

Planning the Digital Transition

PLANNERS LEADING
DATA CENTRE DEVELOPMENT

PLANNING INSTITUTE OF AUSTRALIA
NSW STATE CONFERENCE

SEPTEMBER 2026



SGS
Economics
& Planning

Certified





Every swipe, tap and click...

Data centres are a land use issue.



Scale of investment



Location matters



Opportunities



\$51.9B

NSW data centre SSD pipeline (August 2026)
+ 60 operating & more under construction

National: \$150B by 2030.

Dominant driver of business investment and growth.

Along with energy investment, data centres are factors in solid GDP growth.

Global: \$7T spend by 2030 (McKinsey)



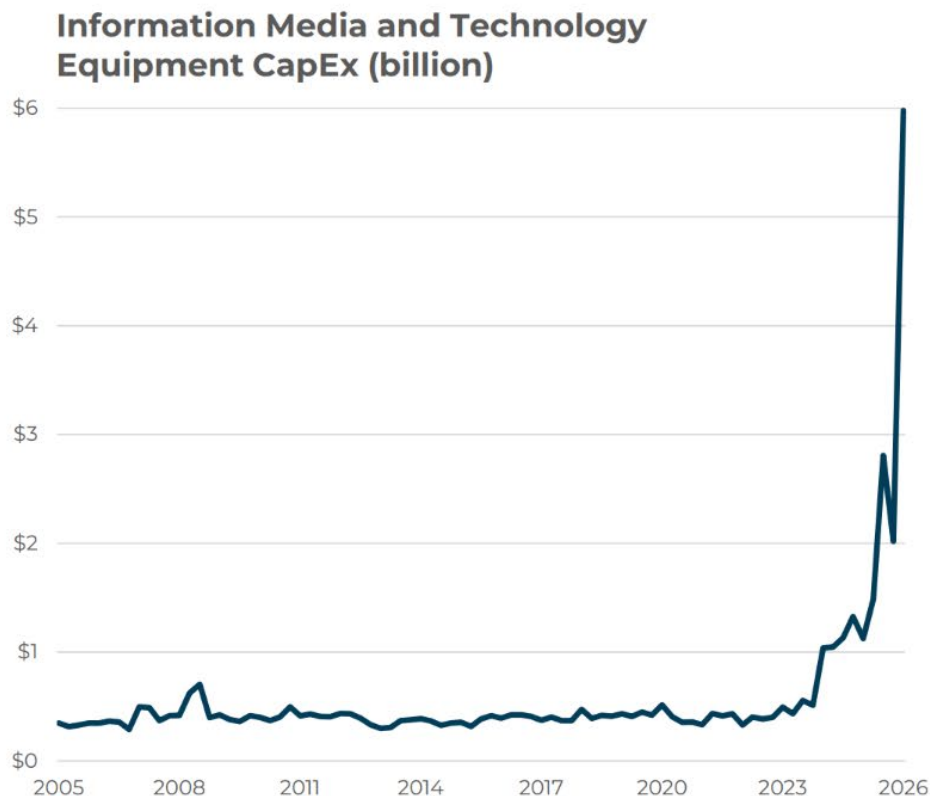
Source: Data Center Map, DATACENTERS.com.
Accessed August 2026

Two driving forces

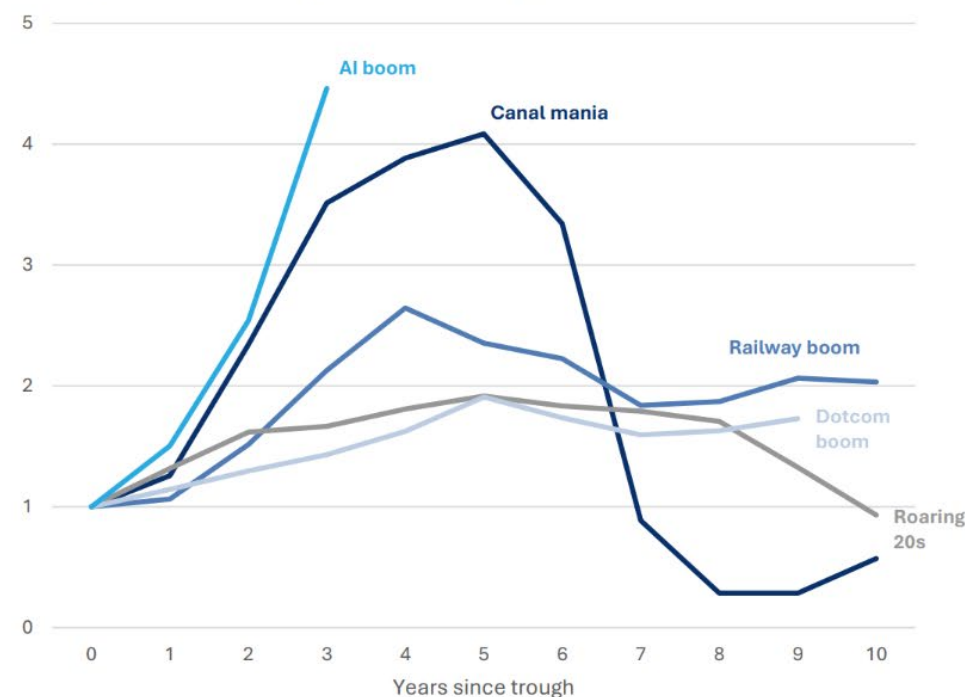
1. **Every day digital activity:** streaming, uploading to cloud, process and using more data.
2. **Artificial intelligence:** shifting the scale and intensity.



Capital spending tied to AI. Pushing growth.



Investment during selected economic booms, multiples relative to pre-boom trough



Source: Australian Bureau of Statistics, Cranmer (1960); Rungcharoenkitkul (2026b); Bank of England; Federal Reserve Bank of St Louis; Bank of America; S&P Global Market Intelligence; companies' communications; national data; BIS.

Typical types of data centres



EG: CDC DATA CENTRE MARSDEN PARK, 504MW CAPACITY



EG: NEXT DC S4 DATA CENTRE, HORSLEY PARK 232MW



EG: COMMERCIAL CITY CENTRE BUILDINGS, MELBOURNE

AI Campus

Large: > 500 – 1,000 + MW

AI training. High compute density.

Regional or remote locations with dedicated power.

Network latency irrelevant.

Hyperscale & Enterprise

Medium: 50–500 MW

AI, cloud and internet services. Inference capacity.

Distributed closer to end users to be more responsive.

Business parks, industrial areas.

Some 3rd party providers.

Edge

Small: < 15MW (SSD threshold June 2023 is >15MW)

Decentralised close to end users, low latency (network performance and user experience), non-cloud based, high security.

Commercial buildings or co-located sites ie hospitals or universities.

What location attributes do data centres seek?

Subsea cables

Fibre

Water

Energy +
transmission lines

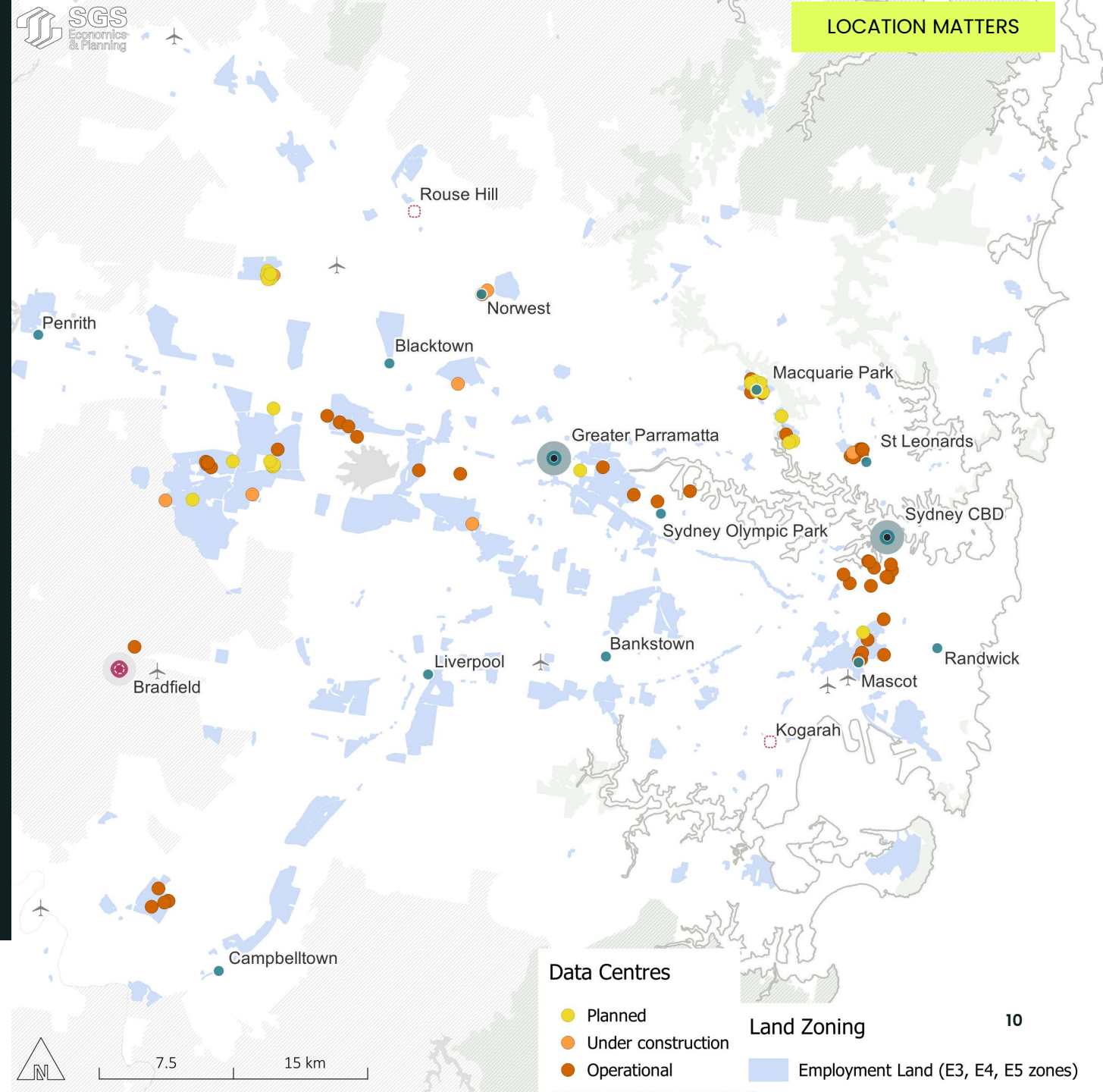
Greater Sydney

Industrial land



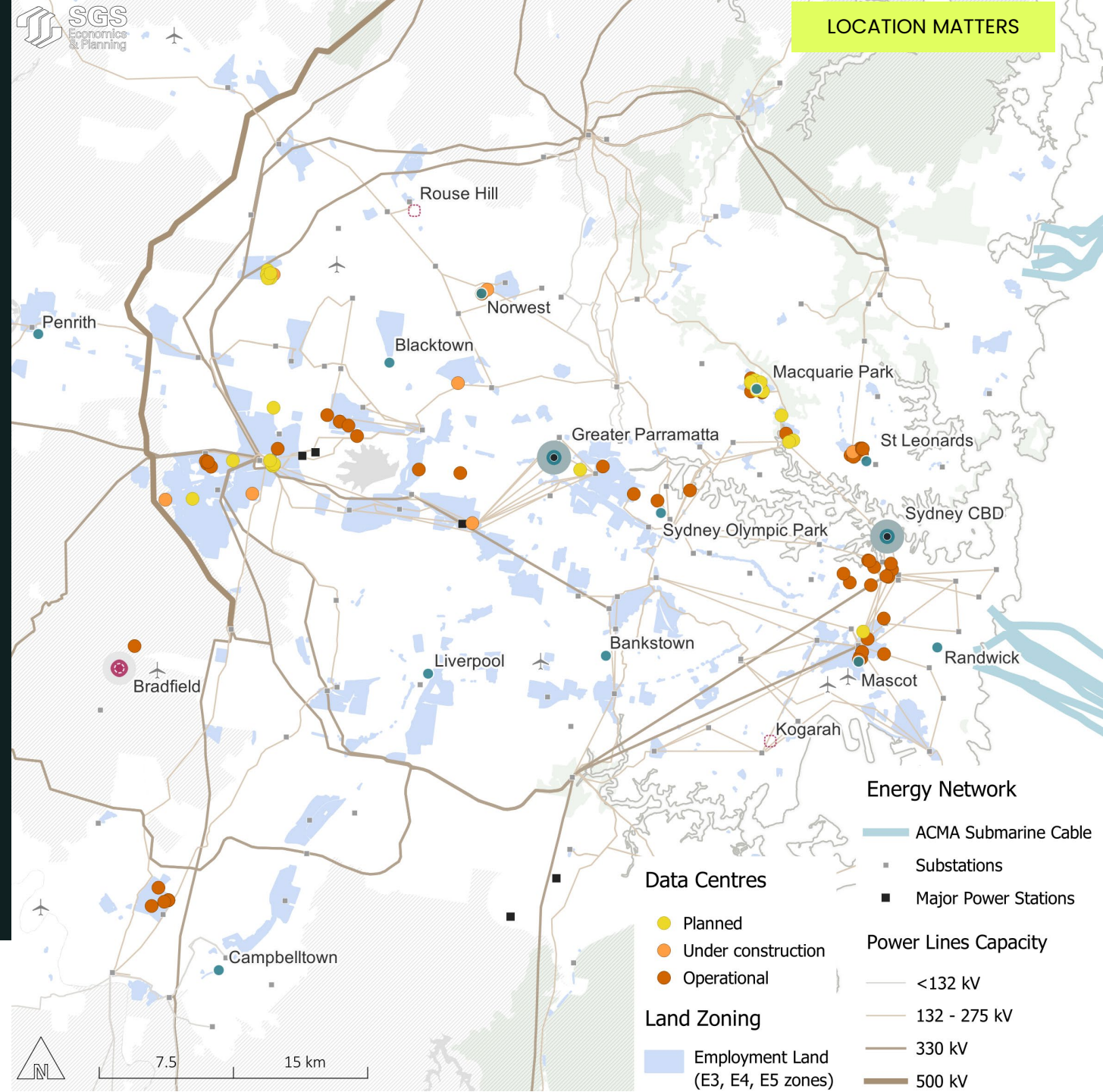
Greater Sydney

Data centres



Greater Sydney

Clusters follow energy and fibre



NSW Data centres



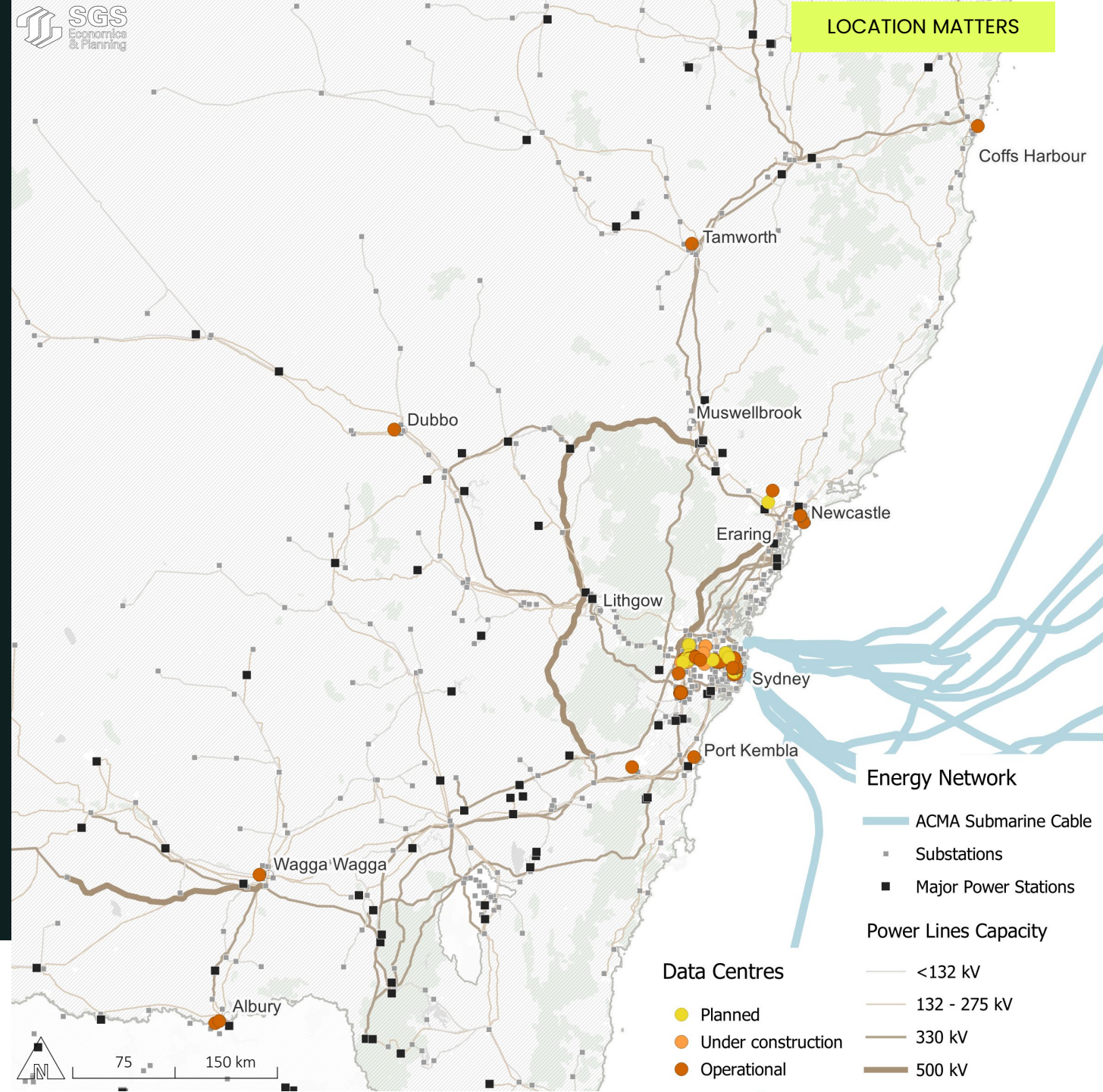
NSW Data centres

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Data centre source:
Data Center Map,
DATACENTERS.com.
Accessed August 2026

Land zones source: NSW
LEP, 2026

Energy network source:
Digital Atlas of Australia



Policy Response

National AI Plan & Data Centre Standards

"we have space"

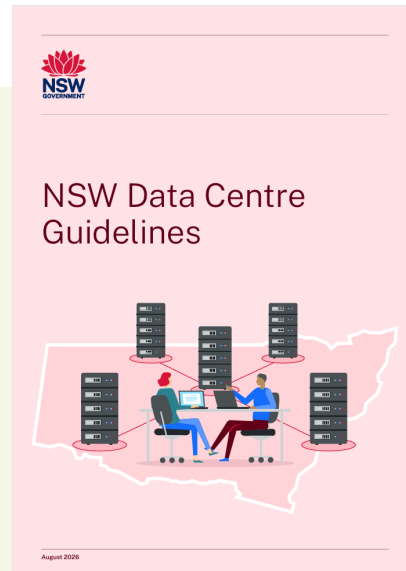


Early 2027 Nationally consistent minimum standards for energy, water and land use.

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NSW Data Centre Guidelines

NSW is an appealing location.



August 2026

NSW Legislative Council Inquiry Report due by 30 September.

Sydney Plan

Action 6.4 Identify potential new industrial land, including identifying suitable industrial lands for data centres.



August 2026

Local government

LG is all about land use & location!

NSW Parliamentary Inquiry
6 LG submissions + NSROC, WSROC, NGAA.

National Inquiry into AI and data centres.. 5 LGA submissions.

Case Study:
Northumberland UK

Aligning data centre investment

with land use, infrastructure & economic development

Northumberland

North East England

(bordered by Cumbria, Durham, Tyne and Wear and Scotland)

Industrial legacy to digital infrastructure

Large rural county

Population: 320,000

Built up as: Coal mining, shipbuilding and heavy industry.

Repositioning: strong visitor economy (renowned coastline and castles), renewables, advanced manufacturing, digital and AI.

Designated UK AI Growth Zone: framework for government, industry and local partners to maximise broader economic impact of digital infrastructure.

Key attraction was access to power.

FORMER CAMBOIS POWER STATION SITE



ICONIC LANDSCAPES AND HERITAGE



With thanks to **Sarah McMillan**
Director of Economic Development & Growth
Northumberland Council

Driving economic and social value

What does the region get in return?

1. Northumberland Growth Fund £110 million to support economic growth and job creation.
 - Infrastructure and Employment Land site enablement
 - Recoverable fund, investing in business growth
2. Created social value through procurement
 - Local recruitment
 - Skills and training
 - Community investment
3. Refreshed economic strategy
 - Future employment land requirements.
 - Appropriate locations for growth.
 - Infrastructure priorities.
 - Sector strategies to align broader innovation economy.



NSW Data centres

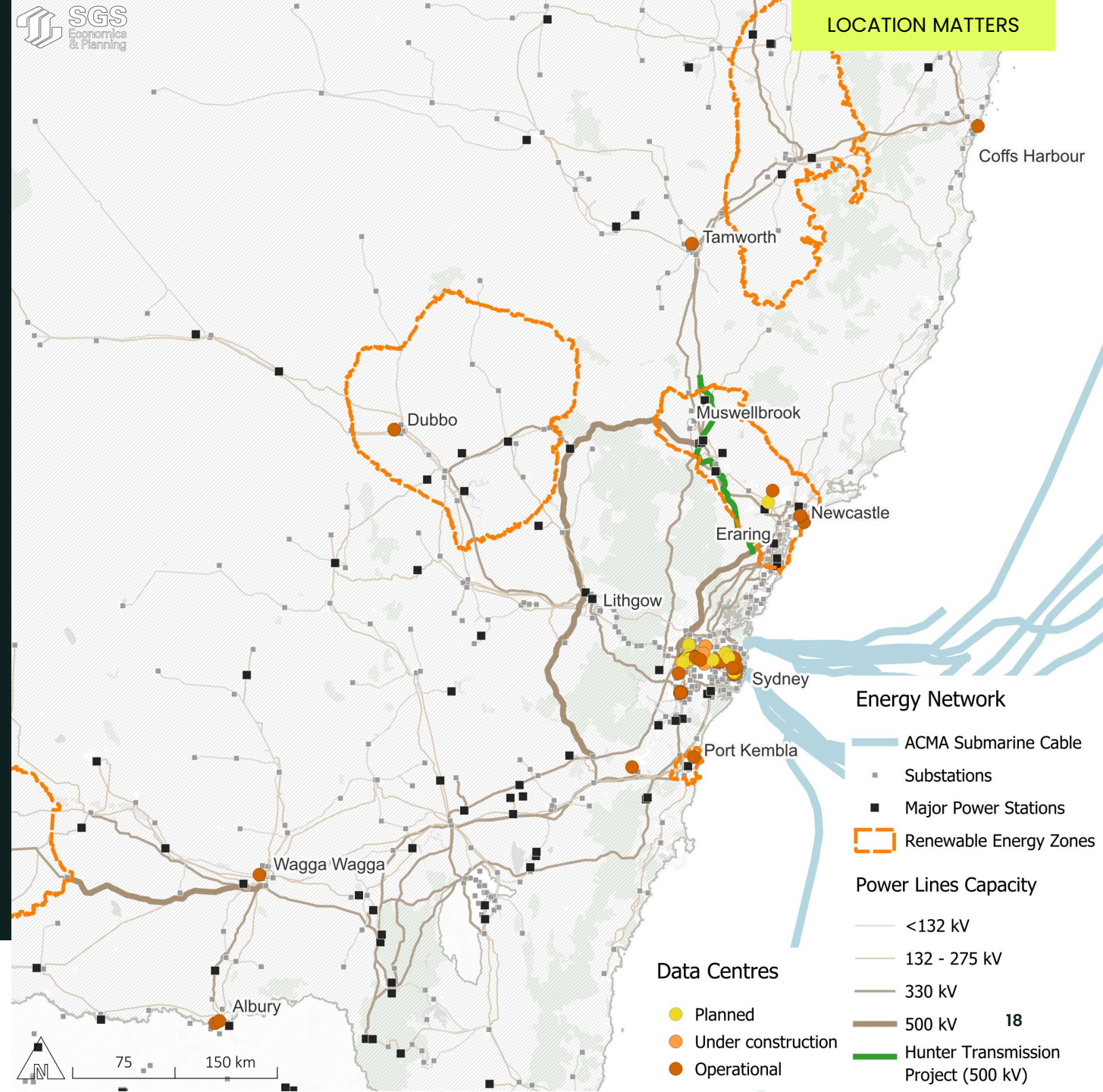
Opportunities to align
with energy and
economic development

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Data centre source:
Data Center Map,
DATACENTERS.com.
Accessed August 2026

Energy network source:
Digital Atlas of Australia

REZ and HTP source:
NSW Government,
Energy Co



Opportunities

Spatial framework for digital infrastructure.

1. Strategic Spatial and Economic Planning

2. Precinct and Site Planning

1. Strategic Spatial Planning

Principles to identify the right locations for large-scale data centres.

1. Align with infrastructure.
2. Integrate with economic opportunities and future industries.
3. Address displacement of other valuable strategic land uses.
4. Plan for resilience and evolution, by building in redundancy.
5. Deliver public value (skills training, local employment, community investment).

2. Precinct and Site Planning

Principles for development of data centres

1. Provide buffers to bushland, flood risk, including managing sediment runoff risks.
2. Consider adjacent or co-located uses.
3. Respond to adjacent current and planned building heights, footpaths, street connections, public domain and heritage values.
4. Accommodate future access needs for asset renewal and maintenance.
5. Safe connections to fibre, water and energy infrastructure networks.
6. Seek precinct solutions for sustainable energy generation, heat re-use, and use of recycled water.

Key takeaways

1. Data Centres are a land use issue.
2. Location matters, and planners have an important role.
3. Spatial framework for digital infrastructure
 - guide strategic, precinct and site planning
 - create enduring economic and social value.



Opportunity to strengthen
economies and communities.

Questions?



Alison Holloway

Principal & Partner

alison.holloway@sgsep.com.au

SGS Economics and Planning Pty Ltd

www.sgsep.com.au

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MUWININA, WURUNDJERI, AND GADIGAL PEOPLES.