QUEENSLAND SPACE INDUSTRY

Strategy 2020-2025 PROGRESS REPORT

By 2025, Queensland's space industry will be recognised as a leading centre in Australasia for launch activities, ground systems, Earth observation, niche manufacturing, robotics and automation for space.



Unite & Recover

Queensland's space industry has shown resilience and maintained growth throughout the COVID-19 pandemic. The Queensland Government has continued to support the space industry through grants, facilitation, advocacy and working with proponents towards developing key space-related infrastructure. Funding has been earmarked for the establishment of infrastructure such as an Earth observation hub and a rocket engine static test facility. I look forward to continuing to work with industry to deliver opportunities that strengthen our economy and deliver jobs for Queenslanders.

The Honourable Steven Miles MP DEPUTY PREMIER and MINISTER FOR STATE DEVELOPMENT





Case study – Hypersonix Launch Systems

Brisbane-based Hypersonix Launch Systems is disrupting the space industry by creating a low-cost, reliable and reusable hydrogen-fuelled space launch system that can 'fly to space'. The three-stage system is built around a scramjet powered hypersonic aircraft called Delta-Velos. Once boosted to Mach 5 by a hydrogen-fuelled rocket, Delta-Velos accelerates to Mach 10 and releases a small upper-stage rocket that takes the satellite to orbit. Delta-Velos then flies back to base and lands on a normal runway, ready for another mission. This is the first application of scramjets for space launch, providing greater performance and, as around 80 per cent of the system is reusable, offering significant cost savings. Hypersonix is putting Queensland innovation in the global space spotlight.



Achievements under the Queensland Space Industry Strategy 2020-2025



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Action area 1 – Strengthening capability

Strengthen existing capabilities to support Queensland's niche areas to be world-class and positioned for growth, with new opportunities in the space supply chain

- > Completed a technical and environmental investigation for a potential orbital launch facility near Abbot Point and facilitating private sector development of the site.
- > Conducted a market sounding for a Queensland satellite ground station development and commenced commercial discussions with potential proponents.
- > Contributed to a market analysis on the demand and potential economic impact of Australian launch services with the Australian Space Agency, Austrade, and the Northern Territory and South Australian governments.
- > Working with Earth Observation Australia and the national SmartSat Cooperative Research Centre to establish a space-derived data analytics and commercialisation hub in Queensland.
- > Working with industry to establish a common user static test site for rocket engines.
- > Promoting clear career pathways into the Queensland space sector working with industry, schools, TAFEs and universities.
- > Supporting Space SMEs through the Defence and Aerospace Industry Development Fund; workshops; networking and information events; and facilitation support.
- > Supported Queensland industry to access Australian Government programs such as the Modern Manufacturing Initiative and Moon to Mars program.

Action area 2 - Growing Queensland's industry

Connect Queensland's industry to domestic and international markets.

- > Regular consultation and liaison with Austrade and the Australian Space Agency to promote Queensland capability on the world stage.
- > Promoted Queensland through attendance at key space-related events and trade shows such as Avalon and the International Astronautical Congress in Washington D.C.
- > Providing funding and other support for the 2021 Advancing Earth Observation Forum event.
- > Working with defence primes to promote and connect them with Queensland's industries e.g. supporting virtual B2B events and identifying Queensland's capability for key projects and tenders.
- > Developing a Queensland space industry capability directory to increase connections between and within the space sector, and to support promotion in domestic and international supply chains.

Queensland on space launch trajectory

As part of an action under the Queensland Space Industry Strategy 2020-2025, the Queensland Government undertook a technical and environmental investigation of the potential for Abbot Point to host a space launch facility.

The investigation found the site within the Abbot Point State Development Area (SDA) may be suitable for small-scale launch activities. Queensland-based Gilmour Space Technologies has expressed interest in the site for a rocket it is developing and is progressing discussions to lease the site.

In the meantime, the Queensland Government will investigate whether there are other coastal sites which could meet longer-term, broader industry requirements.