

01 — THE CHALLENGE

Enova by Veolia manages facilities across MENAT for some of the region's most demanding clients — malls, airports, healthcare campuses, and metro systems serving millions of visitors daily. With a 40,000+ workforce and 350,000+ assets under management, Enova has already embraced AI cleaning robots indoors (Emrill's LeoMop deployed at Dubai Festival City Mall). But outdoor spaces — the promenades, parking structures, landscaped plazas, and community pathways surrounding MAF properties — still rely entirely on manual litter collection. In temperatures exceeding 45°C, outdoor litter picking is the most physically demanding and hardest-to-staff cleaning task across the portfolio. As Enova's LEED Platinum commitment and Hubgrade smart monitoring show, the appetite for next-generation facility technology is already there.

02 — OUR SOLUTION

CleanWalker is the world's first commercial quadrupedal litter-collecting robot — the outdoor complement to the indoor robots Enova already deploys:

- **AI-powered detection** across 20+ litter categories (25,000+ real-world images)
- **Gulf heat tolerance** — operates up to 45°C with multi-shift capability (20+ hours/day)
- **Four-legged locomotion** navigates landscaped pathways, grass, gravel, sand, and curb transitions
- **Silent operation** (<55 dB) suitable for retail surrounds and residential communities
- **Fleet dashboard** designed to integrate with Enova's Hubgrade smart monitoring platform

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

03 — PILOT PROPOSAL — 8 UNITS, 6 MONTHS

Deployment zones: Mall of the Emirates outdoor promenades, City Centre Deira surrounds, and one MAF residential community

KPI	TARGET
Litter items collected per unit/day	Tracked & reported weekly
Coverage per shift	2,000-4,000 m ² /hr per unit
System uptime in Gulf conditions	>90%
Integration with Hubgrade monitoring	Real-time fleet data feed
Coverage hours vs. manual	20+ hrs/day autonomous vs. shift-limited manual

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

Enova's Veolia lineage means the CleanWalker partnership carries strategic weight beyond a single deployment. A successful pilot positions Enova as the first Veolia entity globally to operate quadrupedal litter robots — a differentiated capability across the entire Veolia network. Combined with the MAF

Launchpad Accelerator's focus on climate-tech projects, CleanWalker fits naturally into the innovation ecosystem Enova and MAF are building.

cleanwalker@cleanwalkerrobotics.com | walker@cleanwalkerrobotics.com

cleanwalkerrobotics.com/pilot