

QUEENSLAND

Northern Silica Project

Diatreme's flagship project, the Northern Silica Project (NSP) is set to become a leading supplier of high-grade silica products for the global solar PV and specialty glass industry. The NSP is favourably positioned for Asian markets, being located 35 kilometres north of Hope Vale and 14 kilometres west of the Port of Cape Flattery in Far North Queensland.

In June 2025, Diatreme announced a significant upgrade to the estimated Mineral Resource at the NSP, including a 278% conversion in the Measured Resource from 49.5 million tonnes to 187.5 million tonnes, with 42Mt Indicated and 43Mt Inferred. This upgrade reinforces NSP's position as one of the world's largest deposits of high-purity silica sands.

On 20 September 2024, the Coordinator-General released the Final Terms of Reference (ToR) for the NSP's Environmental Impact Statement (EIS) process, following public review of the draft ToR (which outlined the environmental, heritage, social, and economic study requirements for the project).

The NSP is situated in the Hope Vale Aboriginal Shire near Cape Flattery, Far North Queensland, and in close proximity to the operations of Cape Flattery Silica Mines and the Cape Flattery Port.

NSP is one of the world's largest deposits of high purity silica sands, with a silicon dioxide (SiO₂) purity of greater than 99% and iron content of less than 120ppm, a critical criterion for solar panel glass manufacturers. The proposed project is a greenfield cut mining operation with onsite processing facilities that will produce a saleable silica sand product.

World class global material solutions group, Sibelco (through Sibelco Asia Pacific Pty Ltd) is Diatreme's joint venture developm

partner on its silica projects via the Cape Silica Joint Venture. Sibelco has agreed to provide Diatreme access to Sibelco's tech and project development expertise, pursue joint product marketing and downstream onshore silica processing opportunities, well as assistance in securing project finance.

Sibelco has already contributed circa A\$49 million (\$35 million into the Cape Silica Joint Venture and A\$13.97 million via a strab placement in Diatreme completed in June 2022), supporting the ongoing development and expansion activities at the NSP.

In January 2024, the NSP was designated with "Coordinated Project" status under the State Development and Public Works Organisation Act 1971 (QLD) by the Office of the Coordinator General in Queensland. Coordinated project status is a major milestone recognising the NSP's strategic value, including its infrastructure and approval requirements. The status also establishes the environmental approvals process, including an EIS, which will be assessed and decided through the joint Queensland and Commonwealth Government bilateral agreement.

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Recognising the importance of local communities and traditional owners of the area, Diatreme places a high priority on engagement with the Hope Vale community and the traditional owners of the land, including the Dingaal, Dharrpa, Nguurruumungu, Gulaal Thanil clans. The project aims to provide important jobs and business development opportunities directly to these local communities, fostering a strong relationship and contributing to regional economic growth.

In May 2024, Diatreme signed a negotiation protocol and a Cultural Heritage Management Agreement with the Walmbaar Aboriginal Corporation RNTBC, representing the Dingaal Clan. These agreements establish a framework for ongoing collaboration ensuring the protection of cultural heritage and maximising economic benefits, employment, and training opportunities for the Dingaal People.

The NSP is poised to become a leading supplier of low-cost, premium quality "low iron" silica sand product, catering to the rapidly expanding photovoltaic glass markets. The NSP Scoping Study indicated a potential target production rate of 5Mtpa could be sustained for 25 years. Metallurgy tests have shown that the high purity silica product produced is highly suitable for solar panel manufacturers' sheet glass requirements.

The NSP Scoping Study highlighted the potential for a valuable long life mining operation of significant scale, low cost, robust economics within the designated area of Cape Flattery Port and in close proximity to existing marine infrastructure.

The key results of the NSP Scoping Study with a 25 year mine life included:

The initial target production is set at 3Mtpa of silica sand, with a production expansion to 5Mtpa of silica after the first two year operation.

Key infrastructure components will comprise an on-site processing plant, conveyors to transport sand product to port, on-site and off-site stockpiles, and any maritime infrastructure required to support construction and operational/export activities at Port of Cape Flattery.

Mining will occur via a front end loader or dry bucket wheel system, which will feed silica sand to trommels or vibrating screen. Sand is then pumped as a slurry to a processing plant for removal of impurities. Final product is then dewatered and stacked in 250Kt stockpile, with the reclaimed final product then transported to port via conveyor for loading on to ocean-going vessels for export.

A mine access road will be constructed from the mine site to the Starcke Highway (Mount Webb Wakooka Road). The Northern Silica Access Road alignment (MLA 100311) is the preferred road alignment for the project.

Diatreme's planned maritime infrastructure, designed in harmony with the Great Barrier Reef World Heritage Area, excludes capital dredging, reflecting our dedication to conservation. Diatreme is at the forefront of sustainable mining, exploring renewable energy options like solar and wind, complemented by back-up diesel generators. A wind turbine for the processing facilities is also under consideration, showcasing the Diatreme's commitment to innovative and sustainable energy solutions.

Water resources will be sourced from a dedicated groundwater bore within the project area. With an allocation of 3,500 ML per year, water usage will be meticulously managed to meet operational needs while preserving the region's ecological balance. Ongoing environmental monitoring ensures sustainable water management practices are in place.

By providing on-site accommodation and potential commuting options from the Hope Vale township, Diatreme will foster a close-knit work environment and ensure direct employment opportunities for the local community.

The NSP is expected to consist of the following components:

- A. camp and administration infrastructure area;
- B. mine extraction areas, processing plant and associated mine infrastructure area;
- C. processing plant and industrial area;
- D. slurry pipeline, dewatering facility and stockpile area;
- E. site access road from Mount Webb – Wakooka Rd; and
- F. product transport conveyor and port infrastructure at Port of Cape Flattery for transshipment operations during the early years followed by a direct loadout facility.

EXPORT SOLUTIONS AND USE OF CAPE FLATTERY PORT

In developing the export methodology within the NSP Scoping Study for the use of Cape Flattery strategic port land and marine infrastructure, Diatreme has used an underpinning commercial rationale and development strategy, which is self-reliance and independence from the incumbent port operator Cape Flattery Silica Mines (CFSM), wholly owned by Mitsubishi Corporation) and assumes no access to its export outloading stream.

Diatreme, CFSM and the Far North Queensland Ports Corporation (Ports North) (the Queensland government-owned port authority) have entered into a tripartite deed of access which allows Diatreme, its employees and contractors to access

Ports North's leasehold and freehold land parcels to undertake environmental monitoring and surveys. Additionally, the deed also provides for access to existing port infrastructure to support part-facility user agreement investigations regarding the NSP under agreed conditions.

Through negotiation of a partial user agreement with the Ports North, Diatreme will look to create and construct its own loading option for product from the NSP within the port precinct by construction of an independent outloading stream, transship its product to a moored vessel located at the existing wharf and then load by use of geared vessels from barge to ocean going vessels (55,000 tonne OGV's) for product export.

Moving forward, Diatreme remains optimistic that a negotiated outcome with all relevant stakeholders can be facilitated, allowing open access to all port infrastructure.

This is expected to result in the following positive outcomes for the NSP:

- A. significantly decrease in capex due to reduced marine infrastructure spend;
- B. condensed timeline to production and first export of NSP product;
- C. reduced environmental disturbance; and
- D. more efficient EIS process.

The development would substantially increase the export capacity of PV grade critical mineral silica sand from the existing port precinct.

On 13 July 2023, Diatreme signed a non-binding memorandum of understanding with Flat Glass Group Co Ltd (FLAT) to negotiate and potentially facilitate long-term binding offtake arrangements for the supply of photovoltaic grade, high purity low iron silica from the NSP for FLAT's glass manufacturing operations in China.

Diatreme has advanced its engagement with the Hope Vale community with a dedicated community engagement team and Hope Vale office, as well as the signing a memorandum of cooperation with Hope Vale Aboriginal Shire Council aimed at maximising local economic benefits from the NSP.

Diatreme and its joint venture partner Sibelco are planning to advance to a definitive feasibility study involving all necessary technical studies, environmental impact assessments, permits, and approvals required to move to a final investment decision.

Northern Silica Information

Over the last couple of years, Diatreme has engaged with the Hope Vale community to understand environmental v concerns and expectations. This video shares community perspectives alongside Diatreme's approach, including environmental protection, rehabilitation and monitoring are being planned in recognition of the deep connection people hc their land and Country.

Diatreme Resources Northern Silica Project - Environmental Values

Diatreme Resources

Hope Vale is home to the community Diatreme engages with, including current and future workforce members. This video shows community perspectives on social impacts, daily life and expectations about how a project should operate alongside community, and Diatreme's commitment to ensuring mining and community life can co-exist respectfully.

Diatreme Resources - Community perspectives on social impacts, Hope Vale, Qld

Diatreme Resources




Watch on

This video reflects conversations with Hope Vale community members about economic aspirations, jobs and opportunities in the region. It also outlines Diatreme's perspective on potential economic contribution associated with the Northern Silica Project, informed by ongoing engagement and planning.

Diatreme Resources Northern Silica Project - Economic Impacts

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HOPE VALE

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In the spirit of reconciliation, Diatrene Resources Limited acknowledges the
Custodians of Country throughout Australia and their connections to land, sea and
We pay our respects to their Elders, past and present.