



Western Sydney Aerotropolis

Agribusiness Precinct





Acknowledgement

The long-term planning for the Western Sydney Aerotropolis, including the Agribusiness Precinct, acknowledges more than 40,000 years of continuous Aboriginal connection to the land that makes up NSW.

This document recognises that, as part of the world's oldest living culture, traditional Aboriginal and Torres Strait Islander owners and custodians of the Australian continent and adjacent islands share a unique bond to Country — a bond forged through thousands of years of travelling across lands and waterways for ceremony, religion, trading and seasonal migration.

The Deerubbin, Gandangara and Darug people are the traditional custodians of the land in the Aerotropolis. The Aerotropolis is close to tribal boundaries with the Tharawal and Eora people, which may give rise to sites of shared interest relating to ceremonial gatherings.

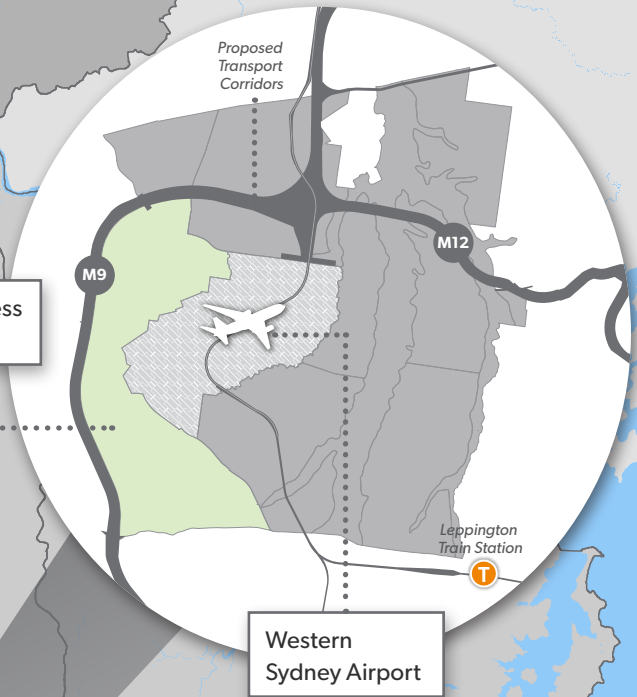
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Disclaimer: The information contained in this publication is based on the knowledge and understanding at the time of writing (February 2019). However, because of advances in knowledge, users are reminded of the need to ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of NSW Department of Primary Industries or the user's independent adviser. Recognising that some of the information in this document is provided by third parties, the State of New South Wales, the author and the publisher take no responsibility for the accuracy, currency, reliability or correctness of any third parties.

The 11,200 hectare Western Sydney Aerotropolis will be Greater Sydney's newest economic hub. The Agribusiness Precinct provides an opportunity to create a world-class agribusiness facility adjoining the Western Sydney Airport.



Western Sydney Aerotropolis boundary, as included in the Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan – Stage 1: Initial Precincts, page 19

Penrith

Parramatta

Liverpool

Sydney

50 km from the CBD

Campbelltown–Macarthur

Key agencies and documents

NSW Department of Primary Industries

Part of the NSW Department of Industry, the Department works to increase the value of primary industries and drive economic growth across NSW.

Greater Sydney Commission

Leads metropolitan planning to make Greater Sydney more productive, sustainable and liveable and coordinates and aligns the planning that will shape the future of Greater Sydney.

Western City & Aerotropolis Authority

Facilitates the design and delivery of the Western Sydney Aerotropolis to support the growth of the Western Parkland City.

Western Sydney Airport Co

Established to build Western Sydney Airport.

NSW Department of Planning and Environment

Sets the strategic vision for the Western Sydney Aerotropolis through the Stage 1 Land Use and Infrastructure Implementation Plan and contributes to the Planning Partnership for the development of the Stage 2 Plan and detailed precinct plans.

Western Sydney Planning Partnership

A local government-led collaboration that draws on resources from across local government and the NSW Government and, among other things, leads the detailed planning for the Western Sydney Aerotropolis.

Western Sydney City Deal

A partnership between the Australian Government, NSW Government, and Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly councils. It sets the investment foundation for the Western Parkland City to become a fully realised 21st century city.

www.nsw.gov.au/improving-nsw/projects-and-initiatives/western-sydney-city-deal

Western Sydney Aerotropolis Stage 1 Land Use and Infrastructure Implementation Plan

Provides a foundation for a conversation with the community and industry, enabling a collaborative approach to the finalisation of the Plan, Stage 2, which will set the strategic direction for the Aerotropolis.

www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Aerotropolis

Western Sydney Infrastructure Plan

A partnership between the Australian Government and NSW Government to deliver major road infrastructure upgrades and capitalise on the economic benefits from the Western Sydney Airport.

www.infrastructure.gov.au/infrastructure/western_sydney/files/WSIP_Map_Poster.pdf

State Infrastructure Strategy 2018-2038

Sets out the NSW Government's priorities for the next 20 years, and combines with the *Future Transport Strategy 2056*, *Greater Sydney Region Plan* and *Regional Development Framework* to integrate infrastructure investment and land use planning in NSW.

www.nsw.gov.au/improving-nsw/projects-and-initiatives/nsw-state-infrastructure-strategy

Future Transport 2056

A 40-year strategy, supported by plans for regional NSW and for Greater Sydney, that aligns future planning of the transport network with land use by working closely with State agencies. Starting with a long-term vision for communities, it is also the first transport plan in Australia to harness technology to improve customer and network outcomes.

www.future.transport.nsw.gov.au/plans/future-transport-strategy

Greater Sydney Region Plan

A 40-year vision for the Greater Sydney Region that seeks to meet the needs of a growing and changing population by transforming Greater Sydney into a metropolis of three cities – the Western Parkland City, the Central River City and the Eastern Harbour City.

www.greater.sydney/metropolis-of-three-cities

Western City District Plan

A 20-year plan to manage the district's growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney.

www.greater.sydney/western-city-district-plan



A new agribusiness precinct for Western Sydney

The development of Western Sydney Airport will bring many opportunities for the people and businesses of the emerging Western Parkland City, the broader metropolitan area, NSW and Australia.

Extensive studies and planning across government as part of the Western Sydney City Deal have identified the potential for an agribusiness precinct adjoining the Western Sydney Airport. The Aerotropolis is being planned in stages, with Stage 1 precincts already under consideration.

As this work continues, the Department of Primary Industries, as part of the NSW Government's commitment to the City Deal, is examining what a world-leading agribusiness precinct might look like in Western Sydney. This precinct would support the production and value-adding of sustainable, high-quality fresh produce and pre-prepared consumer foods, bringing opportunities to existing and new businesses, markets and products.

Its sustainability will be underpinned by circular economy principles: integrating food production, industry collaboration, research and development, energy, waste and water.

Linked directly to a planned freight and logistic hub, the agribusiness precinct has the potential to enable delivery from farm gate to international consumer plate within 24 hours.

Case study: Agriport A7

Agriport A7 (Noord Holland) is the largest greenhouse horticulture region in the Netherlands, which includes 850 hectares of land dedicated to large-scale greenhouse cultivation and 100-hectares of land dedicated to a business park. We understand the A7 has nine growers and around 420 hectares currently under production.

Home to major Dutch companies and international organisations such as Shell and Microsoft, Agriport A7's intensive horticulture activities are at a scale that encourages shared investment in energy and logistics. In large-scale greenhouses, like in data centres, management of energy costs is the key to success; hence there is a synergy between these two industries at the A7, making both more viable. The glasshouse growers generate electrical energy that generates electricity for a hyper-scale data centres (such as Microsoft). The by-product of this energy generation is heat and CO₂, which is in turn utilised by the greenhouse crops to increase production and reduce costs.

These types of circular economy principles will be integral to the agribusiness precinct. Agriport A7's business park tenancy model, private sector leadership and mix of food production, logistics and energy provides rich learnings as we work across government and industry to create a new agribusiness precinct.



From farm gate to international consumer plate within
24 HOURS

The Feasibility Study

The Western Sydney Airport Agribusiness Precinct Feasibility Study considers the concept of a world-leading agribusiness precinct adjoining the new Western Sydney Airport.

Stakeholder and industry engagement

Our engagement began at the Aerotropolis Investor Forum in May 2018 – since then, we have engaged with more than 110 stakeholder organisations and 400+ stakeholders across industry, community and the three levels of government. We've incorporated the insights gained into the vision and direction for the precinct.

During December 2018, we spoke directly with key participants from world-leading agribusiness precincts.

We learned that:

- Participants view cooperative-based precinct production systems as a positive, highly commercial approach to producing more with less.
- Success is driven by groups of enterprises working together to leverage economies of scale, and continually striving towards more innovative approaches.
- Energy, water and CO₂ are the most common shared services in larger precincts that can justify the development of internal grids. This has flow-on benefits to local government areas and communities and attracts further commercial interests.

Case study: Fresh Park Venlo

Fresh Park Venlo (FPV) in the Netherlands develops and maintains functional and profitable space for fresh food companies.

Its 25-hectare business area includes logistics companies, suppliers, food producers and storage and packaging companies. It is located to link the import and export ports of Rotterdam and Antwerp and the German and European markets.

The 130-hectare food park provides a dedicated Facility Management Services team for more than 100 companies. Suppliers procure locally or imported vegetables from overseas for processing at the park facilities, and also conduct packaging procedures and transport to retail stores and wholesalers.

FPV manages public spaces, while lessees, owners and tenants are responsible for areas within their allocated plot boundaries. FPV also offers business space to small-sized businesses and established food companies.

FPV can be accessed by 152 million Europeans within a nine-hour drive. With two rail terminals within a kilometre, two airports within 100 kilometres and two ports within 200 kilometres of the business area, FPV provides access to a substantial road, waterway and rail transport network.

The area also includes practice-oriented education and research institutions that specialise in food and logistics.

Early partnerships

We identified and entered into formal partnerships with two key anchor tenants in 2018: Sydney Markets and the University of Sydney.



Sydney Markets is the largest wholesale fruit, vegetable and flower markets in Australia and one of the largest food distribution centres in the Southern Hemisphere. Our 43-hectare site at Flemington operates 24 hours a day, seven days a week with more than 500 semi-trailers and trucks unloading here each night. We supply thousands of retailers, providores, florists and food processors.

Each year, Sydney Produce Market and Sydney Growers Market sell around 2.5 million tonnes of fresh fruit and vegetables, valued at \$3 billion; the Sydney Flower Market sells more than \$150 million of fresh flowers; and the Sydney Market exports approximately \$100 million of fresh produce.

More than 5,000 people work in businesses at Sydney Markets. Approximately 120 wholesalers, 394 produce growers, 172 flower growers-sellers and over 160 supporting businesses are located on site at Flemington. Approximately 1,500 traders operate within the various community markets (Paddy's Markets) at Flemington and Haymarket. Around 140,000 customers visit the community markets each week.

We're excited to be partnering with the NSW Government to explore an expanded and diversified operation at the Western Sydney Aerotropolis to complement our existing operations.

**Brad Latham,
Chief Executive Officer,
Sydney Markets**



THE UNIVERSITY OF
SYDNEY

The University of Sydney was founded in 1850 as Australia's first university and is regarded as one of the world's leading universities.

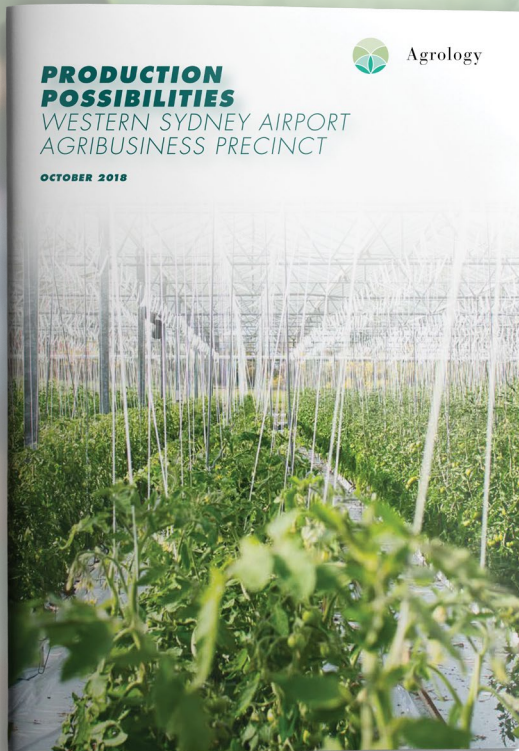
We see great value in the opportunity to combine the University's world-class veterinary, agriculture and life sciences expertise with the Department of Primary Industries at the historic Elizabeth Macarthur Agriculture Institute Centre of Excellence for Plant and Animal Health. The opportunity will amplify and support research in plant biology, soil science, food research and animal husbandry. This will also further strengthen the Institute's position as NSW's premier quarantine and biosecurity facility.

**Professor Iain Young,
Dean,
Faculty of Science**



We are looking to engage with other interested potential key partners. Early adopters will have a unique opportunity to help create the Western Sydney Aerotropolis by contributing and collaborating to the planning of infrastructure and facilities, thus driving the development of industry-specific precincts.

Production Possibilities Report



Work has been undertaken to analyse climatological, technical and economic elements of existing and potential new food production systems in and around the Aerotropolis.

This work discovered that controlled climate glasshouse vegetables production is one of the most attractive propositions, due to its high financial yields, resilient growing solutions and substantial production capacity relative to land and water resource use.

Further, blueberry/berry production offers an interesting investment opportunity beyond the financial yield in the domestic market, and high intensity land-based recirculating aquaculture should be considered. The analysis also found that poultry broiler production businesses will be subject to several new influences as the population increases.

Case study: The Perich Group

Agriculture has been integral to the Perich Group business for over 70 years. As one of the leading dairy operators in Australia, the group and consortium partners milk over 10,000 cows with expansion plans to grow to 14,000 in the short term, producing approximately 200 million litres of milk a year. The farming activity has diversified to include substantial cropping activity required to feed the milking herd and other beef cattle.

Perich Group holds over 800 hectares of farming land within the Western Sydney Aerotropolis, specifically within the core and agribusiness precincts, with direct links into the future Western Sydney Airport. Another 1,000 hectares of farming land is used for cropping and grazing in Camden Local Government Area, 12,000 hectares at Wyalong, 1,800 hectares at Coomboona and 4,000 hectares at Goolagong.

A large proportion of the milk and by product is supplied to Freedom Foods Group and The A2 Milk Company for manufacturing and sale in Australia and overseas. Some of our original farming land has transformed into new communities with the group building Oran Park Town Centre and supplying more than 4,000 residential lots to date.

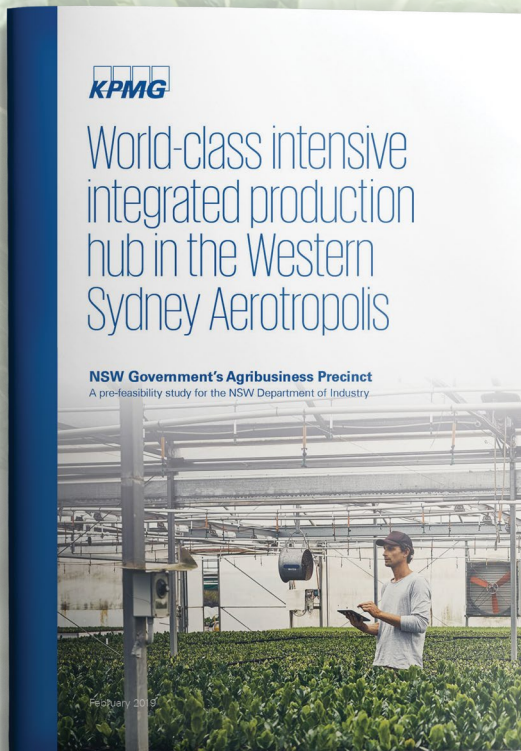
The development of the Western Sydney Airport and the surrounding precincts within the Aerotropolis provide an unprecedented opportunity to deliver world-leading processes for agribusiness, transport, health, education and business in general.

Collaboration between stakeholders during these early stages of development is critical to optimise the outcomes for all. Of course we are particularly interested in the opportunities that will be realised in the agribusiness precinct given the success of comparative examples in places such as Singapore and Amsterdam.

Tim Bryan,
Chief Executive Officer



Integrated intensive production hub analysis



Building on the *Production Possibilities Report*, analysis on the elements necessary to establish a world-class integrated intensive production hub within or near the agribusiness precinct identified the required integrated components for success, and confirmed there were no major obstacles preventing its development.

Importantly, the work found that with increasing demand for fresh food from both domestic and overseas markets, an integrated intensive production hub could transform fresh food production.

For example, a 500-hectare hub could support 2,500 new direct and 12,000 indirect jobs, with up to 96,000 tonnes of additional fresh food production capacity each year at full production. This could generate \$2.8 billion in additional revenue over a 10-year period.

The hub presents circular economy possibilities of significant value, including energy generation and smart grid distribution; innovative off-grid energy solutions; recycled water use; and opportunities for renewables and waste solutions. The benefits generated by the hub could help to underpin an agribusiness precinct in the Aerotropolis.

Case study: Perfection Fresh Australia

Perfection Fresh Australia is one of Australia's leading vertically integrated fresh produce companies with annual revenue around \$500 million.

We are one of the only companies in Australia to successfully brand fresh produce and carry many proprietary lines such as Calypso Mango, broccolini and sweet solanata tomatoes.

Our Sydney head office employs 220 staff, nationwide we employ more than 500 staff. Our operation encompasses the entire value chain including production, research and development, international marketing and domestic retailing.

We are currently planning the relocation of our head office. The new operation will become our new National HQ employing around 300 staff.

It will likely include an advanced manufacturing and ripening facility that harnesses cutting-edge technology to develop international marketing opportunities among other marketing-leading attributes.

We view the Western Parkland City as an ideal location given its access to a strong workforce, its proximity to Australia's largest domestic market, the strategic infrastructure plans enabling rapid export opportunities, circular economy synergies that promote industry collaboration to reduce waste and cost, and the opportunities to engage with leading education centres regarding research and development and skills development.

Michael Simonetta,
Chief Executive Officer



Case study: Bio-Park Terneuzen

Bio-Park Terneuzen, also in the Netherlands, is home to three horticultural production businesses. Around 70 hectares are dedicated to the production of crops such as tomatoes, eggplants and paprika. Additional sites are under development.

Other businesses include industrial partners Yara Fertiliser and their subsidiary WarmCO2. There is also a biomass powerplant and a solar power plant is under construction.

Companies operating from Biopark Terneuzen actively engage in mutually beneficial long-term projects. Interconnected piping systems allow them to exchange and re-use waste products as feedstock, energy or utility supplements.

For example:

- Cargill provides residual starch, purified water, power and compressed air to Nedalco.
- Yara supplies waste heat and CO₂ to the horticultural greenhouse park.
- Rosendaal Energy delivers water to the recycler Heros.

These kinds of shared infrastructure services require less capital upfront. All energy infrastructure is owned outside of the grower group and growers pay a fee to connect; contracted usage fees are negotiated under contract based on demand.

Implementation

Work has commenced on developing an implementation plan for the agribusiness precinct. This process will be led by the Western City & Aerotropolis Authority in conjunction with the NSW Department of Primary Industries.



Stay engaged

The NSW Government is issuing an invitation to continue to be part of the agribusiness precinct's growth and direction.

We are ready to talk to innovative and future-focused companies, universities and research institutions interested in becoming partners in this new precinct.

We invite you to be a part of history.



To find out more, please email contact@wcaa.sydney



