

AI and Sustainability: The Impact of Data Centres

AI is increasingly shaping our daily lives. As AI's reach expands, so too does its energy consumption – with serious implications for resources, emissions and environmental sustainability.¹

Data centres consume huge volumes of power and water and if their development is uncontrolled in the long-term may slow down the achievement of Australia's energy security and emissions reduction objectives, and globally cause public health concerns from the pollutants they release.²

Victoria is encouraging the establishment of more data centres by promising less regulation for them. Considering the pace at which Artificial Intelligence (AI) is developing, the leadership in Victoria is of the view that they cannot afford to impose new regulation on data centres. New regulations would take a significant amount of time to establish and become operational.³

Data centres support infrastructural and technological development, and make operations more efficient. They are significant investments which boost economies, and many regions around the world race to encourage their establishment. However, the energy required for AI is growing faster than the ability to build renewable, sustainable energy sources. While individual chips are becoming more energy-efficient, the rise in the number and scale of AI models cancels out these gains.

There is a need for dialogue amongst all stakeholders on how the many risks that data centres pose are to be handled to make the most out of their positives.

¹ Climate Leaders Coalition. AI, climate and the environment: Strategies to reduce the impact. September 2025. <https://www.climateleaders.org.au/wp-content/uploads/2025/10/2509-CLC-AI-Climate-and-Environment-Strategies-to-Reduce-Impact.pdf>

² Ren, S. & Wierman, A. (2025, November 5). Mitigating the Public Health Impacts of AI Data Centers. Harvard Business Review. <https://hbr.org/2025/11/mitigating-the-public-health-impacts-of-ai-data-centers>

³ Bleby, M. (Jan 30, 2026). Victoria woos monster data centres with light-touch regulation. Financial Review. <https://www.afr.com/property/commercial/victoria-woos-monster-data-centres-with-light-touch-regulation-20260127-p5nxd4>



Questions

1. Does the potential that AI holds outweigh the environmental impact of data centres? What can be done to make data centre operations more sustainable?⁴
2. Is Victoria's approach of reducing regulation the way forward to incentivise data centres and handle their impact?

⁴ The Economist Foundation, Topical Talk. AI and sustainability: difficult choices. <https://talk.economistfoundation.org/resources/ai-and-sustainability-difficult-choices/>