

# SKYDRIVE EYES OSAKA'S ROOFTOPS FOR A NEW GENERATION OF EVTOL VERTIPORTS

News / Manufacturer



**Following the successful public flight demonstrations at Expo 2025 Osaka, SkyDrive announced plans to undertake a feasibility study exploring the conversion of Osaka City's existing rooftop emergency landing sites into dedicated eVTOL vertiports. The initiative, launched under Japan's Cabinet Office Super City Programme, brings together key partners including Chodai Co., Ltd., Kansai Electric Power Co., Inc., and the Organization of Airport Facilitation.**

While much of the global eVTOL industry is focused on connecting airports with suburban heliports, SkyDrive is pursuing a different vision: enabling convenient, everyday urban air mobility within city centres through the deployment of compact, low-noise aircraft. By leveraging existing rooftop infrastructure, the project marks a significant step toward integrating eVTOL operations into Osaka's transportation ecosystem and advancing the reality of daily aerial commuting in one of Japan's largest metropolitan areas.

## Key Project Activities

The project will conduct a phased evaluation to determine the viability and prospects of repurposing existing building rooftop emergency landing zones in Osaka City into operational vertiports for eVTOL aircraft, focusing on the following core areas:

- **Verification of Surrounding Airspace and Obstacle Limitation Surfaces**

The study involves evaluating high-rise structures in Osaka City that feature established emergency landing zones (identified by an "H" symbol). By utilizing airspace maps, the project will categorize and examine flight operations by district and confirm compliance with Civil Aeronautics Act standards.

- **Wind and Noise Surveys Considering the Impact of Surrounding Buildings**

The project will analyze locations where building-induced winds occur to clarify safe weather and operational requirements. Additionally, it will simulate noise levels during takeoff, landing and flight.

- **Feasibility Study for Repurposing into Alternate eVTOL Vertiports**

To evaluate the feasibility of establishing alternate vertiports for eVTOLs, the survey will assess floor load capacities to withstand aircraft landings, map out passenger movement flows during flight diversions, and establish logistics for transporting aircraft in cases of mechanical failure. Additionally, it will evaluate the feasibility of installing charging infrastructure, determine necessary upgrades or new installations for power receiving and transforming equipment, and calculate estimated project costs.

- **Discussions Toward Formulating Coexistence Rules with Relevant Authorities**

SkyDrive and its partners will consult with relevant organizations, including the Osaka Municipal Fire Department, to draft emergency scenarios and coexistence rules that balance the original purpose of "disaster response and lifesaving operations" with "ensuring safety in the daily operation of eVTOL."

Following their successful collaboration at **Expo 2025 Osaka**, SkyDrive and Osaka Metro are advancing plans to introduce commercial eVTOL services across Osaka Prefecture and Osaka City by around 2028. Both jurisdictions have been designated as **Super City National Strategic Special Zones** by Japan's Cabinet Office, reflecting their commitment to creating a highly connected and technologically advanced mobility ecosystem.

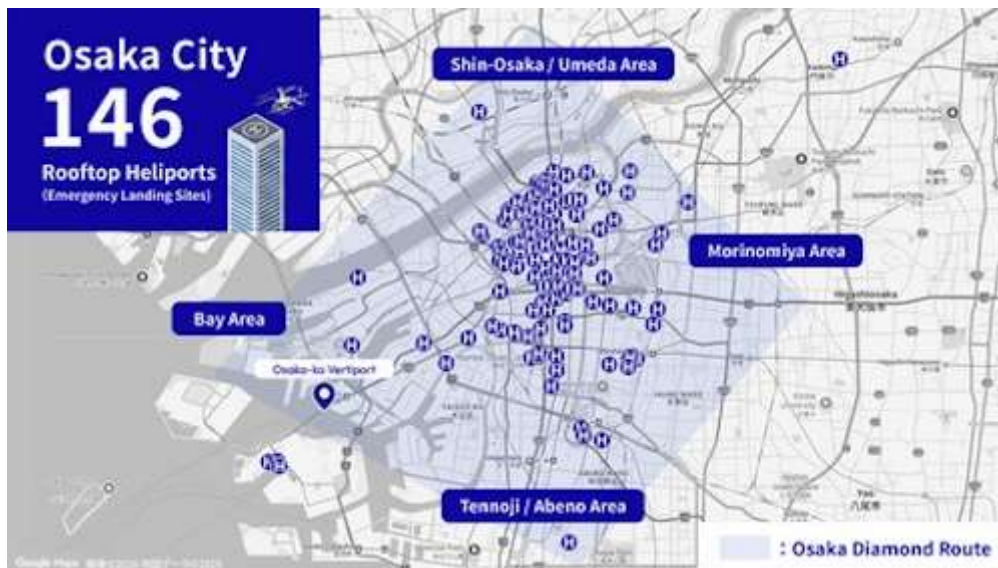
One of the key barriers to scaling urban air mobility remains the limited availability of vertiport infrastructure. Developing new takeoff and landing facilities from the ground up is both costly and challenging, particularly in densely populated city centres where suitable land is scarce.

Osaka City already possesses a valuable yet largely untapped asset: a network of 146 rooftop emergency landing sites located primarily on buildings exceeding 100 metres in height. Originally installed to meet fire safety regulations, these facilities are equipped with essential infrastructure, including reinforced landing surfaces, firefighting systems, and lighting. However, their use is currently restricted to emergency response and disaster relief operations, largely due to regulatory hurdles associated with certifying them for commercial passenger transport.

To address this challenge, the initiative will assess the potential of converting these rooftop emergency landing sites into alternate eVTOL vertiports. Serving as contingency landing locations when aircraft are unable to reach their intended destination, these facilities could play a critical role in supporting safe and reliable commercial eVTOL operations.

By leveraging the regulatory flexibility offered through the National Strategic Special Zone framework, the project will conduct technical assessments and develop the operational standards necessary for future deployment. The initiative aims to overcome two of the most significant urban air mobility challenges, namely high infrastructure costs and limited available land, while laying the

groundwork for a resilient, city-wide vertiport network capable of accelerating the adoption of eVTOL transportation in Osaka.



## Future Outlook

The 146 rooftop emergency landing sites distributed across Osaka City were originally designed to support disaster response and emergency operations rather than commercial aviation. As a result, unlike many eVTOL infrastructure projects that focus on building purpose-designed vertiports, the regulatory pathways, operational procedures, and safety standards required to repurpose these facilities for commercial use are still evolving.

To address these challenges, the project will combine detailed desktop analysis with on-site inspections of selected buildings. This comprehensive approach will generate the operational, technical, and safety data needed to support future regulatory approvals and establish best practices for rooftop vertiport integration within dense urban environments.

The findings will not only guide the potential conversion of Osaka's emergency landing network but also contribute to the development of future vertiport design and certification standards. By creating a scalable model that can be adapted to other cities facing similar land and infrastructure constraints, the initiative aims to accelerate the deployment of urban air mobility services and bring next-generation aerial transportation closer to everyday reality.

01 OCTOBER 2026

### ARTICLE LINK:

<https://50skyshades.com/news/manufacturer/skydrive-eyes-osakas-rooftops-for-a-new-generation-of-evtol-vertiports>