WESTERN SYDNEY
UNIVERSITY

AGRI TECH PRECINCT

INFORMATION MEMORANDUM

Artist's impression

ACCELERATE YOUR SUCCESS

The Agri Tech Precinct will be a world-leading hub of innovation, research, incubation, and production to advance sustainable and resilient food systems.

PRECINCT VISION

The Precinct will be the focal point of a diverse ecosystem of collaboration and partnerships across the food supply chain, involving investors, agri-tech developers, knowledge partners and resource input providers. It will also benefit from Western's leading research and expertise in agriculture, food science and sustainability through co-location with the Hawkesbury Institute for the Environment and Schools of Science and Engineering, Design and Built Environment.

It will include a high-tech industry-partnered greenhouse array, supported by research clusters in food technology, sustainable land use management and consumer demand. The Precinct will create jobs and develop sustainable peri-urban farming, locally and globally.

Within the Agri Tech Precinct will be Western's dedicated research facility, the Agri Tech Hub (the Hub). Infused with state-of-the-art agriculture and food technologies and featuring co-location space for industry and research, the six hectare hub is expected to generate over $30 million of economic activity per year for the surrounding region.

The Hub will provide sophisticated work integrated learning opportunities for students, enabling them to complete their studies in an industry engaged context and graduate with strong industry knowledge and skills.

The site is strategically located just 40 minutes from the new Western Sydney International Airport and main arterial roads in Sydney, driving your connectivity and growth. Located close to the Centre of Excellence in Agricultural Education being developed by the NSW Government, the Hub will enable close collaboration with schools and TAFE.

Embracing the wisdom and knowledge embedded within Indigenous Heritage and local communities, it will deliver on Western's commitment to Connecting with Country, sustainability, innovation and building partnerships with industry.

ACKNOWLEDGEMENT OF COUNTRY

With respect for Aboriginal cultural protocol and out of recognition that its campuses occupy their traditional lands, Western acknowledges the Darug, Eora, Dharawal (also referred to as Tharawal) and Wiradjuri peoples and thanks them for their support of its work on their lands (Greater Western Sydney and beyond).

CONTENTS

Our ambition is to bring together Western's research and scientific expertise with a range of strategic industry partnerships to achieve enhanced commercial and community outcomes

- Recognition as a regional, national and international value creation hub
- Connect Precinct partners and complementary enterprises
- Work integrated learning and employment opportunities
- Effective, efficient and economic B2B and supply chain relationships
- Collaborative working practices and mechanisms to engage effectively with Government and NGO partners
- Systematic R&D collaboration on cross-sectoral, multi-disciplinary innovation

THE OPPORTUNITY

1

Prime location for local and global markets

The Agri Tech Precinct is located just 40 minutes from the new Western Sydney International Airport with excellent connectivity to major arterial roads and logistics inter-modal hubs, opening up access to domestic and international markets for your products.

2

Access to a skilled workforce and educational opportunities

Embrace a thriving educational ecosystem where learning never stops. Collaborating with local high schools, TAFE and Western, the Precinct offers a diverse pool of talent, from entry-level to expert skills. Take advantage of a wealth of skill development opportunities through our onsite educational programs.

3

Harness our knowledge and unleash innovation

Partner with us to tap into our vast knowledge base and our commitment to frontier research. Our researchers and experts are dedicated to pushing boundaries, driving breakthroughs and discovering new possibilities. This will help you stay ahead of the curve in the ever evolving agricultural landscape.

4

Maximise your potential

At the Agri Tech Precinct, our mission is clear: to maximise your potential. We're here to provide you with the tools, resources and insights you need to thrive in a competitive market. Join us and unlock unparalleled growth potential for your business and boost your profitability.

5

Carbon Neutral precinct

As a leader in sustainability and social responsibility, we have big ambitions for the Agri Tech Precinct to be a showcase of sustainable design and operations. By partnering with us, we can help your business reduce your carbon footprint and environmental impact.

BENEFITS

Accelerate your success by co-locating with leading research and industry innovators

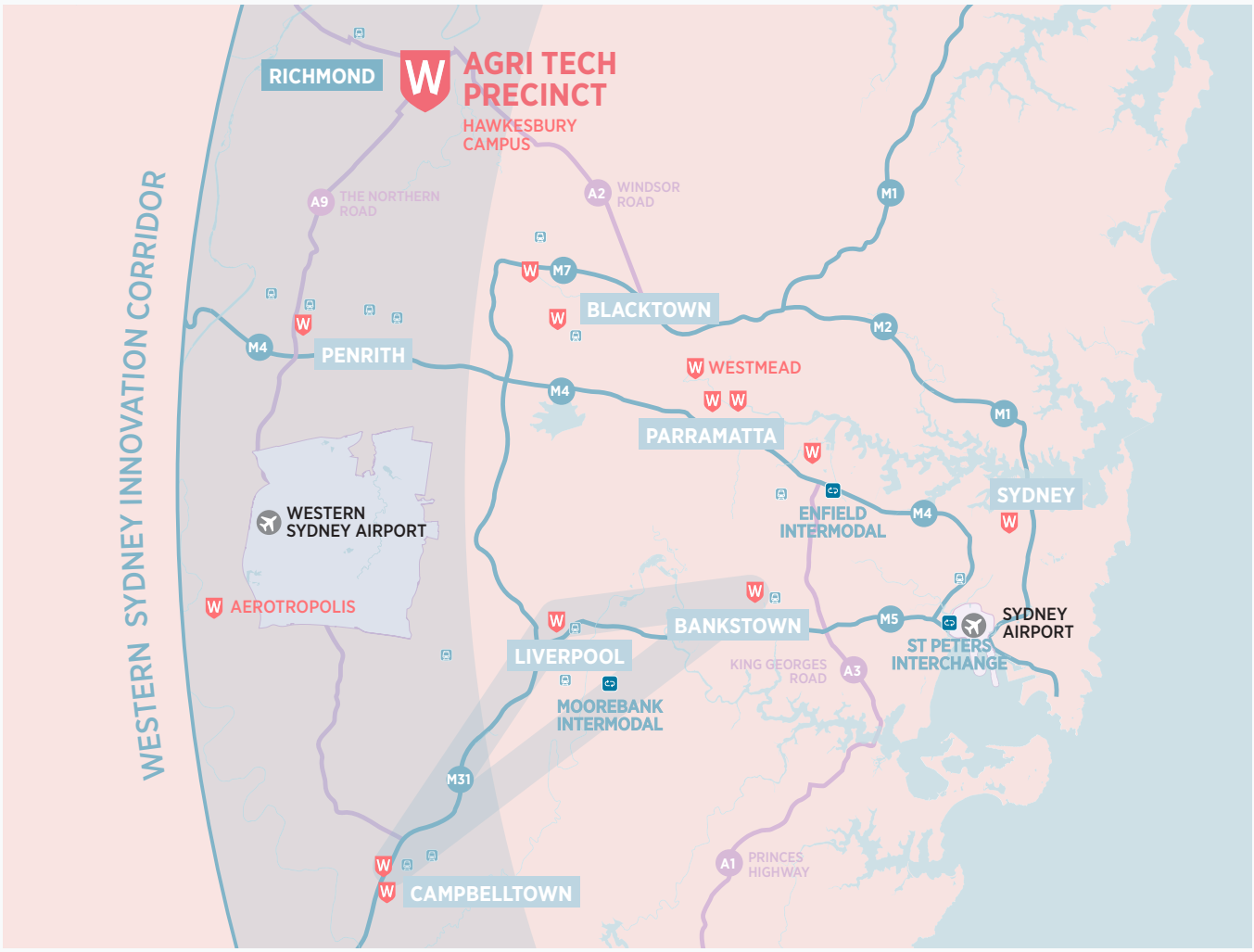
Integrated research and educational opportunities

Partner with complementary industries to develop leading solutions that drive higher yields

Deliver shared economic, social and innovation outcomes

STRATEGIC LOCATION

Be part of the new Innovation corridor



CONNECTIVITY

The Agri Tech Precinct is conveniently located close to major arterial roads and key infrastructure including trains and the Western Sydney Aerotropolis.

INNOVATION CORRIDOR

The site is located on Western Sydney University's Hawkesbury campus in the south-eastern part of Richmond, within the Hawkesbury River valley, north-west of Sydney. The Precinct is strategically located in the Innovation Corridor, a critical contributor to supporting the region's expanded production.

AN INTERNATIONAL GATEWAY

Set to be fully operational prior to the opening of Western Sydney Airport in 2026, the Agri Tech Precinct will be an international gateway for glasshouse, food science and agribusiness technologies and research.

With growth and investment in the Western Sydney region set to intensify in the coming years through the development of the Aerotropolis, the Precinct is in a prime position to tap into this growth.

CATALYST FOR GROWTH

This strategic regional location of the Precinct maximises the potential for both urban and rural farming land for co-location, trials and intensive production.

The Precinct is designed for flexibility to accommodate various sizes of facilities with space to grow, providing future-proofed solutions for your growing operations.

The development will contribute to achieving the commitments of the Western Sydney City Deal, including the development of 200,000 jobs across the region.

The development, combined with the Western Sydney Parkland City Authority's visioning for an agriculture precinct aligned to the Aerotropolis, will further grow Western Sydney's presence as a leader in sustainable agriculture and protected cropping, as well as boosting industry-attraction and investment.

The Agri Tech Precinct will offer direct access to a concentration of R&D, education and industry innovators to deliver world-class outcomes and support commercial activation into a global market.

The campus is already home to several leading agricultural institutions which will provide a strong teaching and research platform for the Agri Tech Precinct.

HAWKESBURY CENTRE OF EXCELLENCE IN AGRICULTURE

Providing world-class academic, research, entrepreneurial and practical learning programs via industry and educational clustering. The Centre is a statewide resource delivering world-class agricultural and science, technology, engineering and mathematics (STEM) education.

NATIONAL VEGETABLE PROTECTED CROPPING CENTRE

A flagship, high tech glasshouse with diverse research and education projects funded by Hort Innovation, NSW Government and industry partners. Opportunities for research collaboration and engagement with students at both an undergraduate and postgraduate level.

HAWKESBURY INSTITUTE FOR THE ENVIRONMENT (HIE)

Recognised as the leading centre of research and excellence in ecosystem function and environmental responses to changing climates.

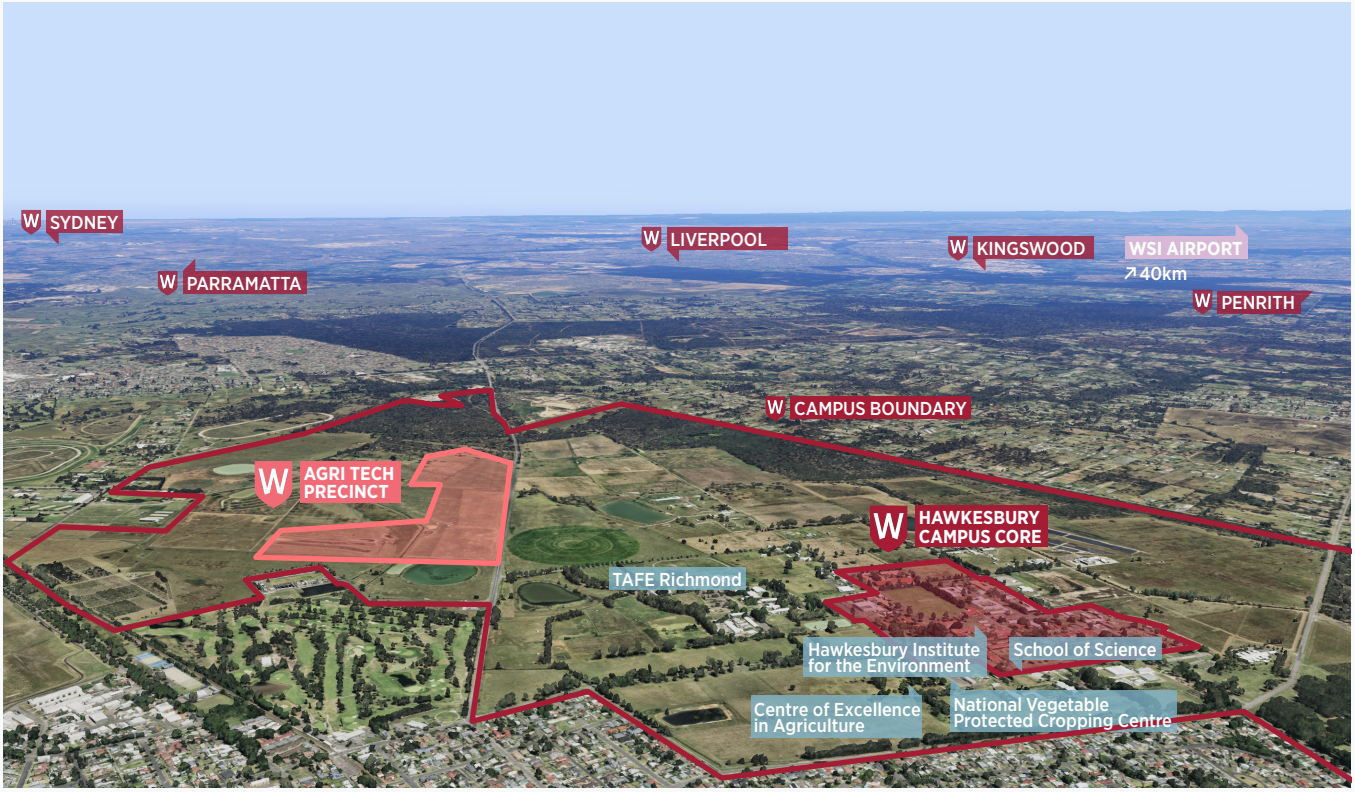
With a unique suite of world-class research facilities, the Institute has an extensive number of collaborations with Australian and international institutions, government, research and industry organisations.

SCHOOLS OF SCIENCE, BUSINESS, ENGINEERING, DESIGN AND BUILT ENVIRONMENT

Delivering innovative graduate and post graduate degrees in horticulture, agriculture, food security, nutrition and food science, protected cropping and more.

Advanced specialisation courses in protected cropping combine specialist funding with seven industry partnerships to develop Australia's future industry leaders.

Bringing together initiatives and strengthening ties between these organisations, the Agri Tech Precinct will foster collaboration between industry and partners in education, research, entrepreneurial opportunities and transformational innovation.



NATIONAL IMPACT

Advance in one of Australia's largest and leading industries.

Australian agriculture is a high-value national industry with significant potential for innovative impact. The demand for higher value agricultural production is increasing worldwide with Australia, and Western Sydney in particular, well-positioned for success.

ECONOMIC VALUE

$80bn

Gross value of agriculture in 2024, accounting for 11% of goods and services exports.

EMPLOYMENT CREATION

318k

People employed in agriculture, forestry and fisheries as of August 2019 or some 2.5% of the national workforce.

ENVIRONMENTAL IMPACT

55%

of Australia's landmass occupied and managed by Agricultural businesses.

LEVERAGE OUR TRACK RECORD

The Agri Tech Hub brings together industry, academia and government to research, innovate and commercialise new products and processes that create enhanced solutions to address global and local challenges around food production and distribution.

The Hawkesbury region plays a historic role as Sydney's food-bowl. The plains of the Dyarubbin Hawkesbury continue to be a productive horticultural region. This forms a cultural landscape, where river, bush and farmland interrelate. The Agri Tech Precinct builds on the Indigenous use of this Country, and the Hawkesbury campus's history in agricultural education dating back to 1891 and the Hawkesbury Agricultural College. Western is widely regarded as the Australian leader in various aspects of high tech food production including pollination, crop variety trials and nutrient management. Western is also the research theme lead for High-Tech Controlled Environment Production in the Future Food Systems CRC (2019-29).

Leveraging this proud heritage and track record to date, we will foster greater education and industry collaboration, helping to drive the significant technological innovation, workforce pipeline and research and development required to grow agriculture in Australia to a $100 billion industry by 2030.

Sources: National Farmers Association, 2018 | Australian Government Department of Agriculture, Water and the Environment, 2024.

PIONEERING SUSTAINABILITY

The Agri Tech Precinct will contribute to the resilience of our region and will provide a platform for demonstrating globally relevant and applicable initiatives for success.

More than half of Australia's landmass is agricultural. These businesses are at the front-line in delivering food production and environmental outcomes on behalf of the broader community and it is in our collective interest to drive further advances in environmental performance and innovation.

THINKING AHEAD

The Agri Tech Precinct is designed for sustainable businesses who are committed to contributing to sustainability innovation and enhanced environmental outcomes.

As leaders in sustainable building design and development, and in line with Western's Sustainability and Resilience 2030 strategy, our vision for the Agri Tech Precinct is purposefully aspirational and ambitious.

Our vision is for the Precinct to be at the forefront of pioneering sustainability research and application in Australia. Our mission is to create a sustainably designed, clean, green, connected precinct with in-built digital capabilities and smart technology.

DELIVERING CHANGE

Since our inception, Western has had a long and rich tradition of sustainability research, teaching, and learning. In recent years, we have prioritised campus development, taking action and developing initiatives not driven by legislation but by our passion to work towards a better future.

Western is certified Climate Active carbon neutral and is working towards being Climate Positive by 2029. Our objective is for the Agri Tech Precinct to be carbon neutral in construction and operations and we are committed to working in partnership with your organisation and key stakeholders to achieve this.

WORLD LEADING UN SDG COMMITMENT

The United Nations (UN) 2030 Agenda for Sustainable Development Goals (SDGs) provides a shared blueprint for peace and prosperity for people and the planet, now and into the future.

In 2023, Western placed first overall worldwide for the second consecutive year in the latest Times Higher Education (THE) University Impact Rankings, a first for an Australian university. These prestigious annual rankings assess universities on their commitment to the UN SDGs and social, ecological and economic impact.

Western is committed to supporting and promoting the principles of the UN SDGs through all our teaching, research, campus operations and outreach to deliver meaningful impact. At the Agri Tech Precinct, SDGs will be front of mind and foundational pillars for the Precinct design and leasing mix.

GREEN PRECINCT

The landscaping strategy will include soft, native landscaping and diverse planting to improve biodiversity, including re-vegetating riparian zones and a green buffer. Integrating landscaping and planting with seating will create a welcoming entry experience with spaces to pause and rest.

CONNECTION TO COUNTRY

The Agri Tech Precinct is on Dharug Country. Western's Indigenous Futures Decadal Strategy positions local Indigenous Knowledge centrally as an integral part of the way that we care for Country and respond to sustainability and resilience objectives. The Agri Tech Precint will use a Country centred design approach, aligning with established principles to ensure the outcomes for Country are positive and co-designed with Indigenous Knowledge Holders and community.

PRECINCT LEADERSHIP

Western has a strong track record of Green Star accreditation at the highest level, with a target 6 Green Star and a WELL Gold Core rating for the Agri Tech Hub.

We will partner with your organisation to seek to achieve appropriate building performance ratings to ensure the facilities deliver leading environmental health and well-being outcomes for occupants, in line with our shared aspirations.

greenstar6 Certified

WELL GOLD

SUSTAINABLE DEVELOPMENT GOALS

Artist's impression

UNLOCK YOUR FUTURE TODAY

Western is seeking to partner with aligned organisations who share our vision to create a world-class Agri Tech Precinct and wish to co-locate with like-minded businesss.

Stage 1 is now available for lease, with a commercial and economic focus, to set the Precinct up for success. Future stages are anticipated to have more of a research and academic focus, bringing greater opportunities for collaboration between research and industry.

The Stage 1 Concept Plan is designed to accommodate a diversity of uses with a range of site layout options available from 2,000sqm to 5 hectares. The site will connect directly to both Blacktown Road and the Campus core.

Entry to the Precinct is alongside a riparian corridor that will provide a welcoming arrival experience with partner branding opportunities and plans to activate Blacktown Road including convenient amenities for occupants.

Active transport will be supported via the provision of pedestrian and cyclist routes and separate vehicle and pedestrian zones to create a safe environment. The Precinct will be designed to create a safe and secure environment that encourages activity and creates a vibrant and welcoming experience for occupants and visitors.

We have already received strong interest from innovative companies, leading research institutions and new start-ups.

Agri Tech will combine research and innovation, education and business to deliver world-class solutions for rapidly growing industry needs.

The University is currently in progressed discussions with two potential commercial partners and co-occupants of the facility.

A number of industry partners have already been secured, and leading retailers have commited to prioritising the purchase of produce grown at the precinct.

TARGET USES

The Agri Tech Precinct will bring together a diversity of uses, including research and commercial enterprise, and provide enabling infrastructure to foster an innovation ecosystem including:

- Industry led research programs.
- Incubator hubs to enable prototyping and industry led innovation.
- Industry collaboration to provide work integrated learning experiences for students.
- Worker, student and community amenity and infrastructure.
- Shared infrastructure to enable a circular economy.
- A mix of large food industries, growers, supply chain, technology and start up industry partnerships.

Western is seeking Expressions of Interest from innovative companies in the following sectors:

- FOOD PRODUCTION
- BIOTECH & BIOSECURITY
- FOOD SCIENCE AND NUTRITION
- NOVEL PROCESSING
- AGRIBUSINESS
- ENVIRO & BIO SCIENCES
- ENGINEERING AND BUSINESS
- SUPPLY CHAIN
- TECHNOLOGY
- LOGISTICS
- TRANSPORT
- MARKETING

POINTS OF DIFFERENCE

LEVERAGE WORLD-LEADING EXPERTISE IN APPLIED RESEARCH

ACCESS EDUCATION & TRAINING TO BUILD A SKILLED TALENT PIPELINE

JOIN COLLABORATIVE CROSS-INDUSTRY PARTNERSHIPS

EXTEND YOUR REACH TO PREMIUM, GLOBAL MARKETS

BENEFIT FROM GOVERNMENT SUPPORT AND INDUSTRY EXCELLENCE

Leverage our knowledge to boost your potential, and access a skilled labour force at the Agri Tech Precinct at Western Sydney University's Hawkesbury campus.

Artist's impression

WHY PARTNER WITH WESTERN

1.

The right partner

Selecting the right location and development partner is critical to success. By partnering with Western, you can be confident of an aligned, long-term partner to co-locate with at our world-leading Agri Tech Precinct.

2.

Shared vision for Agri Tech

We are committed to driving research innovation and commercial results in Australia's Agri Tech sector. This dynamic project will create a recognised ecosystem for industry development, learning, research and innovation and a vibrant, thriving community.

3.

Regional expertise

We are proudly Western Sydney's pre-eminent education and research institution. We know our region and the inter-connectivity with Sydney and the rest of the nation better than anyone. We are passionate about the development of our region and its further transformation.

4.

Sustaining success

Our mission for Agri Tech is to help our industry partners, students and researchers succeed, while having a positive impact on our communities through our commitment to excellence, sustainability, equity, transformation, and connectedness.

5.

Flexible and Commercial

We take a flexible, commercial and entrepreneurial approach.

We will partner with your organisation to determine the optimal facility design and commercial terms to achieve our shared objectives.

6.

Collaborative approach

We have extensive expertise as an anchor tenant and developer of state-of-art blended learning and commercial precincts. We will bring this expertise to this project with a collaborative approach to partnering with your organisation, industry and key project stakeholders.

1ST IN THE WORLD
2022 AND 2023 TIMES HIGHER EDUCATION IMPACT RANKINGS

TOP 2%
OF UNIVERSITIES WORLDWIDE

A TRACK RECORD OF INNOVATION

Western has a proven track record of driving innovation in the Agri Tech sector through public and industry collaborations that will be leveraged at the Agri Tech Precinct.

CASE STUDY

Automating the future of Australia's indoor cropping sector

Our researchers are working on a transformative project to develop smart solutions for monitoring and managing horticultural crops in protected facilities including polytunnels, glasshouses and vertical farms, as part of a $6.8 million project due to complete in mid-2028.

Co-funded by the Government via the Future Food Systems Cooperative Research Centre (CRC) and led by Western's Hawkesbury Institute for the Environment and National Vegetable Protected Cropping Centre (NVPCC), the research team are developing non-invasive ways to monitor key crop attributes such as yield, quality, stress, disease and pollination. This is providing foundational research to support Australia's growing protected cropping sector in transitioning to advanced, high-tech decision support systems.

This responds to the global priority to increase the sustainability and efficiency of food production systems challenged by urbanisation, population growth and climate change. However, most technologies to date have been developed for regions with temperate, cool or desert climates. Adapting these to subtropical and tropical climate conditions has the potential to bolster growth and resilience in Australia's domestic food supply chain, lower production costs and reduce reliance on imported technology thereby increasing our global competitiveness.

This exciting collaboration is also addressing the commercial challenges for Australian growers including labour costs and yield. The focus is on finding practical, integrated solutions that are cost-effective to drive greater revenues for farmers while lowering the carbon footprint of farming practices.

The project is a collaboration between plant scientists, industry and government partners including NSW Department of Primary Industries (DPI), CRC, Future Food Systems, Episteme Solutions, Rijk Zwaan and Vertical Patch.

CASE STUDY

Enterprise meets entomology: unlocking the emerging market in edible insects

Edible insects are a growing market in Australia – and an opportunity for local businesses. Yet there are many unknowns and challenges, particularly commercialising a new food product in an emerging market with no regulatory framework. The School of Science is working with industry partners to map, understand and respond to these challenges during production.

Our researchers are helping develop innovative systems that can divert waste bound for a landfill and turn it into useful products. For example, combining biological and mechanical processes to use black soldier fly larvae to convert waste into environmentally-friendly and commercially-viable products. These include high-grade insect meal for commercial feeds, high-nutrient fertiliser, and an innovative reductant for industrial use.

CASE STUDY

Smart lighting cropping innovation

Crop scientists at Western's Hawkesbury Institute for the Environment are trialling new 'light-spectra-shifting' films on various edible crops in partnership with CRC industry partner LLEAF P/L. The company's luminescent light-emitting agricultural films (LLEAF) are designed to optimise the amount of photosynthetically active radiation (PAR) that reaches crops grown under cover in greenhouses and polytunnels.

This film is being used to cover blueberries as part of a CRC project with Western's scientists and DPI looking at ways to increase the nutritional potency and yield of berries grown in polytunnels. Meanwhile, CRC-Western projects with Hort Innovation and LLEAF are trialling lettuce and eggplant crops within arguably Australia's most sophisticated experimental greenhouse: the 1,600sqm, state-of-the-art, Netherlands-designed facility at the Hawkesbury Institute for the Environment.

The trials are aiming to further optimise the PAR reaching crops grown undercover so that their growth, yield and nutritional potency match or exceed their field-grown counterparts. LLEAF has already had interest in its prototype film from commercial enterprises in eight countries.

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Contact us today to find out how the Agri Tech Precinct can be the catalyst for your success.

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https://www.westernsydney.edu.au/strategic-projects/agritechhub

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