

CCAM R&D&I Ecosystem in United Arab Emirates



The United Arab Emirates provides a strong enabling environment for CCAM development, driven by ambitious national strategies on smart mobility, artificial intelligence, and digital transformation. Federal and emirate-level authorities — particularly in Dubai — are actively supporting autonomous vehicle pilots and smart transport systems through early regulatory adaptation and designated testing zones. High public

investment capacity, advanced infrastructure, and a strategic ambition to position the country as a global mobility and logistics hub further support deployment of connected and automated mobility solutions. At the same time, specific local conditions such as extreme climate, high private car dependency, and rapid urban growth make CCAM particularly relevant for improving safety, efficiency, and sustainability of transport systems.

Main Stakeholders, Pilots & Deployments

- Deployments
- Pilots



POLICY

- Roads and Transport Authority (RTA)
- Integrated Transport Centre / Abu Dhabi Mobility
- Department of Municipalities and Transport
- Smart and Autonomous Systems Council (SASC)
- Dubai Future Foundation

INDUSTRY



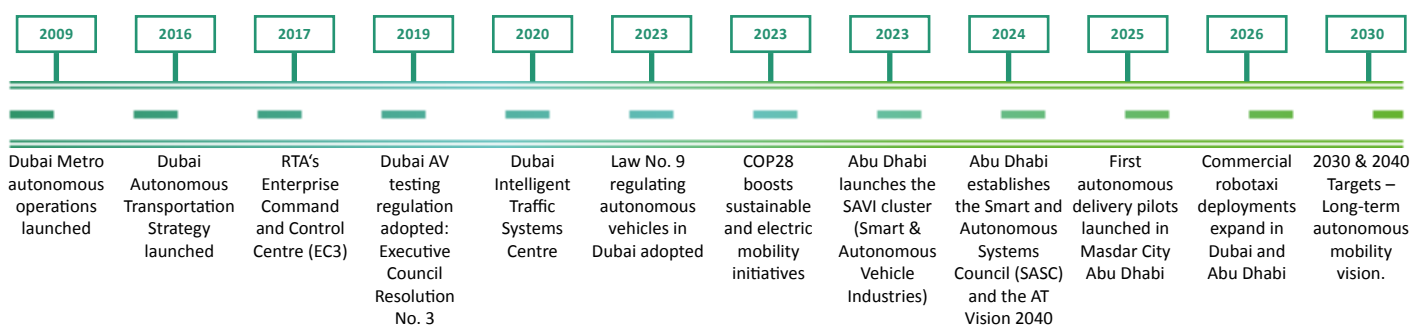
R&D PILOTS

- Masdar City L4 shuttle testbed, 2025–
- Abu Dhabi AV Test Hub (ITC/Space42/EDC), 2025–
- Autonomous delivery, Masdar City, 2025–
- Air taxi: Joby (Dubai), Archer (Abu Dhabi)

DEPLOYMENT

- apollo
- ARCHER
- EASY MILE
- lumo
- MASDAR CITY
- pony
- RTA
- SPACE42
- VOLOCOPTER
- WeRide

National CCAM Timeline



Primary R&D Topics

- Autonomous public transport and robotaxis
- Connected infrastructure (V2X/V2I)
- AI perception, localization and decision-making
- Safety validation and certification
- Cybersecurity and data governance
- Smart traffic management and fleet orchestration
- Regulatory frameworks and liability models
- Autonomous logistics, drones and advanced air mobility
- Operation in desert and extreme-weather environments
- Integration of autonomous transport with smart-city ecosystems

Relative Fleet Sizes

🚗 = 50

WeRide (200)



Baidu/Apollo Go (50)



Pony.ai (Unknown)

Lumo / Mercedes-Benz / Momenta (Unknown)

Building Block Index

Successful implementation of CCAM depends on a combination of regulatory, organisational, technical and societal conditions that enable automated mobility solutions to move beyond pilot projects and into everyday operation. Europe has identified the following key Deployment Building Blocks (DBBs) to support this transition: Vehicle (inside the vehicle), Person (users, citizens, workforce), Physical & Digital Infrastructure (communication, roadside, server), Business, Design and operations (operational challenges, lessons learnt, integration into public transport) and Regulation. A qualitative assessment by the CCAMBassador team to see to what extent these building blocks are addressed in the various regions around the world led to the following insights / relative ranking. In the UAE the most mature building blocks are Regulation and Business, followed by Physical & Digital Infrastructure and Vehicle, then Design and operations and Person.

This factsheet is based on publicly available information, input from CCAMBassador experts and relevant national stakeholders. Despite best efforts to ensure accuracy and completeness, it should not be considered authoritative or exhaustive. Suggestions or remarks? Contact info@connectedautomateddriving.eu

