. They allow the system to associate the type and weight of the deposited waste with the account of a specific dwelling.

↘ The QR code opens the container for the type of waste indicated on the label, helping prevent residents from mistakenly placing sorted waste in the wrong bin.

↘ If a bag has no sticker, the IT system can still identify its owner.

↘ Thanks to the QR codes attached to the bags, it is possible to conduct waste sorting quality checks and link the results to the resident who disposed of the waste.

↘ Waste collection crews receive a reusable code that opens all containers in the city, instead of using a set of keys for each waste enclosure.

Waste Control App

Educating residents and verifying their compliance with segregation obligations.
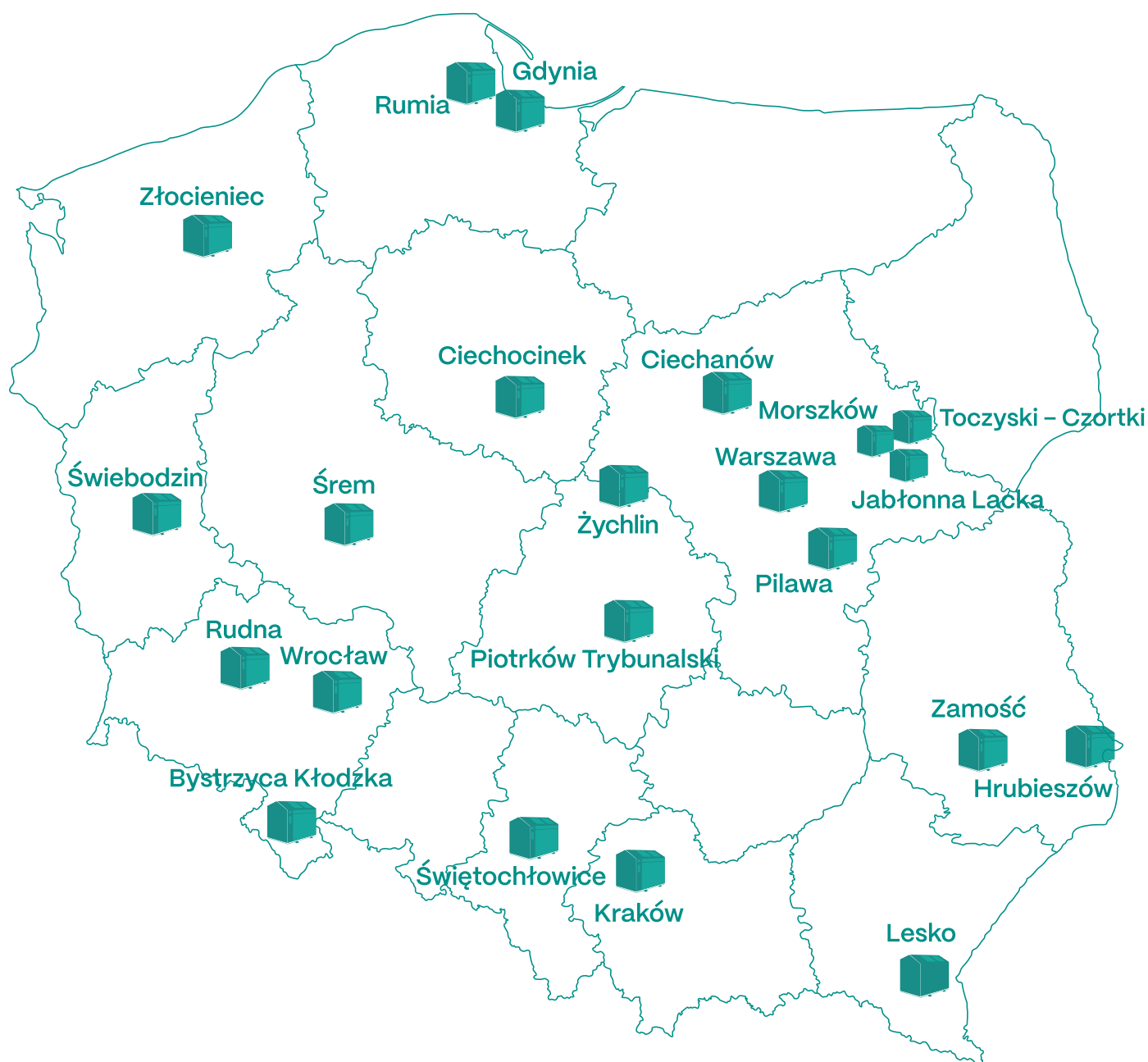

What does verification involve?

↘ The inspector selects a bag from the container.

↘ Scans the QR code on the bag.

↘ Assesses the bag's contents, the waste compression (if applicable).

↘ Sends the inspection results with a photo to the Less Waste application.

Information on the conducted inspection and its result is available to the inspected premises, the property manager and the commune. The collected data can be used to plan a targeted educational campaign to raise awareness of the principles of waste segregation among residents.

Over 850 devices
in 22 municipalities in Poland

Rumia
Gdynia
Złocieniec
Ciechocinek
Ciechanów
Morszków
Toczyski – Czortki
Świebodzin
Śrem
Warszawa
Jabłonna Lacka
Żychlin
Pilawa
Rudna
Wrocław
Piotrków Trybunalski
Zamość
Bystrzyca Kłodzka
Hrubieszów
Świętochłowice
Kraków
Lesko

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less
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