SNAP4

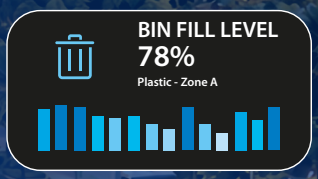
WWW.SNAP4.EU

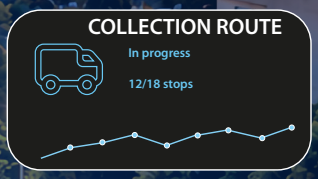
SNAP4WASTE

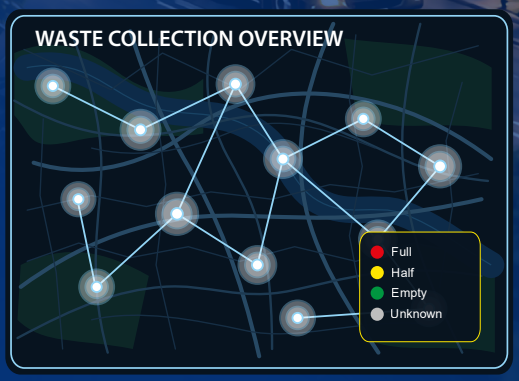
Smarter Waste.

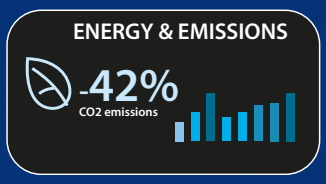
AI-Powered Waste Management.
Smarter Decisions.
Better Operations.

- CONNECTED BINS
- AI PREDICTION
- OPTIMISED COLLECTION
- LIVE WASTE INTELLIGENCE
- OPERATIONAL EFFICIENCY
- AGENTIC AI









SMART BINS | ROUTE OPTIMIZATION | AGENTIC AI INSIGHTS | REAL TIME MONITORING | CIRCULAR ECONOMY

2

WHAT SNAP4WASTE CAN DO?

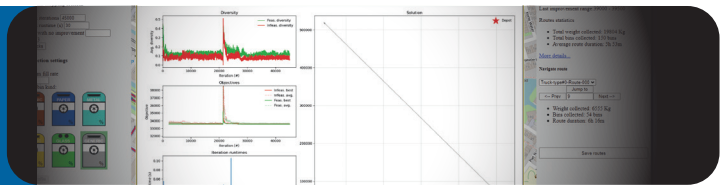
From monitoring to intelligent action.

01 MONITOR

Real-time status of bins, trucks, routes, incidents and KPIs

02 PREDICT

AI-driven forecasts for fill lvels, colelction needs and anomalies.



03 OPTIMIZE

Smart routing and dynamic collection planning.

04 CONNECT

Integrate with existing systems, apps and city services.

ERP | GIS | PAYT | APIs

05 ACT

Enable operators and field teams with the right informations.

Mobile App | Control Room | Reports

06 ASSIST

Ask the Agentic AI. Get insights, recommendations and reports.

Which bins need collection first?

46 bins with generic waste have risk of overflow. The optimised routes for the truck flleet have been produced and are available in the **Routes planned** dashboard (**click here to open**).

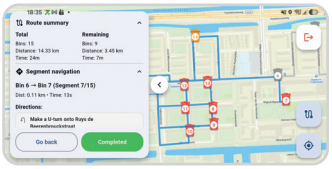
Snap4Waste aims to optimize waste collection and management in urban environments using AI and IoT solutions. It collects data from bins (status, temperature, and a number of alarms, etc.), and/or from trucks (weights collected, when possible) according to differentiated waste collection. **Snap4Waste** offers operational efficiency, cost savings, and environmental benefits, recovering the initial investment with a scalable and flexible solution that may adapt to the service needs.
Snap4Waste is modular and allows to start small and scale up as needed reducing initial investments.

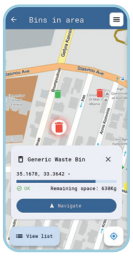
Snap4Waste supports a range of sensors, devices, and functionalities, making it easier to adapt to changing needs, also reaching the policies as Pay As You Throw, PAYT, provided that the bins are controlled with fobs, NFC, RFID, etc.

LESS WASTE - LOWER COSTS - CLEANER ENVIRONMENT - SUSTAINABLE CITIES

FROM DATA TO
SUSTAINABLE ACTION

Snap4Waste provides a Mobile App for waste collection trucks to exploiting the routing on the basis of the optimal routing service provided, daily or planned according to different strategies. On the basis of the plan, and the effective waste collection, reports and dashboards are provided including statistic, real time monitoring and forecast. The actual trends are monitored including alarms of eventual critical conditions notified from the citizens.



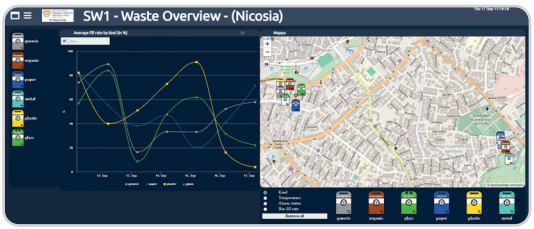


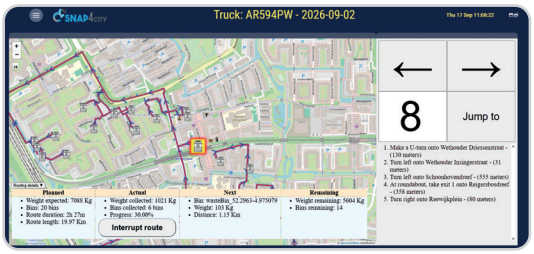
SMARTER TOOLS.
GREATER IMPACT.

A flexible platform for every need.

Snap4Waste detects from sensors: fire, up-side-down, hurts, too filled, run out of battery, errors, movements, etc. (on the basis of the sensors positioned to the bin). The map view shows the different kinds of smart waste bins (generic, plastic, paper, glass, metal, organic, in any combination if any) with their status (Full, Half-full, Empty, and/or % proportionally depicted on the graphic representation). All the results and parameters are view/set from the views/dashboards of the graphic interface which can be provided with different customized user interfaces and styles.

Snap4Waste can be endowed by an AI-based optimizer which takes into account: the position of the depots; the capabilities of the trucks and their number; the capability of the bins, instrumentation, usage / kind, position, time of upload, etc.; the possibility of providing access to the bins via fobs; the actual routing time on the city map; etc.





Integrating **SnapAdvisor Agentic AI** into the powered by Snap4Tech Smart Waste Management system can transform it from a monitoring platform into an **intelligent decision-support and operational assistant**. By combining real-time data from waste bins, vehicles, alarms and KPIs with municipal procedures and historical information, SnapAdvisor can help operators identify critical situations, explain anomalies, predict operational needs, recommend actions such as collection priorities or route adjustments, and potentially activate authorized workflows through **Snap4City** services and APIs.

SNAPADVISOR - YOUR AGENTIC AI ASSISTANT FOR SMARTER WASTE MANAGEMENT

Which bins are likely to overflow today, and how should we adjust the collection plan?

SnapAdvisor
"I analysed current fill levels, historical collection patterns, recent alerts and fleet availability.
18 bins are predicted to reach critical levels today, mainly in the **city centre and northern district**.
I recommend prioritising **12 bins** and adjusting the current route to collect them before the expected overflow time.
Estimated impact:

- 24 km of unnecessary travel
- 1 collection trip
- Improved service coverage

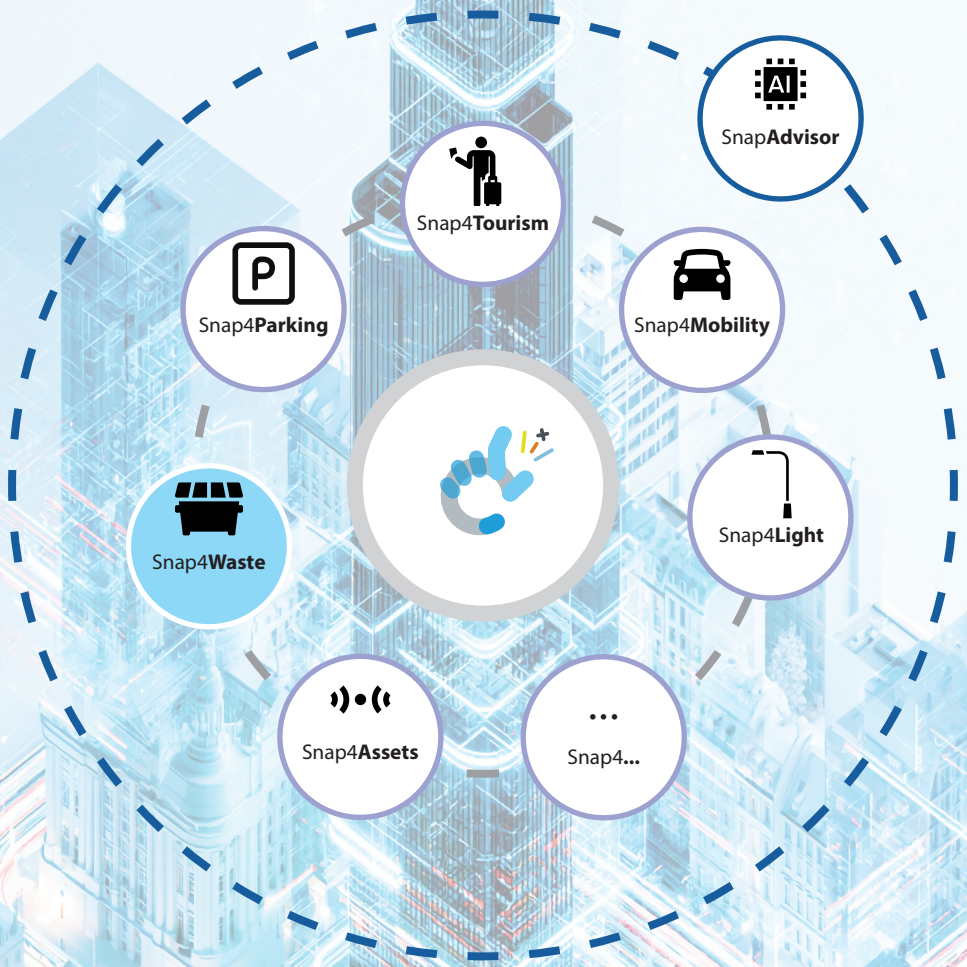
Would you like me to generate the optimised route for the available trucks?"

AI

From data to action

- ☑ Detect anomalies
- ☑ Explain probable cause
- ☑ Recommend actions
- ☑ Evaluate scenarios (What-if)
- ☑ Support authorised workflow

ONE CITY. ONE PLATFORM.
MANY INTELLIGENT SERVICES.



OPEN
Based on open and full interoperable framework

SCALABLE
Multiple cities, tenants and verticals

SECURE
RBAC, cybersecurity & GDPR compliance

FLEXIBLE
Cloud, SaaS and on-premise deployment

TRUSTED BY SEVEN CITIES IN CYPRUS

Powered by SNAP4Tech
https://www.snap4city.org

Discover more:
https://www.snap4city.org/1172

CONTACT
SNAP4 S.R.L.
Email: info@snap4.eu
Cell: +39 347 653 0884