

SAUDI UAV MARKET INTELLIGENCE



Mac-Brothers

2022

Introduction

The global unmanned aerial vehicle (UAV) and drone industry is undergoing an accelerated expansion, propelled by groundbreaking advancements in autonomy, sensor technologies, communication systems, and regulatory frameworks. In alignment with its Vision 2030 aspirations, Saudi Arabia is strategically embracing UAVs as a transformative tool to drive economic diversification, foster the development of smart infrastructure, modernize agriculture, enhance national security, and optimize logistics operations. This summarized report offers an in-depth examination of the current and future trajectory of UAV's adoption in Saudi Arabia, focusing on the key drivers, market segmentation, challenges, and future prospects shaping the industry.



UAV and Drone Adoption in Saudi Arabia

As part of its Vision 2030 strategy, Saudi Arabia is leveraging drones and UAVs to support the Kingdom's digital transformation, smart city development, and industrial modernization. Drone technologies are being applied across key sectors such as energy, agriculture, air mobility, logistics, construction, and security to enhance efficiency, reduce costs, and improve safety in complex environments.

To enable this growth, the General Authority of Civil Aviation (GACA) is developing a regulatory framework

focused on licensing, airspace management, and operational safety. Strategic partnerships, including collaborations between Saudi entities and global drone companies are driving technology transfer and local expertise development. With strong government support and increasing investment, Saudi Arabia is positioning itself as a regional leader in UAVs innovation and deployment, merging the Kingdom into the largest market of latest UAVs and drone technologies and solutions.

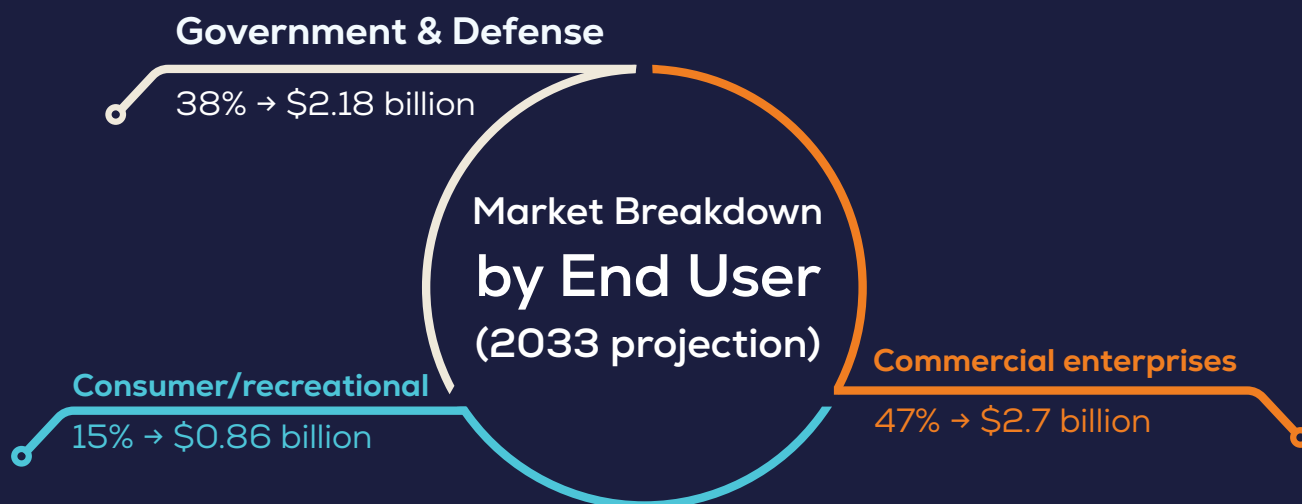
Overview of the Saudi UAV Sector

The UAV sector in Saudi Arabia is experiencing an exceptional robust growth, driven by both domestic policy initiatives and the country's groundbreaking transformation, under Vision 2030.

Contrary to number of market studies under evaluating the Saudi market, Mac-Brothers Consulting deep research reveals an exceptional development. The UAV market in Saudi Arabia is accordingly estimated in 2025 at \$971.5 million, representing 2.3% of the global drone market valued at \$40,6 billion. With a cumulated growth of 16.89%, this promising market with brilliant perspectives might reach in 2033 \$5.75 billion, representing 5.75% of the global market, predicted to reach \$74.8 billion.

Saudi Drone Market Breakdown





Key Market Players & New Entrants

The Saudi drone landscape is marked by the active presence of leading global drone manufacturers, who have either established operations in the Kingdom or formed strategic partnerships with local entities. Concurrently, an increasing number of local companies and startups are emerging within the sector, often in collaboration with foreign firms or through participation in state-sponsored innovation initiatives. These ventures are supported by the Kingdom's push to foster homegrown technological expertise and innovation, bolstering the sustainability of the sector.

Regulatory and Institutional Support

The Saudi government is increasingly playing a pivotal role in the development of the drone sector through targeted regulatory measures and institutional support. The General Authority of Civil Aviation (GACA) is actively working to streamline the regulatory environment by issuing commercial drone permits, defining essential safety standards, and facilitating Beyond Visual Line of Sight (BVLOS) operations in specific contexts. These efforts are crucial in expanding the operational scope of drones within the Kingdom's airspace.

Furthermore, government-backed investment programs, including funding initiatives and research & development (R&D) support, are increasingly directed toward drone-related technologies that align with the Kingdom's strategic objectives, such as economic diversification, smart infrastructure, and innovation-driven growth. These initiatives are fostering a conducive environment for the sector's long-term success.

Key Growth Drivers of Saudi Arabia's Drone & UAV Market



Strategic Alignment with Vision 2030: Drones are emerging as a cornerstone technology in Saudi Arabia's national transformation. As the Kingdom accelerates the modernization of sectors like infrastructure, energy, agriculture, healthcare, and security, UAVs are enabling smarter, faster, and more efficient progress—directly supporting the ambitious goals of Vision 2030.



Efficiency in Cost, Time, and Risk Management: Unmanned aerial systems deliver tangible operational value by reducing labor-intensive tasks, accelerating inspection cycles, and minimizing human exposure to dangerous environments such as oilfields and disaster zones. These efficiencies translate into lower operational costs and enhanced workplace safety across critical industries.



Rapid Technological Advancements: Breakthroughs in autonomy, AI-driven analytics, next-gen sensors, and extended battery life are transforming drones into highly adaptable and intelligent platforms. These advancements are driving broader adoption by unlocking new use cases and improving the scalability and reliability of UAV solutions.



Demand from National Infrastructure and Megaprojects: Saudi Arabia's mega-initiatives—including NEOM, The Line, and the Red Sea Project—require continuous, large-scale monitoring and data capture. Drones offer an agile, real-time solution for managing complex project sites, enabling efficient oversight across expansive, often remote, landscapes.



Agricultural Innovation and Resource Optimization: With pressing challenges related to arable land and water scarcity, the Kingdom is prioritizing precision agriculture. Drones are key to this evolution, providing advanced capabilities for crop monitoring, irrigation management, and data-driven farming that enhance yields and conserve vital resources.



Surging E-Commerce and Logistics Demands: As consumer expectations rise in parallel with e-commerce growth, drones are gaining traction as a game-changing logistics tool—especially for last-mile delivery. Their ability to reduce transit times and optimize delivery networks makes them highly attractive in the evolving retail and supply chain landscape.



Strategic Role in Defense and Security: UAVs are a critical asset in Saudi Arabia's national defense strategy, supporting missions in surveillance, border control, and tactical operations. Their dual-use potential also makes them invaluable in both military and civilian contexts, enhancing national resilience and emergency response capabilities.



Government Support, Investment, and Localization Initiatives: The Kingdom is actively nurturing the drone sector through public-private partnerships, targeted funding, and localization programs. These efforts are not only attracting international expertise but also building a sustainable, innovation-driven ecosystem that fosters homegrown talent and industrial resilience.



Leveraging eVTOLs for Religious and Mega International Events: Saudi Arabia has planned the integration of eVTOL aircraft into its smart air mobility framework to enhance transportation during major events such as Hajj, the Universal Expo 2030 or FIFA World Cup 2034, as these large-scale gatherings attract millions of attendees and pose significant logistical challenges, including traffic congestion, emergency access, and last-mile connectivity. eVTOLs offer a fast, sustainable, and efficient solution by enabling on-demand urban air transport between key locations like airports, hotels, and event venues. Their deployment can improve crowd flow, reduce environmental impact, and support real-time emergency response, positioning Saudi Arabia as a global leader in next-generation mobility solutions for high-impact international events.

Saudi UAV Market Segmentation

The following analysis provides an in-depth examination of how drone applications are distributed across key sectors in Saudi Arabia, highlighting market trends, opportunities, and challenges.

01/

Agriculture & Environmental Monitoring: Agriculture & Environmental Monitoring is a high-potential use case for drone technology in Saudi Arabia, with the agricultural drone market expected to grow from USD 150 million in 2024 to USD 800 million by 2033. Drones are enhancing precision agriculture through crop monitoring, soil and irrigation analysis, spraying, seeding, and pest control. They also support environmental monitoring, including vegetation, water resources, desertification, and air quality. Growth opportunities lie in shared service models, agritech integration, and government-led initiatives, especially across large-scale public farming projects—aligning with Saudi Arabia's digital and sustainability goals.

02/

Air Transportation (eVTOL, Passenger Drones) : While still in its nascent stages in Saudi Arabia, air mobility, particularly eVTOL (electric vertical takeoff and landing) aircraft, is gaining traction in the Kingdom with a cumulated command exceeding 500 units, expected to double by 2030. Air taxis will be used in mega global events (World Expo 2030 or FIFA World Cup 2024), smart cities such as NEOM, New Murrabah, Qiddiya projects, King Salman Park as well as in Hajj to ease mobility. with the market size estimated between USD 1 to 1.20 billion, by 2033

03/ Construction & Infrastructure: In Saudi Arabia, the rapid expansion of modern infrastructure, smart cities, and large-scale real estate developments is driving a surge in the adoption of drone technology across the construction and engineering sectors. Drones are now integral to site surveying, progress tracking, 3D mapping, safety and structural inspections, and as-built verifications, offering unmatched speed, accuracy, and efficiency. For transformative national projects such as NEOM, The Line, the Red Sea developments, Qiddiya, and upcoming record-breaking giga-towers, drone-based monitoring has evolved from a value-add to a mission-critical tool, empowering developers and stakeholders with real-time insights that streamline execution, enhance safety, and reduce project risk at scale.

05/ Delivery & Logistics : Last-mile delivery drones are among the most commercially visible applications. Saudi Arabia successfully conducted its first drone parcel delivery pilot in Jeddah in 2025. Strong growth is expected in the delivery and logistics segment, driven by consumer demand for fast, efficient services. Opportunities are deliveries to remote areas, including desert regions, islands, and isolated communities, along with integration into smart logistics hubs and medical supply delivery systems, present considerable growth opportunities.

08/ Oil & Gas, Energy Facilities: The oil and gas sector represents a critical application area for drones in Saudi Arabia. ARAMCO considers drone as a game changer in the sector, as it is used for pipeline inspections, flares monitoring, facility inspections, leak detection, thermal monitoring, flare stack inspections, predictive maintenance and powerline scanning.

04/ Defense & Homeland Security : The defense sector remains a primary driver of drone technology development, with high budgets allocated for defense applications. The Saudi military drone market is expected to grow from USD 508 million in 2024 to USD 1.3 billion by 2030. Key use cases are surveillance, border security, counter-UAV operations, reconnaissance, target acquisition, and tactical support. Saudi Arabia is increasingly focused on self-reliance in defense technology, including local production of drones.

06/ Health & Emergency Services : Drones are poised to play a significant role in medical supply delivery (e.g., vaccines, blood, diagnostic kits), emergency response (e.g., search and rescue, disaster mapping), firefighting support, and casualty transport (if eVTOL-enabled). The approval of a prototype drone for medical supply transportation in Saudi Arabia marks a significant advancement.

07/ Media & Entertainment: Drones are widely used for aerial filming, event coverage, and drone-based light shows. Entertainment Integration include drone light shows, particularly during major festivals and events, align with the Kingdom's tourism and entertainment initiatives. This sector has relatively low barriers to entry, with increasing demand for creative, stable, and reliable drone systems.

09/ Public Safety & Law Enforcement: Drones are deployed for traffic monitoring, crowd control, event surveillance, border patrol, search and rescue, firefighting, and disaster response.

Conclusion

Saudi Arabia's drone and UAV sector is entering a pivotal growth phase, driven by Vision 2030, strong government support, and accelerating demand across high-priority sectors such as agriculture, logistics, security, infrastructure, and environmental monitoring. With significant progress in regulatory frameworks, emerging drone technologies, and a growing focus on local manufacturing and R&D, the market is increasingly primed for large-scale commercial adoption and investment.

NEOM, the Red Sea developments, Qiddiya, record-breaking skylines, and strategic defense initiatives—are opening up exceptional, large-scale use cases and generating robust demand for aerial intelligence and automation. As these verticals continue to mature, Saudi Arabia is uniquely positioned to become a regional powerhouse in drone innovation and smart aerial mobility, offering early investors strong long-term returns in one of the Middle East's most dynamic and future-forward technology markets.

High-impact national projects—including



Report Coordinated by

Feirhouz Kathy Mac-Clavry

Senior Consultant & Portfolio Director

Mac-Brothers Consulting

38 rue de Lagarde

93370 Montfermeil

Paris – France

contact@mac-brothers.com

www.mac-brothers.com