





... IT COUNTS!

egate fill is a comprehensive practical waste logistics solution that saves time, money and the environment. Based on reliable fill-level and other data from wireless sensors in waste containers and waste containers without sensor it creates accurate forecasts, fully automatic task lists for a dynamic collection or generates a collection tour, which can be optimized manually either by volume, weight or way. The webbased egate fill solution provides interfaces for an easy integration of your data in your existing IT solutions. The emz environmental technology solution provides up to 50% in direct cost savings.

CONCEPT

STATIC ROUTES

So far waste collection has been done with static routes and schedules. Containers are collected in a fixed cycle (daily, weekly) regardless if they are full or not. This causes unnecessary collection costs, poor equipment and vehicle utilization, constant trouble of overfilled containers and increased costs for cleaning.



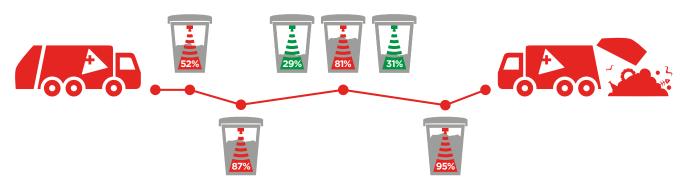
DYNAMIC ROUTES

emz environmental technology uses smart wireless sensors to gather fill level data from waste containers and sends it to the cloud based analytics platform. The platform then generates accurate forecasts and sends task lists to the drivers (TabletPC) for ideal container pick-up. That saves time, money and the environment and in addition it increases the safety and cleanliness around the containers.

emz ENVIRONMENTAL TECHNOLOGY OPTIMIZED STATIC ROUTES



emz ENVIRONMENTAL TECHNOLOGY DYNAMIC ROUTES



BENEFITS

egate fill provides a significant increase in efficiency across the whole value chain and provides you up to 50% in direct cost savings in waste logistics.

DECISION-MAKERS

- + Cost savings
- + Automated and manual planning of tours
- + More transparency and control: less room for foul pay and overcharging
- + Detailed reporting & statistics
- +Better negotiating position for the conditions for submission of transports

OPERATOR

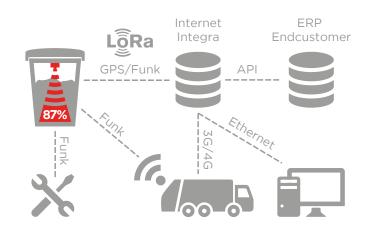
- + Cost savings
- + Less maintenance
- + Less fuel used
- + Offer better services
- + Higher fleet utilization
- + Tour length and time can be planned in advance
- + No or less over time work

END CUSTOMER

- + Cost savings
- + No waste overflow fewer accidents and cleaning
- + Higher quality of services
- + Better transparency
- + New business models
- + Increase the positive perception
- + Solution for a better world
- + Containers live longer

SOLUTION

egate fill is a comprehensive logistics solution that uses wireless sensors to measure and transmit the fill-level of waste containers. It generates task lists and reports and sends the information on time to the specific users. egate fill facilitates your site installation, commissioning and maintenance of sensors or is gathering the fill level of your containers in real-time data when driving by. In addition integra provides a robust API for accessing and managing your data and allowing you an easy integration with your existing IT solutions. Retrieve fill level data and trends, task lists, sensor history and more. 24/7/365 whenever and as often as needed.



SERVICES

egate fill OFFICE





FILL LEVEL

- Optimal container waste management per fraction based on fill level forecast
- Individual automated creation and delivery of task lists
- Documentation (e.g. diary for maintenance, database for pictures,...)





TOUR OPTIMIZATION

- Tour planning, coordination and monitoring of all containers (with and without electronics) and vehicles
- Task list optimized by volume, weight or area (way)





ROUTE MANAGEMENT

- Easy creation and modification of routes by waypoints added with hints, street names, driving direction. Know-how stays in-house and increases
- Export of routes as a gpx-file (can be used in standard navigation systems)
- •Clear task to the operator

egate fill MOBILE





FILL LEVEL

- Automatic visualization of fill level in real time when passing by with TabletPC
- Supports the operator to set priorities (e.g. to fill up the truck when driving back)
- Provides high and consistent quality of service





CLEANING

- Systematic planning, execution and reporting of cleanings
- Clear task to the operator and cleaner by default task list
- Provides high and consistent quality of service





CLEANLINESS INDEX

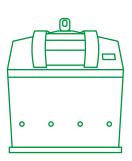
- Systematic collection of cleanliness information around the containers
- Solid data base for management, political and private institutions
- Basis for optimal use of resources and reporting

PRODUCTS



egate fill hardware

- Multi ultrasonic sensor
- Wireless communication
- GSM (700 global partners)
- Radio or GSM/radio
- Internal and external antennas
- 10+ years battery life
- Robust housing
- Protection class IP 65
- Operational in -40°C to +85°C
- Options: with GPS, temperature and/or g-sensor
- Easy installation
- Reliable measurements
- Fits in all containers
- For mixed waste and all recycables
- Zero maintenance



Above-ground containers



Stationary containers



Underfloor systems



Semi-underfloor systems



Four-wheeler



Two-wheeler

SUPPORT

The applications are available around the clock 24/7/365. The emz environmental technology control center monitors the status of devices and services continuously. Our local partners are your contact – just around the corner.

If required, all our products can be installed, commissioned and maintained by our qualified staff and local partners.

ACADEMY

emz environmental technology Academy is modular and offers several learning modules for emz environmental technology products and services at different levels (beginners, intermediate and advanced). In addition it promotes professionals with innovative ideas in waste management logistics, research and development for products and solutions for a better world.

PRICING

Buy, rent or lease our products and services. Contact our sales staff or one of our local partners for an exact quote. Bulk pricing available.

COMPANY

emz - environmental technology GmbH offers complete logistic solutions for waste management. Therefore the company uses the know-how, the competence and the experience of emz - Hanauer in the areas of R & D and production. The logistic solutions of emz environmental technology are being used as access control systems in waste business. By collecting data we are able to invoice citizens according to the Pay-as-you-throw concept. Next to this we register tours and to optimize them. By doing this the waste collection service can be optimized. Emz environmental technology offers significant advantages to waste collection companies and municipalities.



emz - environmental technology GmbH Siemensstraße 1 D-92507 Nabburg









