

# NW TECS IoT

Smart Waste Management Solution



# Smart Trash Solution – innovated

- Next-generation smart-solutions for waste management and haulers around the world.
- **Cost-effective** smart sensors and solutions for municipal and commercial waste pickup.
- The **sensors** measure fill levels and data, sending them to either our or a third party platform.
- Our **platform** uses data from sensors and AI-algorithms to optimize waste pickups and city planning.

## This means

- Cost reduction
- Less heavy traffic
- Emissions cut
- Greener cities.



# Benefits

## SAVINGS

- **You're sure to cut costs.**
- Save up to **50%** on waste collection

## FLEXIBILITY

- **We'll tailor the solution to your needs.**
- Open API - compatible with any third party platform
- Fits 90% of bins
- Tailormade solutions, no matter how niche.

# The Solution

We're creating the **simplest, cost effective**, and most **versatile** sensor-solution for waste management in the market today. Versatility and flexibility are important to us. The solution isn't uniform, it's a dynamic system designed to be altered and expanded upon. That's why we're happy to tailor solutions to your needs, read about our flexibility.

## Fill Level Measurement

Accurately measures the fill level of waste-wells, dustbins, containers, and other bins. It sends data through LoRa, and GSM to either our Smart Platform or a third-party platform.

## Battery

- Lasts up to 8 years of uninterrupted service - dependent on rate of transmission
- Non-rechargeable lithium battery

## Range

LoRa: 20-30km

## Environmental specifics

**Casing:** IP65/IP67

**Operational temperature range:** -20 to +60 degrees Celcius

## Remote device management

**Some configurables:**

1. Measurement intervals
2. Fire alarm threshold
3. Back ground sampling (increasing battery life)
4. Pickup alert configuration

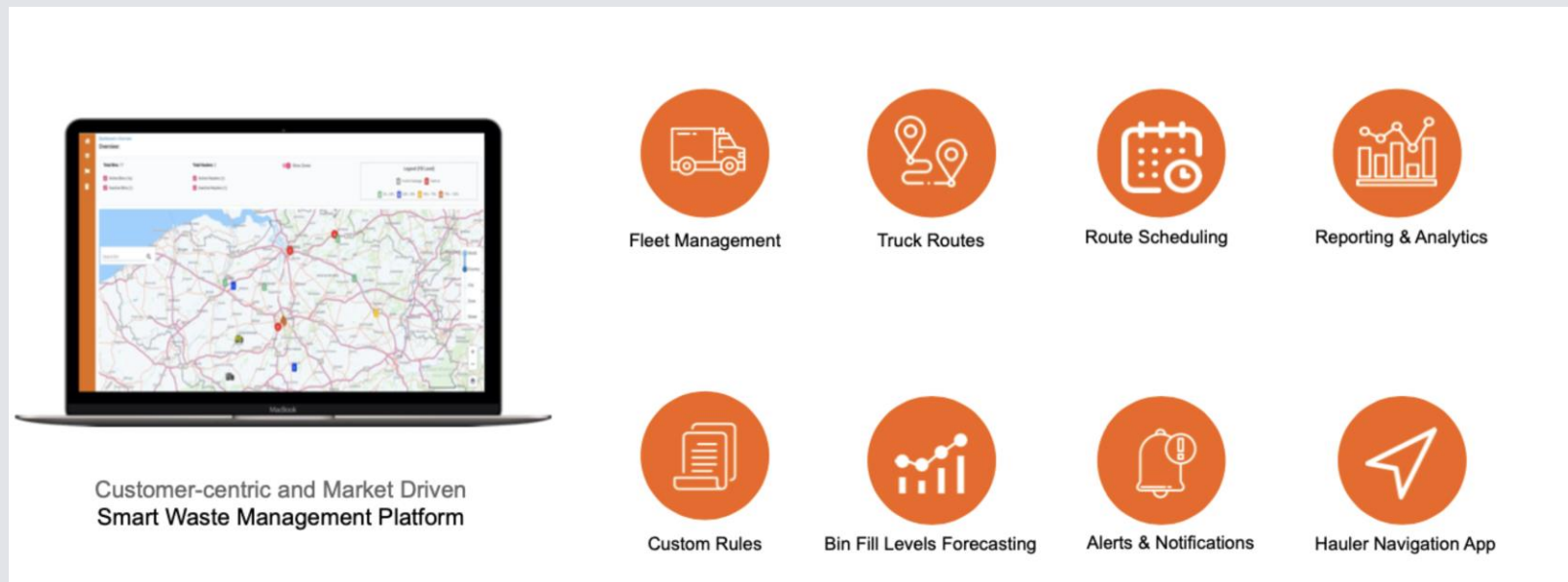
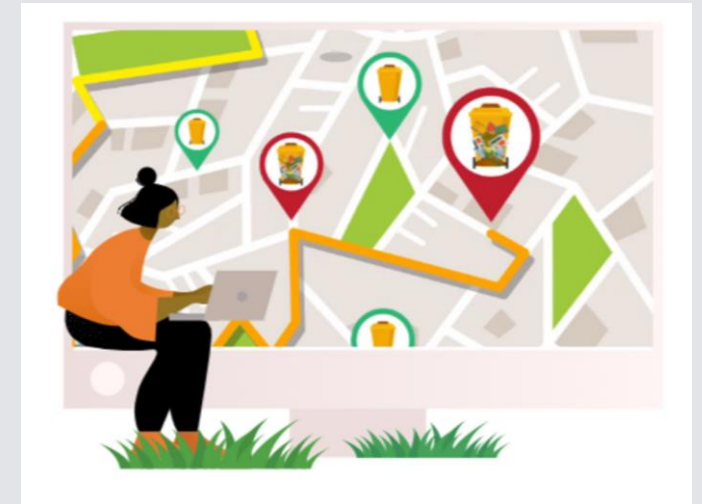
# Smart Platform

The Smart Platform brings a scalable, easy to use, and advanced solution for use in hauling.

- It informs route-planners on what to prioritize and deprioritize.
- It gives higher management an overview of statistics, including suggestions and feedback on efficiency.

The platform does this through machine learning and algorithms.

Sensors installed on bins send data to the Smart Platform



## THE PLATFORM FOR EVERYONE

*Accessibility and simplicity are the keys to making change easy. We don't want to overwhelm haulers with statistics, nor upper management with what turns their haulers should take next.*

*The platform gives the right information to the right people. We do this through different platform components*

### UPPER MANAGEMENT

*Through upper-management login, you will get a deeper look into your company's operations and efficiency.*

*We supply advanced data analytics to provide bi-annual reporting to municipalities and partners for better urban planning.*

### ROUTE PLANNERS

*Sensor data and machine learning combined is a powerful tool for route planners.*

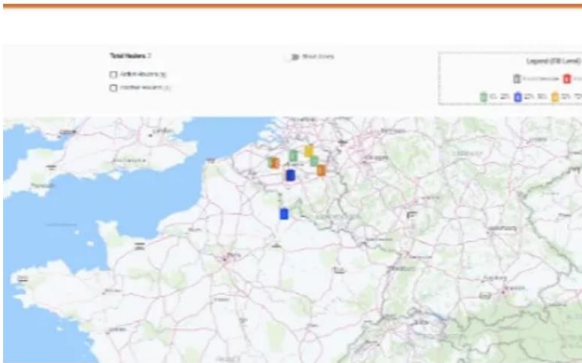
*The Smart Platform learns from your company's behavior and bin fill-levels. The Platform will predict and make suggested actions for holidays, events, and seasons based on previous experience.*

### HAULERS

*Through our app haulers will get navigation and data analytics in the field. Navigation, routes, data, and communication with offices will all be features of our app.*

*Our app is currently in development, set to release in the summer of 2021.*

# PLATFORM BENEFITS



## FLEET MANAGEMENT

*Manage your fleet with ease. Track and communicate with haulers: dispatch jobs, get on-site reports, and more.*

## REAL TIME ROUTING FOR TRUCKS

*Route optimizing is crucial in cutting costs, through our app, we deliver real-time routing. Traffic data and fill-levels are used to help create the best route, skipping the empty and almost empty bins.*

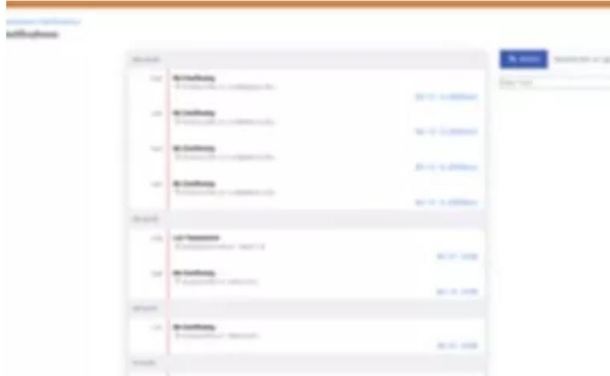


## FORECASTING

*Our AI and algorithms will forecast fill levels based on experience. Identify seasonal trends and hidden patterns, and plan accordingly.*

## DATA INTEGRATION API

*Our sensors offer RESTful API, in other words, we provide seamless integration with third-party systems. The sensors can work with your current software or third-party systems. The sensors provide data for analysis, visualization, and storage at your wish.*

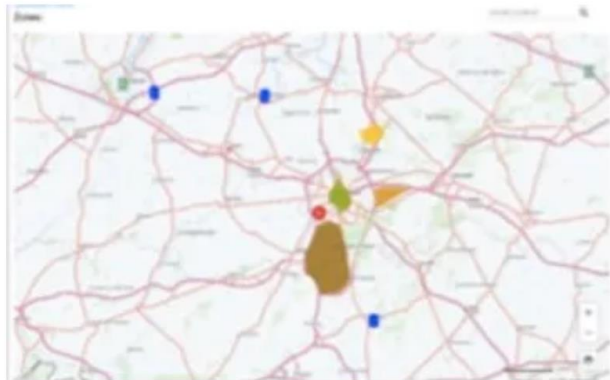


## **NOTIFICATIONS**

*The notification terminal monitors the health of sensors, bin conditions, and haulers. It keeps you updated on the status of your assets.*

## **REPORTS & ANALYTICS**

*Get an overview of emissions, fuel consumption, litter, and garbage trends. This data will help you in urban planning, aiding in creating sustainable and clean waste handling.*



## **ZONES**

*To effectively manage bin-pickups you can define zones of any shape and size. Zones are a way of organizing pickups, using average fill levels to pick up bins that are close to each other.*



# Contact Us

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