

TO WHOM IT MAY CONCERN

The development of large-scale data centres in Tasmania presents an opportunity to establish a new industry in renewable hydrogen generation and associated energy infrastructure.

Large data centres require highly reliable electricity supply and therefore require firming and backup generation to maintain continuity of operations during periods of network stress, outages or other interruptions. The emerging national policy framework is already moving towards requiring large data centres to demonstrate that their electricity demand is supported by new renewable generation and firming capacity. Tasmania should consider going further by requiring large new data centres to provide zero- or very-low-emissions firming and backup generation, with renewable hydrogen generators being a key pathway.

A requirement for hydrogen-capable generation could provide several benefits:

- Protect Tasmania's renewable energy advantage by avoiding the establishment of large-scale diesel generation as a long-term backup solution for new data centre loads.
 - Create a new demand for renewable hydrogen, providing an additional domestic market alongside transport, industrial heat, shipping and other emerging applications.
 - Establish a new Tasmanian supply chain, including hydrogen production, storage, compression, transport, generators, engineering, maintenance and specialist services.
 - Create opportunities for local manufacturing and technical capability, particularly if Tasmania can develop expertise in hydrogen generation systems and associated infrastructure.
 - Provide an additional source of firming capacity that can operate independently of the electricity grid when required, while potentially reducing reliance on fossil-fuelled backup generation.
 - Support Tasmania's broader hydrogen and clean-fuels objectives by creating an early, visible and potentially substantial anchor customer for renewable hydrogen.
- The opportunity is not limited to the data centre itself. A requirement for hydrogen-capable backup and firming systems could help create the conditions for a broader hydrogen energy services industry in Tasmania, with technology and capability that could subsequently be deployed across other industries and jurisdictions.

Recommended approach

The Tasmanian Government should consider establishing an expectation that large data centres:

1. provide or contract for sufficient firming and backup generation to meet their reliability requirements;
2. use zero- or very-low-emissions technologies wherever technically and commercially feasible;
3. ensure new backup generation is hydrogen-capable, with an agreed pathway towards renewable hydrogen operation;
4. minimise the use of diesel generators and avoid establishing long-term dependence on fossil-fuel backup infrastructure; and
5. report transparently on the capacity, technology, fuel source and emissions associated with their firming and backup arrangements.

This approach could initially apply to the largest new data centre developments, recognising that requirements should be proportionate to the scale and system impact of the load.

Importantly, this should not be treated solely as an additional obligation on data centre proponents. It could be used as an industrial policy opportunity for Tasmania. By creating a predictable domestic demand signal for renewable hydrogen, Tasmania could encourage investment in hydrogen production, storage, generation technology and associated services.

The policy could therefore support two objectives simultaneously: ensuring that data centre growth does not undermine Tasmania's renewable energy advantage, while using the growth of the sector to help establish a new Tasmanian clean-energy industry. This would complement the national direction towards data centres bringing clean and firm energy and would provide Tasmania with an opportunity to develop a distinctive model for low-emissions, highly reliable digital infrastructure.

