

The Newcastle Response

Innovation Economy

City of Newcastle acknowledges that we operate on the grounds of the traditional country of the Awabakal and Worimi people. We recognise and respect their cultural heritage, beliefs and continuing relationship with the land and waters, and that they are the proud survivors of more than two hundred years of dispossession. Council commits to address disadvantage and attain justice for Aboriginal and Torres Strait Islander people of this community.

- **Newcastle is Australia's largest and most mature innovation ecosystem outside of a capital city; where industry, startups, local government, and the education sector collaborate to validate innovative solutions to global problems.**
- **Our city is host to over 180 innovation ecosystem assets that support the experimentation and commercialisation of innovation; with assets including 25 innovation spaces, 24 programs, 30 organisers delivering over 203 events, 26 networks, smart infrastructure and 15 support organisations.**
- **Newcastle is rapidly developing as one of Australia's leading innovation living laboratories and smart cities.**
- **Throughout the last year more than \$50 million in private capital has been invested in Newcastle startups.**



Newcastle is undergoing a transition from a primarily industrial base to one that boasts a diversity of economic foundations. The manufacturing and engineering expertise across the city provides a strong foundation for growth of

technology, digital and advanced manufacturing industries. Newcastle and the wider Hunter Region is home to world-class research institutions and a vibrant innovation ecosystem centred on energy and resources, manufacturing and engineering, health technologies, defence / aerospace, the digital and creative industries and a rapidly growing startup and entrepreneurial sector.

Newcastle is an emerging globally significant city; recognised by agencies such as the OECD as a leader in smart city innovation. Newcastle is well positioned to respond to the local community and economic challenges of COVID-19; being resilient and dynamic. We welcome the piloting of new programs and approaches; we are small enough to care and big enough to deliver. Newcastle is a gateway city connecting Northern and North Western NSW regional communities with the rest of the world. We can play

an important role in restarting and providing new job opportunities for the future.

Most importantly, the leaders of greater Newcastle are united with a common voice providing collaborative governance for our city. In response to COVID-19, a City Taskforce made up of 17 key city leaders from across manufacturing, small business, financial services, tourism, transport and logistics, arts and culture, workers, education, business and community sectors have been charting a path for our community and economic recovery.

The City Taskforce will be sharing our local stories and experiences to equip you to make decisions on COVID-19 policy responses. These memos, called 'The Newcastle Response', outline the local community and business impacts, the effectiveness of current government measures, details on how we are mobilising our own resources (and identify opportunities to partner with State and Federal Government bodies to accelerate and increase impact).

Each issue of the 'The Newcastle Response' includes a focus topic. The fifth and final edition examines our Innovation Economy in Newcastle, how we've been responding locally and how State / Federal decision-makers can partner with us to create new opportunities through the COVID-19 economic recovery.

Nuatali Nelmes
Lord Mayor of Newcastle
Chair of Newcastle Taskforce

Innovation Economy

Policy Ask:

The City Taskforce recognises the valuable contribution innovative enterprise and entrepreneurs play in diversifying our city economy and creating globally resilient local jobs. We ask that the Federal and State Government support the continued growth of local innovation-led economic activity, to help recover and rebuild our city economy from the COVID-19 recession. Strategic decisions and investments now as part of COVID-19 recovery can accelerate the economic transformation of the Newcastle and the Hunter as one of a nationally leading regional economy.

We ask that all levels of Government value and prioritise investment in innovation-led economic activity supporting programs and infrastructure that accelerates the commercialisation of Australian innovation globally.

We request the **Federal Government:**

- a) Make employee share schemes a tool for growth and creating more jobs by increasing limits on current caps
- b) Increase tax concessions for investing in innovation to incentivise entrepreneurship and angel investment to fuel job creation
- c) Reduce the funding requirements of the entrepreneur visa scheme for entrepreneurs that choose to move to gateway cities or regional areas
- d) Reduce the minimum salary threshold for innovative enterprise located in gateway cities and regional areas accessing Global Talent Visa programs
- e) Partner and co-invest in a Regional Transformation Hub within the University of Newcastle's Hunter STEMM Precinct.

We request the **State Government:**

- a) Support the development of a Newcastle Innovation Precinct that aligns with the strategic vision of the Sydney Innovation and Technology Precinct (SITP)
- b) Reinstatement of the \$2.1 million Local Innovation Network (LIN) program to support entrepreneurs across the state.
- c) Provide continued funding of the Boosting Business Innovation Program (BBIP) to accelerate commercialisation and R&D between SMEs and Publicly Funded Research Agencies (PFRA's)
- d) Prioritise smart infrastructure investment in Newcastle as a technology testbed through the NSW Smart Places Acceleration Fund
- e) Reduce payroll tax for early stage innovation companies to incentivise the employment of more staff
- f) Co-fund the University of Newcastle's new Regional Transformation Hub within the Hunter STEMM Precinct.



Detailed Policy Asks

We request the **Federal Government:**

a) Make employee share schemes a tool for growth and creating more jobs by increasing limits on current caps.

Employee share schemes (ESS) help innovative enterprise to attract and retain talent during early stages of growth through incentivisation and reducing the perceived risks of entrepreneurship. These schemes further help innovative enterprise to manage cashflow and reduce costs, enabling them to focus resource on achieving rapid growth. ABS data shows that small, young firms (startups) with EES had almost five times greater labour productivity than those who had no EES¹.

Restrictions under the current EES system prevent many innovative enterprises from reaping these benefits. The 20/12 rule (if a company offers shares to more than 20 investors in a 12-month period it must issue a disclosure document), the cap of \$5,000 per person for allowable shares and a maximum share ownership of 10 per cent per employee, impede innovative enterprise from using EES as a tool for growing talent and financial capital as used overseas.

Reform by increasing the limits of the listed restriction would help Newcastle innovative enterprise to more easily raise capital and attract / retain talent. This would help to fuel growth and help our local economy emerge from the COVID-19 recession.

¹ *Committee for Sydney; 'Unleashing Sydney's Innovation Economy' July 2020; Pg 22.*

b) Increase tax concessions for investing in innovation to incentivise entrepreneurship and angel investment to fuel job creation.

The current early stage innovation company (ESIC) tax incentive scheme does not extend to startup founders. Capital gains from shares owned by founders is often their main source of return from their innovation. Extending the scheme to founders would create an incentive for entrepreneurs to scale more ideas and support a culture that rewards innovative entrepreneurship.

Further changes need to be made to the scheme to make it easier for innovative enterprise to qualify as an ESIC. Doing so would increase capital available for innovation as it would incentivise investors away from traditional investment opportunities such as real estate. Increasing capital for early stage innovation will create jobs as more firms will be able to rapidly scale.

Providing further tax relief for investors in ESICs located in gateway cities and regional areas would greatly improve access to capital for entrepreneurs outside of capital cities, leading to more innovation across Australia. Increasing the capacity for gateway cities and regional areas to innovate will help these locations to create globally resilient jobs that can replace those impacted by the COVID-19 recession.

c) Reduce the funding requirements of the entrepreneur visa scheme for entrepreneurs that choose to move to gateway cities or regional areas.

Australia has one of the most uncompetitive entrepreneurship visa schemes in the world. To immigrate to Australia, an entrepreneur must have raised \$200,000 from Australian funders before immigrating, which is significantly higher than the UK requiring £50,000 GBP and NZ \$100,000 NZD. We suggest that the Federal Government significantly reduce the funding requirement to immigrating entrepreneurs on the basis that they land in gateway cities and regional areas. This would distribute the economic benefits from immigrating entrepreneurs into regional economies across Australia, creating jobs and developing new enterprise.

We suggest the Federal Government pilot a scheme such as the Supporting Innovation in South Australia program, which would enable entrepreneurs willing to work in Newcastle to immigrate with zero upfront capital.

d) Reduce the minimum salary threshold for innovative enterprise located in gateway cities and regional areas accessing Global Talent Visa programs.

Lowering the minimum salary threshold for global talent visas and contributions to the Skilling Australians Fund levy would increase innovative enterprises' access to talent and reduce the offshoring of technical and highly skilled work. By further extending this reduction to gateway cities and regional areas, the Federal Government would create significant incentives for firms to relocate and establish new locations resulting in the creation of more local jobs and distribution of population growth.

e) Partner and co-invest in a Regional Transformation Hub with the University of Newcastle's Hunter STEMM Precinct.

Refer to Major Infrastructure projects supporting Innovation case study on page 8.

We request the **State Government:**

a) Support the development of a Newcastle Innovation Precinct that aligns with the strategic vision of the Sydney Innovation and Technology Precinct (SITP).

The NSW Government's \$35 million investment in the Sydney Startup hub and \$50 million in the SITP recognises the integral role innovation precincts and spaces play in fostering and scaling innovation-led economic activity. An investment worth 5-10% of that being invested in Sydney would create a Newcastle Innovation Precinct accessible to the Hunter New England and Northern NSW.

A Newcastle Innovation Precinct would enhance the SITP by extending its ecosystem and creating more opportunities for regional entrepreneurs. This would also enable Sydney enterprises the opportunity to offer talent the luxury of working from Newcastle, which provides a cheaper cost of living and a more relaxed lifestyle. This would result in more enterprise remaining in NSW instead of opening regional offices in places such as Brisbane.

Locally, a Newcastle Innovation Precinct would create jobs and attract innovative enterprise to our city. The precinct would increase

opportunities for local entrepreneurs to grow new business through attracting investment and networks from the SITP and increased visibility of innovation in north regional NSW. We ask that the State Government include an innovation precinct in the development of the two remaining parcels of land at Honeysuckle, currently undergoing concept development by the Hunter and Central Coast Development Corporation.

b) Reinstate the \$2.1 million Local Innovation Network (LIN) program to support entrepreneurs across the state.

The Local Innovation Network (LIN) program played a significant role in developing innovative enterprise and entrepreneurs across NSW. In Newcastle, the program provided innovation support organisation Hunter iF with funding to deliver projects to grow the capabilities of local entrepreneurs and the capacity of the greater Newcastle innovation ecosystem. Without this funding, Hunter iF was unable to continue supporting entrepreneurs and innovation across our region.

The NSW Government invested \$75 million in the Sydney innovation ecosystem through both the Sydney Startup Hub and SITP projects. The LIN program, which supports innovation ecosystems and innovators outside Sydney, requires only 2.8% of the funding pool dedicated to the two state-led innovation ecosystem projects in Sydney.

By comparison, the Queensland Government has invested approximately \$6 million establishing local innovation networks across the state through the Advancing Regional Innovation Program (ARIP). Through this program, 12 regions are provided \$500,000 for a Regional Innovation Coordinator to match fund local innovation projects over three years ending 2020. The ARIP program is helping facilitate new opportunities for local economies through collaborating with over 120 partners to deliver innovation support services in regional

Queensland. Investing in regional innovation ecosystems through projects such as ARIP, the Queensland Government has helped deliver projects that are supporting over 7,400 regional jobs.

c) Provide continued funding of the Boosting Business Innovation Program (BBIP) to accelerate commercialisation and R&D between SMEs and Publicly Funded Research Agencies (PFRA's).

The Boosting Business Innovation Program (BBIP) has supported the development of the University of Newcastle's Integrated Innovation Network (I2N) enabling the acceleration and incubation of more than 60 enterprises who have so far attracted over \$6 million in funding, created more than 30 jobs and provided dozens of work integrated learning opportunities for University students. The I2N has so far supported a network of over 4,400 innovators and entrepreneurs through skill development workshops and events. BBIP has proven to be a successful portfolio of place-based economic stimulus that has provided a significant return on investment. The support the BBIP gives startups, scale-up and SMEs to innovate is critical, particularly in regions outside of Sydney, creating new jobs and economic opportunities, while also further growing the NSW innovation ecosystem.

We strongly urge the NSW Government to consider funding BBIP to further grow collaboration between universities and SMEs, and commercialisation of IP-backed startups and SMEs with export potential. Continued support in the current economic climate for small businesses to develop new ideas and the technology of tomorrow is especially critical for job creation and to future-proof the State's economy.

d) Invest in Newcastle as a technology testbed through the NSW Smart Places Acceleration Fund.

The NSW Smart Places Strategy outlines a range of policy and investment programs to accelerate the advent of smart infrastructure across the State. The City of Newcastle is acknowledged nationally and internationally as a leading Australian smart city. Investment by all levels of government has seen the Newcastle city

centre emerge as an exemplar testbed for testing and evaluating emerging technologies and smart solutions. Continued investment in Newcastle's smart city infrastructure program will enable the continuation and expansion of the city as a living lab for acceleration of smart solutions for the State and provide economic benefits for Hunter digital and technology industries.

e) Reduce payroll tax for early stage innovation companies to incentivise the employment of more staff.

Early stage startups and innovative enterprise reach the payroll tax threshold more rapidly than traditional business would. This quickly makes staff wages a startups most significant cost. The repercussions of this is it disincentivises these companies from employing more staff as their revenue grows. This significant cost created by payroll tax impedes startups from using their resources to globalise their business, which if they did would result in more local jobs and higher tax revenues for the NSW Government long term.

We suggest the NSW Government introduce a concession or exemption on payroll tax to startups and early stage innovative companies with a payroll tax below \$2.5 million. Implementing such an exemption would incentivise the innovation community to employ more staff and provide financial relief that would enable them to more rapidly scale their business creating greater economic opportunities for the state.

The City Taskforce would like to thank the NSW Government for the recent increase to the payroll tax exemption threshold to \$1 million. This exemption has provided much needed relief to many Newcastle businesses and has enabled many enterprises to continue expanding their business during this time of uncertainty. For our city, increasing this exemption on payroll tax to early stage innovative companies would help create new economic opportunities that will help greater Newcastle recover from the COVID-19 recession.

f) Co-fund the University of Newcastle's new Regional Transformation Hub within the Hunter STEMM Precinct.

Refer to Major Infrastructure projects supporting Innovation case study on page 8.

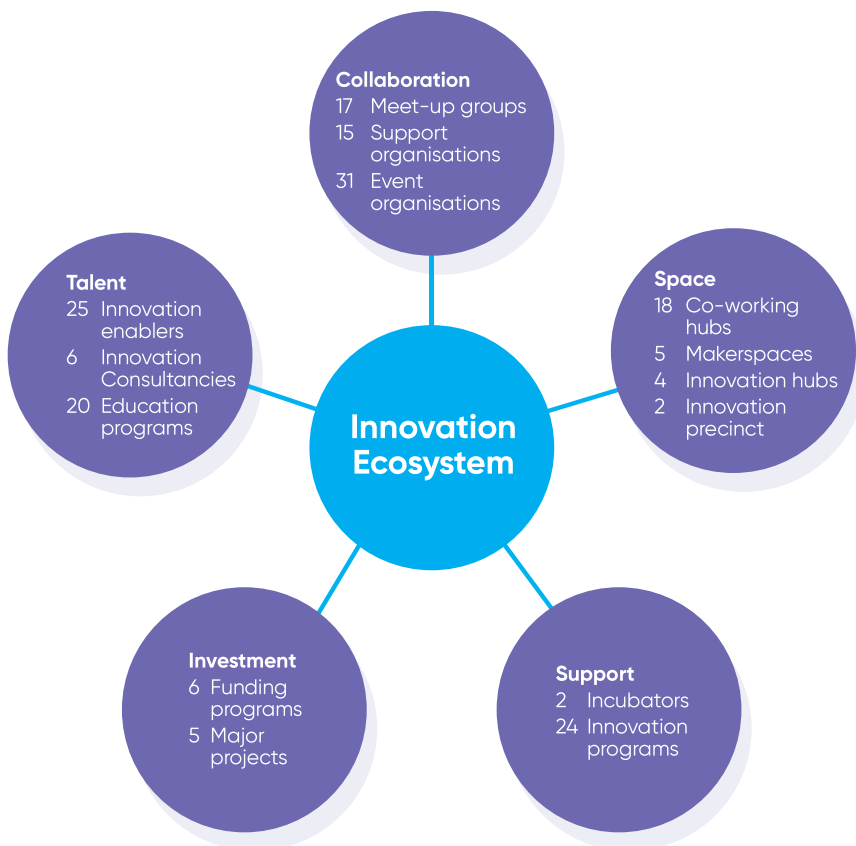
Local insights

The innovation economy is a segment of the local economy representing businesses that adopt and optimise enablers, such as new knowledge, disruptive megatrends and technology, to create commercial opportunities. Those who identify these commercialised solutions and efficiencies are referred to as entrepreneurs and the businesses they create are identified as innovative enterprise. Startups are the enterprises with potential for rapid growth and/or mass consumption.

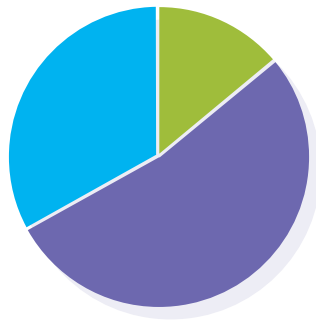
For the innovation economy to thrive, an environment conducive to experimentation and rapid commercialisation needs to exist. This positive environment is referred to as the innovation ecosystem, a network of enabling economic infrastructure converging people, place and policy. The innovation ecosystem

makes it easier for entrepreneurs and their enterprises to pursue innovation, which is an idea driven change through adoption, modification or invention, that when implemented creates a new dimension of performance and/or competitive advantage.

Newcastle has cultivated one of Australia's largest innovation ecosystems; hosting over 180 ecosystem assets that support the experimentation and commercialisation of innovation. These assets include innovation spaces, programs, events, networks, smart infrastructure and support organisations. As an ecosystem, we specialise in the validation of innovation; with 53% of Newcastle ecosystem assets designed to support the testing and early-stage commercialisation of ideas, making our city Australia's leading testbed for innovation.



Innovation Ecosystem Support Clusters



- **Formation**
- **Validation**
- **Commercialisation**

14% Formation – assets supporting the ideation and the discovery of innovation.

53% Validation – assets supporting testing and MVP development.

33% Commercialisation – assets supporting the scaling of innovation and business development.

There has never been a more pressing time to innovate and exploit disruption for economic opportunities. Strategic investment in the Newcastle innovation ecosystem by Federal and State Governments would increase the commercialisation and scale of validated innovation. This would result in an upsurge in the creation of resilient enterprise and jobs that could support the economic recovery of the Hunter New England and Northern NSW from the COVID-19 recession.

The support measures outlined in The Newcastle Response will increase the number of ecosystem assets and enabling policy in Newcastle that supports the scaling of innovation and innovative

enterprise growth. By improving local pathways to scale innovation, Newcastle will grow more global business and increase knowledge exports.

A competitive city in the global market is one whose economy is knowledge-intensive, technology centric and backed by smart infrastructure. Future competitiveness in the attraction of talent and investment hinges on our ability to accommodate the needs of scaling innovative entrepreneurs and enterprise by developing a supportive ecosystem for innovation-led economic activity.

Major Infrastructure projects supporting Innovation

University of Newcastle – Regional Transformation Hub within the Hunter STEM Precinct

The University of Newcastle is proposing to develop a \$207 million Regional Transformation Hub within the Hunter STEM Precinct. This is a major shovel-ready infrastructure project with significant existing capital investment, that would create a centre for industry-led technology and training directly linked to major employers in the Hunter Region. The project would create 1,600 – 2,100 jobs during the construction phase and accommodate 2,300 students, researchers and industry partners once complete. The project has recently received State Significant Development approval from the NSW Government.

The Regional Transformation Hub will be a living lab where industry, researchers, students and trainees work side-by-side to solve real world problems and create new products and approaches, with a strong focus on the greater Newcastle region. Industry problem solving would be underpinned by a mission to create regional jobs, and industry-ready skills. Partners will link startup technology created at the University with entrepreneurs and marquee training providers. The Regional Transformation Hub will ultimately be a work integrated learning environment creating the employees of the future. A major prototyping centre will be available to business and industry to develop and test new ideas for market deployment.

The Regional Transformation Hub will be directly linked to the University's partnership operations in the Upper Hunter, including the Muswellbrook Integrated Innovation Network space at the TAFE NSW site, as well as major resources and energy projects underway. The Hub would be an early activation precinct for growth at the Williamstown Astra Aerolab, providing key labs and prototyping facilities for the Williamstown Innovation Hub and resident companies.

For more information visit: www.newcastle.edu.au/stemm/facility

John Hunter Health and Innovation Precinct

The John Hunter Health and Innovation Precinct will deliver updated and enhanced facilities providing a larger facility to meet the demands of the greater Newcastle, Hunter New England and northern NSW Regions. The precinct master plan was developed in partnership with health, education, research, business and political leaders. The John Hunter Health and Innovation Precinct will encourage collaboration between health, education and research partners.

The NSW Government has committed \$780 million for Stage One of the John Hunter Health and Innovation Precinct. Construction of the precinct is expected to support more than 3,000 jobs over the life of the project, with early works expected to start in 2021.

For more information visit: www.hinfra.health.nsw.gov.au/our-projects/project-search/john-hunter-health-innovation-precinct

Astra Aerolab

Astra Aerolab, which is co-located with Newcastle Airport and RAAF Base Williamtown, will become Australia's pre-eminent place for innovation in aviation, defence and aerospace-related manufacturing, maintenance, research and education. With direct airside access and four of the 57 F-35 Joint Strike Fighters already at RAAF Base Williamtown, Astra Aerolab estimates it will deliver 5,500 new jobs and expand global connectivity for Northern NSW. Stage 1 construction works commenced in early 2019.

In May 2020, the NSW Government announced a Special Activation Precinct [SAP] at Williamtown as part of its 20 Year Economic Vision for Regional NSW. The SAP is 10,000 hectares in size and envelopes Newcastle Airport, RAAF Base Williamtown and Astra Aerolab. SAPs bring together a planning and investment focus on growing jobs and economic activity in an area. The SAP ensures streamlined planning approvals and tailored infrastructure investment in areas such as rail, roads and drainage to support the precinct's establishment. Assuming Williamtown receives its fair share of funding, an estimated \$200 million will be invested by the State Government into the precinct.

For more information visit:

www.astraerolab.com.au/

www.nsw.gov.au/williamtownsap

Smart City Infrastructure

The City of Newcastle's Smart City program is a roadmap for an ambitious regional revitalisation to establish the city as an internationally recognised centre for innovation. Our program leverages digital transformation to improve liveability, sustainability and economic diversity, by creating a city-wide ecosystem for developing local innovation and attracting talent and investment.

Newcastle has emerged as a leading Smart City having built one of our countries most advance IoT networks. City of Newcastle has installed more than 150 smart poles in the city centre, supported by a system of high-speed fibre and is continuing to role this infrastructure out into suburban centres. This network has laid the foundation for Newcastle to become Australia's first 'Living Lab', making our city a testbed for the prototyping and trial of innovative city solutions developed by government, industry and startups.

City of Newcastle is endeavouring to use its Smart City infrastructure to enable a digital precinct in the CBD that utilises highspeed fibre to offer local business our countries fastest broadband speeds. Utilising our Smart infrastructure to improve connectivity and the digital capabilities of local business will create a key competitive advantage for attracting and retaining business in a digitally enabled economy.

City of Newcastle's ambitious Smart City program has been internationally recognised for its innovativeness and achievements. City of Newcastle is the recipient of over 17 awards for its Smart City initiatives including the 'Smart City of the Year – Metropolitan' at the 2019 Smart Cities Awards. City of Newcastle is proud to have delivered over \$38 million in Smart City initiatives that are making Newcastle even more liveable, sustainable and prosperous for its community.

Buidling World Class Innovation from Newcastle.

Throughout 2020 an estimated \$50 million has been invested in Newcastle startups by local, national and international investors. Many local innovative enterprises are rapidly scaling and providing new employment and economic opportunities that reflect the future of work and industry in our city. Innovative enterprise in Newcastle have been impacted by the COVID-19 pandemic, however through this adversity have continued to grow, receive investment and create employment demonstrating the resilience of the innovation economy. We have identified several case studies to give evidence to the resilience of innovative enterprise and how government has supported their growth through a diversity of programs and initiatives.



MGA Thermal

MGA Thermal manufacture thermal energy storage 'bricks' for use in large scale energy storage projects. These bricks store renewable and waste energy as heat, which can be used to offset coal in coal fired power plants or provide base load power to heat intensive industrial processes. Bricks can be recharged, functioning like batteries but at a substantially lower cost.

MGA Thermal has been able to rapidly scale their innovation with support from both Federal and State Government. As participants of the University of Newcastle's I2N Hub, backed by the Boosting Business Innovation Program,

MGA Thermal's founders accessed early stage support to build their entrepreneurial capability. A \$500,000 accelerating commercialisation grant from the Federal Government further supported growth enabling MGA Thermal to pilot local manufacturing of their revolutionary energy storage product.

With Government co-investment, MGA Thermal has been able to scale to employ eight full-time staff and projected to grow to 13 in 2021. The startup was able to secure a further \$500,000 in venture capital from CP Venture. Federal and State government investment in the Newcastle innovation ecosystem helps to grow enterprise, create jobs and develop innovation that helps Australia and the world.

The impacts of COVID-19 have led to a 30% drop in revenue for MGA Thermal, due to travel restrictions delaying international pilot projects. To help innovative enterprise reach international markets, we need Federal and State government support to build more ecosystem assets through initiatives such as BBIP, LIN and precincts, that support commercialisation and globalisation of local innovation.



Coassemble

Coassemble is an online training tool that connects people with the information they need – anytime, any place. Coassemble empowers organisations to create online educational experiences that provide training, information and knowledge through digitally tracked experiences.

The scaling startup employs 14 people in Newcastle, and is projected to grow to 20 in 2021, 11 in Colorado and 5 across Sydney and Brisbane. Coassemble acquires most of its customers from the US and as a result of COVID-19 travel restrictions have pivoted and

now operate their US business entirely from Newcastle. Due to the high demand in online training from COVID-19, the business saw a spike in sales, however, not being able to travel to the US made this rapid growth difficult to manage. Investment in ecosystem infrastructure that supports global connection and commercialisation would help more innovative enterprise from Newcastle to service international clients.

Operating from Newcastle, Coassemble has raised \$6.2 million across two rounds – Seed and Series A. During their Series A funding round in February this year, the startup raised \$4.4 million from both the US and Australia demonstrating the confidence many national and international investors have in investing in Newcastle innovation.

State and Federal Government have both supported the growth of Coassemble. The startup accessed the Federal Governments Export Market Development Grants (EMDG) scheme to support their expansion and rapid growth in the US. Coassemble have also regularly utilised the NSW Government funded Sydney Startup Hub Regional Office to meet with Sydney investors.



GreenBe

GreenBe has developed a digital engagement customer portal used by utilities and government to host customer facing digital programs. The portal helps to drive customer behaviours around energy and water usage, resource demand management, health and wellbeing, sustainability and community building.

COVID-19 has accelerated the adoption of the GreenBe platform by utilities and local

government that require enhanced virtual solutions to interact with their customers. City of Newcastle collaborated with GreenBe during COVID-19 to rapidly deploy 'Lean in Newy', a social action and economic incentive app to support small business and encourage volunteering.

The Federal Government's research and development tax incentive scheme helped GreenBe employ graduate engineers and young people within its Newcastle office. The startup employs seven full-time staff and is using its growth to provide more opportunities for female graduates.

Investing in the Newcastle innovation ecosystem will help support the growth of startups such as GreenBe enter global markets and build local economic opportunities for young people and women.



Portt

Portt is an intelligent sourcing, contract and supplier management platform that enables the strategic potential of procurement teams.

The platform is currently used by all three levels of government in Australia and the New Zealand government. Portt recently established a satellite office in Newcastle creating 10 fulltime roles. Since expanding their operation to Newcastle, Portt has raised \$4 million in investment.

Supporting the growth of the Newcastle innovation ecosystem, the Federal and State Government can help to create local economic opportunities through investing in the development of ecosystem assets such as an innovation precinct that would help attract scaling startups like Portt and support national and international commercialisation; fulfilling a gap impeding the scale of local innovation.

Pegasus™

Powered by Onsite



Pegasus

Local software-based company Pegasus provides workplace management solutions to companies including Woolworths, BHP,

Visy, Lendlease, Aurizon and Ausgrid. Pegasus' technology enables organisations to manage their contractors and workers, giving them control over qualifications, competency, inductions, training, site safety, and assets on site.

Since 2013, Pegasus have experienced close to 25% year on year growth. More recently, Pegasus raised \$28 million from Silicon Valley tech investment firm Accel-KKR to take their offering to the US, UK, and Europe. Pegasus employs 120 staff, 100 of which work from their Newcastle HQ. Federal and State government support for the Newcastle Innovation Ecosystem will help build more world-class tech companies like Pegasus. Further investing in innovation support programs that target the commercialisation of innovation internationally will help enterprise such as Pegasus accelerate their global ambition.

diffuse energy™



Diffuse Energy

Diffuse Energy has developed the world's most powerful small wind turbine to complement solar PV generation. With this innovation they're helping telecommunication sites save on diesel generation and increase energy resilience with renewable energy.

The Federal government JobKeeper scheme has enabled Diffuse Energy to continue scaling and operating their business. COVID-19 travel restrictions have impeded their ability to install this new technology. As a hardware startup their service cannot be easily delivered via video conferencing tools.

Diffuse Energy has benefited from the NSW Government Boosting Business Innovation Program, having been supported by the I2N Innovation Hub at the Williamstown Astra Aerolabs. I2N provided Diffuse energy with the knowledge and connections needed to commercialise their innovation. Thanks to this early-stage help Diffuse Energy has created three full-time jobs, one part-time job, and several internships.

The startup was able to advance further with support from Federal Government R&D tax incentives and the NSW State Government Minimum Viable Product grant, which helped to develop their wind turbine technology and gain commercial customers. These measures helped Diffuse Energy to engage local manufactures in developing their innovation, such as Newcastle-based Newie Ventures and have 80% of their product be Australian made. Having successfully developed an MVP, Diffuse Energy was able to secure \$400,000 in pre-seed funding from Shearwater Growth Equity.



I2N

The Integrated Innovation Network (I2N) is an initiative of the University of Newcastle with the central aim of being a catalyst for regional transformation through enterprise skill development, new venture creation and entrepreneurship. At the heart of I2N is a strategically positioned innovation hub in Newcastle's CBD offering incubation facilities complemented by a series of connection events and cohort-based programs covering individual enterprise skill development, pre-startup creation, new venture establishment and acceleration, and innovation development for existing SMEs. All industry sectors are supported, extending beyond the traditional tech-based startups to include social innovation and creative industries.

In mid-2021, a purpose-built 1,500sqm innovation hub will open at Honeysuckle. The NSW Government has provided funding through its Restart NSW Fund as part of the Hunter Innovation Project with City of Newcastle; enabling programs to be expanded and provide increased support for innovators and entrepreneurs.

In just under four years of operation, and with the support of the NSW Government's Boosting Business Innovation program, I2N has welcomed more than 4,000 innovators and entrepreneurs from a range of industries and sectors, at any stage of their journey and regardless of their affiliation with the University. I2N has helped fuel, grow and graduate more than 60 businesses, that have collectively raised over \$6 million in funding and fostered the creation of more than 30 jobs and dozens of work integrated learning opportunities for students. I2N has acquired customers, won awards, grown their teams and developed products and solutions that are delivering real-world impact.

I2N is recognised as having a leading and unique capacity to act as a connector and enabler of entrepreneurship and innovation within the Hunter Region, utilising the skills of experienced and skilled program developers, facilitators, mentors and coaches. A recent evaluation by the Hunter Research Foundation Centre confirmed that I2N programs are highly regarded by community members with 93% of survey respondents having their expectations met or exceeded and the same percentage in agreement that I2N programs are useful. 93% of survey respondents agreed that the I2N provides value to the Hunter innovation ecosystem.

While the COVID-19 pandemic has altered the way we live and work, I2N has seen an opportunity to deliver virtual programs and memberships for emerging and established entrepreneurs that eliminates geographic boundaries, enabling wider program participation and engagement from investors and partners across Australia and overseas.



Eighteen04

Incubator Eighteen04 provides clean tech and smart cities startups with access to collaborative co-working space, startup capital

and experienced mentors. In 2017, Jobs for NSW invested \$300,000 under the Accelerators and Incubators program to support the expansion of Eighteen04 at the Newcastle West TafeNSW Campus.

Eighteen04 has supported over 60 new local jobs since 2015. Resident startups have raised over \$8.46 million in capital to scale clean tech and smart city innovation. This phenomenal growth has led to \$8.69 million in economic output from Eighteen04 startups. A 97% return on the investment made by Jobs for NSW. An investment that was 0.8% of the total investment made in the Sydney Startup Hub. Continued investment in Eighteen04 by the NSW Treasury would increase economic and employment opportunities locally.



SwitchDin

SwitchDin develops technology for electricity utilities that makes distributed energy resources visible and controllable. The startup is at growth stage in Australia and has early traction in

Europe. SwitchDin has created 27 jobs all in Newcastle and raised \$2.3 million from Australian seed stage and angel investors and recently closed a Series A round of \$5 million from an international strategic investor.

Eighteen04 has played an important role in the growth of SwitchDin. The incubator provided the startup with low-cost office space to reduce costs during growth and product development, and the space to scale safely as their team expanded. Eighteen04 further helped SwitchDin to connect with local angel investors to seed fund early stage growth. Eighteen04 was able to deliver this support through investment made by Jobs for NSW under the accelerators and incubators program.



Hone Agriculture

This local startup has developed a handheld light device which helps farmers test the chemical properties of soil, crops and grain samples, revolutionising what has traditionally been a very slow and arduous process.

Started by three PhD students, Hone has grown into a team of 12 full-time staff. Hone's growth has been helped by multiple government programs. In 2018, Hone received an Accelerating Commercialisation grant from AusIndustry that helped scale their concept into a business. Whilst at the I2N hub, the business benefited from the NSW Government BBIP gaining early-stage support and receiving the connection they needed to raise their first round of seed capital.

Hone was also a resident of Eighteen04 which was supported by the NSW Government under a Jobs for NSW initiative. Whilst residing at Eighteen04 Hone raised \$1.6 million in investment. Hone further benefited from the Jobs for NSW LIN initiative participating in the Hunter iF's Pitch X competition, which helped to raise the profile of the startup in its early stage growth.

Local Responses

City of Newcastle

City of Newcastle is part of the solution and is investing in developing our local innovation economy ecosystem as part of our Smart City initiatives. We have invested in development and deployment of sector-leading smart city infrastructure and continue to expand our innovation-enabling infrastructure, networks and digital platforms. We're investing in solutions that support the incubation, scale, collaboration and clustering of innovative enterprise to support entrepreneurs to commercialise innovation for global consumption.

Our solutions:

- **Virtual Innovation Hub** – a platform designed to help entrepreneurs connect, collaborate and find the resources they need to scale a global business.
- **Landing Pad** – an initiative designed to retain and attract innovative enterprise by making it easier to establish operations.
- **Smart City Incubator** – a series of structured programs designed to help local entrepreneurs discover, formulate and accelerate commercialised solutions to create local economic opportunities and improve the efficiency, sustainability and liveability of cities.
- **Innovation Matchmaker** – a program developed to facilitate collaboration between startups, SME's, corporates and research to create new innovations that can be commercialised to develop new economic opportunities.
- **Scale-up Incubator** – initiatives that promote local scaling innovative enterprise and supports the facilitation of local pathways to assist entrepreneurs with national and international commercialisation.
- **Maker Mapping** – identifying all resources and assets that support the prototyping of digital, physical and hardware innovation.
- **IQ** – a quarterly event series to encourage connection among the innovation ecosystem and inspire entrepreneurship.
- **Smart Citizen Lab** – educating our community and young people about innovation models and how they utilise Smart City enablers such as data, sensing and technology to create innovation.
- **Living Lab** – a framework to support the utilisation of our city as a testbed for Smart City, IoT, cleantech and any city innovation that needs to be validated to support commercialisation and global expansion.
- **Innovation support industry capacity building** – supporting initiatives that build the capability and capacity of local support organisations to assist entrepreneurs in commercialising innovation and forming enterprise.

Integrated Innovation Network I2N

The Integrated Innovation Network (I2N), an initiative of the University of Newcastle, is supporting the growth of the Newcastle innovation economy ecosystem through a range of structured programs and events that support the creation of early-stage innovative enterprise and the building of entrepreneurial capabilities.

I2N's solutions:

- **Navigator** – a program designed to equip entrepreneurs with the skills and mindset to discover innovation.
- **Validator** – program developed to provide a guided experience for entrepreneurs to quickly and cost-effectively determine pathways to market for an idea, invention or research project.
- **Accelerator** – a structured curriculum supporting the commercialisation of innovation and provide equity to early-stage innovation.
- **Incubator** – an affordable co-working space to support the scale of early-stage innovation.
- **Startup Stories** – a speaker series that supports the sharing of entrepreneurial experiences to build the capacity and knowledge of emerging entrepreneurs.
- **Join the Dots** – a panel and networking event that encourages collaboration and ideation through breaking down barriers.

The opportunity to partner with us

The innovation economy is integral to creating a more resilient local economy, stimulating new growth to develop economic opportunities; and developing social aspiration and human capital. To support a thriving innovation economy, partnership and co-investment is required to develop pathways to support rapid and global commercialisation of innovation through investment in the ecosystems and innovation support industry.

The City Taskforce calls on all Federal and State decision-makers to prioritise support for the Innovation economy ecosystem. Dr Nathaniel Bavinton, Innovation & Futures Manager at the City of Newcastle, is the Innovation representative on the City Taskforce. Dr Bavinton can provide further local insights and is available to co-design policy solutions. Newcastle is always open to piloting new initiatives. Dr Bavinton can be contacted on nbavinton@ncc.nsw.gov.au.



City Taskforce Members


Nuatali Nelmes (Oct 23, 2020 11:00 GMT+11)

Signature

Nuatali Nelmes
Lord Mayor Chair
City of Newcastle Newcastle Taskforce




ANTHONY J CADE (Oct 23, 2020 13:28 GMT+11)

Signature

Tony Cade
Chief Executive Officer
Hunternet



Will Creedon (Oct 23, 2020 09:49 GMT+11)

Signature

Will Creedon
Chief Executive Officer
Alloggio




Signature

Signature

Peter Macadam
Director in Charge
Colliers International



Scott Morgan (Oct 26, 2020 09:11 GMT+11)

Signature

Scott Morgan
Chief Executive Officer
Greater Bank



Signature

Bob Hawes
Chief Executive Officer
Hunter Business Chamber



Signature

Leigh Shears
Acting Secretary
Hunter Workers



Justine Cogan (Oct 23, 2020 10:11 GMT+11)

Signature

Justine Cogan
Co-Founder
Independent Creative Alliance




Signature

Signature

Peter Cock
Chief Executive Officer
Newcastle Airport



Signature

Bernadette Inglis
Chief Executive Officer
Newcastle Permanent Building Society




Signature

Signature

Mark Fitzgibbon
Chief Executive Officer
NIB Health Funds




Craig Carmody (Oct 26, 2020 16:30 GMT+11)

Signature

Craig Carmody
Chief Executive Officer
Port of Newcastle



Signature

Brad Webb
Chief Executive Officer
Samaritans Foundation



Signature

Alex Zelinsky
Vice-Chancellor
University of Newcastle



Signature

Philip Gardner
Chief Executive Officer
West's Group



Innovation Ecosystem Supporters



1. Catalyst Areas for Greater Newcastle Projects, as identified in the Greater Newcastle Metropolitan Plan

2. Large-scale priority infrastructure projects:



Coastal Management Planning and Erosion Management, especially at Stockton Beach



Flood mitigation at Wallsend



Newcastle Airport Expansion



Port of Newcastle Diversification



Hunter Sports and Entertainment Precinct



Newcastle Light Rail Expansion



Lower Hunter Freight Corridor



Affordable housing initiatives



Metropolitan wide active transport (walking & cycling) improvements



John Hunter Hospital campus upgrades



Newcastle Art Gallery Expansion



Local Sporting Amenity Upgrades



Local Playground upgrades, particularly for disability inclusion



Ferry Terminal at Wickham



Pensioner Rate Rebates



University of Newcastle STEM Regional Transformation Hub

3. Local priority infrastructure projects:



Summerhill Waste Management Centre – Organics Processing Facility



Richmond Vale Rail Trail



Newcastle Beach Community Facility (Stage 2, Newcastle Beach – Bathers Way)



Junction to Merewether Cycleway



Newcastle West Bi-directional Cycleway – West End Stage 2, Phase 1



Newcastle East End Streetscape Upgrades and Cycleway



Foreshore Park All Abilities Playground



Western Corridor Active Hub



Local Centres Program