

SUBMISSION IN OPPOSITION

Project Mars Data Centre – 12 Mars Road, Lane Cove West NSW 2066

Application Number: SSD-82052708

Applicant (Proponent): Goodman Group

1. Introduction and Standing

I am a resident of Wood Street, Lane Cove West, located approximately 230–280 metres from the proposed Project Mars Data Centre at 12 Mars Road, Lane Cove West. My household includes young children, one of whom has autism. I am directly and materially affected by this proposal and have standing to make this submission under the Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act).

I strongly oppose the grant of development consent for this application. After thoroughly reviewing the Environmental Impact Statement (EIS) and supporting documents lodged with this application, I have identified significant and unresolved concerns regarding noise and health impacts, fire and emergency risk, environmental harm, water consumption, visual amenity, and the adequacy of the EIS itself.

The proposal involves the construction and 24-hour, 7-day-a-week operation of a data centre with an overall power consumption of approximately 90 megawatts (MW) – among the largest industrial installations ever proposed in a location directly adjoining a low-density residential zone (R2) and immediately south of public recreation land (RE1) in NSW. Goodman Group lodged its Secretary's Environmental Assessment Requirements (SEARs) application on 18 March 2025. The proposed development would replace four existing warehouse buildings and occupy a gross floor area of 18,829 sqm at a height of 15–25 metres.

Source: NSW Planning Portal, SSD-82052708; Goodman Group SEARS application, 18 March 2025; Data Center Dynamics, April 2025

2. Applicable Legal Framework

In assessing this application, the consent authority is required under Section 4.15 of the EP&A Act to take into consideration:

- The provisions of any applicable environmental planning instrument;
- The significant likely impacts of the development, including environmental impacts on both the natural and built environments and social and economic impacts in the locality;
- The suitability of the site for the development; and
- The public interest.

The EP&A Act also enshrines community participation rights. The Act requires that “the community has a right to be informed about planning matters that affect it” and that “community participation should be inclusive and planning authorities should actively seek views that are representative of the community.” This submission is made in exercise of those rights.

I submit that the EIS fails to adequately address the matters required under Section 4.15 of the EP&A Act and the Secretary's Environmental Assessment Requirements (SEARs), and that approval of this development in its current form would not be in the public interest.

3. Noise Impacts – Inadequate Assessment and Ongoing Community Harm

3.1 Relevant EIS Section

EIS Section 8.2 – Noise and Vibration Assessment

3.2 Concerns Regarding Noise Assessment

The data centre is proposed to operate 24 hours a day, 7 days a week. This means that noise from cooling systems, backup diesel generators, and other plant equipment will be present continuously, with no respite for nearby residents. The noise and vibration assessment in the EIS is deficient in the following respects:

- **Generator and maintenance noise:** Modelling only, no worst-case analysis. The EIS provides no robust data on maximum noise levels during generator testing, emergency operations, or maintenance events. These are known to be significantly louder than average operational levels and are a recognised source of community disturbance in comparable data centre developments in NSW.
- **Failure to comply with NSW EPA Noise Policy for Industry (2017):** The NSW EPA Noise Policy for Industry (2017) (NPI) is the mandatory framework for assessing industrial noise from new developments, including data centres. Under the NPI, applicants must assess noise at the “potentially most affected location” – which may not be the geographically closest receiver. The EIS appears to have assessed only the closest receivers, not the potentially worst-affected locations, which may differ due to topography and receiver height. This is a material deficiency.
- **Low-frequency and tonal noise:** Low-frequency noise from cooling towers, HVAC plant, and emergency generators can travel further and penetrate buildings more effectively than broadband noise. The A-weighting measurement standard used in most EIS assessments is recognised as inadequate for evaluating the non-auditory effects of low-frequency noise. International and peer-reviewed research (including studies published in *Applied Sciences* in 2020) confirms that low-frequency noise is associated with more severe health effects than community noise in general. The EIS does not adequately assess this risk.
- **Health impacts of continuous noise exposure:** The WHO Environmental Noise Guidelines (2018) document that environmental noise causes serious health effects, including increased risk of cardiovascular disease, sleep disturbance, cognitive impairment, and mental health problems. A 2022 systematic review published in *Oxford Academic (Environmental Health Perspectives)* confirms these exposure-response relationships. The EIS does not engage with this body of evidence in the context of vulnerable residents, including children and people with neurodevelopmental conditions.
- **Impact on neurodiverse children:** Continuous and unpredictable noise exposure, particularly from mechanical equipment with low-frequency components, can severely disrupt the ability of children on the autism spectrum to concentrate, communicate, and learn. This may trigger anxiety, sensory overload, or behavioural distress. The failure to assess these impacts constitutes a failure to comply with obligations under the Disability Discrimination Act 1992 (Cth) and the Disability Standards for Education 2005, which require that environmental conditions not impair the educational outcomes and wellbeing of students with disability.
- **No enforceable monitoring regime:** There is no commitment to ongoing, publicly verifiable noise monitoring at residential receivers post-commencement, nor any enforceable noise trigger levels at which Goodman would be required to take remedial action.

3.3 Questions for the Decision-Maker and Goodman

1. *Given the site's 24/7 operational schedule, what enforceable noise limits and publicly accountable monitoring arrangements will apply at residential receivers, including during generator testing?*
2. *Why does the noise assessment not address the potentially most affected receiver locations, as required by the NSW EPA Noise Policy for Industry (2017)?*
3. *What specific, enforceable mitigation measures does Goodman propose to protect neurodiverse children from the documented impacts of continuous low-frequency noise, and how will compliance with the Disability Discrimination Act 1992 and the Disability Standards for Education 2005 be ensured?*

Source: NSW EPA, Noise Policy for Industry (2017); NSW EPA, Approved Methods for the Measurement and Analysis of Environmental Noise; WHO Environmental Noise Guidelines for the European Region (2018); Basner et al., Environmental Noise and Effects on Sleep: An Update to the WHO Systematic Review, Oxford Academic (2022); Pelegrin-Garcia et al., Low-Frequency Noise and Its Main Effects on Human Health, Applied Sciences, vol. 10, no. 15 (2020); Disability Discrimination Act 1992 (Cth); Disability Standards for Education 2005

4. Health and Amenity Impacts – EMF and Air Quality

4.1 Relevant EIS Section

EIS Sections 2.3 (Site Context), 8.4 (EMF and Air Quality)

4.2 Concerns Regarding Health Assessment

The EIS acknowledges the site's adjacency to low-density residential development to the east (R2 zoning), with the nearest homes approximately 230–280 metres from the site boundary. Despite this, the health impact assessment is materially inadequate:

- **Modelling only, no independent verification:** The EIS relies on general predictive modelling for both electromagnetic field (EMF) and air quality impacts, rather than site-specific, independent, peer-reviewed assessment. No longitudinal or epidemiological studies on the health impacts of living near data centres of this scale are cited or considered.
- **Generator emissions and air quality:** The proposal will operate up to 90MW of electrical load, requiring the operation of large diesel backup generators. Diesel generators produce nitrogen oxides (NOx), particulate matter (PM2.5 and PM10), and other pollutants. There is no assessment of the cumulative health impact of diesel exhaust emissions during generator testing on nearby residents, including children and people with pre-existing respiratory conditions. The NSW EPA has noted in previous data centre assessments that EIS applicants must include expected in-stack emission concentrations for generators and demonstrate compliance with Group 6 POEO Clean Air Regulation limits.
- **Vulnerable groups not addressed:** Children and people with disability are recognised as vulnerable subgroups requiring additional protection in the context of environmental noise and air quality. The WHO Guidelines for Community Noise (1999) and subsequent WHO guidance explicitly identify children and people with medical conditions as requiring stronger protections. The EIS provides no enhanced assessment for these groups.

4.3 Questions for the Decision-Maker and Goodman

4. *What site-specific, independent assessment of EMF and diesel generator air quality impacts has been conducted at the nearest residential receivers, including with respect to children and people with disability?*
5. *How will compliance with Group 6 POEO Clean Air Regulation limits for generator emissions be demonstrated and monitored on an ongoing basis?*

Source: NSW EPA, *Advice on EIS for data centre developments* (PAE-77806014, 2024); WHO *Guidelines for Community Noise* (1999); NSW EPA *Noise Policy for Industry* (2017); *Protection of the Environment Operations (Clean Air) Regulation 2010* (NSW)

5. Fire Safety and Emergency Management – Critical Gaps

5.1 Relevant EIS Section

EIS Section 8.11 – Fire Safety Risk Assessment

5.2 Concerns Regarding Fire Risk

Data centres at this scale carry unique and severe fire risks due to the concentration of electrical equipment, lithium-ion battery energy storage systems (BESS), and the use of chemical fire suppressants. The EIS addresses these risks only generically and fails to provide the scenario-based analysis required for a development of this scale in proximity to residential areas:

- **Battery and electrical fire risk:** The proposed development will utilise large-scale backup power systems, including diesel generators and likely battery storage. Lithium-ion battery fires are notoriously difficult to extinguish and produce toxic smoke containing hydrogen fluoride, carbon monoxide, and other hazardous gases. The EIS does not include detailed consequence modelling for a major battery or electrical fire event on adjacent residential properties, public recreation land (Blackman Park), or the Lane Cove West Public School catchment.
- **No demonstrated consultation with Fire and Rescue NSW:** The EIS provides no evidence of formal consultation with Fire and Rescue NSW (FRNSW) regarding emergency response capabilities and response times for a major fire event at a 90MW data centre in this location. This is a material omission, particularly given the proximity to residential properties and recreation land.
- **No community emergency planning:** There is no tailored emergency management or evacuation plan for the surrounding residential community, nor is there evidence that the development has been assessed against the FRNSW Data Centre Fire Safety Guidelines.
- **Diesel fuel storage risk:** The large quantities of diesel fuel required for backup generation (potentially in excess of 110,000 litres per facility, based on comparable NSW data centre assessments) present significant fuel spill, fire, and explosion risks. The EIS does not adequately address bunding and containment design, nor does it confirm whether licensing under clause 9 of the Protection of the Environment Operations Act 1997 (POEO Act) may be triggered by diesel storage volumes.

5.3 Questions for the Decision-Maker and Goodman

6. *What is the total volume of diesel proposed to be stored on site, and has the proponent confirmed compliance with AS1940:2017 bunding requirements and POEO Act licensing thresholds?*
7. *Has Fire and Rescue NSW been formally consulted regarding emergency response capability for a major electrical or battery fire at this site? If so, please provide that advice as a public document.*
8. *What consequence modelling has been undertaken for a worst-case fire scenario involving battery storage and diesel generators, and what are the predicted impacts on adjacent residential properties and Blackman Park?*

Source: NSW EPA, *Advice on EIS for data centre developments* (PAE-77806014, 2024); *Protection of the Environment Operations Act 1997* (NSW), cl 9; AS1940:2017 *The Storage and Handling of Flammable and Combustible Liquids*; Fire and Rescue NSW, *Guidelines for Data Centre Fire Safety*

6. Environmental Impacts – Water, Energy, and Biodiversity

6.1 Relevant EIS Sections

EIS Sections 8.5 (Air Quality), 8.6 (Biodiversity), 8.10 (Water and Waste Management)

6.2 Concerns Regarding Environmental Assessment

6.2.1 Water Consumption

The environmental impact of the proposed development's water consumption is significantly understated in the EIS. Peer-reviewed research published in npj Clean Water (Nature Portfolio, 2021) and reporting by the World Economic Forum (2024) confirm that a 1 MW data centre using conventional evaporative cooling can consume approximately 25.5 million litres of water per year. Applied to a 90 MW facility, this equates to a potential annual water draw of over 2.2 billion litres – equivalent to the annual water consumption of a large hospital complex.

Australian data centres collectively consume approximately 100 billion litres of water annually, a figure expected to grow significantly. The EIS does not disclose the proposed Water Usage Effectiveness (WUE) rating for this facility, nor does it commit to closed-loop or recycled water cooling systems that would substantially reduce this footprint. In a climate-stressed region, this is a material omission.

Source: Mytton, D., Data centre water consumption, npj Clean Water, Nature Portfolio (2021); World Economic Forum, Circular Water Solutions for Data Centres (2024); Sustainable Living Guide, How Data Centres are Draining Australia's Water (2025); Climate Council of Australia, Data Centre Boom and Renewables (February 2026)

6.2.2 Energy and Emissions

The Climate Council of Australia has confirmed that data centres in Australia currently source approximately 40% of their power from renewables. The EIS contains no binding commitment to 100% renewable energy supply for this facility, nor does it provide a full lifecycle greenhouse gas emissions disclosure that accounts for both direct (Scope 1) and indirect (Scope 2 and 3) emissions. The development will draw approximately 90MW of continuous electrical load – equivalent to powering approximately 90,000 homes.

Goodman Group's own head of planning acknowledged in the SEARs application that "noise and air quality impacts will also be key considerations" for this development. These issues are not adequately resolved in the EIS.

Source: Climate Council of Australia, Data Centre Boom and Renewables (February 2026); Goodman Group SEARS application, letter from Guy Smith, Head of Planning, 18 March 2025; Mingtiandi, Goodman to Invest \$722M Developing 90MW Sydney Data Centre (April 2025)

6.2.3 Biodiversity

The site is bounded to the south by RE1 – Public Recreation zoning (Blackman Park) and to the east by R2 Low Density Residential. The EIS relies on offsite biodiversity offsets rather than local on-site mitigation, and does not provide a detailed cumulative impact assessment for local fauna corridors, given that Goodman Group is simultaneously developing multiple data centres across greater Sydney (including in Macquarie Park, Guildford West, Mascot, and North Shore).

Source: Data Center Dynamics, Goodman files to develop 90MW data center campus in Sydney (April 2025); Lane Cove Council, Data Centre proposed for 12 Mars Road (2025–26); Goodman Group SEARS application, 18 March 2025

6.3 Questions for the Decision-Maker and Goodman

9. *What is the projected annual water consumption of the facility (in megalitres), what Water Usage Effectiveness (WUE) rating is targeted, and what commitment is made to non-potable or recycled water sources?*
10. *What legally binding commitment does Goodman make to 100% renewable energy supply for this facility, and when will this be achieved?*
11. *How have cumulative biodiversity impacts been assessed given the proponent's concurrent data centre development programme across greater Sydney?*

7. Visual and Amenity Impacts

7.1 Relevant EIS Section

EIS Section 8.7 – Landscape and Visual Impact Assessment

7.2 Concerns Regarding Visual Assessment

The proposed development will involve structures of 15–25 metres in height with a gross floor area of 18,829 sqm. This represents a fundamental transformation of the existing built environment immediately adjacent to low-density residential properties. The visual impact assessment in the EIS is deficient in the following respects:

- **Limited viewpoints:** Visual modelling has been conducted from a limited number of viewpoints, which do not adequately represent the perspectives of the most affected residents. Viewpoints from residential backyards, school play areas, Blackman Park, and other community spaces have not been adequately modelled.
- **No privacy or solar access assessment:** No analysis has been provided of privacy impacts, loss of sunlight to adjacent residential properties, or the seasonal variation in visual impact as vegetation changes throughout the year.
- **Character and amenity:** The development would fundamentally alter the low-scale, bushland-edge character of the Lane Cove West residential interface. No alternative design options that might better preserve community amenity have been explored or disclosed.

7.3 Questions for the Decision-Maker and Goodman

12. *Why does the visual impact assessment not include viewpoint modelling from residential backyards on Wood Street and adjacent streets, the Blackman Park recreation area, and the nearest school play areas?*
13. *What alternatives to the current building massing and height were considered and rejected, and on what basis?*

Source: NSW Planning Portal, SSD-82052708, EIS Attachments; In the Cove, Two New Data Centres Planned for Lane Cove Local Government Area (April 2025); Goodman Group SEARS application, 18 March 2025

8. Adequacy of the EIS and Precautionary Principle

Section 4.15 of the EP&A Act requires the consent authority to consider the significant likely impacts of the development. The EIS, as lodged, does not provide the independent, peer-reviewed, and site-specific evidence necessary to discharge this requirement for a development of this scale in this location.

In particular:

- The EIS cites no independent case studies or empirical evidence from comparable data centre developments located immediately adjacent to low-density residential zones in Australian cities. Most comparable facilities in Australia are located in industrial precincts or at substantially greater distances from homes.
- Where the EIS relies on predictive modelling, no independent peer review of that modelling has been disclosed.
- The precautionary principle, which is a foundational principle of ecologically sustainable development under the EP&A Act, requires that where there is scientific uncertainty about potential harm, the lack of full scientific certainty should not be used as a reason for postponing protective measures. The EIS does not apply this principle.

I submit that the EIS is not adequate to support consent, and that the application should either be refused or referred to the Independent Planning Commission for public hearing, given the scale, intensity, and community impact of the proposed development.

Source: Environmental Planning and Assessment Act 1979 (NSW), s 4.15; EP&A Act, s 1.3 (objects, ecologically sustainable development); NSW Planning Portal, SSD-82052708

9. Relief Sought

I respectfully request that the NSW Department of Planning:

- Refuse development consent for SSD-82052708 in its current form;
- Defer any determination until the NSW Parliamentary Inquiry into data centres has reported its findings.
- Alternatively, refer the application to the Independent Planning Commission for determination at a public hearing, given the scale of community concern and the significance of unresolved impacts;
- Require the proponent to provide: (a) independent, peer-reviewed noise assessment in accordance with the NSW EPA Noise Policy for Industry (2017), including worst-case generator and maintenance scenarios; (b) independent air quality assessment for generator emissions demonstrating compliance with the POEO Clean Air Regulation; (c) formal Fire and Rescue NSW advice and a publicly disclosed community emergency management plan; (d) full water consumption disclosure including WUE target and binding commitment to non-potable water sources; (e) binding renewable energy commitment with a legally enforceable timeline; and (f) extended visual impact modelling from residential and community viewpoints;
- Ensure that any consent granted includes legally enforceable and publicly monitored conditions addressing all noise, air quality, water, and fire safety impacts identified in this submission.

Source: NSW Planning Portal, SSD-82052708; EP&A Act, ss 4.15, 5.5; NSW Independent Planning Commission Act 2018 (NSW)

10. Conclusion

Project Mars Data Centre, as proposed, represents one of the most intensive industrial land uses ever proposed directly adjacent to a low-density residential neighbourhood in Lane Cove. The proponent is investing approximately AU\$1.2 billion in this development and is simultaneously developing multiple data centres across greater Sydney. The community deserves an EIS of commensurate rigour.

The EIS as lodged does not meet that standard. It fails to provide independent, peer-reviewed, site-specific evidence on noise, health, fire risk, water consumption, and visual impacts. It does not adequately protect the most vulnerable members of the community – including children with disability, who have the right to live and learn free from harmful environmental conditions.

I urge the Department to refuse or defer any determination on this application until the NSW Parliamentary Inquiry into data centres has reported its findings, and to ensure that the interests of the Lane Cove West community are given full and genuine weight in the assessment process.

Reference list of sources included in this submission SSD-82052708

Primary Planning Documents

1. **NSW Planning Portal** — *Project Mars Data Centre*, Application No. SSD-82052708, State Significant Development, Lane Cove LGA. Exhibition period 27 March – 28 April 2026 (extended to 5 May 2026). Available at: planningportal.nsw.gov.au/major-projects/projects/project-mars-data-centre
2. **Goodman Group** — *Secretary's Environmental Assessment Requirements (SEARs) Application, 12 Mars Road Lane Cove West*, lodged 18 March 2025. Letter from Guy Smith, Head of Planning. On file: NSW Planning Portal, SSD-82052708.
3. **Lane Cove Council** — *Data Centre Proposed for 12 Mars Road Lane Cove*, Hot Topics and Major Projects webpage, lanecove.nsw.gov.au (updated 2025–2026).
4. **NSW EPA** — *Advice on Environmental Impact Statement: Marsden Park Data Centre* (used as a reference for comparable EPA comments on data centre EIS requirements, evidence of what the EPA has required from comparable applications), Document Reference PAE-77806014, NSW Planning Portal, published 11 December 2024.

Legislation and Regulation

5. **Environmental Planning and Assessment Act 1979** (NSW), No 203, as amended. Sections 1.3 (Objects), 4.15 (Matters for Consideration), 5.5 (Duty to Consider Environmental Impact). Available at: legislation.nsw.gov.au and austlii.edu.au/au/legis/nsw/consol_act/epaaa1979389/
 6. **Disability Discrimination Act 1992** (Cth), Act No. 135 of 1992. Available at: legislation.gov.au
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 8. **Protection of the Environment Operations Act 1997** (NSW), No 156. Section 9 (licensing thresholds including petroleum/diesel storage). Available at: legislation.nsw.gov.au
 9. **Protection of the Environment Operations (Clean Air) Regulation 2010** (NSW). Group 6 emission limits for diesel generators. Available at: legislation.nsw.gov.au
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NSW Government Policy and Guidance

10. **NSW EPA** — *Noise Policy for Industry* (2017). NSW Environment Protection Authority, Sydney. Available at: epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-2017
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 12. **NSW EPA** — *Approved Methods for the Measurement and Analysis of Environmental Noise* (2021). NSW Environment Protection Authority. Available at: epa.nsw.gov.au
 13. **NSW EPA** — *Noise Guide for Local Government* (2013, updated). NSW Environment Protection Authority. Available at: epa.nsw.gov.au
 14. **Standards Australia** — *AS 1940:2017 The Storage and Handling of Flammable and Combustible Liquids*. Standards Australia, Sydney, 2017.
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WHO and International Health Guidance

15. **World Health Organization** — *Environmental Noise Guidelines for the European Region* (2018). WHO Regional Office for Europe, Copenhagen. ISBN: 978-92-8-905356-3. Available at: who.int/publications/i/item/9789289053563
 16. **World Health Organization** — *Guidelines for Community Noise* (1999). Eds Berglund B, Lindvall T, Schwela DH. WHO, Geneva. Available at: who.int
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Peer-Reviewed Research

17. **Smith MG, Cordoza M, Basner M** — 'Environmental Noise and Effects on Sleep: An Update to the WHO Systematic Review and Meta-Analysis', *Environmental Health Perspectives*, vol. 130, no. 7, article 076001 (July 2022). DOI: 10.1289/EHP10197. PubMed ID: 35857401. Available at: ehp.niehs.nih.gov/doi/10.1289/EHP10197
 18. **Alves JA, Paiva FN, Torres Silva L, Remoaldo P** — 'Low-Frequency Noise and Its Main Effects on Human Health — A Review of the Literature between 2016 and 2019', *Applied Sciences*, vol. 10, no. 15, article 5205 (28 July 2020). DOI: 10.3390/app10155205. Available at: mdpi.com/2076-3417/10/15/5205
 19. **Mytton D** — 'Data Centre Water Consumption', *npj Clean Water*, vol. 4, article 11 (15 February 2021; corrected November 2021). Nature Portfolio / Springer Nature. DOI: 10.1038/s41545-021-00101-w. Available at: nature.com/articles/s41545-021-00101-w
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Industry and Media Reporting

20. **Data Center Dynamics** — 'Goodman Files to Develop 90MW Data Center Campus in Sydney, Australia', 8 April 2025. Available at: datacenterdynamics.com
21. **w.media** — 'Goodman Files Application for "Project Mars" 90MW Data Center Campus at Lane Cove West, Sydney', 9 April 2025. Available at: w.media
22. **Mingtiandi** — 'Goodman to Invest \$722M Developing 90MW Sydney Data Centre', 14 April 2025. Available at: mingtiandi.com

23. **In the Cove** — 'Two New Data Centres Planned for In and Near the Lane Cove Local Government Area', 9 April 2025. Available at: inthecove.com.au
24. **Stockhead / The Australian** — 'Goodman Poaches Microsoft Data Centre Boss to Ramp Up Global Business', 17 April 2025. Available at: stockhead.com.au
25. **The Urban Developer** — 'NSW Reveals Hot List for IDA Data Centre Pathway', 31 March 2026. Available at: theurbandeveloper.com
26. **Climate Council of Australia** — 'Seizing the Opportunity to Do Data Centres Right: What Does the Data Centre Boom Mean for Australia's Switch to Renewables?', 19 February 2026. Available at: climatecouncil.org.au
27. **World Economic Forum** — 'Circular Water Solutions Key to Sustainable Data Centres', November 2024. Available at: weforum.org/stories/2024/11/circular-water-solutions-sustainable-data-centres