Submission to NSW Parliamentary Inquiry into Data Centres

Introduction

Sweltering Cities works directly with communities in hot suburbs and homes to advocate and campaign for more liveable, equitable and sustainable cities. Our work is at the intersection of health, inequality and climate change. We are a registered health-promotion charity with the ACNC and have been working in NSW since 2020. In that time we have spoken to thousands of NSW community members who support greener cities, safer homes, urgent climate action and more.

Heatwaves are the deadliest environmental disaster in Australia. Climate change is leading to longer, hotter summers and more frequent deadly heatwaves with devastating consequences for the health and wellbeing of our community. It is clear that we need urgent action to address the impacts of extreme heat and to create more resilient communities that can withstand the challenges of a changing climate.

Our organisation was founded in Western Sydney, and we continue to work with local communities to highlight the region's disproportionate vulnerability to extreme heat. We are deeply concerned by proposals for 'mega' data centres in suburbs like Marsden Park and Kemps Creek, which are areas already experiencing temperatures up to 10°C hotter than suburbs in the east. At this scale, it is undeniable that data centres act as significant urban heat islands, generating immense waste heat while driving the loss of critical tree canopy and green space through their construction and industrial zoning.

Moreover, it remains unclear to Sweltering Cities and the communities we represent, whether the localised heat impacts of data centres have been appropriately considered in planning approval processes. We are concerned by the lack of community consultation and the absence of meaningful local decision-making.The rapid State Significant Development approval pathways, seen in the NSW Government's approval of the CDC Marsden Park Data Centre within just 12 months, are relegating community voices to the sidelines. In the Marsden Park case, this fast-tracked process resulted in the dismissal of significant objections and health concerns raised by the Western Sydney Local Health District.

In preparation for this submission, we have gathered stories and feedback from community members across NSW. These accounts, particularly from those living in close proximity to proposed mega data centre sites in Western Sydney, highlight a serious fear that environmental and health risks are being imposed on the community:

“I live just a minute down the road from this proposed data centre & I completely disapprove. We have just heard from the UN that we have 13 years of fresh water usage left & data centres notoriously have extremely high water usage. Alongside that, it increases the temperature of surrounding areas & already in Western Sydney we are experiencing temperatures up to 10°C hotter than suburbs in the east & that will only get worse due to climate change & continuing developments.

I am also worried about energy demand and rising energy bills, noise pollution & air quality as we have seen issues all around American towns due to data centres. No one in the community I’ve lived in my entire 29 years of my life wants this data centre here. We have already had this area destroyed due to poorly planned housing developments, please rethink this decision- data centres are 100% unnecessary to life- we’ve lived our entire lives happily without them. But fresh air, water & climate is something no one can live without”. – Giacinta, Marsden Park

In this submission, we outline the serious risks data centres pose to Western Sydney regarding urban heat. We note our separate ‘Stop the Bill Shock’ submission to this inquiry regarding grid stability and energy bill protections, made in partnership with advocacy organisations, Antipoverty Centre and Parents for Climate. We propose greater accountability and transparency to ensure that the potential health and climate harms brought to the community by data centres are actively prevented, and that genuine community endorsement is sought throughout the planning process and long-term operation.

Heat impacts of data centres in Western Sydney

The Data Center Map lists 91 data centres in Greater Sydney, existing in clusters in Alexandria and Macquarie Park. New hyperscale data centres are increasingly being approved and developed in Western Sydney. The recently approved CDC Marsden Park Data Centre campus has a combined capacity of 504MW, while new proposals on Mamre Road in Kemps Creek reach 1GW. If completed, the Kemps Creek facility would be the largest data centre in the world.

These hyperscale data centres are being developed in a region that is already severely heat-stressed. Under a high-emissions scenario, Western Sydney could experience up to 46 days of extreme heat (over 35°C) annually by 2090[1]. This trajectory presents severe health[2] and

[1] Australia Institute, HeatWatch: Extreme Heat in Western Sydney (2022)
[2] 70% of respondents in NSW reported feeling unwell in the heat in Sweltering Cities’ 2026 Summer Survey (Australia's largest community survey on heat).

mortality costs[3], as well as rising costs of being able to keep cool[4]. **It is clear that heat resilience must be an immediate government priority, particularly for massive industrial projects, like data centres.**

The effects of data centres on urban heat and thermal comfort is a concern raised by community members: *"Requesting to not permit infrastructure like the data centres in Western Sydney, given the current heat wave and harsh outdoor environment for the people, it is going to aggravate the conditions further disrupting thermal comfort." - Sanchana, Sydney*

In relation to the Marsden Park data centre, we note the objection and concerns raised by the Western Sydney Local Health District (WSLHD). WSLHD identifies that surrounding communities in Bidwill, Shalvey, and Hassall Grove already face a high prevalence of chronic heart and lung disease. They warn that the cumulative exposure to heat, noise, and poor air quality from a 24/7 data centre facility can exacerbate these conditions, leading to higher Emergency Department presentations, increased mortality, and significant stress on health services in Western Sydney. Furthermore, the 24-hour operation of the data centre creates a "permanent change to the area" by introducing an additional heat load, which is especially concerning during summer months. The WSLHD also flags a possible underestimation of health risks due to the development's methodology of using annual averages and historical data, which fails to account for the "worst-case" impacts during extreme heat events.

Borland et al. (2023) estimate that 90% of data centre electricity usage is converted to low-grade waste heat. This waste heat is approximately 30-40 degrees Celsius (Terenius et al. 2025). This represents substantial sources of local heat, especially in the context of Western Sydney where large data centres (up to 1GW) are slated for construction.

Given the heat risks already faced by Western Sydney, it should be an immediate priority for the NSW Government to commission independent reports examining the effects of data centres on local heat islands. Any proposed development should conduct heat impact assessments, accounting for future climate data and the effects of an additional heat load on extreme heat days (35°C and above). The project should only be permitted to go ahead if it can prove that it will not generate and release additional heat in the local environment. Where heat is generated, data centre developers must implement waste heat recovery plans, prioritising public benefit when waste heat is being redirected, such as providing district and water heating.

[3] The National Climate Risk Assessment (2025) projects a 444% increase in heat-related deaths across Sydney if global heating surpasses 3 degrees Celsius.
[4] In its Burning Money report, the Committee for Sydney reports a 44% jump in the cooling component of energy bills per household in Western Sydney over the next 50 years.

Other local community impacts

While Sweltering Cities is primarily concerned about the heat health impacts of data centres, the communities we work with have also raised other potential local impacts, such as on air quality and noise pollution. The air pollution impacts of data centres stems from their use of backup diesel generators. The proposed Mamre Road data centre in Kemps Creek will have 852 backup diesel generators, and the process of testing these generators will result in noxious air pollution (Cumbo, 2026). The air cooling systems in data centres also produce a persistent humming noise.

> *"First the birds grow quiet. Then the wildlife disappears. Massive AI data centers are attacking nature with constant noise, light, energy use and heat. The birds are vanishing. Near Microsoft and Amazon AI data centers, birdsong once filled the air, now a constant mechanical roar never stops. Thousands of servers pulse inside these massive facilities, flooding the surroundings with light and noise. Birds struggle to breed and move their nests elsewhere. The balance of the ecosystem begins to crack, reaching even larger animals. The assault on nature is further powered by the AI boom" – Stacy, Millers Point*

The substantial water consumption from data centres is something that has been raised by community members, especially in relation to water restrictions during drought periods. Sydney Water predicts that by 2035, data centres will consume 25% of Sydney's total drinking water supply.

> *"The large water use of data centres concerns me more than anything else. It is not that many years since we had water restrictions in Sydney. Dry seasons will come again. We shouldn't be prioritising Data Centres over people when it comes to the provision of water." – Jennifer, Castle Hill*

While data centre developments are being fast-tracked through state approval pipelines, energy debt and hardship in Australia reached record levels through 2024–2025. This financial strain is felt most acutely in Western Sydney, where Sweltering Cities found that 34% of residents in the state's most disadvantaged postcodes face chronic or daily energy cost stress[5]. As data centre growth concentrates in these areas, the sharp rise in electricity demand puts immense pressure on the grid, often forcing consumers to absorb the resulting higher prices.

This is a documented global risk. For example, data centre expansion in parts of the US led to a 267% jump in wholesale electricity costs being passed down to households. It is imperative that the creation of new data centres, especially in heat vulnerable suburbs, does not result in energy bill increases. We point to examples in the US, where states such as Georgia, Virginia,

[5] Sweltering Cities 2026 Summer Survey: NSW Snapshot

Oregon, New Jersey and Utah are all in the process of debating bills designed to protect consumers from higher electricity prices due to data centre energy demand.

Summary

Reflecting the concerns raised above, we urge the Inquiry to recommend the following requirements for data centre developments across the state and in Western Sydney:

- **Evidence that Western Sydney will not be made hotter**

The NSW Government must mandate that data centres are not generating and releasing additional heat in already-heat vulnerable areas. Data centre approvals must be contingent on rigorous heat impact assessments, using future climate projections, to ensure that the development is not exacerbating local heat islands during extreme heat events. Waste heat recovery plans must prioritise public benefit.

- **Mandatory blue-green infrastructure**

All data centre developments must integrate blue-green infrastructure to minimise worsening local heat. This can be done by ensuring that projects retain and expand high-quality mature tree canopy on and around the site and investing in blue infrastructure that provides direct cooling to local communities. This should be complemented by measures that contribute to local heat-resilience, for example through ‘developer-pays’ community facilities and green spaces.

- **No costs to community**

It must be an immediate priority for the NSW Government to guarantee that data centre demand does not lead to higher energy prices for local residents. Over the sumer, Sweltering Cities hears from community members everyday about how the rising costs of keeping cool make it difficult to stay safe and healthy during extreme heat. Any strain that data centres place on energy and water resources will be harmful to local residents. We assert that the financial and environmental costs of data centres must be borne by the companies, not the community.

Community Comments

Sweltering Cities works with communities across Western Sydney, including in Marsden Park, Eastern Creek, and Kemps Creek, where hyperscale data centres are slated for construction. As the comments below indicate, there is severe concern within these communities about the local impacts of these data centres.

The following comments were submitted to us for inclusion in this submission.

No matter the attempts to make data centres “green” the scale these centres are being made means giant lands that once would absorb heat, absorb water and be able to turn green, will now be heat sinks. Also the support of AI will continue undermine actually attempts at helping people know what is going on.
Patrick, Bella Vista

I am incredibly worried that my local area will further experience severe adverse climate issues on the basis of these data centres. We have already seen exemplars of how data centres work in the US, to which there has been a negative impact, and despite the innovation this may bring to the Australian digital space, Western Sydney is already struggling with heat and adverse socioeconomic impacts and we can’t afford, monetarily and logistically, to host these centres.
Kaitlyn, Baulkham Hills

Data centres are needed but this shouldn’t be rushed, this needs to be designed to have the best practices in place to limit impacts on the environment, communities, the grid … :
- Ensuring heat is not wasted and dumped, amplifying urban heat islands but instead reused.
- Limiting water usage and reusing as much as possible
- Recycling electronic waste, reducing environmental impact and extracting valuable materials
- Locations should be chosen to limit impact

Nicolas, Seven Hills

I live just a minute down the road from this proposed data centre & I completely disapprove. We have just heard from the UN that we have 13 years of fresh water usage left & data centres notoriously have extremely high water usage. Alongside that, it increases the temperature of surrounding areas & already in Western Sydney we are experiencing temperatures up to 10°C hotter than suburbs in the east & that will only get worse due to climate change & continuing developments. I am also worried about energy demand and rising energy bills, noise pollution & air quality as we have seen issues all around American towns due to data centres. No one in the community I’ve lived in my entire 29 years of my life wants this data centre here. We have already had this area destroyed due to poorly planned housing developments, please rethink

this decision- data centres are 100% unnecessary to life- we've lived our entire lives happily without them. But fresh air, water & climate is something no one can live without.
Giacinta, Marsden Park

No data centres! They are no good for the community!
Bernadette, Carlingford

Approval of data centres should be contingent on environmental performance, with operating license suspended until they have renewable energy electricity and recycled water contracts in place. Some examples include

- Directly buying clean power through power purchase agreements (PPAs).
- Co-locating centres with renewable generation and big batteries, to reduce their energy costs and increase energy security while cutting climate pollution. Aka not in the Southern Highlands where a new gas fired power station is required for their operation.
- Supporting the construction of large wind and solar farms to power data centre operations.
- Installing or upgrading equipment to improve energy efficiency.

Even though Western Sydney is in climate zone 6 according to NSW and Australian Regional Climate Modelling (NARCliM), the urban heat island effect makes it particularly vulnerable to heat waves. I'm concerned that unless these data centres have sustainability performance and vegetative and water buffers, they will significantly contribute to the heat island effect.

Data centres are increasingly exploring the integration of ponds, water features, and plants to facilitate evaporative cooling as a sustainable alternative to traditional mechanical chillers, which can reduce cooling energy consumption by up to 30%. Reference: Junjie Chu and Xiang Huang (2023) "Research status and development trends of evaporative cooling air-conditioning technology in data centers" Energy and Built Environment

This means former and soon to retire coal fired power stations like Liddell, Bayswater, Eraring, Mt Piper, Vales Point which are situated besides lakes and ash ponds, and have existing high voltage power lines, should be more suitable locations than greenfields sites. Another source of recycled water to use in data centre evaporative cooling is treated sewage, which is currently pumped into the ocean at numerous locations on the eastern seaboard.
Cath, Blacktown

Why not build data centres in the ocean if we really need them. Plenty of water there to keep them cool and a few wind turbines and wave energy could provide a lot of the power.
Lyn, Tamworth

The large water use of data centres concerns me more than anything else. It is not that many years since we had water restrictions in Sydney. Dry seasons will come again. We shouldn't be prioritising Data Centres over people when it comes to the provision of water.
Jennifer, Castle Hill

Hello, I am writing to you to express my opposition to the building of any data centres in Western Sydney.

Generative AI data centres (or 'slop factories' as I call them) consume an obscene amount of resources and produce an ungodly amount of heat that will further boil an already overheated region of Sydney, as well as completely undermine our commitments to create an emissions free economy by the middle of the century, and for what?

Generative AI slop is proving to have an overwhelmingly negative impact on our communities and our society at large: it is making making people think less and become more dependent on computers to function, it is taking people's jobs and livelihoods, be they creative pursuits or just a means to survive, and it is making it harder to just perform basic tasks online through it's forced insertion into every tech platform.

It doesn't even contribute to the economy money-wise, it has only been normalised so rapidly because of techbros who want to replace humanity with machinery because they hate anyone who doesn't look, talk, or think like them.

If these slop factories are approved, it will show to the world that the NSW government does not care about its citizenry, and only cares about pinching a few extra pennies (which they wouldn't need to do if they were better at planning things.), even if it means burning the planet in the process.

Please do what's best for everyone, and reject these plans.
Rohan, Merrylands

I live in Bathurst. Think very carefully before you go ahead with the proposed Data centre. We don't have enough water. We were down to our last 10% from the Chifley Dam in the drought. Orange was knocking at our door. So was Cadia Goldmine and the proposed Regis mine. What is the hierarchy of need, above or below agriculture and environment, people and industry? What if a data centre had to stop pumping water to cool? What are the risks to the centre and to the neighbourhood? Crazy stuff.
Stephanie, Bathurst

These billion dollar projects should not impose health ,environmental or economic costs to the public.
Jennifer, Moore Park

Data Centres are probably inevitable to serve our IT needs into the future. Perhaps the extra water, electricity and energy required can be extended to meet the needs of people living in Western Sydney.
Cecilia, Homebush

There is currently no justice in the way that GenAI is being used or set up to be used in our economy. Building massive data centres is an example of this – they use so much electricity and water, they take up so much space. The productivity 'gains' from GenAI usage are not benefitting the people or communities. I am really worried about adding more heat to communities. The benefits go to who?
Wendy, St Peters

I don't think its a good value add to have data centers near where people are.
David, Macquarie Park

Data centres must operate on 100% renewable energy and fully offset their natural resource use through verifiable green technologies and practices. This transition must occur as a matter of urgency, with clear milestones and deadlines to align with global climate targets.

All claims of renewable energy use and offsets should be independently verified and reported transparently to stakeholders. Sustainability standards should cover the entire lifecycle of data centres, from construction and hardware procurement to operation, cooling, and eventual decommissioning. These measures are critical to reducing emissions, protecting local ecosystems and water resources, and ensuring digital infrastructure supports a stable climate future.
Pablo, Ultimo

Requesting to not permit infrastructure like the data centres in Western Sydney, given the current heat wave and harsh outdoor environment for the people, it is going to aggravate the conditions further disrupting thermal comfort.
Sanchana, Sydney

AI data centres use too much water & electricity, the are a driving force of anthropogenic climate change/global warming & they pollute the air & cause cancers in the local areas.
Keith, Armidale

I suggest that resources may be better spent on climate-change mitigation strategies. Plant more trees! Capture and reuse more rain water!
Tracey, Annandale

First the birds grow quiet. Then the wildlife disappears. Massive AI data centers are attacking nature with constant noise, light, energy use and heat. The birds are vanishing. Near Microsoft and Amazon AI data centers, birdsong once filled the air, now a constant mechanical roar never stops. Thousands of servers pulse inside these massive facilities, flooding the surroundings with light and noise. Birds struggle to breed and move their nests elsewhere. The balance of the ecosystem begins to crack, reaching even larger animals. The assault on nature is further powered by the AI boom
Stacy, Millers Point

Western Sydney is already heat-stressed, facing more heatwaves, health risks, and rising costs for cooling. We know the data centres that are being approved in Western Sydney will demand huge amounts of energy, water, and cooling. So why are we not hearing about their impacts on heat, health, electricity bills, water use, and air quality? How will their increasing pressure on energy and water resources affect our ability to stay cool and safe during heatwaves?
Frank, Bronte

It is completely impossible to achieving reductions in climate change if these infrastructures go ahead. They must supply and build their OWN power source – which MUST be renewable and capture their OWN water and recycle it – the community CANNOT afford to lose an ounce of water, nor can it afford any more climate events and the insurance nightmare it brings.

It's up to the government to show a spine and stand up to these corporations and say enough is enough.

BUT because of donations and political lobbying, jobs for the boys and pressure from right wing governments that these companies are often home to – I don't expect much. Only voting at the polling station for sanity, will make a difference !
Adrian, Kembla Grange

Don’t put them in western Sydney
Emma, NSW

The Cumberland Plain isn’t the place for massive heat generators, they should be in cool and cold climate areas, and if in temperate zone, where there’s a cooling sea breeze.
Jimq, Canterbury

Are the tech giants paying for the water ? are they going to harvest grey water ?, will our power bills go up ? What subsidies is the govt providing ?
Glen, NSW

Please tell the public the following:

What conditions is the NSW government placing on the building of data centres?

Are you requiring them to build their own solar or wind farms to power their centres?

Where will their water come from? Will their mega use of water affect the supply of water to the community?

Western Sydney is already dealing with extreme heat in summer? Will data centres exacerbate this?

Will community consultation be manditory? Will they be required to contribute financially to the community the way Solar and wind farms are?

PLEASE do not allow them to become predatory
Jean, Drummoyne

The greater Western Sydney is becoming a heat trap with over development as it is. Now with the airport ready to open, constant clearing of land for development with insufficient replanting of trees. Now the government wants to approve the building of Data Centres that guzzle electricity and water in an already stressed area.

In view of these rash decisions, I'm seriously looking at moving away from NSW to a place that gives more thought to the wellbeing of its tax paying residents and cares more for its environment.
Anita, Penrith

Data Centre are power hungry, they have intense energy and water demands. A single AI Data centre can consume as much electricity as 100,000 households and use millions of gallons of water daily.
Maria, Dundas Valley

I don't like these big data centres they are a big polluter, we need to research more environmentally ways to store data.
John, Coogee

When will the NSW govt stop jamming more concrete structures into Sydney basin?

It doesn't take a rocket scientist to work out these AI centres are detrimental to everything. Look at what's happened to communities in Melbourne.

If we have to have them move them over the range where there's loads more space, they won't be in the public's faces, they won't add more heat and utility stress to an already overcrowded Sydney that can barely cope as it is.

If you push ahead, how much will you then pay for the next research study to determine that, shock horror, western Sydney is hotter? You're ruining ppl's lives and livelihoods by appeasing corporations who have the cash to bully their way into getting what they want.
Tracy, NSW

I see very little evidence of solar panels in the image of the Eastern Creek Data Centre Expansion. Why can't they be required to generate their own power. As for access to water -are they planning to recycle water? It isn't just Eastern Creek that is an issue. A huge data centre is to be built at Artarmon, right next to Royal North Short Hospital. How is it reasonable to have a major hospital have to compete for resources with a data centre?

We already know inner city areas do not have sufficient resources for both data centres and affordable housing after the cancellation of a social housing proposal at Macquarie Park because resources were insufficient. And who is paying for these mega-centres, and how much

are they being subsidised by governments? What are their corresponding obligations to the communities in which they are to be placed?
Sandey, Mt Colah

With reference to Mazlow's Hierarchy, essentials include water, food & shelter. It is well known there is a chronic housing (shelter) crisis in Sydney's west, dam water levels vary despite rapidly increasing population, & the current petrol panic buying impacts on food & essential supplies availability, escalating prices & delivery. Not to forget the anticipated permanent psychological, environmental & physiological impact that data centre construction will create in communities already suffering due to extreme heat.
Glenys, Castelreagh

This is a dreadful idea. Western Sydney is already a flat plain of heat and extreme weather due to poor environmentally appropriate housing builds. Adding a data centre there would absolutely add to this, and make living there even more difficult and add to the already severe heat issues. You need to be building more trees and shade, not energy and water consuming data centres that'll require costly and extreme methods to keep it cool.
Shasha, Harris Park