NSW GOVERNMENT

Investment NSW

New | **beginnings**
South
Wales

A G R I

F O O D

Australia's largest economy, with the infrastructure and technology to create new agrifood opportunities

Australia

13th largest economy in the world

A population of **25.9m**

16 free-trade agreements

Bilateral FTAs with most major Asian economies and a multilateral ASEAN agreement

New South Wales

31% share of national output

11 public universities with 2 in the world's top 100

4 exporting ports

The NSW economy is larger than Singapore, Malaysia or Hong Kong

We acknowledge the Traditional Custodians of the land and pay respects to Elders past and present. We also acknowledge all Aboriginal and Torres Strait Islander staff working within the NSW Government at this time.

Introduction

The Hon. Alister Henskens SC MP
Minister for Enterprise, Investment and Trade
Minister for Science, Innovation and Technology
Minister for Sport
Minister for Skills and Training

As the largest economic state in Australia, food and agriculture have long been cornerstones of the NSW economy.

The agriculture sector is forecast to become a $30 billion industry by 2030, with food and beverage production also growing rapidly. Our well-honed agricultural skills, fast growing manufacturing capacity and diverse climatic zones mean we produce a wide range of delicious, safe, and high-quality food and beverage products.

The NSW Government is investing in innovative technology and infrastructure to create a raft of new agrifood opportunities.

We're combining our natural resources, farming prowess, manufacturing capabilities and scientific expertise to boost the economy and secure a brighter future for NSW.

As consumer preferences and global dietary requirements rapidly change and place pressure on available resources, our research and development capabilities and skilled workforce are gearing NSW up to feed the world.

This prospectus outlines the significant investment opportunities in NSW's agrifood sector, focusing on agricultural technology (agtech), alternative proteins and synthetic biology.

Located at the centre of Australia's eastern seaboard, NSW is readily accessible to three quarters of the country's consumer market.

Export markets are vital to the sector, with more than two-thirds of Australia's agricultural products sold offshore.

The size of the Asia-Pacific market cannot be underestimated. Asia's share of the food market grew from 42% in 2014 to 50% in 2020 and its population is expected to increase by 700 million in the next three decades. This means that Australia's so-called tyranny of distance has now become the opportunity of proximity.

NSW's geography, diverse climate, application of innovative technologies, advanced farming methods and supply chain infrastructure make it an ideal export base for the flourishing Asia-Pacific region.

The opportunity is ripe for investors to capitalise on world-class agricultural production, cutting edge research and some of agrifood's most innovative businesses.

We look forward to working with you to seize this opportunity to grow with us.

Helping agrifood businesses grow in NSW
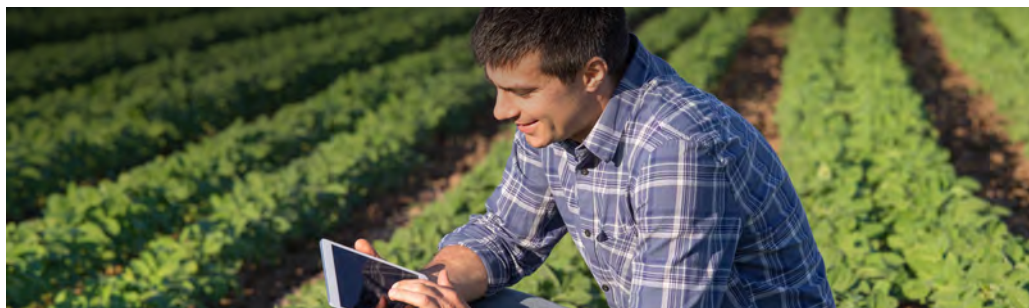
Investment NSW provides tailored support to businesses seeking to invest in NSW through:

Market intelligence and investment opportunities

Advice on government programs and approvals

Support for business case development

Access to relevant government, industry and academic figures

Support to identify investment partners and locations

Information on incentives, grants and funding

Familiarisation visits

Access to a global network

Find out more at investment.nsw.gov.au

Agricultural production in NSW

Map legend

- 🍎 Apples
- 🍌 Bananas
- 🍊 Oranges
- 🐄 Beef
- 🐑 Sheepmeat

- 🥛 Dairy
- 🌾 Grains
- 🥣 Rice
- 📦 Sugar

⚓ Export port

📍 Special Activation Precinct (SAP) with an agrifood focus

Total NSW land area: 801,150kms^2

Moree SAP

New England & North West

Narrabri SAP

North Coast

Far West

Central West & Orana

Hunter

Port of Newcastle

Parkes SAP

Central Coast

Sydney — Port Jackson

Port Botany

Port Kembla

Riverina-Murray

South East & Tablelands

Illawarra-Shoalhaven

Wagga Wagga SAP

Making the food of the future
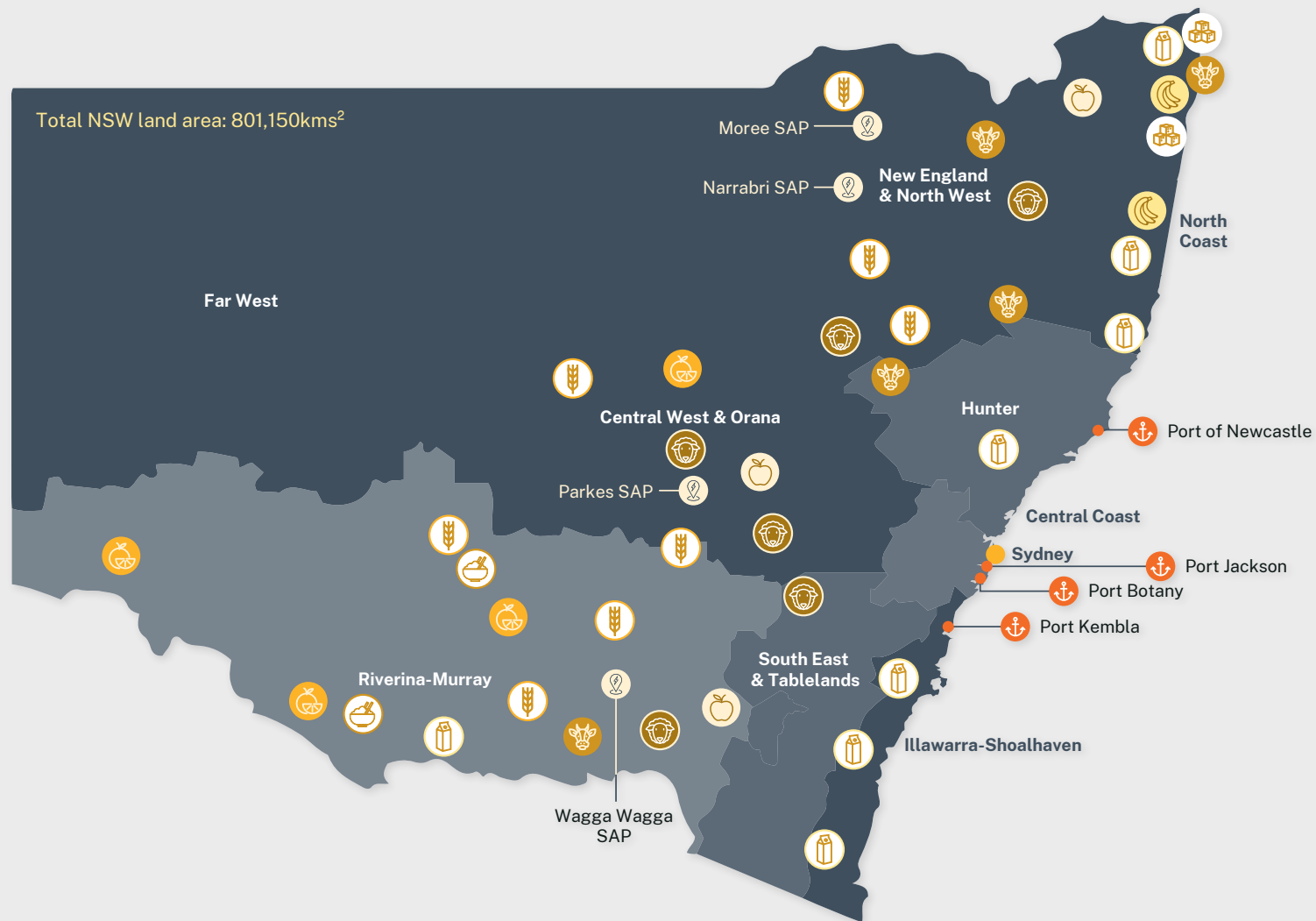
NSW's longstanding agricultural and primary production strengths underpin the state's agrifood investment opportunities.

Livestock, broadacre crops and horticulture feature prominently on the NSW agricultural landscape. They highlight the diversity of NSW's primary sector and growing conditions, and provide key ingredients for food and beverage manufacture.

Freight networks taking us to the world

Global consumers are within ready access of our fresh produce and manufactured goods. NSW has four exporting ports spanning its expansive coastline, numerous airports including Sydney International Airport, and extensive road and rail networks.

Ongoing strengthening of supply chain infrastructure will create new market opportunities. The construction of Inland Rail, spanning three Australian states, will give more regional producers access to increased domestic and international markets.

When it opens in 2026, our new 24/7 airport in Western Sydney, with its supporting rail networks and an adjoining agribusiness precinct, will offer new agribusiness opportunities. Together, they will enable more of our food and beverage products to be exported across the globe.

A strong agricultural and manufacturing base

81% of land mass dedicated to agriculture

Annual F&B turnover:
$35.1bn by food and beverage producers

135,000 people employed within agrifood
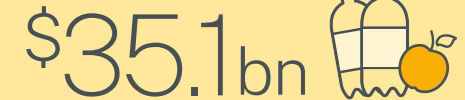
Annual exports:
$7.5bn F&B and primary food products

4,300 food and beverage manufacturers

Making the food of the future

Opportunities across the state

The NSW Government is building Special Activation Precincts (SAPs) in regional areas to build on surrounding economic and geographic strengths. SAPs in Moree, Narrabri, Parkes and Wagga Wagga capitalise on these areas' competitive advantages in agribusiness, food processing, freight and logistics and other industries.

SAPs will benefit from proximity to the Inland Rail network. The NSW Government supports their development through planning assistance and infrastructure development, and by helping businesses establish within the precincts.

Just north of Sydney and south of NSW's second largest city, Newcastle, the Central Coast Food Alliance fosters a thriving food, agriculture and beverage industry in a prosperous region.

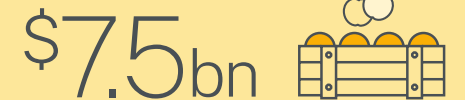Home to many local, national and multinational food and beverage businesses and food service providers, the Central Coast is close to major ports, home to a skilled local workforce and has an engaged business community. The region hosts two major research facilities focusing on food science and horticultural crops.

Bringing science to the table

Coupled with sophisticated farming and manufacturing capabilities, NSW's scientific skills put us at the forefront of innovative food and beverage production. They help us increase yields, and resilience to natural disasters and labour shortages.

Wide-ranging R&D underway in laboratories, farms and factories across the state is producing results in many exciting and innovative spaces such as:

- autonomous drone technology
- greenhouse innovations
- flavourtech
- precision fermentation.

Sydney's Tech Central is the biggest technology district in Australia, bringing universities, scaleups, hi-tech giants and the community together. More than 100 research institutes and centres of excellence have a presence at Tech Central. Artificial intelligence and robotics – two disciplines already being applied on NSW farms and by NSW food and beverage producers – are key focus areas.

Elsewhere, our universities are looking at new ways to apply our abundant natural resources and scientific expertise to the food industry.

Within government, the NSW Department of Primary Industries is globally ranked as a top 1% plant, animal and environmental sciences research organisation.

NSW's top 15 food and beverage export markets ($AUD):	
China	$553.9m
New Zealand	$415.6m
United States	$317.4m
United Kingdom	$113.7m
Hong Kong (SAR of China)	$82.5m
Thailand	$72.1m
Japan	$68.4m
Vietnam	$59.8m
Malaysia	$53.2m
Singapore	$48.2m
Rep. of Korea	$46.3m
Canada	$45.9m
Philippines	$44.3m
Indonesia	$39.9m
Taiwan	$38.5m

Established supply chains give us ready access to consumers across the globe.
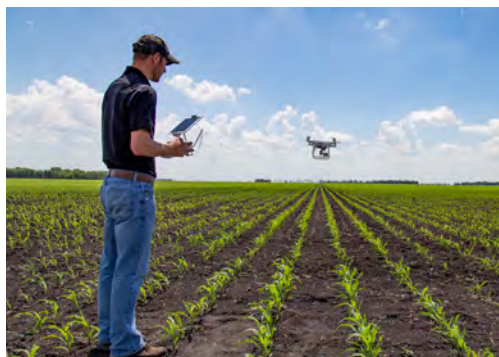
As the world's appetite for quality sustainable food grows, so does NSW's agtech capability.

Agtech uses tools and technologies to improve farmers' productivity and sustainability. It draws heavily on the Internet of Things (IoT) and includes data systems that help primary producers make better decisions.

NSW's agriculture sector was an early adopter of robotic and automation technologies. Off-the-shelf robots, autonomous navigation systems, irrigation management, and custom robots for seeding, spraying, weeding and livestock caring now operate on farms across the state.

Agtech is already transforming the way we farm in NSW, making our primary producers more globally competitive.

NSW's universities have teams to support R&D partnerships with industry, which include diagnostic, testing and demonstration capabilities, access to expertise and infrastructure, student programs, and incubators for start-up and scale-up businesses.

Much of the agtech deployed in NSW is also developed within the state. Opportunities to export this pioneering technology are growing as farmers across the globe seek to improve their productivity. International producers stand to benefit from agtech developed by NSW researchers, companies and entrepreneurs.

Unique initiatives

NSW's Department of Primary Industries (DPI) is Australia's largest R&D supplier, with over 600 researchers and 13,000 hectares of trial farms. DPI's agtech R&D strengths are founded on access to research infrastructure, weather and soil data, and NSW's diverse agriculture products. The Department gives agtech developers a unique opportunity to test and develop livestock, horticulture, fisheries and forestry products across its 25 research stations.

NSW is leveraging research outcomes and a pipeline of freight infrastructure to connect farms to markets. An Agtech Cluster in Wagga Wagga will build on the town's reputation as NSW's food bowl, seeking to add value at every point of the supply chain.

The Farms of the Future initiative further demonstrates a commitment to building NSW's agtech capability. Focusing on connectivity and IoT based-agtech, the $48 million program allows eligible local farmers to apply for grants of up to $35,000 to deploy agtech provided by pre-approved suppliers.

Alternative proteins

As the world's population heads towards 9.7 billion by 2050, the need to produce more protein with finite natural resources is intensifying.

Meat, eggs and dairy products will continue to dominate agricultural production systems and consumption patterns for the foreseeable future. But consumers' dietary preferences are seeing demand for alternative proteins grow, domestically and in the increasingly affluent Asia-Pacific market.

NSW is using its existing primary production capacity, research expertise, smart manufacturing infrastructure and market access to capitalise on demand for alternative proteins.

Plant-based protein

NSW grows a range of world-class quality and protein-rich fruit, grains, nuts, pulses and vegetables, and has extensive capacity to grow more and add value to them. R&D efforts focus on making these crops more productive and transforming them into tasty, nutritional plant proteins for food manufacturing. The Asia-Pacific market for plant-based protein is estimated to exceed $64 billion by 2030.

Australia is the world's largest chickpea exporter, with almost half of production coming from NSW. In the 2021-22 season, chickpeas comprised close to 60% of the 529 kilotonnes of pulses grown on NSW farms.

The NSW Government has committed $10 million to a dedicated chickpea program aimed at enabling us to grow chickpeas with greater yield, efficiency and sustainability in more locations.

Separate research focuses on developing ways to refine chickpeas and other pulses commonly grown in NSW – including faba beans, field peas, lupin and lentils – for use in market-quality protein isolates and concentrates. At the University of Sydney, for instance, researchers are developing refining processes to efficiently extract protein concentrates and isolates from Australia's commonly grown pulse varieties.

The domestic consumer market for these products is forecast to be worth $3 billion a year by 2030. NSW has Australia's largest number of businesses and startups in this space. They are supplying local outlets, including supermarket chains and international markets, and have raised capital allowing for further expansion.

Synthetic biology

Long-established natural resources and cutting edge R&D in NSW is supporting the uptake of synthetic foods.

Synthetic biology applies engineering principles and genetic technologies to DNA-encoded biological components. Enabling new products and processes, synthetic biology is conservatively forecast to add $19.2 billion to Australia's food and agricultural sectors by 2040.

An Australian Government-funded centre of excellence created to build Australia's synthetic biology strengths is being spearheaded by Sydney's Macquarie University. Two other NSW universities – the University of NSW and University of Newcastle – and the Department of Primary Industries are partners at this centre. In addition, Macquarie University hosts the *Australian Genome Foundry*, Australia's first automated facility for the engineering of biology.

The foundry is co-funded by the NSW Government, which has funds available for locally-based researchers and businesses to advance initiatives including synthetic biology and biomanufacturing.

With support from the Australian Government's science agency CSIRO, the University of NSW hosts *SynBio-10X*, an accelerator offering Australian synthetic biologists the financial and technical support needed to take their ideas to market.

NSW is at the forefront of research efforts in precision fermentation, a branch of synthetic biology and a new frontier in agrifood. Precision fermentation allows scientists to use modified microorganisms to produce foods and medicines at scale. The process can produce nature-identical food without the need for animals.

Numerous synthetic biology startups operate in NSW. Among them are businesses producing:

- synthetic food products

- microbes to reduce ruminants' methane elimination

- cyanobacteria to create biological products including food

Unique capability in NSW allows scientists to scale up precision fermentation R&D from across Australia.

"NSW's TechVouchers program enabled us to experiment with the commercialisation of various solutions and build a truly global, scalable business."

Anastasia Volkova, PhD
CEO/Co-Founder of Regrow

From small beginnings in Sydney, Regrow has become a global agtech company with operations in Africa, Europe and the Americas.

The company is headed by Anastasia Volkova, who created a cutting edge crop monitoring platform while completing her PhD at the University of Sydney.

Volkova's Flurosense platform initially provided custom crop progress reports with input from hyperspectral cameras on drones and satellites, plus sophisticated data analysis. Flurosense detects crop problems before farmers can, helping them increase yields while also minimising water and fertiliser use. The platform has grown to offer additional data that advances regenerative agriculture practices across the agrifood supply chain.

TechVouchers received from the NSW Government supported collaboration between Volkova's initial startup, FluroSat, and the University of Sydney. The company also received Minimal Viable Product and Building Partnerships grants from the NSW Government.

After acquiring US soil health startup Dagan, Flurosat rebranded as Regrow in 2021. The company now also provides a monitoring, reporting and validation suite for ecosystem and carbon markets and an emissions assessment tool for consumer brands. Multinational brands including Cargill and Kellogg's are among its clients.

Contact us today to find out more about investment opportunities in New South Wales

investment.nsw.gov.au/contact-us/
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