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Submission: Inquiry into AI Data Centres in Tasmania

1. Overview

The Tasmanian Beekeepers Association (TBA) recognises the potential economic and technological benefits of well-planned data centre and artificial intelligence infrastructure. TBA does not oppose such development. It does, however, consider that decisions must account for the full physical and environmental footprint of each project, including the generation, transmission, substations, roads, water infrastructure and vegetation management required to support it.

This submission focuses on matters within TBA's expertise: apiary access, floral resources, pollination, biosecurity and an emerging evidence base concerning honey bee exposure to electromagnetic fields associated with high-voltage electricity infrastructure. TBA does not suggest that current evidence establishes that data centres themselves cause honey bee mortality or colony decline.

2. About the Tasmanian Beekeepers Association

TBA is the peak apiary industry body in Tasmania, representing the interests of beekeepers and the wider beekeeping sector at state and national levels. Our network of branches and affiliate organisations extend our reach to include commercial and recreational apiarists across Tasmania.

TBA advocates for a productive, resilient and bio-secure sector and for recognition of its contribution through honey production, pollination services, regional employment and support for the wider agricultural economy.

The Tasmanian Government's 2025 Tasmanian Beekeeping Survey reported 1,867 registered beekeepers and 42,613 registered hives and estimated that at least 70 per cent of honey produced was sourced from public land. Analysis presented to TBA by economist Saul Eslake in July 2026 estimated that honey bee pollination contributed about $203 million to Tasmania's economy in 2024-25. Apiary sites, access roads, flowering vegetation and the safe movement of hives are therefore productive infrastructure, even where they are not readily visible in conventional land-use mapping.

3. Recommendations

1. Assess data centres as part of a connected infrastructure system, including associated generation, storage, transmission, substations, roads, water infrastructure and vegetation management.
2. Require environmental and planning assessments to identify registered apiary sites, established access routes, significant floral resources and pollination-dependent agricultural activity.

3. Require early and appropriately confidential engagement with TBA and affected beekeepers before project locations, transmission routes, vegetation clearance and access arrangements are settled.
4. Assess cumulative impacts across multiple data centre, renewable energy and transmission developments within the same landscape.
5. Where new high-voltage lines or substations may affect significant apiary or pollination interests, require project-specific electromagnetic-field assessment and proportionate baseline and post-commissioning monitoring.
6. Require transparent public reporting of forecast and actual energy and water consumption, enabling infrastructure, environmental performance, mitigation commitments and monitoring results.

4. Detailed comments

4.1 Assess the whole infrastructure chain

A data centre's environmental footprint is not confined to its buildings. Large facilities can require new electricity generation, storage, transmission, substations, access works and water or wastewater infrastructure. The Tasmanian Government's draft Expectations for Data Centres and AI Infrastructure Developers expressly require proponents to support additional renewable generation to meet their demand.

Each component may be proposed by a different entity and considered under a different approval process. That must not result in the combined effects being overlooked. Project descriptions, strategic assessments and approval decisions should identify all reasonably foreseeable enabling infrastructure and assess its direct, indirect and cumulative effects.

4.2 Recognise beekeeping, access and floral resources

Beekeeping is a mobile and seasonal agricultural activity. Hives may be temporarily located on public land, forestry land, farms or other private property and moved between honey flows and pollination crops. Precise apiary-site information may also be commercially and biosecurity sensitive. These characteristics make beekeeping easy to miss unless proponents actively seek relevant information.

Assessment should identify registered apiary sites, customary access routes, seasonal hive movements, significant flowering vegetation and commercial pollination activity. TBA, local beekeeping groups and affected registered beekeepers should be recognised as potential stakeholders, with secure arrangements for handling location information.

Construction traffic, gates, closures, fire controls and road works can delay access needed for hive health, harvesting, emergency response or movement to pollination crops. Vegetation clearance, herbicide use, planned burns and altered firebreak management can remove or fragment forage well beyond the facility footprint. Project conditions should therefore protect practical access, require advance notification and secure appropriate rehabilitation. Where impacts cannot be avoided, compensation should be mandatory.

Large construction programs also move machinery, soil, gravel, plants and other materials between regions. Project-specific biosecurity plans should address vehicle and machinery hygiene, weeds and pests, contractor induction, traceable movement arrangements and responsibility for reporting and remedying incidents.

4.3 Electromagnetic fields: apply evidence and precaution carefully

Honey bees can detect and use the Earth's magnetic field.

Peer-reviewed research has found that exposure to extremely low-frequency electromagnetic fields at strengths occurring beneath or close to high-voltage powerlines can affect honey bee learning, flight, feeding and foraging behaviour. A 2023 field and laboratory study also reported reduced flower visitation and pollination performance in proximity to active high-voltage transmission towers.

These studies justify attention to electricity infrastructure, but they do not establish that electromagnetic emissions from data centres cause colony mortality or collapse. Field frequency, strength, duration and distance from the source matter, and computer servers, wireless equipment, transformers and transmission lines do not create identical exposure environments. Claims about a general data-centre effect should therefore not be treated as established science.

The evidence nevertheless identifies a legitimate knowledge gap where substantial new power infrastructure may be located close to apiaries or important forage. In those circumstances, proponents should map the relevant infrastructure, model expected field strengths, identify nearby apiary and pollination interests and use prudent siting where practicable.

Proportionate baseline and post-commissioning monitoring should be required where assessment cannot confidently exclude a material effect. Results should be independently reviewable and publicly reported without disclosing sensitive apiary locations.

4.4 Water, habitat and cumulative environmental pressure

Water demand varies substantially with facility scale and cooling technology. Forecast and actual consumption should be disclosed and assessed against catchment capacity, existing agricultural users and environmental flows. The assessment should cover indirect water use and wastewater impacts as well as water consumed at the facility.

Siting and design should avoid unnecessary loss or fragmentation of native vegetation and flowering resources. Rehabilitation should use locally suitable species that support biodiversity and provide forage across seasons. Most importantly, assessments should consider the cumulative effect of several data centres and their associated energy infrastructure within the same catchment or ecological landscape.

4.5 Planning, consultation and accountability

The inquiry's terms appropriately ask whether Tasmania's Resource Management and Planning System adequately recognises the specific impacts of AI and data facilities. Existing approval pathways should not be assumed sufficient merely because individual buildings resemble other industrial development. The defining issue is often the scale and combination of resource demand and enabling infrastructure.

Proponents should engage affected agricultural industries before project design and transmission routes are fixed, not only after a development application is lodged. Public information should distinguish construction employment from enduring jobs and disclose forecast and actual energy and water use, enabling infrastructure, environmental performance, outstanding commitments and monitoring results.

Commercial confidentiality should be applied narrowly and should not prevent meaningful scrutiny of public-resource allocation or environmental outcomes.

5. Conclusion

Tasmania can pursue digital investment without treating established industries and environmental values as collateral impacts. For TBA, the essential safeguards are recognition of apiculture, protection of access and floral resources, effective biosecurity, assessment of the entire supporting infrastructure chain and an evidence-based response to emerging electromagnetic-field research.

TBA would welcome further engagement with the Committee and with government on practical methods for identifying affected beekeepers while protecting sensitive apiary location information.

References

Department of Natural Resources and Environment Tasmania, Tasmanian Beekeeping Survey 2025.

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Shepherd et al. (2018), Extremely Low Frequency Electromagnetic Fields impair the Cognitive and Motor Abilities of Honey Bees, Scientific Reports 8, 7932.

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