

Autonomous Litter Collection — Partner for Clean & Waste Free 2025-2028

01 — THE CHALLENGE

Amsterdam welcomes over 20 million visitors annually. Its 30+ major parks, 100 km of canal-side paths, and historic cobblestone streets generate litter volumes that manual collection cannot address consistently. The Schoon en Afvalvrij (Clean & Waste Free) Framework 2025-2028 sets ambitious cleanliness targets — yet traditional methods are slow, expensive, and increasingly difficult to staff. Parks, playgrounds, and canal paths need continuous attention, not just scheduled rounds.

02 — OUR SOLUTION

CleanWalker is the world's first commercial quadrupedal litter-collecting robot, built for exactly the terrain that defines Amsterdam:

- **AI-powered detection** across 20+ litter categories (25,000+ real-world images)
- **Four-legged locomotion** navigates grass, gravel, cobblestones, curbs, and park paths
- **Quiet operation** (<55 dB) suitable for residential neighbourhoods, Vondelpark, and canal-side paths
- **IP65 weatherproof** for Dutch rain conditions, year-round

Collected waste is bagged for existing collection routes — no new infrastructure required.

03 — PILOT PROPOSAL — 10 UNITS, 6 MONTHS

Deployment zones: Vondelpark, Westerpark, and Prinsengracht/Herengracht canal-side belt

KPI	TARGET
Litter items collected per unit/day	Tracked & reported weekly
Coverage per shift	2,000-4,000 m²/hr per unit
System uptime	>90%
Public interaction incidents	Zero
Cleanliness score improvement	Pre/post measurement in pilot zones

04 — VALUE PROPOSITION

1.5-2.5 FTE OFFSET PER UNIT
40-60% COST REDUCTION AT SCALE
RaaS ROBOT-AS-A-SERVICE MODEL
Zero HARDWARE OWNERSHIP REQUIRED

No commercial quadrupedal litter robot exists anywhere in the world. Amsterdam would be the first European city to deploy one — aligning with the Schoon & Afvalvrij ambition and the city's global reputation for innovation.