

TAKING OFF: THE RAPID RISE OF CHINA'S LOW-ALTITUDE ECONOMY

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China's "low-altitude economy" – aerial activities in the low-altitude airspace undertaken by capabilities such as drones and vertical take-off aircraft – can boost productivity, modernise services, and strengthen tech competitiveness. Recognised officially as a strategically emerging industry in the recommendations of the 15th Five-Year Plan (2026–2030) in the Fourth Plenary Session, estimates put the industry at more than one trillion renminbi in 2025, as it already delivers practical benefits in industrial development. However, mass passenger applications are likely to grow more gradually as safety, infrastructure, and economics mature.

Nearly 30 provinces and municipalities, driven by central policies, have incorporated the low-altitude economy as shown in 2024 government working reports. Guangzhou–Shenzhen–Zhuhai, for example, are driving rapid iterations of existing technology as well as the development of new ones. Beijing and Shanghai are emphasising top-level design, safety rules, and advanced research. Hunan and Sichuan are upgrading their manufacturing bases, while Hainan is using its free trade port status to advance open test flights. The developing low-altitude economy is advancing high-end manufacturing and broadening the modern service sector, such as logistics, and is changing ways of doing business in traditional industries.

Obstacles linger, nonetheless, and these include disintegrated air traffic management systems, foreign technology reliance, and underdeveloped commercial feasibility.

(Click on the link to read the above in [Chinese](#), [French](#), and [Spanish](#))

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Chinese:

展翅翱翔：中国低空经济的迅猛崛起

中国的“低空经济”—运用无人机和垂直起降飞行器等设备在低空领域开展的航空业务—能够提高国家生产力、推动服务业现代化并增强科技竞争力。在二十届四中全会通过的“十五五”规划（2026-2030年）建议中，低空经济被正式确立为战略性新兴产业，预计2025年产业规模突破万亿人民币。随着安全标准、基础设施建设和经济可行性逐步完善，大规模载人应用将更快的铺开。

在中央政策驱动下，全国近30个省级行政区将低空经济纳入2024年政府工作报告。广州-深圳-珠海不仅推动现有低空技术迭代，还促进新技术研发与应用领域的创新突破；北京与上海侧重顶层设计、安全规程与低空技术的前沿研究；湖南与四川努力增强制造基地；海南则借助自贸港优势推动开放试飞。低空经济正如火如荼地在中国各地推动高端制造业的升级，拓展现代服务业领域（如物流）的范围与新业态，并且改变传统行业的商业模式。

即使如此，低空经济仍面临着许多挑战，包括空域管理体系零散，核心低空技能对外依赖度高以及商业可行性不足等等。

French:

DÉCOLLAGE : L'ESSOR RAPIDE DE L'ÉCONOMIE CHINOISE DE BASSE ALTITUDE

L'« économie chinoise de basse altitude », soit les activités aériennes menées dans l'espace aérien à basse altitude grâce à des capacités telles que les drones et les aéronefs à décollage vertical, peut accroître la productivité, moderniser les services et renforcer la compétitivité technologique. Reconnue officiellement comme une industrie émergente stratégique dans les recommandations du 15e Plan quinquennal (2026–2030) lors de la Quatrième session plénière, elle est estimée à plus de 1, 000 milliards de RMB en 2025 et apporte déjà des bénéfices concrets en matière de développement industriel. Toutefois, suivant le rythme de développement du cadre sécuritaire et des infrastructures, la mise en application concernant le transport de passagers à grande échelle devraient progresser plus lentement.

Sous l'impulsion des politiques centrales, près de 30 provinces et municipalités ont intégré cette économie dans leurs rapports de travail gouvernementaux de 2024. Guangzhou-Shenzhen-Zhuhai, par exemple, accélère le déploiement des technologies existantes et développe de nouveaux usages. Pékin et Shanghai privilégient la conception de haut niveau, les règles de sécurité et la recherche avancée. Le Hunan et le Sichuan modernisent quant à eux leurs bases productives, tandis que Hainan tire parti de son statut de port franc pour élargir les vols d'essai ouverts.

Malgré cet essor, des obstacles persistent, notamment en ce qui concerne la gestion d'un trafic aérien fragmenté, la dépendance aux technologies étrangères et la viabilité commerciale, qui reste pour l'instant limitée.

Spanish:

DESPEGUE: EL RÁPIDO ASCENSO DE LA ECONOMÍA CHINA DE BAJA ALTITUD

La “economía de baja altitud” de China – es decir, las actividades aéreas desarrolladas en el espacio aéreo de baja altitud mediante drones, aeronaves de despegue y aterrizaje vertical y otras tecnologías afines— tiene el potencial de impulsar la productividad, modernizar los servicios y reforzar la competitividad tecnológica del país. Reconocida oficialmente como una industria emergente estratégica en las recomendaciones del XV Plan Quinquenal (2026–2030), aprobadas en el Cuarto Pleno, se prevé que el sector supere el billón de renminbi en 2025, a medida que sus aplicaciones aportan beneficios tangibles al desarrollo industrial. No obstante, las aplicaciones a gran escala en el transporte de pasajeros probablemente avanzarán de forma más gradual, conforme maduren los estándares de seguridad, la infraestructura y la viabilidad económica.

Impulsadas por directrices del gobierno central, casi 30 provincias y municipios han incorporado la economía de baja altitud en sus informes de trabajo de 2024. Guangzhou–Shenzhen–Zhuhai están promoviendo iteraciones rápidas de las tecnologías existentes y el desarrollo de nuevas soluciones.

Pekín y Shanghái ponen el acento en la planificación estratégica de alto nivel, la elaboración de normas de seguridad y la investigación avanzada. Hunan y Sichuan están modernizando sus bases manufactureras, mientras que Hainan aprovecha su condición de puerto de libre comercio para facilitar programas de vuelos de prueba en entornos más abiertos y flexibles.

Con todo, persisten desafíos relevantes: sistemas fragmentados de gestión del tráfico aéreo, dependencia de tecnologías extranjeras en determinados componentes críticos y un modelo de negocio cuya viabilidad comercial aún no está plenamente consolidada.

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Flying to the Future

1. The term “low-altitude economy” is a recent one. It was not found in China’s 14th Five-Year Plan (2021–2025), and only after the Fourth Plenary Session of 24 November 2025 was it proposed by the Communist Party of China for the 15th Five-Year Plan (FYP) as a strategically emerging industry.¹ It was aimed to boost productivity, modernise services, and strengthen tech competitiveness. The recommendations of the 15th FYP highlighted new energy, new materials, aerospace industries, and the low-altitude economy, expected to form several markets that are a trillion-yuan scale or larger.²
2. CCID Consulting under the China Centre for Information Industry Development (CCID) estimated the low-altitude market crossed 500 billion renminbi (RMB) in 2023, and will reach one trillion RMB by 2026 (see Table 1 on the next page). The Civil Aviation Administration of China projects an even faster rise – to RMB 1.5 trillion by 2025 and over RMB 3.5 trillion by 2035. These forecasts suggest the low-altitude economy will quickly double to become a major engine of China’s economic growth.

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¹ While the concept of “low altitude” refers to airspace up to 1,000 metres above ground level, in reality, it could be as high as 3,000m depending on regional characteristics and practical needs. Low-altitude flying involves helicopters, drones, small planes, and flying cars, and it applies to urban transportation, logistics, agriculture, forestry pest control, emergency rescue, power inspections, and cultural tourism.

² https://m.thepaper.cn/newsDetail_forward_31847582, accessed 25 October 2025.

**TABLE 1 FORECASTS OF CHINA’S
LOW-ALTITUDE ECONOMY MARKET SIZE**

Institution/Source	Key Forecast/Estimate	Reference Year(s)
CCID Consulting (China Centre for Information Industry Development, Ministry of Industry and Information Technology)	Roughly 500 billion renminbi (RMB) in 2023, could reach RMB 1 trillion in 2026. Mainly drones involved; rapid growth expected.	2023
Civil Aviation Administration of China	RMB 1.5 trillion by 2025; over RMB 3.5 trillion by 2035.	2025/ 2035
McKinsey & Company	Thousands of eVTOL* aircraft operational globally by 2030; China likely major market.	2030
Financial Times	Multi-trillion RMB market by 2030–2035; rapid eVTOL sector growth	2024–2025

*Electric vertical take-off and landing

Source: CCID Consulting, *China Low-Altitude Economy Industry Report 2023*, Ministry of Industry and Information Technology; Civil Aviation Administration of China, *Low-Altitude Economy Development Outlook, 2024*; McKinsey & Company, *Global Urban Air Mobility Outlook, 2022–2023*; Financial Times, *China’s eVTOL Market Rapid Expansion, 2024–2025*.

3. China’s low-altitude economy has grown rapidly since 2024, driven by central government liberalisation in airspace management and streamlined flight approval processes in major cities. Operational testing for electric vertical take-off and landing (eVTOL) aircraft for passenger transportation commenced in Shanghai and Shenzhen in 2024, and this marks considerable progress in urban transportation.

4. China is piloting low-altitude technologies like eVTOL aircraft and drones in targeted cities to demonstrate their safety and value, while familiarising people and corporations with new services. This initial phase aims to build market trust and lay the foundation for expansion. In the next stage, low-altitude transport and related services will start popping up in more cities, especially in those second-tier places that are growing fast.

5. Furthermore, China’s first “low-altitude + rail” air-rail intermodal project has commenced operations, after the introduction in 2024 of the first short-distance

transportation route of the low-altitude economy from Shenzhen to Zhuhai in the Greater Bay Area. In the Yangtze River Delta, interprovincial flights are also emerging. A helicopter passenger route connecting Shanghai Pudong Airport with the city terminal in Kunshan, Jiangsu, was launched.

6. In addition, more general aviation airports featuring smart flight-management platforms have been launched or upgraded to support the low-altitude economy. According to Wang Minghui, the director of the Second Research Office of the Industrial Economy Department at the Development Research Centre of the State Council, low-altitude infrastructure in the provinces is rapidly increasing.³
7. Zhejiang, for example, has developed a service system that includes a provincial class centre with advanced digital systems, some localised class stations, and 33 monitoring points for the low-altitude economy. Additionally, in Sichuan, by 2027, 20 general airports are expected to exist, along with more than 100 vertical take-off and landing points, covering the whole region, and construction has commenced for low-altitude comprehensive management and service systems in pilot cities.
8. Local action plans demonstrate four groups in developing low-altitude economies. Guangzhou–Shenzhen–Zhuhai follows market-driven approaches, driving rapid iteration and new applications in technology. Beijing and Shanghai put more emphasis on a regulatory-driven and research-and-development (R&D)-driven approach with top-level design, safety rules, and advanced research. Hunan and Sichuan are upgrading their manufacturing bases to strengthen industrial chains, while Hainan is using its unique airspace and tourism strengths to advance open test flights.
9. The low-altitude economy is encountering similar challenges as did new-energy vehicles in the country. China’s air traffic management systems remain fragmented, with hundreds of airports and overlapping local authorities complicating coordination. Additionally, the country relies heavily on foreign equipment and

³ <https://www.drc.gov.cn/DocView.aspx?chnid=379&leafid=1338&docid=2908303>, accessed 25 November 2025.

technology for much of its low-altitude sector, from aircraft to component parts like chips and tires.

10. Also, China's low-altitude flight market remains underdeveloped, limited mainly to agricultural and experimental transport. Meanwhile, without a cohesive national plan, it results in unbalanced development and sporadic regional supervision.

Unlocking Policy and Regulatory Arrangement

11. China's low-altitude economy nonetheless spans a history of over 70 years, at least in concept if not in terminology. It began in 1951 when the original Civil Aviation Administration of the Central Military Commission sprayed chemical insecticides from planes flying over Guangzhou to kill mosquitoes. In the 1980s, general aviation started to emerge, broadening its range of operations to encompass things like mineral exploration and aerial photography.
12. China's low-altitude economy is governed by several central agencies. The Ministry of Industry and Information Technology sets industrial guidelines and drives technological progress, while the National Development and Reform Commission (NDRC) handles strategic planning and economic policy. The Central Air Management Committee enforces air traffic policies and standards, while the Civil Aviation Administration of China manages safety oversight, certification and operational regulation of civil aircraft (see Table 2 on the next page).
13. In February 2021, the "National Comprehensive Three-Dimensional Transportation Network Planning Outline" included the term of "low-altitude economy" in national planning for the first time, marking its elevation of the concept to a national strategic level. By December 2023, during the Central Economic Work Conference and the 20th Central Committee's Third Plenum, the low-altitude economy was further identified as a strategic emerging industry with clear development requirements established.

**TABLE 2 KEY MILESTONES AND POLICY DEVELOPMENTS
FOR CHINA'S LOW-ALTITUDE ECONOMY**

Date	Milestone/Policy	Summary	Lead Agency Involved
Feb 2021	National Comprehensive Three-Dimensional Transportation Network Planning Outline	“Low-altitude economy” included in national planning for the first time; elevated to national strategy.	National Development and Reform Commission (NDRC), Ministry of Transport (MOT)
Dec 2023	Central Economic Work Conference and 20th Central Committee Third Plenum	Low-altitude economy listed as a strategic emerging industry; clear development requirements established.	Central Committee of the Communist Party of China, State Council
2023	Green Aviation Manufacturing Industry Development Plan (2023–2035)	Launched electric vertical take-off and landing (eVTOL) pilot projects for 2025; targeted a complete, safe green aviation system by 2035.	Ministry of Industry and Information Technology (MIIT), MOT, Civil Aviation Administration of China (CAAC)
Mar 2024	2024 Government Work Report	Officially made the low-altitude economy a priority for new economic growth.	State Council
Mar 2024	General Aviation Equipment Innovation and Application Implementation Plan (2024–2030)	Set commercial targets for automated, electric, intelligent aviation equipment by 2027 and 2030, including applications in air transport.	Ministry of Science and Technology, MIIT, CAAC, NDRC
Early 2024	Guidelines on Accelerating High-Quality Development of the Low-Altitude Economy	Accelerated airspace reforms, infrastructure development; Shenzhen and Chengdu chosen as demonstration zones.	State Council, jointly by CAAC, MIIT, MOT, Ministry of Public Security, NDRC
Early 2024	Revised Administrative Measures for Unmanned Aircraft Flights	Strengthened requirements for airworthiness, flight permits and safety supervision for drones and eVTOL aircraft.	CAAC
Nov 2024	Action Plan for Effectively Reducing Logistics Costs; Emergency Communication Equipment Innovation Leader Programme	Encouraged low-altitude equipment manufacturing, expanded application scenarios, and released intelligent networking reference architecture.	NDRC, MIIT, Ministry of Emergency Management
Dec 2024	Opinions on Optimising and Improving Management Mechanism for Local Government Special Bonds	Allowed special bonds for low-altitude infrastructure and increased project bond ratio from 25% to 30%.	Ministry of Finance
Dec 2024	Launch of NDRC Low-Altitude Economy Development Department	Department formed to coordinate strategy, planning and major policy for the sector.	NDRC
Dec 2024 –Jan 2025	Four NDRC Department Notices	Covered expert forums, consultations with state bodies, infrastructure planning, safety supervision and risk management for the sector.	NDRC
Nov 2025	Functional Requirements for National, Provincial, and Municipal Low-Altitude Flight Integrated Supervision and Service Platforms (Version 1.0)	Set clear requirements for functions such as flight filing, alerts, and coordinated responses.	The Central Air Traffic Management Committee
Nov 2025	The Information Interaction Specifications for National, Provincial, and Municipal Low-Altitude Flight Integrated Supervision and Service Platforms (Version 1.0)	Unify interfaces and strengthen nationwide real-time supervision and services for low-altitude flight activities	The Central Air Traffic Management Committee

Source: Various documents summarised by author.

14. Since 2024, several core regulations and standards have been implemented, including the *Interim Regulations on the Flight Management of Unmanned Aerial Vehicles*, *Regulations on the Management of Airspace in the People's Republic of China (Draft for Comment)*, *Civil Unmanned Aerial Vehicle Operation Safety Management Rules (CCAR-92)*, *Civil Unmanned Aerial Vehicle System Safety Requirements*, and the *General Airport Management Regulations*.⁴
15. Also recently established for integrating nationwide interfaces of low-altitude air traffic management are *The Functional Requirements for National, Provincial, and Municipal Low-Altitude Flight Integrated Supervision and Service Platforms (Version 1.0)* and *The Information Interaction Specifications for National, Provincial, and Municipal Low-Altitude Flight Integrated Supervision and Service Platforms (Version 1.0)*.⁵
16. In addition, in December 2024, the Department of Low-Altitude Economy Development was officially launched under the NDRC for formulating and implementing development strategies and medium- to long-term plans for the low-altitude economy. It also proposes relevant policy and coordinates major issues.⁶
17. For financial support, the General Office of the State Council issued the *Opinions on Optimising and Improving the Management Mechanism for Local Government Special Bonds* in December 2024 which implemented a “positive list” management approach for the use of special bonds as project capital and clarified that special bonds can be used for projects related to emerging industries, including low-altitude economy infrastructure. It also increased the proportion of special bonds used as project capital from 25% to 30% at the provincial level.⁷

National Plan Ignites Local Competition

⁴ <https://finance.sina.com.cn/wm/2025-01-19/doc-inefnhpe4807234.shtml>, accessed 5 November 2025.

⁵ <http://www.news.cn/tech/20251125/cdad389ebbc5496aadbd35d9a9c2a224/c.html> accessed 5 December 2025

⁶ <https://www.ndrc.gov.cn/fzggw/jgsj/dks/>, accessed 5 February 2026.

⁷ https://www.gov.cn/yaowen/liebiao/202412/content_6994511.htm, accessed 4 November 2025.

18. Nearly 30 provinces and cities have referred to the low-altitude economy in 2024 government work reports.⁸ Guangdong targets RMB 300 billion in low-altitude output by 2026, while Beijing aims for RMB 100 billion and Shanghai for RMB 50 billion by 2027.⁹
19. According to the local government action plan for the low-altitude economy, four groups can be clearly identified (see Appendix 1). The market-driven group represented by Guangzhou–Shenzhen–Zhuhai, which rapidly iterates technologies and expands application scenarios through market forces. The regulation- and R&D-driven group led by Beijing and Shanghai focus on top-level design, safety standards, and cutting-edge technology research, building a solid foundation for the industry. The provinces represented by Hunan and Sichuan use traditional advantages in aviation manufacturing, and follow the path of manufacturing base upgrade, strengthening industrial chains. And Hainan, with its status as free trade port and mature tourism, is exploring use of open test flights.
20. Apart from the first-tier cities, Sichuan targets 20 general airports and 100+ eVTOL points by 2027, aiming for full regional coverage and an integrated platform for low-altitude supervision, services, and applications in pilot cities. Anhui had planned around 10 general airports and 150 temporary take-off and landing sites by 2025 to seed an initial low-altitude intelligent infrastructure network. Hunan has led low-altitude airspace reform to become the first province to expand its pilot zone nationwide.
21. Chongqing had targeted a 15% increase in low-altitude aircraft by 2025, over 20% growth in flight hours, over RMB 10 billion in new general aviation manufacturing investment and a market of 400 entities (150 in manufacturing and 250 in consumer operations).¹⁰ By 2027, with sustained policy support and pioneering trials,

⁸ <https://www.cctvjingji.com/part-120/15064.html>, accessed 6 November 2025.

⁹ <https://www.china-briefing.com/news/chinas-futuristic-industries-investment-prospects-in-the-emerging-low-altitude-economy>; and <https://english.shanghai.gov.cn/en-Latest-WhatsNew/20241202/a9ad33027234475882873193b5c72d91.html>, accessed 13 November 2025.

¹⁰ https://cq.gov.cn/zwgk/zfxxgkml/szfwj/qtgw/202409/t20240926_13663171.html, accessed 17 November 2025.

Chongqing aims to establish a largely complete urban air traffic management system anchored by BeiDou.

22. By 2026, Hainan will make full use of the policy advantages provided by the free trade port and the mature tourism industry in the province to develop nine general aviation airports and define more than 300 low-altitude flight corridors. Focusing on the development of eight key application scenarios of low-altitude flight, Hainan will promote a string of key projects, striving to reach an output value for the low-altitude economy at over RMB 30 billion.¹¹

The Expanding Industrial Supply Chain

23. The industrial supply chain of the low-altitude economy can simply be divided into upstream, midstream, and downstream industries (see Appendix 2):
 - upstream industries related to raw materials and component parts, for example, aerospace bearings, chips, and aviation electric components;
 - midstream industries include complete machine systems, system integration and flight operation support services, for example, air leasing, eVTOL aircraft, and drones;
 - downstream industries which cover industrial integration and fields of application such as agriculture, logistics, transportation, and travel.
24. Nearly 250 key companies related to the low-altitude economy are included in the Wind Economic Database on supply chains (see Table 3 on the next page). Half are upstream companies (128), while others are classified as middle industry companies (72) and downstream industry companies (42). Upstream and midstream activities, such as raw materials, components, and complete manufacturing account for 70% of industry output, while design, testing and operational services each contribute around 15%. Consumer demand, by contrast, represents only about 15% of the entire industry chain.¹²

TABLE 3 NUMBER OF MAJOR FIRMS

¹¹ <http://hq.news.cn/20240923/8eaa1c1c59a440a9bdeb7fcb4eee92d/c.html>, accessed 17 November 2025.

¹² https://www.ndrc.gov.cn/wsdwhfz/202412/t20241230_1395328.html, accessed 5 February 2026.

IN CHINA'S LOW-ALTITUDE ECONOMY

Supply Chain	Cluster									
	Beijing, Tianjin, and Hebei	Yangtze River Delta	Pearl River Delta	Triangle of Central China	Guangzhong Plain	Central Plain	Chengdu and Chongqing	Other Domestic Regions	Foreign	Total
Upstream	16	31	19	7	9	3	11	16	16	128
Midstream	12	18	17	3	4	0	7	3	8	72
Downstream	2	8	12	1	0	1	1	2	15	42
Grand Total	30	57	48	11	13	4	19	21	39	242

Source: Information compiled by the author from the Wind Economic Database.

Note: The Yangtze River Delta cluster is led by Shanghai, while Pearl River Delta's is led by Shenzhen, Guangzhou, and Zhuhai. As for the Triangle of Central China cluster, Wuhan, Nachang, and Changsha are dominant; the Guangzhong Plain cluster is led by Xi'an, and the Central Plain, Zhengzhou and Luoyang.

25. The downstream low-altitude economy primarily focuses on agricultural and public services, making up over 80% of the market.¹³ Public and private flying represents just 18%, with fewer than 10 general aviation routes operating year-round. In comparison, private, public, business, and tourism flights in the United States account for approximately 65% of total flying hours.¹⁴ According to China's Ministry of Agriculture and Rural Affairs, over 166,700 unmanned aerial vehicles are deployed for agricultural protection, while the Civil Aviation Administration reports that agricultural drones constitute over 98% of all drone flight hours.¹⁵
26. Nevertheless, some logistics companies are now utilising low-altitude routes. Meituan drones, for instance, have launched around 30 flight routes and fulfilled over 300,000 orders in Shenzhen,¹⁶ serving office buildings, communities, tourist sites, parks, and campuses. Partnering with hundreds of merchants, they offer users over 90,000

¹³ Ibid.

¹⁴ <https://www.mordorintelligence.com/industry-reports/global-aviation-fuel-market-industry>, accessed 26 August 2025.

¹⁵ <https://finance.sina.com.cn/jjxw/2024-12-17/doc-inczuerr1625948.shtml>, accessed 6 February 2025.

¹⁶ <https://www.stdaily.com/index/kejixinwen/202408/f03363cc1f574dbeb9618a6e272ab3f5.shtml>, accessed 6 February 2025.

product options, including food, fast-moving consumer goods, maternal and infant supplies, as well as digital products.

27. As the new energy vehicle market gets more competitive, Chinese companies like GAC Group, Geely, and Xiaopeng Motors, have jumped into the eVTOL game. They are using what they already know about batteries and electric drive systems to push the low-altitude economy forward.
28. Regionally, the low-altitude economy is unevenly distributed. The low-altitude economy from the Wind Economic Database shows upstream, midstream, and downstream firms clustered around Beijing, Guangzhou, Shanghai, and Shenzhen (Table 3). These clusters, including the Beijing–Tianjin–Hebei region (30 firms), Yangtze River Delta (57) and Pearl River Delta (48), host a comprehensive range of enterprises focusing on core components and systems, such as avionics and power systems.
29. Apart from first-tier cities, the Chengdu–Chongqing cluster leads with 19 major firms, focused on upstream segments like aerospace bearings and aerospace components/parts, as well as midstream sectors such as air traffic control systems and drone production. Next are the Guanzhong Plain (Xi’an) and Central Yangtze (Changsha, Nanchang, and Wuhan) clusters, primarily on raw materials and core systems. Notably, the Guanzhong Plain is China’s sole titanium alloy production base, supported by three manufacturers. Downstream participation is limited mainly to aircraft leasing and insurance, with few key listed firms in agriculture, logistics, public service, or transport.
30. Global partnerships are instrumental in advancing China’s low-altitude economy, though collaborations with foreign firms remain limited in scale. Nearly 40 foreign companies occupy key roles in several industries. For instance, nine foreign firms supply half of the chips required for China’s low-altitude economy. Aviation tires primarily rely on foreign producers, while most aircraft leasing and insurance services are provided by foreign firms, with few domestic players from first-tier cities. Notably, DJI Enterprises has developed a close connection with US firm

PrecisionHawk in drone data analysis, enhancing agricultural and infrastructure applications.¹⁷

31. Chinese low-altitude sector firms are increasingly partnering with foreign parties to drive development. Huawei's collaboration with European telecom operators is set to enhance real-time drone control and data transmission capability via 5G, advancing the integration of communications and drone technology. In addition, Kazakhstan's national investment company and China's Polyking New Horizons Technology Industry signed a memorandum of understanding to develop an industrial park in Kazakhstan that will incorporate drone technologies, smart city solutions, and state-of-the-art manufacturing systems.¹⁸
32. China is ramping up its international partnerships to boost the low-altitude economy. In November 2024, the Chinese government set up the International Cooperation Alliance for Low-Altitude Economy at the Zhuhai Airshow Centre. The idea brings together top players from around the world to swap ideas, advance tech, and speed up innovation. It is a big move for China as it tries to take the lead in global cooperation in this area.

Prospects and Challenges

33. Low-altitude air vehicles are following China's New Energy Vehicle (NEV) playbook: rapid technology gains, supportive policy, and emerging demand, especially in mountainous or coastal areas, are scaling a dynamic, high-potential sector. Luo Jun, head of the China Low-Altitude Economic Alliance, expects continued piloting across logistics, emergency rescue, agriculture pesticides, cultural tourism, and urban mobility. In two to three years, large Chinese cities should have deployed aerial command ground service platforms, completed eVTOL certification and licensing, and have paved the way for extensive commercial operations.¹⁹

¹⁷ <https://enterprise.dji.com/news/detail/dji-drones-adopted-for-precision-ranching>, accessed 7 February 2026.

¹⁸ <https://timesca.com/chinese-company-to-develop-low-altitude-technologies-and-intelligent-manufacturing-in-kazakhstan/>, accessed 9 February 2026.

¹⁹ <https://www.stcn.com/article/detail/1471891.html>, accessed 7 February 2026.

34. The low-altitude economy can also catalyse the growth of other industries. First, it can support related industries, especially leading to the advancement of high-end manufacturing. The production of low-altitude vehicles is also closely linked to high-end sectors such as aviation, new energy, new materials, and information technology, fostering higher levels of development and enhancing the core competitiveness of the entire industrial chain.
35. Second, it can broaden the modern service sector and drive consumption upgrades. Services such as low-altitude logistics, low-altitude tourism, and low-altitude rescue not only create new consumer scenarios and generate fresh demand, but also have the potential to create more job opportunities, promoting more refined and diversified offerings in the service industry.
36. Third, the low-altitude economy is shaking things up for traditional industries. Thanks to drones, these older sectors can work faster, cut down on labour costs, and shift toward smarter, high-end ways of doing business.
37. However, just as China's NEV sector faces core hurdles, so the low-altitude economy confronts similar challenges, especially from non-integrated air traffic management, undeveloped markets, and foreign dependency.
38. By 2025, China had planned by 2025 to have 500 registered general airports.²⁰ But there is a snag: things like urban air traffic management and flight services are split between different agencies and local governments. That makes it tough to run a smooth, connected low-altitude network. The Civil Aviation Administration of China is teaming up with Chinese tech companies and regulators, and together they are already running large, low-altitude air traffic management trials.
39. China's low-altitude business remains focused on agricultural management and emergency service operations, with limited pilots for logistics and air taxis; business models are currently immature and profits unstable. It is important that policymakers and business leaders consider whether real demand for urban air mobility and how local companies can remain competitive in the long term.

²⁰ https://english.www.gov.cn/news/202309/15/content_WS650444cdc6d0868f4e8df784.html, accessed 27 November 2025.

40. It will be important to decide commercially viable and practical routes for air taxi services such as those connecting large business hubs, tourist attractions, or major transport hubs. The valuable lessons from China's experiment are crucial, including its pilot testing approach, air traffic control, and innovative business models that have been tested in several cities.
41. The country's low-altitude industry is also dependent on technology and core machinery imports, making it difficult to realise a stable competitive market locally. Appendix 2 shows that helicopters and flying cars aside, chips and tires are still largely imported. This reliance ties the industry to the pace of innovation in developed nations, constraining a strong, independent global presence.
42. As China's urban air mobility sector evolves, establishing joint ventures or encouraging foreign companies investing in its low-altitude economy would allow Chinese businesses to access new markets and new technologies. Over time, the partnerships could move from being an aviation supplier to a strategic contributor, in turn guaranteeing long-term sustainability and growth in a rapidly changing aviation landscape.
43. In the Zhuhai urban cluster, for example, Shenzhen plays a pivotal role in the development of China's low-altitude economy. While many low-altitude economic application scenarios are still in the demonstration phase, in the future, successful and safe flight lines will effectively realise commercial applications. Shenzhen's dense, highly urbanised environment with frequently high-tech implications takes advantage of low-altitude development.
44. The Chengdu–Chongqing cluster meanwhile is one of the most proactive second-tier urban clusters in the area, hosting many top companies, notably JOUAV, as well as Tengden Technology and Aerofugia, the most competitive industrial unmanned aerial vehicle enterprises in China and which continue to grow. The low-altitude economy can be a focal project to enhance this partnership, encompassing various industry applications, such as using drone technology in tourism.

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APPENDIX 1 GROUPS IN CHINA’S LOW-ALTITUDE ECONOMY

Group	Region	Strategic Focus and Specialisation	Sources
Market-Driven	Guangzhou	<p style="text-align: center;">Advanced Air Mobility Hub:</p> <p>A focal point for electric vertical take-off and landing (eVTOL) certification, manufacturing, and the commercialisation of passenger-grade “air taxi” services.</p>	<i>Guangzhou’s Action Plan to Promote the High-Quality Development of the Low-Altitude Economy</i>
	Shenzhen	<p style="text-align: center;">Innovation Hub and Commercial Deployment:</p> <p>A global epicentre for research and development (R&D) and pioneering real-world applications and regulatory frameworks for urban drone services.</p>	<i>Shenzhen’s Low-Altitude Infrastructure High-Quality Construction Plan (2024–2026); Regulations of Shenzhen Special Economic Zone on Promoting the Low-Altitude Economy</i>
	Zhuhai	<p style="text-align: center;">Integrated Ecosystem and Application Scaling:</p> <p>A leader in full-spectrum development, from manufacturing drones and eVTOL aircraft to deploying them for logistics and urban air mobility solutions.</p>	<i>Guangdong Province’s Action Plan for Promoting High-Quality Development of the Low-Altitude Economy (2024–2026)</i>
Regulation- and Innovation-Driven	Beijing	<p style="text-align: center;">Policy Formulation and Core Technology R&D:</p> <p>The central hub for foundational research, airspace management systems, and piloting high-stakes government applications.</p>	<i>Action Plan for Promoting the High-Quality Development of the Low-Altitude Economy Industry in Beijing (2024–2027)</i>
	Shanghai	<p style="text-align: center;">High-Value Services and Global Integration:</p> <p>A centre for corporate headquarters, financial services, and the critical airworthiness certification processes.</p>	<i>Shanghai’s Plans for High-Quality Development of the Low-Altitude Economy</i>

GROUPS IN CHINA'S LOW-ALTITUDE ECONOMY (CONTINUED)

Group	Region	Strategic Focus and Specialisation	Sources
Industrial Base Transformation	Anhui	<p style="text-align: center;">Emerging Manufacturing Centre:</p> <p>Rapidly establishing itself as a key base for the research, development, and manufacturing of next-generation eVTOL aircraft.</p>	<i>Anhui's Action Plan for Promoting the High-Quality Development of the Low-Altitude Economy Industry (2024–2027)</i>
	Hunan	<p style="text-align: center;">General Aviation and Propulsion Systems:</p> <p>A historic stronghold in the production of light aircraft and a national leader in small-to-medium aero engines.</p>	<i>Hunan's Implementation Plan for Accelerating the Cultivation and Development of the Low-Altitude Economy (2024–2027) and Supporting Measures</i>
	Jiangxi	<p style="text-align: center;">Rotary-Wing Aircraft Centre:</p> <p>A nationally recognised hub for the research, development, and manufacturing of helicopters.</p>	<i>Jiangxi's Gongqingcheng City Three-Year Action Plan for the Low-Altitude Economy Industry (2024–2026)</i>
	Sichuan	<p style="text-align: center;">Heavy-Lift Unmanned Aerial Vehicles and Aviation Engineering:</p> <p>Specialises in the development and production of large-scale, long-endurance industrial drones.</p>	<i>Several Policy Measures for Supporting the Development of the Low-altitude Economy in Sichuan; Chongqing's Action Plan for Promoting the Reform of Low-Altitude Airspace Management and High-Quality Development of the Low-Altitude Economy (2024–2027)</i>
Scenario-Led Pilot	Hainan	<p style="text-align: center;">Tourism and Regulatory Sandbox:</p> <p>Leverages its unique geographical and policy status to pioneer low-altitude tourism and test innovative airspace management models.</p>	<i>Hainan's Three-Year Action Plan for Low-Altitude Economic Development (2024–2026)</i>

Source: Author, compiled from local government action plans for high-quality development of the low-altitude economy.

APPENDIX 2 DETAILS OF MAJOR FIRMS IN CHINA'S LOW-ALTITUDE SUPPLY CHAIN

Supply Chain	Cluster									
	Beijing, Tianjin and Hebei	River Delta	Pearl River Delta	Triangle of Central China	Guanzhong Plain	Central Plain	Chengdu and Chongqing	Other Domestic Regions	Foreign	Total
Upstream	16	31	19	7	9	3	11	16	16	128
<i>1. Core Components/Systems</i>	13	24	18	6	5	2	10	9	16	103
Aerospace Bearing								1		1
Aerospace Components/Parts		1		1	1		3	2		8
Aerospace Electric Power System		3	5	2			1			11
Aerospace Vehicle Structural Components and Assembly Parts		5	1	1	1					8
Aviation Electronic Components	2	3	1			1				7
Aviation Engine	1	3			1		2	1		8
Aviation Tire								1	4	5
Avionics System	3	1	2			1	2			9
Chip	2	3	2	1				1	9	18
Circuit Board			1							1
Flight Control System	2		3		1			1	3	10
Fuselage	1	1					1	2		5
Payload	1	2	3	1			1			8
Propeller/Rotor Blade		1								1
Wing	1	1			1					3
<i>2. Key Raw Materials</i>	3	7	1	1	4	1	1	7		25
Aluminium Alloy	1						1	1		3
Aviation Steel		1				1		1		3
Composite Material	2	4	1	1	1			5		14
Magnesium Alloy		2								2
Titanium Alloy					3					3

DETAILS OF MAJOR FIRMS IN CHINA'S LOW-ALTITUDE SUPPLY CHAIN (CONTINUED)

Supply Chain	Cluster									
	Beijing, Tianjin and Hebei	River Delta	Pearl River Delta	Triangle of Central China	Guanzhong Plain	Central Plain	Chengdu and Chongqing	Other Domestic Regions	Foreign	Total
Midstream	12	18	17	3	4	0	7	3	8	72
Air Leasing	2	3	4						1	10
Air Traffic Control System	2	8	3		1		3		1	18
Aviation Maintenance	1		2		2		1			6
Drone	4	1	4	1			2	2		14
eVTOL Aircraft		5	4	1			1		2	13
General Aviation – Fixed-Wing Aircraft	1	1		1	1			1		5
Helicopter	2								4	6
Downstream	2	8	12	1	0	1	1	2	15	42
Flying Car	1	4	2	1			1		15	24
Low-Altitude Economy + Agriculture			1							1
Low-Altitude Economy + Logistics	1	1	3							5
Low-Altitude Economy + Public Service		1						1		2
Low-Altitude Economy + Transportation		2	4			1				7
Low-Altitude Economy + Travel			2					1		3
Grand Total	30	57	48	11	13	4	19	21	39	242

Source: Information compiled by the author from the Wind Economic Database.

Note: The Yangtze River Delta cluster is led by Shanghai, while Pearl River Delta's is led by Shenzhen, Guangzhou, and Zhuhai. As for the Triangle of Central China cluster, Wuhan, Nachang, and Changsha are dominant; the Guanzhong Plain cluster is led by Xi'an, and the Central Plain, Zhengzhou and Luoyang.