



# Australian Infrastructure

A golden opportunity for Japan





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Reiwa Era series

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Western Sydney City Deal  
the centrepiece of a  
**\$175bn**  
investment pipeline

This report is part of  
PwC's new series  
"Japan in the Reiwa  
era", focusing on what  
the new era means  
for its people, its  
companies, its culture  
and its trading partners  
and the wider world.



# The Japan in the Reiwa Era series

This series of reports is an initiative of PwC Australia with assistance from PwC Japan.

The aim of the series is to examine opportunities and obstacles that are likely to emerge for Japan, Australia's second-largest trading partner and second-largest source of foreign investment, as the country officially enters a new era.

Japan is unique in many ways and the concept of eras is no exception. The passage from one era to another, driven by a change of Emperor, is accompanied by some unselfconscious reflection and a kind of mental stocktake among policy makers, corporate leaders and everyday Japanese alike.

In keeping with that trend, we have adopted a similar approach and come up with five key themes we think will be vital in Japan's development in the Reiwa era as the starting point for a series looking at exploring how these themes may play out in practice.

## Collaborate

Collaboration at the personal, corporate, national and international level will be vital for Japan.

## Innovate

Innovation is key to Japan maintaining its standards of living, retaining its technological edges and coping with megatrends such as decarbonisation of the economy and digital disruption.

## Populate

The population is declining in Japan and is unlikely to reverse, but the rapid increase in tourist numbers ahead of the 2020 Olympics herald a more open Japan and may sow some seeds of support for expansion of skilled migration.

## Educate

Globalisation will continue to exert its influence on Japan's education system as it strives to make its universities more international and increase collaboration with institutions abroad.

## Imitate

In the same way Japan adopted and then surpassed Western manufacturing systems, there is potential for it to borrow elements of Western systems of corporate governance, organisational culture and entrepreneurialism while retaining unique features of its economy and society that have underpinned its success to date.



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# Introduction

## Executive summary

Australia's \$175bn infrastructure pipeline is the kind of offshore developed world opportunity that Japanese companies and banks have been searching for.

For Australia, this is a match made in heaven - while we have world-leading capability in public-private partnerships and a number of large-scale investors, the scale of the infrastructure task is beyond our capacities both financially and technologically.

The depth and breadth of Japanese expertise, technology, products and services in infrastructure is exactly what's needed.

And this is particularly true of the Western Sydney opportunity, where Japan Inc has made its intentions clear via the signing of Memorandum of Understanding (MoUs) from Hitachi, Mitsubishi Heavy Industries, Sumitomo Mitsui Financial Group and Japan's Urban Renaissance Agency.

Company executives in Tokyo are not only conscious of the opportunity but actively interested in getting involved. We know Japanese companies are sitting on Y506 trillion (\$4.8 trillion) of cash reserves that needs to be invested. Under the country's overhauled corporate governance structures, firms are expected to use capital more productively.

Japan offers all these traits and capabilities as well as a level of commitment, stability, reputation and a long-term approach that none of Australia's other major trade and investment partners can match. Japanese firms will take a collaborative approach to opportunities where what "Team Japan" can offer is greater than the sum of its parts.

The recent angst around technological investment from Chinese telco Huawei, banned from supplying to Australia's 5G network, and similar controversies around Chinese investment in ports and other critical infrastructure, highlight the risks and uncertainties of a dependence on China.

The US, while the leading investor in Australia, arguably lacks the breadth and depth of offering when it comes to financing and technological solutions. With some exceptions, the majority of US firms are unlikely to take the patient, long term and collaborative approach of Japanese firms.

So all roads point to Japan, but Australia needs to commit and seize this opportunity and it is up to the country's network of friends of Japan to drive this vital collaboration forward for the good of Australia.

At PwC we see our role as helping shape and structure these collaborations for the benefit not only of the firms involved, but for that of Western Sydney and the rest of the Australian infrastructure opportunity.



Sydney is Australia’s global city. A growing metropolis in a country of 25 million people that’s also experiencing rapid population growth through a combination of a strong birth rate and steady immigration.

By 2056, Sydney will be home to more than 8 million people, and Australian home to almost 40 million people.

Thanks to geographic and economic drivers, two thirds of that growth is expected to occur in Sydney’s west. Greater Western Sydney, which is already larger than Adelaide on a population basis, is set to become more populous than Brisbane.

This surge of growth will trigger a host of opportunities for global integrated financial, technological, development and construction players both in Western Sydney and in connecting the region to the rest of the city.

The redevelopment of Western Sydney, expected to feature \$50bn of private sector investment in its own right, is part of a broader infrastructure build on Australia’s eastern seaboard that includes \$50bn of rail projects in Melbourne and another \$25bn in Brisbane with rail and airport projects.

But it is Greater Western Sydney, already one of the fastest growing urban areas in Australia, that offers the largest and most proximate opportunity for international investors.

Governments have recognised that it is transport that will be the key enabler to ensure and foster the region’s growth. The construction of the Western Sydney Airport (WSA) and the Western Sydney Aerotropolis (Aerotropolis) will accelerate that growth and a new railway linking it to Sydney’s metropolitan rail network, will open up new commercial opportunities in a variety of industries including aviation, aerospace, defence, logistics, advanced manufacturing, food export, medical technology, agribusiness, education and tourism.

As well as a significant industrial opportunity, the Western Parkland City (the region which will be home to the WSA and Aerotropolis) presents an opportunity to build on an already-growing education sector, featuring a ring of universities and vocational training facilities. This will be supported by residential development, enabling people to live in a “30-minute city”, where they can access these new employment and educational offerings.

For the first time, a project of this scale is being progressed in Australia’s global city with all three levels of government (federal, state and local) working in unison towards its development, contributing a combined \$20bn under a vision that extends out to at least 2050.

The Western Sydney opportunity is a great opportunity for Japan to collaborate, the first of the key themes identified as important for the country’s future in the “Japan in the Reiwa Era” series.

Thus the interlinked developments in Sydney’s west represent a unique opportunity. And it is one that Japanese companies are uniquely placed to capitalise on via the innovation and integrated offering that they bring to the table, building on the strong government-to-government links between the two countries.

Japanese firms hold extensive expertise in technology, transport infrastructure, construction, utilities, urban development, sustainability and waste and smart city design, transport and associated value capture. This expertise, along with the capital and commitment that Japan possesses, could be the success factor for the development of Western Sydney.

Leading Japanese firms, including the trading houses, offer many of these attributes in the one entity. And their ability to form consortia gives another advantage in providing an integrated solution.

The Western Sydney opportunity is one that leading companies from Japan have already begun to get involved in. Mitsubishi Heavy Industries, Sumitomo Mitsui Financial Group and Hitachi have signed MOUs with the NSW Government, flagging their intention to consider investing in the project.

The Western Sydney opportunity is a great opportunity for Japan to collaborate, the first of the key themes identified as important for the country’s future in the “Japan in the Reiwa Era” series. It is an opportunity to not only attract new offshore investment, but to also establish a global partnership for the future benefit of both Japan and Australia.

While there are competing investment opportunities for Japan throughout the developed and developing worlds, there are few - if any- projects with as compelling a mix of attributes in terms of: the attractiveness of the investment environment in Australia, underpinned by an open and relatively buoyant economy; enthusiastic support from all levels of government for the project; and strong economic, governmental and cultural connections between the two countries.

**Jason Hayes**

Partner - Japan Practice Leader, Asia region

A large steel truss bridge with stone pillars over a river at sunset. The bridge is made of dark metal with a complex truss structure. The pillars are made of light-colored stone. The water is dark and reflects the sky. The sky is a mix of blue and orange, with some clouds. In the foreground, there are some green plants.

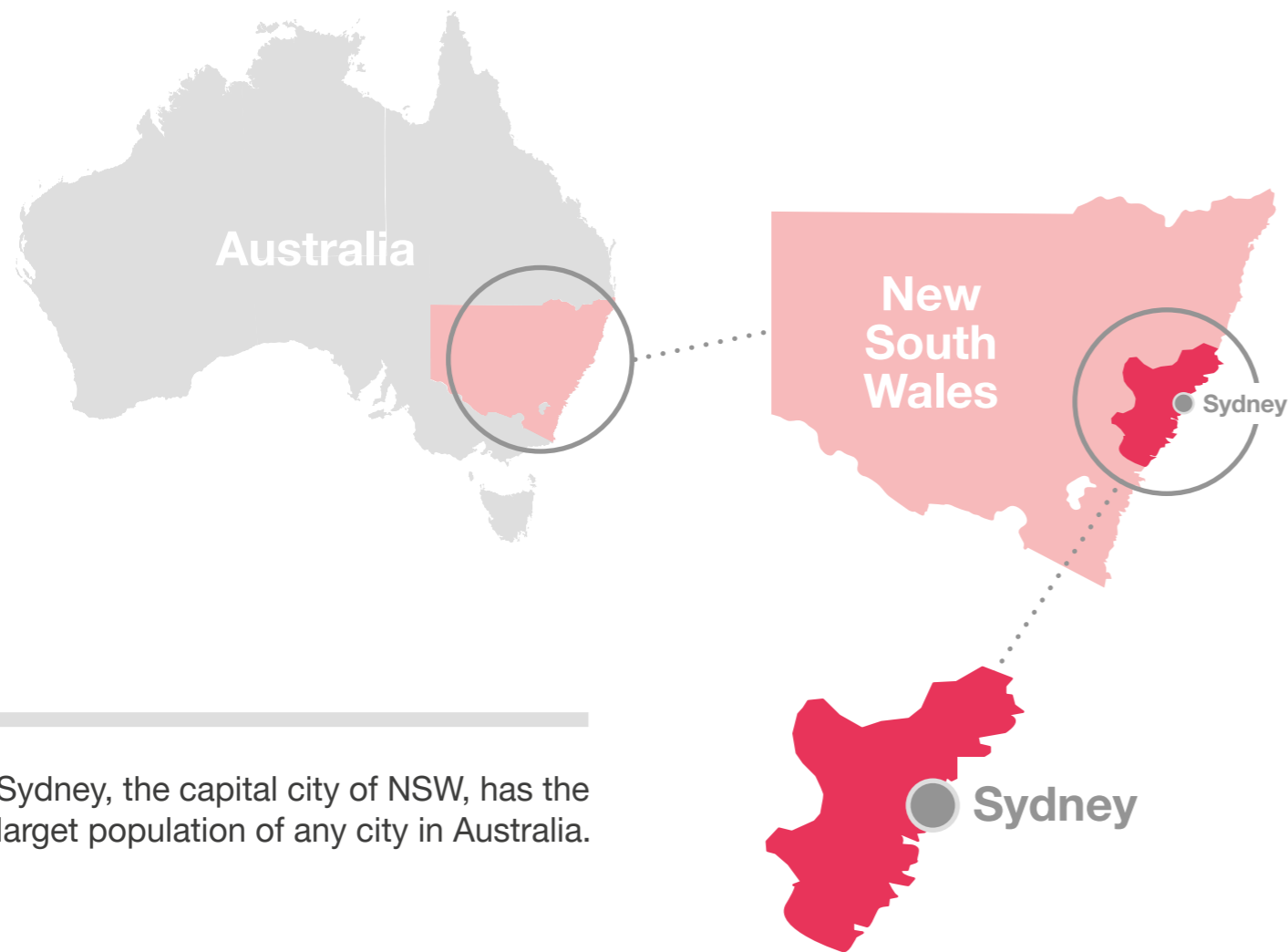
02

# The opportunity

The Western Sydney Aerotropolis will be built on

**11,200**

hectares of land around the planned airport - by comparison, that's equivalent to 10% of the area of Greater Sydney, or 15% the size of the 23 wards of Tokyo.

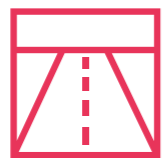


Sydney, the capital city of NSW, has the largest population of any city in Australia.



**\$513 billion**

Largest economy in Australia



**\$93 billion**

Pipeline of infrastructure projects



**AAA**

Credit rating



**8 million+**

People call New South Wales home

# Western Sydney in numbers

## Economy

Greater Western Sydney is already the third largest economy in Australia comprising 8% of GDP.

## Infrastructure pipeline

\$35 billion<sup>5</sup> in Western Sydney Region.

## Key developments

Western Sydney Airport and Aerotropolis, Western Parkland City, Sydney Metro Greater West (formerly known as North-South rail link).

## Airport

Commonwealth land

Aerotropolis Core (1055ha out of 11200 hectares) - state government

## Population growth

Greater Western Sydney population is expected to grow to 3 million people by 2036<sup>1</sup>.

The area has one of the fastest population growth rates in the developed world and is expected to absorb two-thirds of future population growth of the Sydney region. The population of the Western Parkland City is projected to grow from 740,000 in 2016 to 1.1 million by 2036, and to well over 1.5 million by 2056.<sup>3</sup>

## Housing

The Western City District to create for an additional 184,500 dwellings over 20 years.<sup>4</sup>

## Public sector investment

\$20 billion committed so far.

## Employments

200,000 forecast under the Western Sydney City deal in 20 years.

## Aerotropolis

Large-scale precinct development opportunities held by a range of private owners including individuals, private companies, local developers and institutions.

Five landowners in and around the Aerotropolis with consolidated holdings of over 200 hectares and more than ten owners with holdings of over 100 hectares.

<sup>1</sup> [www.westernsydney.edu.au/rcegws/rcegws/About/about\\_greater\\_western\\_sydney](http://www.westernsydney.edu.au/rcegws/rcegws/About/about_greater_western_sydney)

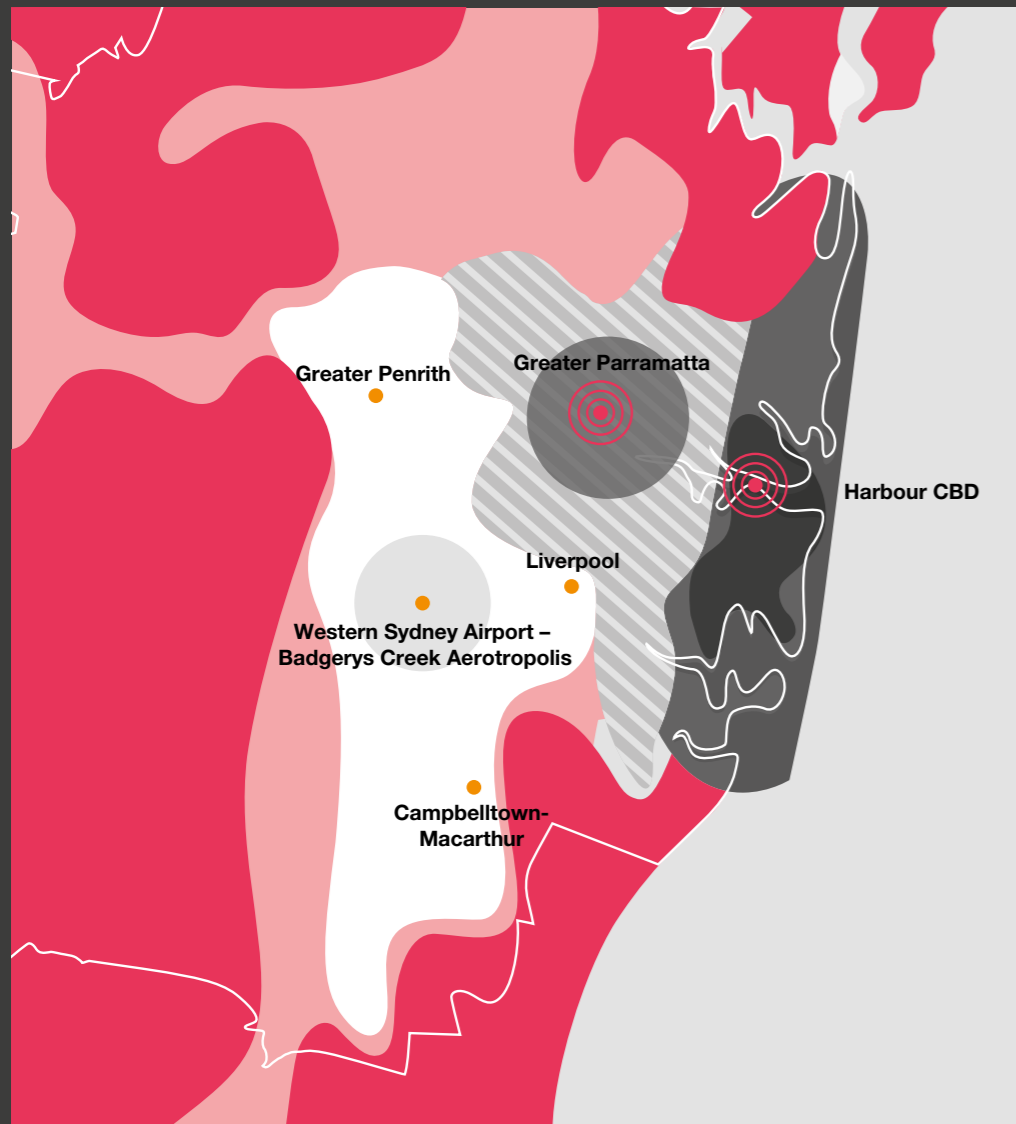
<sup>2</sup> [www.westernsydney.edu.au/rcegws/rcegws/About/about\\_greater\\_western\\_sydney](http://www.westernsydney.edu.au/rcegws/rcegws/About/about_greater_western_sydney)

<sup>3</sup> [www.greater.syddney.gov.au/portal/metropolis-three-cities/vision-metropolis-three-cities/western-parkland-city-vision](http://www.greater.syddney.gov.au/portal/metropolis-three-cities/vision-metropolis-three-cities/western-parkland-city-vision)

<sup>4</sup> [gsc-public-1.s3-ap-southeast-2.amazonaws.com/western-district-plan-0618.pdf](http://gsc-public-1.s3-ap-southeast-2.amazonaws.com/western-district-plan-0618.pdf)

<sup>5</sup> [business.nab.com.au/western-sydney-australias-third-largest-economy-32773/](http://business.nab.com.au/western-sydney-australias-third-largest-economy-32773/)

## A Metropolis of three cities



## Growth in gross regional product (GRP) from PwC's Geospatial Economic Model (GEM)

Weighted average GRP growth, FY2014 -18

**3.87%**

Western Sydney

**3.57%**

Greater Sydney  
(includes Western Sydney)

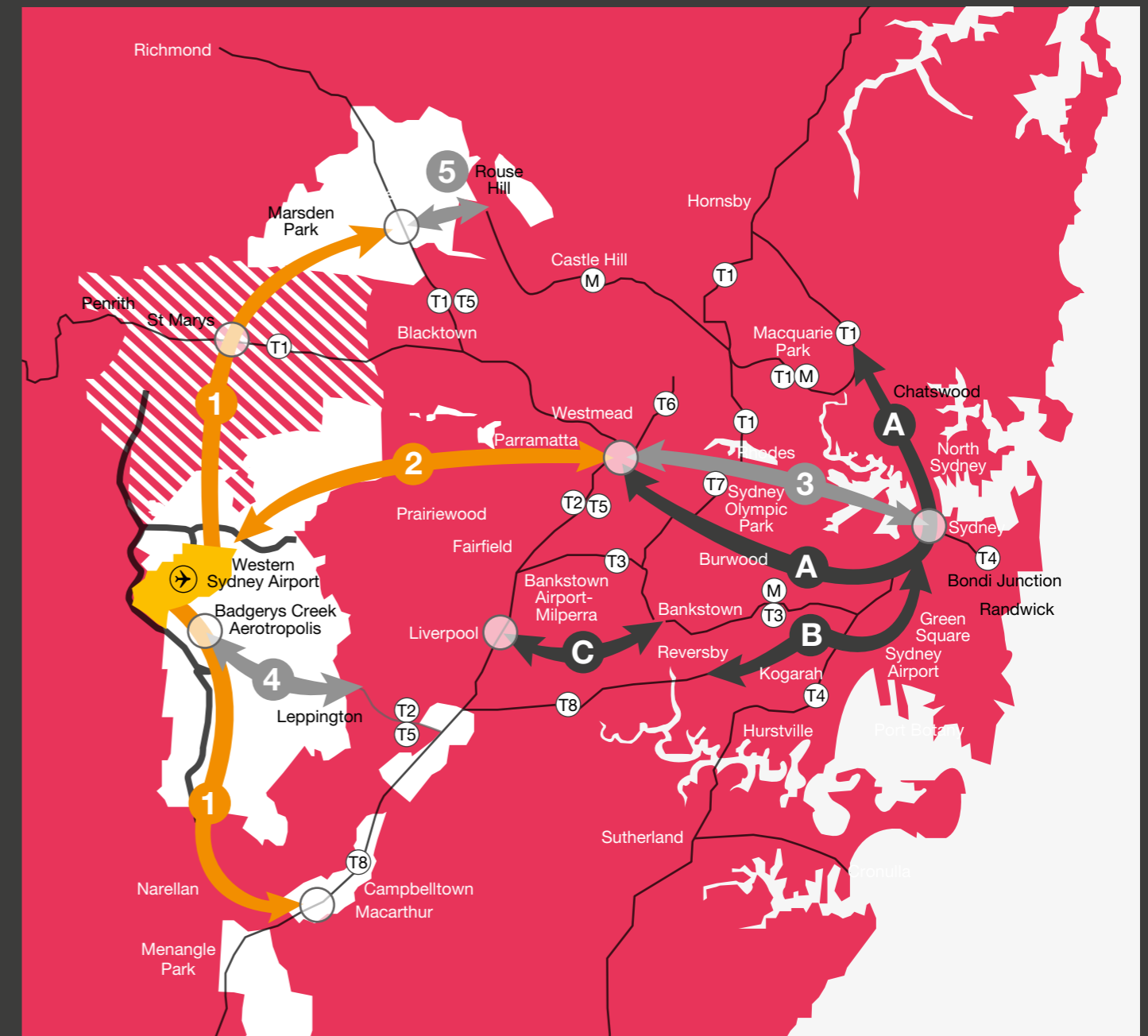
**2.74%**

Rest of Australia  
(not including Greater Sydney)

The figures consider the 2014 -18 financial years. Estimates are for weighted average growth in GRP across the 2014 -18 period, with regional GRP forming the weights. This means that areas with higher GRP make a greater contribution to the reported average growth figures.

Figures for the 2019 financial year are not yet available given primary input data are not published until November 2019.

## Preferred network for Western Sydney



### Rail links connecting Western Sydney and the airport

- 1 North-South Link via Western Sydney Airport
- 2 East-West Link via Western Sydney Airport

### Rail links supporting growth and the airport

- 3 Sydney Metro West (detailed planning has commenced)
- 4 South West Link from Leppington to the Badgerys Creek Aerotropolis
- 5 Extending the Sydney Metro Northwest from Cudgegong Road to Schofields

### Rail links connecting to Greater Sydney

- A Upgrades to the T1 North Shore, Northern & Western Line to increase capacity
- B Upgrades to the T8 Airport & South Line to increase capacity
- C Extending the Sydney Metro City & Southwest from Bankstown to Liverpool
- Key existing or future transport interchange
- Western Sydney Infrastructure Plan major road projects
- Growth areas in Western Sydney
- Growth areas for investigation

- T1 North Shore, Northern & Western Line
- T2 Inner West & Leppington Line
- T3 Bankstown Line
- T4 Eastern Suburbs & Illawarra Line
- T5 Cumberland Line
- T6 Carlingford Line
- T7 Olympic Park Line
- T8 Airport & South Line
- M Future Sydney Metro
- Western Sydney Airport

# Western Sydney explained

## Greater Western Sydney

The term for the 12 local government areas of Sydney's west, including the eight municipal areas within the Western City District.

## Western Parkland City

The western most of the three cities under the Greater Sydney Regional Plan - A Metropolis of Three Cities. Including the established centres of Liverpool, Penrith and Campbelltown-Macarthur, the Western City District also includes the Western Sydney Airport, the Western Sydney Aerotropolis and the regional hinterland to the west.

[www.greater.sydney.gov.au/portal/metropolis-three-cities/vision-metropolis-three-cities/western-parkland-city-vision](http://www.greater.sydney.gov.au/portal/metropolis-three-cities/vision-metropolis-three-cities/western-parkland-city-vision)

## Western City + Aerotropolis Authority (WCAA)

The agency facilitating the design and delivery of the project. Jointly established by the NSW and federal governments.

[www.wcaa.sydney.gov.au](http://www.wcaa.sydney.gov.au)

## Greater Sydney Regional Plan

The key plan underpinning the concept of Sydney as a metropolis of three cities: the Eastern Harbour City, the Central River City (centred around Greater Parramatta) and the Western Parkland City. The plan extends out to 2056 to shape the development of Sydney in a structured way based on the 30-minute city concept.

[www.greater.sydney.gov.au/metropolis-of-three-cities](http://www.greater.sydney.gov.au/metropolis-of-three-cities)

## Western Sydney City Deal

The 2018 deal between the NSW and federal government and the eight local governments within the Western City District to develop the region and establish the Western Parkland City.

[www.wscd.sydney.gov.au](http://www.wscd.sydney.gov.au) and [citydeals.infrastructure.gov.au/western-sydney](http://citydeals.infrastructure.gov.au/western-sydney)

## Western Sydney Airport Corporation

The government business enterprise that is building the airport, which is expected to open in 2026 as a 24-hour curfew-free international airport.

[www.wsaco.com.au](http://www.wsaco.com.au)

## Western Sydney Aerotropolis

A mixed commercial and residential development surrounding the Western Sydney Airport focused around the aerospace and defence, advanced manufacturing, health, tourism, freight and logistics, agribusiness, education and research industries.

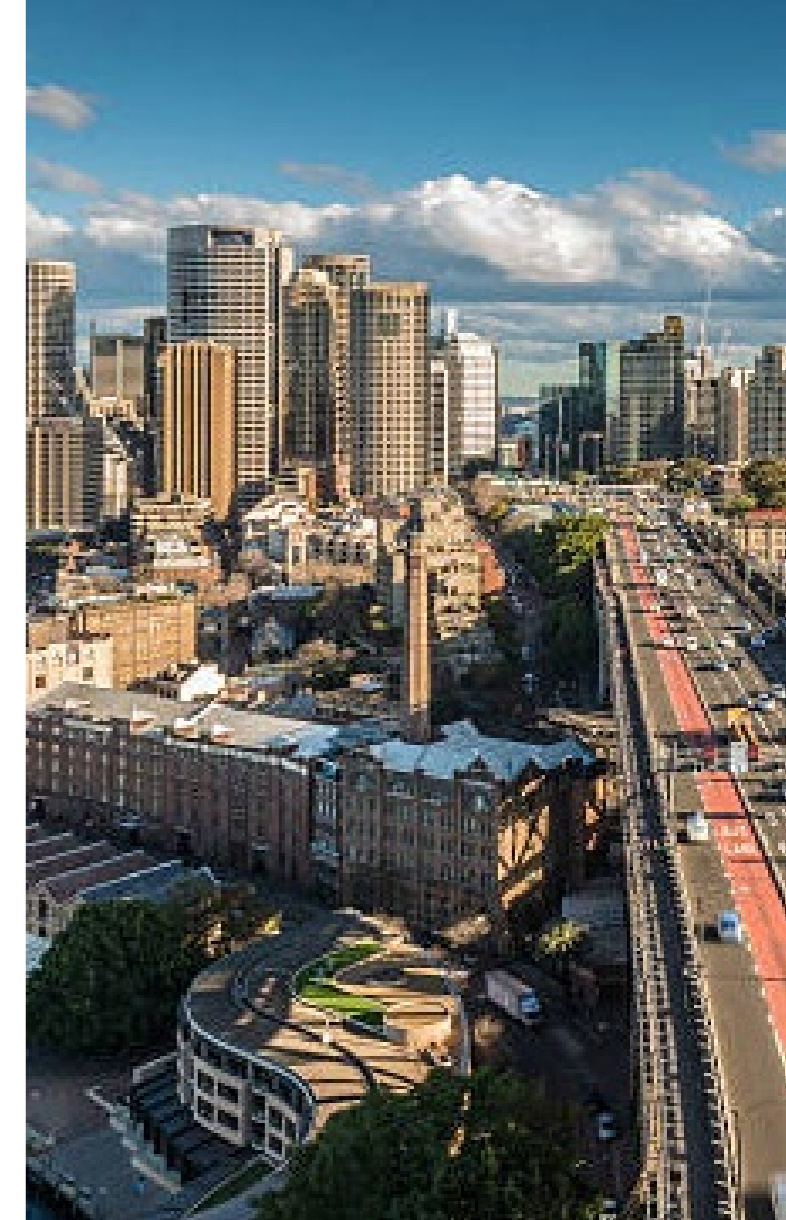
[www.westernsydneyairport.gov.au/sites/default/files/Aerotropolis\\_Investor\\_Guide.pdf](http://www.westernsydneyairport.gov.au/sites/default/files/Aerotropolis_Investor_Guide.pdf)

## Rail Links

Sydney Metro Greater West will bring passengers between St Marys (served by existing metropolitan rail linking it to the CBD), the Aerotropolis and Western Sydney Airport. A detailed business case is also underway for a link south to Macarthur, and a South West Rail Link connecting Leppington to the Airport. A future rail connection will provide rapid service between the Airport, Aerotropolis and Parramatta CBD.<sup>6</sup>

[www.transport.nsw.gov.au/corridors/nsrl-swrl](http://www.transport.nsw.gov.au/corridors/nsrl-swrl)

<sup>6</sup> [https://www.westernsydneyairport.gov.au/files/Aerotropolis\\_Investor\\_Guide.pdf](https://www.westernsydneyairport.gov.au/files/Aerotropolis_Investor_Guide.pdf)



The first of its scale in Australia - with the Commonwealth developing the airport, the State developing the Aerotropolis and both projects enjoying bipartisan support.



Australia is a vibrant aviation market with Sydney as the nation's key international gateway and busiest domestic destination.

But its capacity to continue to play this role is limited with all takeoff and landing slots at Kingsford Smith Airport filled and the freight and logistics load that it bears made increasingly difficult due to traffic congestion and the costs of operating these operations in an inner urban environment.

Subsequently, the long-planned second gateway for Sydney has now been approved and is being constructed by the federal government.

The construction of the first major airport in Australia in 50 years is the key catalyst for what will be the transformation of Sydney's outer west.

Coupled with the addition of rail links to Sydney's existing metropolitan network, this initiative is expected to usher in a host of projects, businesses and investment, attracting new residents to what's now known as the Western Parkland City.

This could result in a significantly large and carefully thought-out urban development, planned by all three levels of government - the first of its scale in Australia - with the Commonwealth developing the airport, the State developing the Aerotropolis and both projects enjoying bipartisan support.

The concept underpinning the development, and the related defining (from a planning perspective) of Sydney into three distinct cities, is that of a 30-minute city - where residents have all they need from the perspective of jobs, education, recreation and green spaces within 30 minutes' journey on public transport. The \$150m allocated to a liveability program to enhance public amenity may need to be increased to provide the level of amenity to support these outcomes.

With a timeline reaching the halfway mark of the current century, this is unusually long-term planning by Australian standards and is backed by a total of \$20 billion in committed investment so far, although the need for private sector involvement is clear with an estimate \$100 billion of total investment required.

The development will occur across vast areas of land to be released close to established centres in Penrith, Liverpool and Campbelltown.

The key commercial driver for the project is without question the WSA (more than 40 years in the making) and the Aerotropolis, designed to be a booming industrial precinct alongside the airport in the same way we see at airports in Incheon (Seoul), Shanghai, Singapore and Schipol (Amsterdam).

While Sydney's Kingsford Smith Airport (KSA) will remain the preferred destination for the majority of airlines, a new greenfield airport in a global city is a rare opportunity, especially one that will be curfew-free (KSA currently has a curfew running from 11pm to 6am).

Qantas CEO Alan Joyce has committed to using the WSA for both its core airline and low-cost subsidiary Jetstar's lack of a curfew opens up the opportunity for night flights to key Asian capitals arriving in the early morning. It also offers significant potential for air freight - an increasingly important industry - as the curfew disrupts distribution.

Experienced hands in aviation note that low-cost carriers are likely to initially take up the slots at WSA but with no prospect of expansion at Kingsford Smith Airport, full service airlines are likely to follow.

The development also includes an educational component aimed at shifting the academic centre of gravity in Sydney westwards. A new education campus, a 'multiversity', to be jointly developed by four universities, including the University of NSW, will be located in the Western Parkland City, with a focus on science, technology, engineering and mathematics (STEM).

Rail links to the Sydney metropolitan rail network have been planned (and in the case of the first stage of the \$15-\$20bn North-South Rail Link, approved), along with upgraded road connections, helping to make this a connected development. Ultimately a fast and direct link to the Central River City and the Eastern Harbour City, home to the CBD, will be required.



Foreign capital will likely be essential to deliver a project of this significance, with up to \$100bn required. Japan's capacity for financing and the desire to diversify beyond its home shores makes it a logical fit.

Japanese businesses and expertise can play a large part in the development of this project and the subsequent development of the entire Western Parkland City. Global expertise in transport, services, infrastructure, digital technology, innovative utilities, sustainability and waste solutions will be critical, along with financing and knowledge and innovation on smart cities and value capture in commercial and residential real estate.





# Tsukuba City

Sam Sangster, CEO of the Western City Aerotropolis Authority (WCAA), has said Tsukuba Science City, about 50 km to the northeast of Tokyo, serves as a possible blueprint for the Western Sydney Aerotropolis.

Tsukuba is a planned science park designated in 2007 that is now home to numerous leading companies, including US multinational Intel, as well as higher education facilities and schools centred around a series of zones.

“Tsukuba is probably the closest proximity to what we’re thinking the aerotropolis core will look like,” Mr Sangster told a business lunch in 2019. “It’s a really good example on a global scale.”

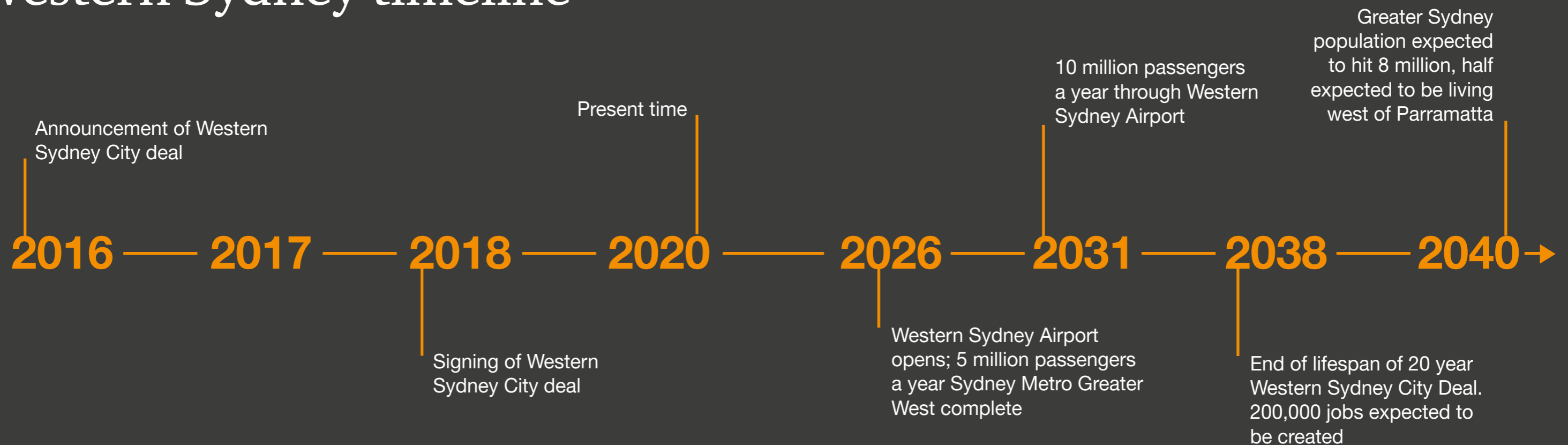
Tsukuba was built in the 1960s, but only began to flourish with the

connection of the Tsukuba Express railway line in August 2005 putting it within 45 minutes of Tokyo.

“Development went very, very slowly until government committed to the Tsukuba express,” he said.

“What has now happened is about seven cities along (the line) have gone through a massive regeneration process, not just focused on jobs but hospitals and education. It’s a prime example of how train connections can make or break development.”

## Western Sydney timeline





03

## Western Sydney and Japan

The Aerotropolis, which is at the heart of the commercial development in Western Sydney, has attracted international and local interest.

18 foundation partners - including four leading Japanese companies - have signed MoUs with the NSW Government, expressing their intent to invest in the project.

The MoUs are aimed at aligning the goals of the federal, state and local governments as well as the commercial goals of the participating companies.

The Japanese companies bring a diverse range of expertise from technology, transport, construction, smart-cities, urban development, energy, utilities and financing. In some cases, all these offerings can be found in a single entity or in a consortium of the kind favoured by Japanese industry.

Japan's strong government-to-government links with both Australia and NSW provide a strong foundation for Japanese participation.

The project is expected to attract new investors from Japan and other countries as well as investment domestically. Early investment is occurring in the form of drug manufacturer Vitex Pharmaceuticals and NSW universities who have committed to develop a new education institution on the site dedicated to Science, Technology, Engineering and Mathematics (STEM) courses.

The United States defence and aerospace company Northrop Grumman announced it would invest \$50m technology investment into the precinct, as well as South Korea's Samsung SDS signing up as a foundation partner.

PwC's Michael Bacik said the Japanese involvement was vital to the project.

"It's a unique opportunity for these companies to do what they are best at - infrastructure, transport, integrated energy, utilities and sustainability systems, IoT," he said.

"It is a good match with the capabilities of team Japan. This is a greenfield site - building a new city from scratch. I don't think there are many places in the world where this has been attempted in such close proximity to an existing major global CBD."

# Foundation partners

In many ways what's offered by Japanese and Australian companies is complementary - Australia's expertise in the commissioning, management, and design of infrastructure projects and Japan's integrated technology solutions and competitive, substantial and flexible financing and knowledge of the opportunities through value capture in large and transformative transport and infrastructure projects.

In Japan, the challenge is not in generating enthusiasm among Japanese companies - as the series of signed MoUs already shows, major Japanese firms are clamouring to either get involved or deepen their involvement in the Western Sydney opportunity and in Australian infrastructure.

Nor is it in bringing firms together - Japan's established system of inter-company collaboration takes care of that.

Rather, the challenge is more in helping companies understand the breadth of the offering they can put forward across the full range of business units and presenting this in an integrated and cohesive way.



The key for Japanese corporate leaders is to start to proactively identify potential opportunities now rather than sitting back and waiting for it to unfold.



While we see Japan as the ideal partner for Australia on this project, there will be work needed in marrying up the differing approaches to business with Australia following a more Western, transactional approach and Japan applying a longer-term lens to its involvement.

Strong and collaborative partnerships will be essential to success and the many friends of Japan within Australia, and professional services firms such as PwC, will need to play a role in helping drive these joint ventures and bringing key firms and people together.

From the Australian side, it will require understanding of the need on the Japanese side for consensus based-decision making. And on the Japan side, understanding will be required in terms of trusting Australian partners and advisory firms on navigating required permitting, regulatory and government relations challenges and collaboration with other local operators.

Differing expectations on the amount of preparatory and investigative work required for joint venture partners will also have to be managed.

Japan's tendency towards exhaustive research, encapsulated in the expression 'ishibashi o tataite wataru' (to tap the stones in a bridge as you cross it), is something that Australian partners will need to come to terms with, along with understanding that trust is built over time through face-to-face connections and respectful and considered dialogue. However, they should draw comfort from the understanding that once a commitment is given, that is absolute and inviolable.

And from the Japanese side, there will have to be some understanding that the time to strike is now, and that without being cavalier, it won't pay to let the perfect be the enemy of the good in terms of seizing this opportunity. What might seem like undue haste in an Australian partner may be driven by the knowledge that there will be advantages for first movers.

The key for Japanese corporate leaders is to start to proactively identify potential opportunities now rather than sitting back and waiting for it to unfold. Commencing field research and starting discussions, either with potential partners or external advisors, ensures that firms will be well placed as the development gathers pace.



## Japan

Four Japanese companies have signed MoUs with the NSW Government to commit in the project.

### Hitachi

Has proposed assisting with precinct design and social infrastructure services. energy, construction, water and railway systems to defence, digital systems and health technology.

### Mitsubishi Heavy Industries

Wants to offer its energy management and low carbon technologies along with social infrastructure expertise.

### Sumitomo Mitsui Banking Corporation

Will offer financing support and collaboration with Japanese and global clients tin the Western Sydney development, such as transport, logistics, healthcare, education, renewable energy or residential/commercial/community development (including concept of smart cities).

### Japan's Urban Renaissance Agency

The semi-governmental organisation has extensive experience in urban revitalisation, smart city design and energy-efficient building both in Japan and overseas. Including Tokyo CBD and Yokohama portside area.



## International

### Northrop Grumman

The Global defence and aerospace company has announced plans for a \$50 million investment in an advanced defence electronics maintenance and sustainment centre.

### BAE Systems

BAE Systems is a British multinational defence, security, and aerospace company. Its headquarters are in London in the United Kingdom with operations worldwide.

### GE Additive

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### DB Schenker

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## Australia

### Sydney Markets

Will establish a presence in the Aerotropolis to take advantage of agri-business, freight and logistics opportunities that will develop over the next decade and beyond.

### Vitex Pharmaceuticals

Announced plans to invest an initial \$10 million in a pharmaceutical training and research facility to support about 100 jobs and train up to 200 students at a time.

### Universities

Education is Australia's largest services export and a key component of plans for the Western Parklands City. The University of Sydney has plans for a global agricultural science hub.

Vice chancellors from the University of Newcastle, University of NSW and University of Wollongong (the NUW Alliance), and Western Sydney University have agreed to jointly deliver a world-class higher education institution within the Aerotropolis with a focus on science, technology, engineering and mathematics (STEM) education.





“In Western Sydney, it’s not just about the airport, it’s about stimulating the whole Western Sydney economy. It’s about residential, commercial, jobs and services - the whole piece.”

**Michael Burns**  
PwC

Japan is already the second-biggest source of foreign direct investment in Australia behind the United States and the pace of that investment has grown.

Japan has the financial capacity and willingness to become even more involved in investments in Australia in areas ranging well beyond the traditional resources sector.

The key Japanese companies know Australia very well and are facing pressure to continue the process of diversification of earnings outside of Japan to combat the impact of declining home markets.

Eiji Kamiyabu, Partner, PwC Advisory LLC (PwC Japan Group) says the Japanese government has been promoting urban development to corporate Japan from the context of promotion of “Quality Infrastructure” investment and export.

“Looking at the urbanisation trend globally, I think this is an area that needs to be promoted,” he says. “With respect to Western Sydney, I would think Japanese companies interested would include key urban development businesses and also large construction companies and general contractors.

“Then there is also an opportunity related to development and O&M of utilities including power, water and gas - so that major Japanese utility companies and also some of major prefectural government such the Metropolitan Government of Tokyo would also be interested.

“There are also opportunities for real estate and industrial park development, particularly from the perspective of smart cities, energy management system, and distributed generation.

In recent history, Japanese cities have been successfully developed under the transit-oriented development model where stations become nodes for development on the back of rapid and convenient public transport links.

That is also the intent with the Western Sydney opportunity, although the links from the Western Parklands City back to the CBD, are yet to be approved and funded.

Nonetheless Eiji Kamiyabu is confident that there will be significant opportunities around the Sydney Metro Greater West (formerly known as North South rail link) for Japanese firms such as railway companies - who have an intimate understanding of what rail construction brings to commercial and residential real estate development in terms of value uplift - as well as trading companies.

“If you are looking at the key transport projects in Australia to have involved Japanese companies have been the Northwest Rapid Transit and Canberra Metro light rail project. These have been under a public private partnership framework.

In most cases Japanese companies tend to team up with local partners who know the local business environment, regulations and culture very well. Almost always they will have a local partner and sometimes an international partner.

A recent example of that in urban development was the recent East Quarter 44-storey Docklands skyscraper being built by LendLease and Mitsubishi Estate.

PwC’s Michael Burns, an infrastructure and urban renewal specialist, said the scope of the Western Sydney opportunity, and the project pipeline on the rest of the eastern seaboard, meant it was essential for Australia to attract integrated infrastructure investors who can build and operate key transport and commercial developments in the area.

“If you are into rail and airports and the associated road infrastructure, well these are big projects and all three cities are looking at the associated real estate investment that goes with it. That’s also a big opportunity.

The problem in the past with attracting international investors to projects in Australia has been scale, but now they have big enough projects that they can design and construct and supply equipment into, Mr Burns said.

“We don’t want just financiers or just constructors - we have those. We have our own real estate development companies. We need all those rolled into one company that has done all this before. We need players who have cheap money and we are also looking for high quality innovative players who offer something better in terms of capability than we are able to offer.

“And Japan shines above other countries in this regard. In Western Sydney, it’s not just about the airport, it’s about stimulating the whole Western Sydney economy. It’s about residential, commercial, jobs and services - the whole piece.”

# Key sectors



## Aerospace and defence

Northrop Grumman has committed a \$50m investment in electronic warfare equipment and advanced electronics at the Aerotropolis. Talks have begun with the Japanese Aerospace Exploration Agency (JAXA) and other national space agencies. Local space companies and supporting organisations are developing a Space Industry Hub in Sydney that will later be relocated to the Aerotropolis.

## Logistics

A dedicated logistics hub must be at the centre of the development with this being a central element of successful Aerotropolis developments in Incheon (world's second largest air cargo hub). Currently, Sydney's Kingsford Smith Airport takes most international air freight but unlike Melbourne and other airports there is no adjacent freight zone with forwarders scattered through the region and heavy congestion a problem.

## Food and agriculture

The same advantages that the curfew-free airport offers to logistics also apply to food manufacturers and the agricultural, aquaculture and horticulture supply chain. Rising overseas demand for trusted Australian food, particularly from Asia, is the key driver of Australia's growing air freight task, the majority of which is food.

Sydney Markets' agreement to become part of the Aerotropolis' proposed agri-business precinct is the first of what proponents hope will be a cluster of food manufacturing and export companies serving Asia's growing middle class population.

## Advanced manufacturing

The freight export potential, the area available and the mix of local and international companies present and a skilled workforce nearby make the Aerotropolis a key candidate for the establishment of an advanced manufacturing sector. There is already a significant manufacturing presence in the west of Sydney.

## Tourism

The influx of passengers from the WSA will create opportunities in tourism, with this sector currently limited in Greater Western Sydney to the Blue Mountains as the main attractor. The challenge will be the draw of the central and harbour cities, which have world renowned tourist attractions. To date, the Eastern Harbour City has dominated the tourist market, with an expanse of major attractions, drawing millions of tourists every year into Kingsford Smith Airport.

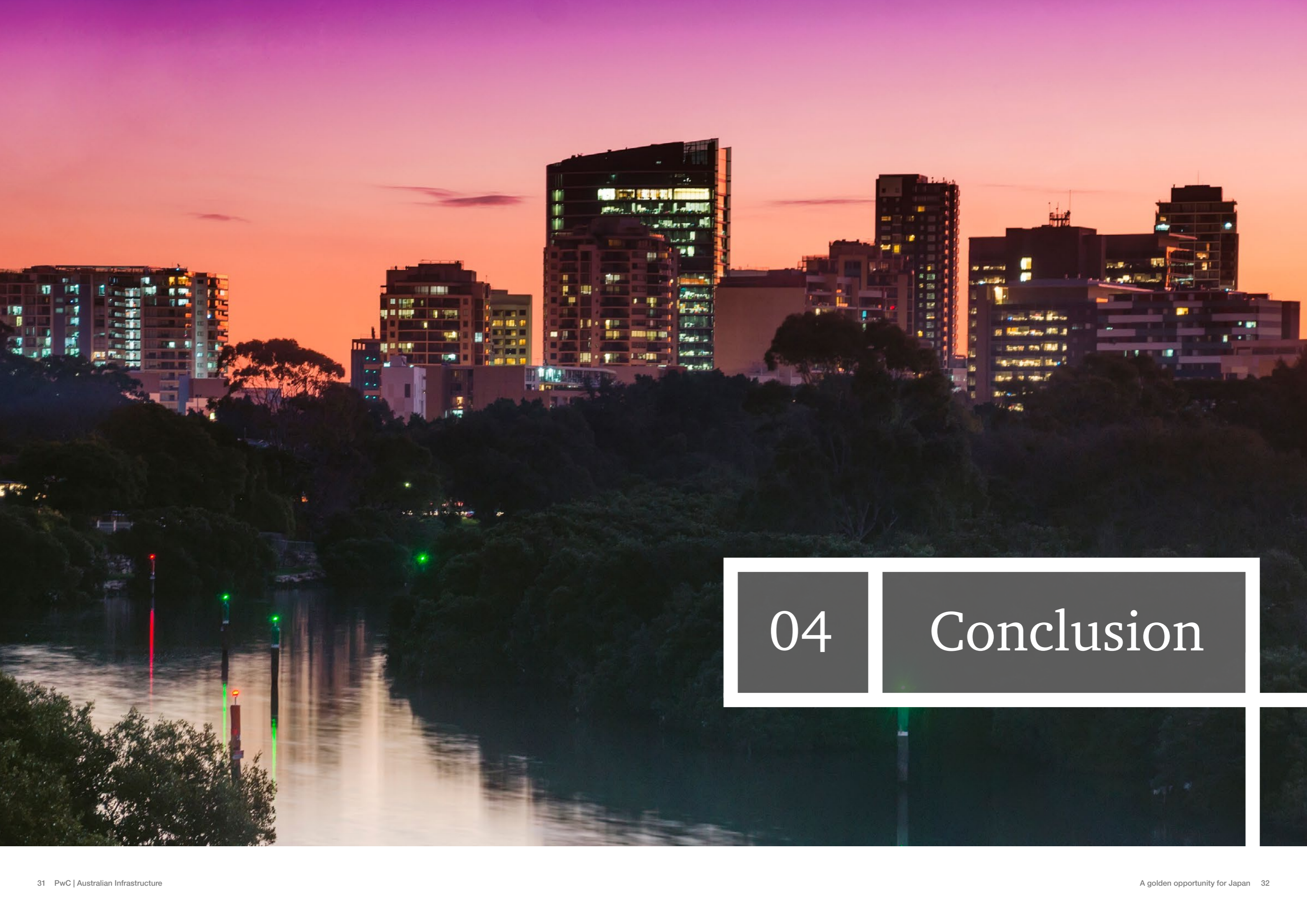
## Housing and accommodation

185,000 homes are required in the Western Parklands City, and far more throughout Greater Western Sydney, during the course of the project, presenting a substantial development opportunity. Additionally, housing across the rest of Greater Sydney will be required to an even greater scale as the population grows.

The residential market is an area of increasing interest for Japanese investors, who have been increasingly active in the market in Australia, including Sekisui House, Daiwa House and constructor Obayashi Group, who has partnered with commercial and residential builder Built Group.

## Health

With the global medical technology and pharmaceutical industry predicted to be worth \$3 trillion globally by 2025, this is a priority area for the project. Investment in the area's hospitals and medical facilities, along with access to educational facilities and export markets, provide potential for health sector investment building on Vitex Pharmaceuticals' plans for an education and training base.



04

Conclusion

“For this type of significant and large project probably a significant government to government discussion would help and would help Japanese companies to consider this type of project.”

**Eiji Kamiyabu**  
PwC

Sydney’s west has great potential as a region and the Western Sydney Airport and Aerotropolis will be what unlocks that promise.

Conceived under Malcolm Turnbull’s Prime Ministership, the project retains the support of the Morrison government and the re-election of the NSW Coalition government Premier has given continuity to the early state development.

Historically, second airports have not always been successful and questions around the need for a second airport in Sydney, where the population has been relatively small by global standards, have been raised. However, Sydney is growing fast, with an extra 3 million inhabitants expected by 2040, which will increase the demand for both living space and air travel. This growth is also being seen in industries which rely on air freight, placing further pressure on existing airport infrastructure.

Progress so far has been solid with MoUs signed with 18 companies (including Japan’s Hitachi, Sumitomo Mitsui, Banking Corporation, MHI and Urban Renaissance Agency) and investment committed from

Australian and international companies. The decision by the government to build the airport - itself the subject of more than 40 years of debate - has helped take out some of the uncertainty.

Nonetheless, the Aerotropolis and WSA projects are greenfields projects and therefore participants will be facing higher risk than buying into existing assets.

PwC’s Eiji Kamiyabu says that’s OK as companies such as trading houses are prepared to tackle this kind of investment and most would look to partner with local companies.

“The Western Sydney project is significant in terms of area to be developed and the industry expected to get involved is quite wide ranging.

“I think traditional investors such as trading houses continue to make investments in both greenfields and brownfields projects - they just expect different levels of return because of the different risk profile and time horizons.

“In general investors would be looking for the risk to be shared - be that with government or with local partners.”

The land involved in the Aerotropolis project is a mix of government owned and privately held, which adds another layer

of complexity.

But the exact precincts to be developed and the structure of it has not been developed yet. Conceptual plans and details on who is going to lead the project need to be clarified.

“For this type of significant and large project probably a significant government to government discussion would help and would help Japanese companies to consider this type of project,” Kamiyabu san says.

While the scale of the development opportunity and associated transport links are one of the project’s attractions, the complexities in negotiation approvals with three levels of government, securing productive partnerships with local operators and navigating the purchase of suitable land parcels are areas where global investors are going to need advisory support.

And with the development in Western Sydney rolling out quickly, firms looking to get involved should move quickly. In the next 6-12 months the structure of various elements of the project and the likely bidders will begin to become clear.



# How we can help?

What truly differentiates PwC from other advisors is our multi-disciplinary approach, which allows us to provide an integrated service offering across all stages. Our IUR team often works alongside PwC's best-in-class experts in tax, legal, structuring and corporate finance to assist clients in seeing their projects through from beginning to end.

Overall service provision and management led by your IUR team, bringing along specialist tax, accounting, funding and legal services from PwC as required.

## Project planning, business case and feasibility

- Project management
- Project governance
- Strategic direction
- Identify opportunities among key market segments and participants
- Map potential supply chains
- Lead feasibility study and site assessment
- Manage technical and design consultants
- Demand Modelling
- Strategic value capture and land use

## Structuring and Procurement

- Identify optimal development structure
- Analyse, advise and prepare delivery and contracting and procurement plans
- Advise and prepare optimal tax and corporate structure
- Prepare and negotiate legal project agreements
- Market sounding
- Project and transaction management
- Statutory approval management

## Equity raising / Partner selection

- Prepare valuation report
- Prepare/audit financial model
- Run tender process for partners or equity
- Prepare and negotiate related contracts (e.g. shareholder agreement)

## Debt raising

- Advise on optimal funding structure
- Advise on optimal debt syndicate including use of export credit agencies
- Run debt tender process
- Prepare debt term sheets
- Negotiate debt package and debt agreements

## Due diligence

- Undertake multi-disciplinary due diligence – covering tax, legal, financial and commercial
- Prepare key take-out and gap analysis, including risks and mitigates

## Financial close

- Contract negotiations including negotiation with government
- Execute all legal agreements (project, debt and equity) and opinions
- Understand financial close processes

## Post financial close – Delivery

- PMO – Assist with construction and operational management
- Program and budget management
- Prepare management manuals for construction and operation phases
- Assist with claims and disputes
- Divestment of assets/ownership
- Refinancing
- Review projects for ongoing compliance and capability



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