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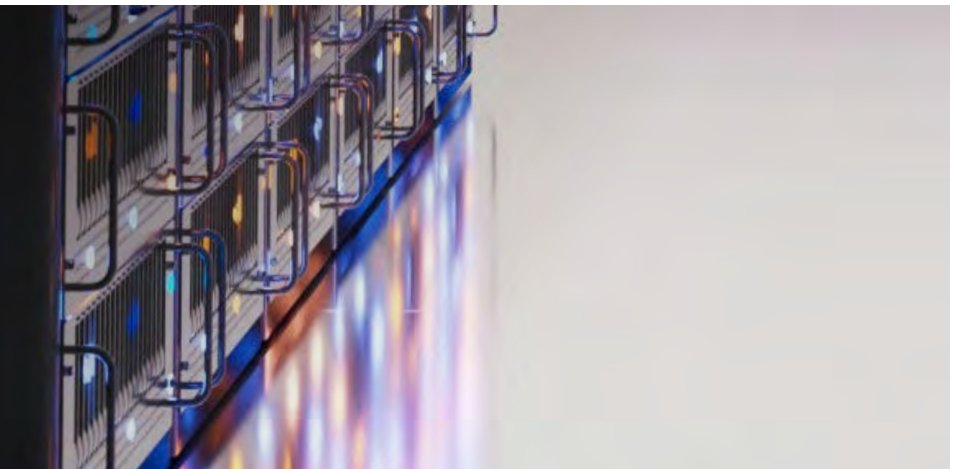
DATA CENTRES: WHERE DIGITAL LIFE MEETS REAL INFRASTRUCTURE

A practical guide to what data centres are, how they work, and what they mean locally



CONTENTS

A DAY POWERED BY DATA

Everyday digital services need real infrastructure.

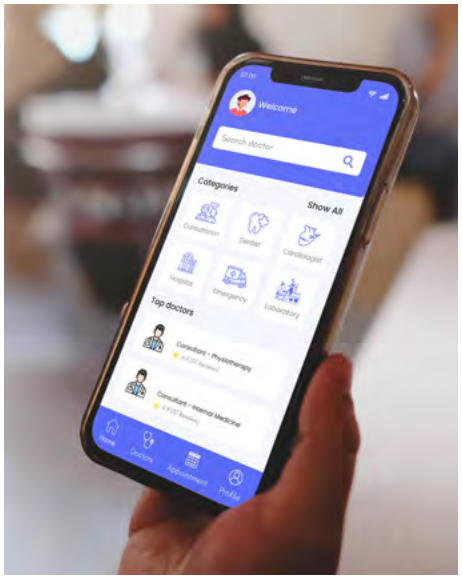
When you check traffic, pay for groceries, book a medical appointment, check social media, stream a show, join a video call, use online banking, or send a message, data moves behind the scenes.

That data is not floating in the sky. It is stored, processed, and delivered through physical infrastructure, including data centres.

Data centres are the secure buildings that help keep digital services available 24/7. They support the apps, systems and online tools that people, businesses, schools, hospitals, and governments rely on every day.

As they have a physical footprint, they need land, energy, cooling, secure operations, skilled people, and careful planning. At AirTrunk, our role is to build and operate the infrastructure behind digital services — and to do it responsibly, reliably and safely.

EVERYDAY DIGITAL SERVICES NEED DATA CENTRES



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THE INFRASTRUCTURE BEHIND EVERYDAY SERVICES

WHAT IS A DATA CENTRE?

A data centre is a secure building filled with powerful computers called servers.

Servers store, process and deliver data on a 24/7 basis. That data supports digital services that we all use, such as email, banking, streaming, maps, online learning, business systems, healthcare platforms, and government services.

A data centre is built to keep these systems running. It includes power systems, cooling equipment, fibre connections, security controls, and backup systems so services can remain available.

You can think of it as part of the physical foundation of the digital world. Just as roads, power lines, and water networks support daily life, data centres support the online services people use every day.

WHAT'S INSIDE?

Servers: store and process data

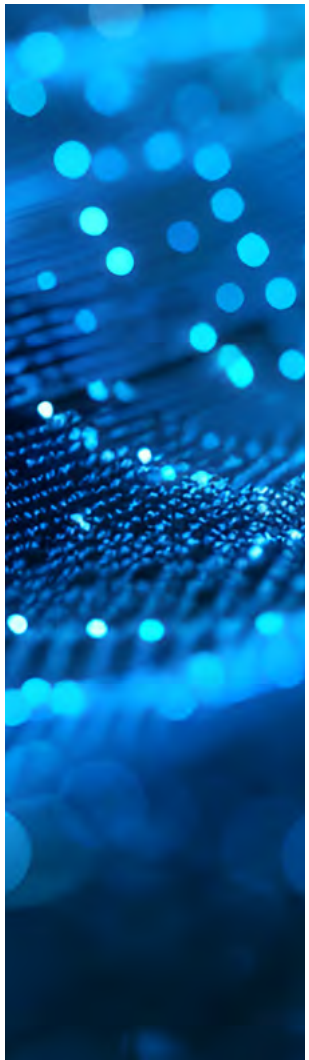
Cooling: keeps equipment at safe temperatures

Power: keeps systems running

Fibre: moves data quickly

Security: protects the facility and equipment

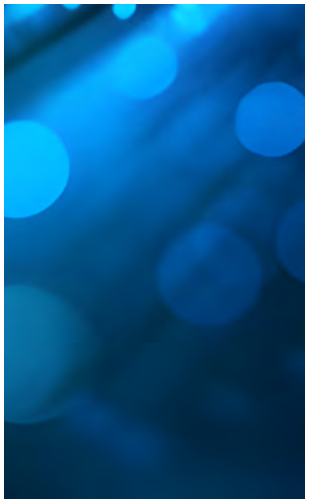
WHAT IS "THE CLOUD"?



COMMON PHRASE

"IT'S IN THE CLOUD."

What it means:
Your data is stored and processed through physical infrastructure, including data centres



"The cloud" is not in the sky.

It is a network of data centres and communications networks that store and deliver digital content. When people save a photo, open an app, stream a movie, or use online banking, their device connects to systems that may be housed in data centres.

Storing and processing data in purpose-built facilities can be more reliable, secure, and 7 times more efficient than every organisation running its own small server room[1].

1 Mandala, Data Centres as Enabling Infrastructure, November 2025, p. 18.

DATA CENTRES SUPPORT EVERYDAY LIFE

Data centres power more everyday moments than most people realise, helping the digital services you rely on run seamlessly and reliably.

Morning

You check the weather, traffic, or public transport before leaving home.

Data moves between your device, networks, and systems that process information quickly.

School, work and business

Businesses use digital systems to serve customers and keep operations moving.

Workers join video calls, share files, and access cloud-based tools.

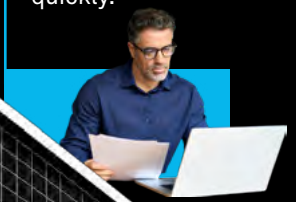
Students use online learning platforms.

Errands

Tap-and-go payments, online shopping, delivery updates, and supermarket systems all rely on digital services that need data to move safely and quickly.

Money and life admin

You might check your bank account, pay a bill, update an insurance claim, book travel, or manage an online account. Secure digital infrastructure helps everyday transactions happen safely and quickly.



Staying connected

Families message each other, grandparents join video calls, parents receive school notifications, and friends share photos or updates.

Data centres help process and deliver these interactions in seconds.

Health and public services

Medical bookings, patient systems, government portals, and emergency networks depend on secure, reliable digital infrastructure.

Evening

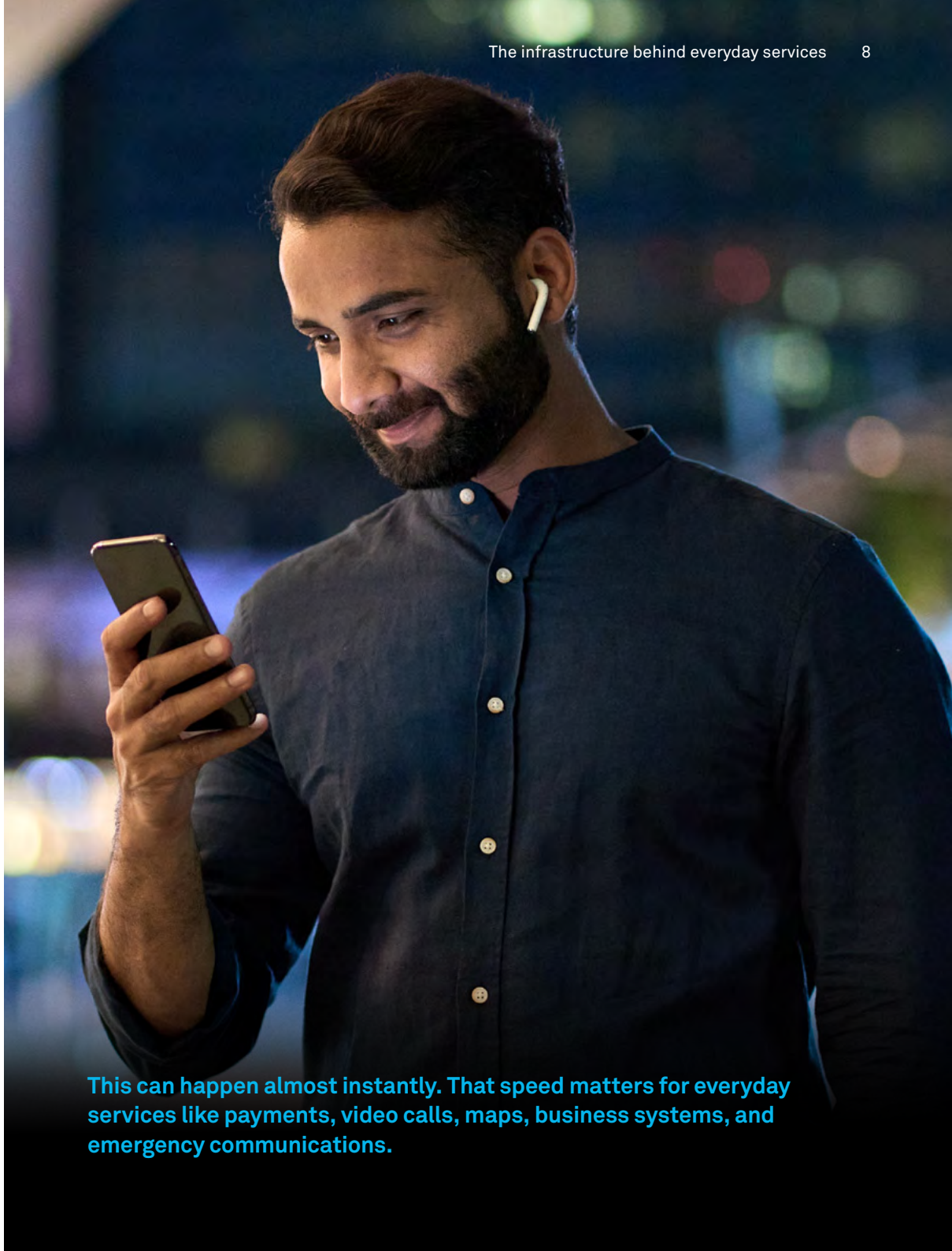
You might stream a show, play online games, use a smart home device, upload photos, or listen to music.

Data centres enable digital content and services respond when people need them.

HOW DOES DATA MOVE?

Most digital activity feels instant. Behind that speed is a physical journey through networks, fibre connections, and data centres that help everyday services respond when people need them.

1. Your device sends information through Wi-Fi or a mobile network.
2. That information moves through your internet provider and network equipment.
3. It travels through fibre-optic cables and network hubs.
4. It reaches a data centre, where servers process or store it.
5. The information is sent back to your device when you need it.



This can happen almost instantly. That speed matters for everyday services like payments, video calls, maps, business systems, and emergency communications.

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HOW DATA CENTRES OPERATE

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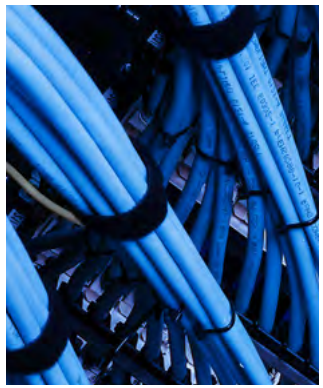
ARE ALL DATA CENTRES THE SAME?

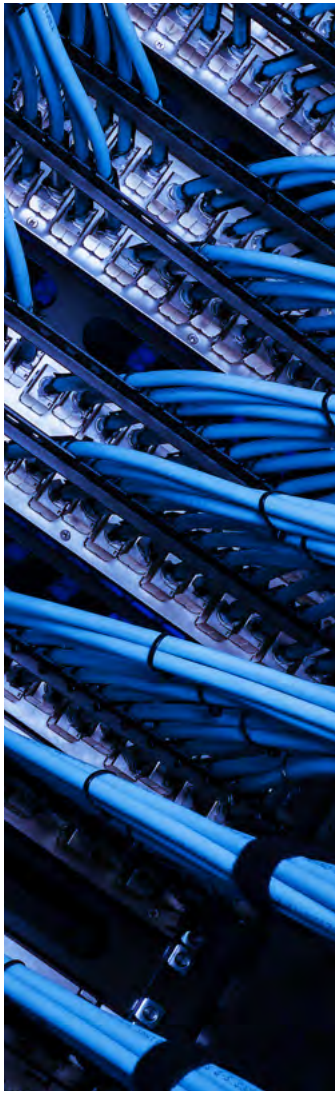
No, data centres are not all the same. They come in different sizes and serve different needs.

Co-location data centres are shared facilities where multiple organisations rent space for their servers. Each organisation manages its own equipment, while the facility provides shared power, cooling, connectivity, and security.

Hyperscale data centres are much larger facilities designed to support major cloud, digital, and artificial intelligence services used by many people and organisations at once.

AirTrunk designs, builds, and operates hyperscale data centres. These facilities are built for scale, reliability, security, and efficiency to keep our digital world running.





WHAT DO DATA CENTRES LOOK LIKE?

From the outside, they often look like large, modern buildings. Inside, they're like a futuristic personal library — rows of servers in clean, cool and controlled environments.

They run 24/7, so even a brief outage can disrupt essential services like payments, flights, hospital systems, emergency services, or business operations. To prevent this, they're engineered with layers of backup power, advanced cooling, and fast, resilient network connections. These systems help meet strict safety and environmental standards and ensure that services stay online without interruption.

Strong physical security is also essential to keep your data safe, so data centres include features like secure perimeters, monitored entrances, and controlled access to protect the equipment inside. That level of security is important because data centres hold critical digital infrastructure, and any unauthorised access could disrupt services or compromise sensitive information.

WHAT HAPPENS INSIDE A DATA CENTRE?

Inside a data centre, rows of servers run around the clock. These servers need controlled conditions so they can operate safely and reliably.

That means a data centre includes:

- Cooling systems to manage heat from servers
- Power systems and backup systems to support continuity
- Secure access controls to protect equipment
- Fibre connections so data can move quickly
- Monitoring systems so teams can manage the facility safely

Data centres are designed for reliability because even short outages can affect services people and businesses depend on.

DOES AIRTRUNK ACCESS PEOPLE'S DATA?

AirTrunk manages the physical facility. That includes the building, power, cooling, security, and operating environment. The companies that use the data centre control their own servers and the data stored on them.

Data centre operators do not manage, view, or control the information on customer servers. Customers use their own security controls, encryption, and access arrangements to protect their systems.

WHY ARE SOME DATA CENTRES BUILT NEAR CITIES?

Data centres need strong infrastructure — like reliable electricity, water, internet, and land because they run 24/7 and support millions of digital transactions every second. They are often built near cities because digital services work better when data does not have to travel too far. The delay between sending and receiving data is called latency. Lower latency helps services respond faster. That matters for things like payments, video calls, navigation, business systems, and other services people expect to work immediately.

Choosing the right site helps balance speed, reliability, and community impact, while meeting strict planning and environmental standards.

DO DATA CENTRES MAKE A LOT OF NOISE AND ARE THEY SAFE TO BE LOCATED NEARBY?

Modern data centres are designed to operate within strict environmental and planning regulations. Before construction, acoustic modelling is undertaken to assess potential operational noise at surrounding properties, particularly during night-time periods.

This modelling considers the main sources of operational sound, including cooling systems and backup generator testing. Backup generators are needed so critical services — including cloud platforms, banking, hospitals and communications — can stay online during rare grid outages. They are used infrequently, mainly for emergency outages and short scheduled testing.

To minimise impacts, facilities commonly incorporate:

- Acoustic enclosures and silencers on generators and mechanical equipment
- Noise barriers and building insulation
- Restricted schedules and limited duration for generator testing
- Continuous monitoring and maintenance of equipment to reduce tonal or low-frequency noise
- Fire suppression systems
- Fuel containment measures
- Noise and emissions controls
- Automatic shutdown protections
- Regular maintenance and testing

Data centres are generally considered safe, low-impact neighbours. They are typically built following strict safety standards, and do not involve heavy manufacturing or chemical processing. The activity inside is primarily computing equipment operating in temperature-controlled rooms, making them more comparable to modern commercial buildings than factories.

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BALANCING ENERGY, WATER, AND EFFICIENCY

WHY DO DATA CENTRES USE ENERGY AND WATER?

Data centres use energy because servers run continuously to store, process, and deliver your data. They also use energy for cooling, security, monitoring, networking equipment, and backup systems.

Servers produce heat, so cooling is needed to keep equipment at safe operating temperatures. Some facilities use water-based or liquid cooling because it removes heat efficiently and can reduce the electricity needed for cooling. Others use “dry cooling,” which uses much less water but generally requires more energy. Operators choose different approaches depending on local climate, efficiency needs, water availability, and sustainability goals.

Water use needs to be planned carefully. Data centres can track consumption, use recycled or non-potable water where available, and design cooling systems to suit local conditions.

WHAT’S THE TRADE-OFF BETWEEN USING ENERGY AND USING WATER?

Cooling systems must balance two resources:

Liquid Cooling

Using water can reduce energy use, because water is **very effective at removing heat**.

Dry Cooling

Using **less water often means using more energy**, because air-based or mechanical cooling relies heavily on electricity.

There is no single best answer for every site. The right approach depends on climate, water availability, and environmental goals.

WHAT CONDITIONS SHAPE ENERGY AND WATER USE?

The right cooling approach depends on local conditions, with the goal of balancing energy use, water availability, safety and reliability for each site.

Data centres may use more water to reduce energy use when local conditions make water-based cooling efficient, recycled or non-potable water is available, or reducing electricity demand is a priority.

Or, they may use more energy to reduce water use in water-scarce regions, when heat or humidity makes water-based cooling less effective, or when air-based systems are the better option for the site.

ARE DATA CENTRES SUSTAINABLE?

Data centres can be designed and operated more sustainably as technology improves. Modern facilities can use efficient building designs, renewable power where available, advanced cooling systems, recycled water systems, and better monitoring to reduce environmental impact.

Leading operators are continually working to lower their environmental impact — from improving efficiency and investing in recycled or non-potable water systems to setting long-term goals like net zero emissions. While the sector is still evolving, data centres are steadily becoming cleaner, smarter, and more efficient over time.

WHAT'S BEING DONE TO REDUCE IMPACT?

Data centre providers are working with customers, suppliers, governments, utilities, and communities to reduce environmental impact, including:

- Designing energy-efficient buildings and equipment.
- Improving cooling systems to optimise energy and water use.
- Using renewable energy such as solar and wind.
- Expanding recycled and non-potable water use where available.
- Locating facilities in areas with strong existing infrastructure, including industrial zones where possible, to reduce pressure on local grids and water systems.
- Partnering with utilities on batteries, demand response, and other solutions that support grid stability.
- Reusing heat where practical.
- Reporting sustainability progress transparently.
- Engaging with local communities to understand local priorities and respond to concerns.

The industry recognises there is more work to do. As demand for cloud, AI, and digital services grows, continued collaboration across operators, customers, utilities, governments and communities will be essential.

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THE ROLE OF DATA CENTRES IN OUR COMMUNITIES

WHAT IS THE IMPACT ON LOCAL COMMUNITIES?

Data centres support businesses, government services, and the digital tools people rely on every day. Like other major infrastructure, they also need reliable electricity, connectivity, suitable land, and careful planning.

Modern data centres are designed to operate securely and with high environmental and safety standards. They can still have local impacts. Cooling equipment may generate sound. Large buildings can change the look of an area. Construction can affect traffic and local movement for a period of time.

These impacts need to be planned for early and managed with councils, neighbours, regulators, and other local stakeholders. This includes steps such as:

- Using advanced cooling technologies to minimise noise.
- Designing landscaping and setbacks to reduce visual impact.
- Ensuring power and water use does not affect local community supply.
- Meeting — and often exceeding — strict planning, environmental, and safety requirements.

Data centre operators recognise the importance of being a good neighbour. That means listening to communities, minimising local impacts where possible, operating responsibly, and contributing positively to the areas where they operate.

Data centres need to be delivered in a way that balances digital infrastructure needs with thoughtful planning and responsiveness to community expectations.

WHAT DO DATA CENTRES CONTRIBUTE TO LOCAL COMMUNITIES WHERE THEY OPERATE?

Unlike short-term developments, data centres operate for decades, providing stable employment and ongoing economic activity in the area.

This can include:

Jobs

Construction phases support hundreds to thousands of jobs, depending on the scale and number of buildings. Ongoing operations create long-term roles in engineering, security, maintenance, and facility management.

Strengthening local infrastructure

Building a data centre often leads to upgrades in fibre networks, power systems, and utilities that can benefit surrounding neighbourhoods and future developments.

Creating education and training pathways

Many operators partner with schools, TAFEs, and universities to support STEM programs, apprenticeships, and skills development for local students.

Supporting local businesses

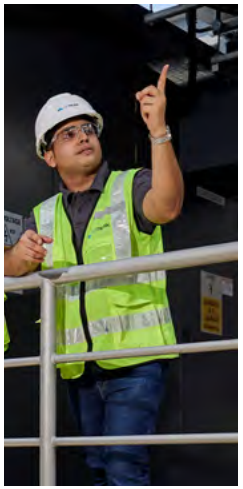
Data centres rely on a wide network of local suppliers — electricians, plumbers, construction firms, security services, landscaping, cleaning, catering, and more. This creates steady demand for local companies long after construction ends.

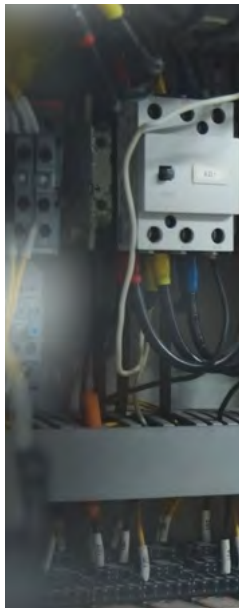
WHAT IS THE ECONOMIC IMPACT OF DATA CENTRES ON LOCAL COMMUNITIES INCLUDING CREATING JOBS?

Independent studies show that data centres deliver strong economic benefits. A 2023 PwC referenced analysis (cited by CBRE) found that every direct data centre job supports an additional 7.4 jobs through construction, suppliers, utilities, and local services. This reflects the large capital investment required to build and operate these facilities.

The 2025 Mandala Research report for Data Centres Australia similarly shows that data centres act as long-term economic anchors, driving billions of dollars in construction activity, supporting skilled trades, and strengthening essential infrastructure such as power, water, and fibre networks.





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BUILDING A SUSTAINABLE DIGITAL FUTURE: AIRTRUNK IN ACTION

AIRTRUNK COMMUNITY COMMITMENTS

For generations, infrastructure has driven economic growth and supported thriving communities.

Today, data centres are part of that foundation: creating jobs, attracting investment, and enabling the digital services and innovation that power modern life. As demand grows, so does our responsibility to deliver infrastructure that supports communities, protects shared resources like energy and water, and creates lasting value.

AirTrunk's community commitments set out how we approach this responsibility. They reflect the standards we apply today and how we aim to continuously improve as digital and AI infrastructure continues to scale.

These commitments also provide transparency: helping communities and stakeholders understand our approach and hold us accountable.

COMMITMENT 1

SAFELY DELIVER CRITICAL INFRASTRUCTURE FOR EVERYDAY LIFE

Our core purpose is to deliver secure and resilient infrastructure that people, businesses and governments can rely on every day.

We design and operate our facilities to high standards of availability, security, and performance, with layers of resilience so systems continue to operate even if components fail.

How we deliver on this

- Designing for continuous and uninterrupted operations.
- We innovate across our entire business in order to build and manage data centres to the highest standards of safety and security.
- We invest in our people to build capable and skilled teams that deliver strong outcomes for communities and stakeholders.

COMMITMENT 2

BE RESPONSIBLE USERS OF ENERGY AND WATER

To operate efficiently, data centres require energy and cooling, making electricity and water an important part of how digital infrastructure works.

We take responsibility for the resources we use, and fund the infrastructure required to support our developments, so costs are not passed on to the community. Energy and water systems are shared, and how infrastructure is delivered can either place pressure on them or help build capacity and resilience.

How we deliver on this

- Investing in renewable energy and energy storage solutions.
- Progressing toward 100% renewable electricity matching.
- Increasing the use of recycled water, where available.
- Improving efficiency through design and innovation.

COMMITMENT 3

BE A GOOD NEIGHBOUR

We plan, build, and operate our developments with care and engage communities every step of the way. This means taking a transparent, considered approach: engaging early and listening to feedback to minimise disruption and contribute positively to local communities.

How we deliver on this

- Selecting suitable locations, usually within industrial areas where the impact on residential communities is minimal.
- We engage openly and regularly with our neighbours, listening to feedback, respectfully responding to concerns and keeping communities informed along the way.
- We work to minimise impacts such as traffic, noise, and construction disruption, responding quickly and respectfully when concerns are raised.
- We create local opportunities — supporting jobs, training pathways, and inclusive skills programs through local partnerships.

COMMITMENT 4

STRENGTHEN COMMUNITIES WHERE WE OPERATE

For communities to benefit from digital infrastructure, they need the capability, partnerships, and opportunities to participate. We take a long-term approach to community engagement and contribution. Supporting local initiatives, partnering with community organisations, and proactively seek opportunities to create shared value beyond our sites.

How we deliver on this

- Our **SOCIAL IMPACT PROGRAM** supports local initiatives and strengthens long-term community resilience.
- We stand with our communities in times of need, working with disaster response partners to support preparedness, relief, and recovery.
- We look for practical opportunities to contribute to local infrastructure, amenities, and initiatives that benefit our neighbours and surrounding communities.

DELIVERING INNOVATION IN OUR OPERATIONS

AirTrunk is committed to designing, developing, and operating sustainable hyperscale data centres in Asia Pacific and the Middle East that support the digital economy while improving efficiency, reducing environmental impact and strengthening resilience.

Energy efficiency

AirTrunk designs and operates data centres with industry-leading efficiency. Its Power Usage Effectiveness (PUE) metric is 1.32 — significantly better than the market average of PUE 1.6 — meaning less energy wasted and more sustainable operations.

Decarbonisation

AirTrunk introduced the Embodied Carbon Ratio — a new metric to measure and reduce carbon emissions associated with the construction of new data centres. Through responsible sourcing, transparency, and continuous improvement, AirTrunk ensures a best-in-class, responsible supply chain.

Water efficiency

AirTrunk's water resilience strategy ensures sustainable, responsible, and productive use of water. AirTrunk is investing in recycled water systems, liquid cooling technology, and pursuing alternative water sources in water-stressed regions.

Energy transition

AirTrunk is actively supporting the transition towards 24/7 clean energy by investing in renewable energy, storage, and grid stability — turning hyperscale demand into a catalyst for clean power. AirTrunk aims to match 100% of its electricity use with renewable energy by 2030 and is investing in major renewable projects in Australia, Hong Kong, and Malaysia through Power Purchase Agreements (PPAs).

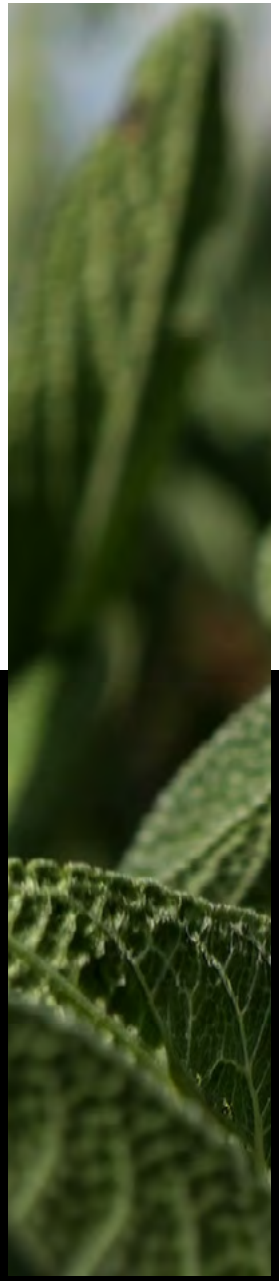
Nature and biodiversity stewardship

AirTrunk is deepening the assessment of its impact on nature and committed to responsibly managing its footprint through mitigation and restoration actions.

Sustainable finance and social impact

In 2025, AirTrunk secured a record A$16 billion sustainability refinancing — the largest in the global data centre industry. Savings from this financing are directed to a social impact fund supporting STEM education, digital equity, biodiversity and conservation, sustainable innovation, and disaster relief in local communities where AirTrunk operates.

TRANSPARENCY, ACCOUNTABILITY, AND RECOGNITION



AirTrunk acts ethically, with integrity, and accountability, reporting openly on its commitments and progress through the annual Sustainability Reports and Climate & Nature-Related Risks Reports. AirTrunk has earned global recognition for innovation, reliability, and environmental leadership including:

ecovadis	Top 1% globally for sustainability performance
GRESB	5-STAR rating (98/100)
ISO 14001	Internationally recognised environmental management system standard

Our sustainability approach and reporting are aligned with leading frameworks and standards, including:

- Paris Climate Agreement
- GHG Protocol
- Global Reporting Initiative Standards
- UN Sustainable Development Goals
- Task Force on Climate-related Financial Disclosures (TCFD)
- ISSB / IFRS S2
- Task Force on Nature-related Financial Disclosures (TNFD)

WANT TO LEARN MORE?

Find out more about AirTrunk's sustainability initiatives and community programs. Visit our website airtrunk.com.

LEARN ABOUT OUR SOCIAL IMPACT AND COMMUNITY PROGRAMS

LEARN MORE ABOUT OUR SUSTAINABILITY INITIATIVES

GLOSSARY

Artificial intelligence: Technology that can perform tasks that usually require human intelligence, such as recognising patterns, making predictions, or generating content.

Cloud: A network of data centres and communications infrastructure that store, process, and deliver data and services over the internet.

Cooling: Systems that manage heat from servers so equipment can operate safely.

Data: Digital information, such as files, messages, transactions, images, records, or instructions.

Data centre: A secure facility that houses servers and the systems needed to keep them running.

Fibre-optic cable: A cable that uses light to move data quickly over long distances.

Hyperscale data centre: A large data centre designed to support major cloud, AI, and digital services at scale.

Latency: The time it takes data to travel from one place to another. Lower latency means faster response times.

Power Usage Effectiveness: A measure of how efficiently a data centre uses energy. A lower number means less energy is used by supporting systems.

Server: A powerful computer that stores, processes, and delivers data.

Water Usage Effectiveness: A measure used to understand water consumption in relation to data centre operations.