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NSW PRODUCTIVITY COMMISSION DISCUSSION PAPER: KICKSTARTING THE PRODUCTIVITY CONVERSATION

The Australian Industry Group (Ai Group) welcomes the opportunity to provide input to the NSW Productivity Commission's Productivity Discussion Paper, October 2019.

We commend the State Government for seeking to obtain broad feedback on the priorities for addressing specific productivity challenges facing NSW with a view to shaping the state's productivity reform agenda. We are also pleased to have participated in the various roundtables to allow for further discussion and consideration of appropriate policy options.

To ensure economic opportunities are maximized, it is critical that there is a strong focus on investing in the fundamentals of our economy and putting in place measures that support productivity growth. This serves as a basis for industry and community prosperity while concurrently underwriting the state's financial position over the longer term.

This includes leveraging off the State's strong and innovative services base and exploiting its skills and capabilities across a wide range of highly specialized and technologically advanced sectors. It also requires an ongoing commitment to manufacturing industry in NSW, along with the support and development of growth industries such as biotechnology, information technology, agribusiness and pharmaceuticals. As the NSW manufacturing industry focusses increasingly on higher value-added activities this will add to the need for inputs of new knowledge and technologies, areas where Government can play an important facilitatory role.

A further requirement is a focus on lowering business costs for NSW businesses and ensuring policy and regulatory settings - in areas such as taxation and the provision and maintenance of infrastructure - are conducive to strong productivity growth. Equally important is the need for Government and business to have a key role in building the State's knowledge capabilities through the development of a skilled workforce that ensures workers are equipped to meet the challenges of a modern economy and can adapt to new growth drivers and technologies. There is also a need to encourage and support the adoption of new information technologies and complimentary policy and regulatory changes, which can make a valuable contribution to realisation of growth and productivity advances across the economy.

In building on the state's major strengths as a diversified and globally engaged economy with a strong innovation and research culture, there are a range of specific areas where government can take direct action and play a leadership role to facilitate and support efforts to encourage productivity improvements across the economy. These include:

- **Provide a more supporting industry development function** and help to stimulate investment, new product development, increased R&D and the adoption of new technologies to increase efficiencies and capacity.
- Implement well targeted policy interventions that support industry development and productivity enhancements by lifting capabilities, building networks, strengthening relationships between industry and research organisations, creating mature partnerships with the private sector, and by providing appropriate information and encouragement to businesses and other providers of goods and services.
- Develop responsive regulatory frameworks and advance flexibility across regulatory measures to promote room for innovation and "breakthrough" improvements in industry performance while reducing costs and other burdens on industry. This includes consideration of earned autonomy in regulation for high compliance performers; negotiated rule making based on a process of consensus building (between industry and regulatory agencies) for draft regulations and; establishing government project teams which focus on identifying and reducing red tape in target sectors or industries. This includes using innovative approaches such as sector red tape reduction compacts that simultaneously address regulatory burdens and the behaviours that triggered the regulation
- Ensure that taxes and charges levied are efficiently designed and contribute to the international competitiveness of the state's private sector.
- Continue to invest significantly in the state's infrastructure to ensure NSW has adequate, appropriate infrastructure and services to meet future population growth with project delivery strongly focussed on local capacity, skills and supply chains to ensure we maximise the benefits of these major projects in developing industry capabilities and the adoption of new technologies.
- Invest in education and skills development for the current and future workforce to enable all NSW businesses and workers to reach their full potential in the context of rapidly evolving technologies and the emergence of new work opportunities.
- **Position NSW at the forefront of the digital economy** by enabling NSW businesses and workplaces to utilise the full potential of digital technologies, including the next wave of industry 4.0. A key priority must be increased investment in the development of foundation digital and STEM skills for new and existing workers.

Drawing on our most recent policy submissions to the NSW Government, Ai Group's specific policies and priorities in support of productivity growth for are set out as follows:

1. Regulation and Compliance that supports competition and innovation

The State Government must take priority action to reduce the cost of regulation and compliance on businesses. While regulation by Government generally aims to achieve particular economic and social objectives, excessive, ineffectual or badly designed and administered regulations can impose significant costs on businesses, deter investment, reduce employment and generally detract from the international competitiveness of industry.

Further reforms in regulatory compliance could provide significant spin-offs in improving business efficiency and productivity at a relatively low cost to the State Government.

We would encourage the NSW Government to **work closely with the Federal Government with a view to adopting the Productivity Commission's regulatory reform recommendations arising from the Commission's study on Regulator Engagement with Small Business (September 2013).** These recommendations are in accordance with Ai Group's long held position that a commitment to best practice regulation is essential for all government departments and that regulations should be transparent; accountable; proportionate; consistent and; properly targeted.

We support an outcomes-based approach to regulation as it gives businesses greater flexibility to achieve an end objective, subject to meeting consumer and community protections. It enables businesses to adopt innovative approaches to achieve the intended outcomes of regulation, while conferring advantages in terms of business efficiency and cost. It can also be effective in clearly highlighting to industry and the community the desired ends or underlying reason for the regulation. Specifically, we support further advances in flexibility across regulatory measures, including consideration of earned autonomy in regulation for high compliance performers; negotiated rule making based on a process of consensus building (between industry and regulatory agencies) for draft regulations and; industry working to developing its own standards and codes of conduct in line with principles/guidelines developed by the Government. It is a constructive and proactive approach, which allows for innovation and "breakthrough" improvements in industry performance and has the potential to lower cost burdens on industry and boost productivity.

Ai Group would be concerned if for instance, if criteria under an outcomes-based regulatory approach imposed more of a hinderance or burden on industry than is currently the case. An outcomes based approach should also not be a means by which standards are allowed to slip or by which unscrupulous operators may avoid their proper responsibilities.

The State Government should also consider the implementation of the following initiatives:

• Further advance flexibility across regulatory measures, including consideration of earned autonomy in regulation for high compliance performers; negotiated rule making based on a process of consensus building (between industry and regulatory agencies) for draft regulations and; establishing government project teams which focus on identifying and reducing red tape in target sectors or industries. A concept worth considering is a form of a red tape reduction compact where regulatory burden relief across a sector is tied to identified

behaviour that reduces the need for the regulation in the first place – earned autonomy on a sector basis;

- Drive **best practice in regulatory design and implementation** and reduce the considerable cost burden imposed on business and the community by inefficient, outdated and anticompetitive regulations;
- Achieve improved regulatory outcomes for business and the community by **investing in gaining a better understanding of markets being regulated**. One recommended approach is the development of an effective, objective research and market sensing mechanism to facilitate real time feedback on how Government policy is working on the ground. This would be particularly beneficial in areas including skills, environment, safety and workplace health and procurement;
- Develop and review regulatory instruments in concert with other state and territory governments to achieve genuine harmonisation of state-based laws (or centralisation of laws to the Federal level) particularly where the actors regulated operate or are managed across state borders;
- Lead efforts to reduce the burden of inconsistent and duplicative reporting, particularly by advocating for, and facilitating, a single national online reporting portal;
- Investigate options to recycle information gained through regulation as intelligence for markets being regulated. Industry players often object to the burden of supplying information for regulatory purposes in part because they get nothing back despite expending considerable resources on compliance. Government may benefit from a more equitable "trading" view of the relationship between regulator and regulated as opposed to demanding information merely because Government has the authority to do so. These benefits may include more speedy compliance, behaviour change through peer benchmarking and lower perception of burden.
- Encourage greater consistency amongst local government regulatory processes to reduce compliance costs for businesses, particularly in the areas of planning and approvals;
- Establish an on-line platform that details all local government regulatory instruments, procedures and costs. This would provide industry and regulators with a highly visible comparison of the cost of doing business across local government jurisdictions; and
- Provide businesses with the option of paying taxes, premiums and charges on an instalment basis where practicable.

2. Industry, Innovation and Economic Development

Strong economic growth necessitates that the State Government continues to support industry, innovation and economic development. This necessitates an on-going commitment to programs that are critical to stimulating economic growth. Key recommendations include:

• Pledge an on-going commitment to programs that are critical to supporting industry and economic growth, including Minimum Viable Product, Tech Vouchers and Boosting

Innovation, Supply Chain Accelerator Pilot Program, Youth Employment program, Business Connect, Export Capability Building and the Resources for Regions program. The sporadic commitment to such programs undermines their promotion and efficacy;

- Build on these existing programs with the introduction of an innovation "Start-Up" program for those businesses with no prior experience in R&D, but with an interest in starting an R&D project. These businesses often find it difficult to compete with larger and more experienced businesses for government funding which acts as a barrier to involvement. Under such a program, grants could be provided to companies (on a competitive basis) on a matching dollar for dollar basis, and be used for a broad range of purposes such as purchasing specialist equipment to undertake proposed R&D, to engage a consultant to assist in R&D activity, to employ a scientist or engineer to undertake R&D, or to engage the expertise of a university, CSIRO or another research centre;
- Provide support for cluster initiative programs that would direct financial and other assistance to individual cluster initiatives. The Victorian Regional Manufacturing Clusters (VRMC) is an important initiative that is proving to be highly successful in addressing issues constraining regional industry growth and we strongly recommend that consideration be given to its implementation in NSW. The VRMC is a Victorian Government initiative delivered by Ai Group, to support regional manufacturers to invest in innovation, develop capability and grow. It is run across two programs, the Collaborative Business Improvement Program (CBC) and the Innovation Culture (IC) Program. The CBC is a 2-year tailored program to drive continuous improvement and solve some of your most pressing barriers to growth. The focus is on tangible actions, peer learning, collaboration and quantifiable outcomes. The IC program is tailored to foster and nurture innovative, organisation wide business culture that values and embraces innovation from all employees and harnesses the untapped ability of employees to bring improvement across the whole of the business through workshops, coaching and peer-learning sessions. The focus is on tangible actions, peer learning, collaboration and quantifiable outcomes. Ai Group has built a strong track record in supporting industry innovation and business improvement and would welcome the opportunity to work with the NSW Government to further develop this type of initiative in NSW;
- Consider the use of initial tax relief for start-ups and new businesses, as well as
 regionally-based incentives to support growth in designated areas, or assistance and
 incentives to set up new businesses. This could include exploring new lower cost industry
 approaches to regulation in special economic zones or regions that require a development
 boost, drawing on best practice models internationally. Badgerys Creek is an emerging area
 of strategic significance to the NSW economy that could be targeted for this purpose;
- Maintain a focus on building collaborative links between researchers and industry, and in doing so ensure that opportunities for collaboration are open and accessible to all sizes of businesses from all sectors with an emphasis placed on the generation of commercial outcomes;
- Deliver the physical infrastructure geared towards promoting innovation such as innovation precincts and improving SME's access to Government research facilities;

- Establish Government education programs that assist SMEs, particularly in regional areas, in taking advantage of broadband and other advances in ICT (including the upskilling of employees) could make a valuable contribution to NSW's future global competitiveness;
- Reduce or remove regulatory barriers to innovation and new technologies across all sectors, including (but not limited to) energy, transport, engineering, food development, robotics, digital technologies and telecommunications;
- Assist NSW businesses and workplaces to utilise the full potential of the next generation of digital technologies and smart manufacturing systems. A key focus must be the further investment in the development of digital and STEM skills for new and existing workers;
- Take a key role as a skills enabler in cyber security risk management through appropriate education and training initiatives; and
- Take a pro-active approach to connecting businesses with opportunities in government procurement.

3. Getting More from Our Infrastructure

NSW's long-term economic performance continues to depend on maintaining a substantial level of infrastructure investment to improve productivity and enhance competitiveness across the State. It is important that the NSW Government is committed to ensuring that its infrastructure planning is underpinned by: a rational, clear and transparent process that identifies the highest-value infrastructure options; incorporates appropriate risk assessment, management and allocation; directs adequate and appropriate investment towards those options; ensures timely delivery; and ensures efficient use of the resulting assets. Less than optimal planning and delivery outcomes generate waste, compromise stakeholder benefits and puts at risk the productivity of the NSW economy.

Key priorities include:

- **Stronger regional development plans** need to be addressed with projects identified and progressed at rates consistent with the roll-out of metropolitan projects;
- Prioritise major investment in the transport network linking the regions with Sydney and interstate destinations;
- Provide the necessary public and freight transport infrastructure needed at Badgerys Creek Airport to realize the economic and social benefits for the Greater Western Sydney area - an integrated freight and logistics hub would be the key to meeting medium to longterm demand for freight services for Badgerys Creek Airport;
- Provide regular updates and early alerts on the level of priority attached to major infrastructure projects and the anticipated funding arrangements;
- Ensure all proposed infrastructure projects are subject to thorough and transparent cost-benefit analysis to ensure the government gets the best possible use of taxpayer funds;
- Work in partnership with the private sector in **developing and implementing best practice** principles within the Government's infrastructure delivery responsibilities. This is an

obligation that will be central to private sector commitment to, and investment in, NSW infrastructure projects for the longer term;

- Promote private sector confidence in the provision of new infrastructure, by ensuring that
 procurement teams are comprised of experienced and appropriately skilled project
 development and delivery personnel. This includes taking steps to increase core skills and
 competence in project delivery;
- Establish and formalise a community and business consultation process, where robust debates on the prioritisation of NSW infrastructure projects could be conducted;
- Implement measures achieve greater Government connection with construction companies operating in the supply chain covering materials, product and equipment suppliers;
- Ensure the implementation of the **NSW Government 10 point Construction Action Plan**, the related practice notes and the agreed commitments to improve the capability and capacity in the construction sector;
- Take action to further develop structured public-private partnership policies that can lower the risks faced by private investors thus attracting more private sector investments while reducing upfront costs to the public; and
- Ensure improved provision of real-time information by governments about transport options and network conditions; investment in new and smarter transport infrastructure to keep up with population pressures; and pricing reform to improve utilisation and efficiency in the use of transport infrastructure.

4. Taxation Reform to Help Our Economy Grow

While NSW, like the other states and territories, is constrained in what it can do to improve taxation arrangements in isolation from a genuine national effort, there are some improvements it can make while also taking a leadership role in promoting improvements in taxation and intergovernmental finances across the federation.

In this context Ai Group strongly supports the NSW Government's initiative to examine ways to improve intergovernmental finances and tax arrangements in Australia and we have made a separate submission to its Federal Financial Relations Review.

Improvements can be made to reduce the costs involved in compliance with, and administration of NSW's taxes and NSW can work with other state and territory governments to harmonise common tax bases used by the states and territories.

Productivity-enhancing reforms of NSW's tax arrangements could also include:

• Ensuring an overall level of taxation that is consistent with the objective of cultivating internationally competitive businesses in the State;

- Reducing or removing taxes and charges that hinder or discourage businesses from growing and otherwise distort or reduce economic activity. This includes minor "nuisance" taxes that are narrowly-based and inefficient;
- Simplify the design of the major tax bases including by avoiding thresholds and multiple rate scales which increase complexity;
- Implement reform of NSW property taxes by removing residential and commercial stamp duties and more fully utilising the existing local government land rate system or by reforming the state government land tax base. Stamp duties are inefficient transaction-based taxes that distort economic activity. There would be substantial gains for the economy through the imposition of an annual charge on the unimproved capital value of land rather than taxing property transfer transactions; and
- A far-sighted remodelling of the taxation of property could also see a reduction in many existing land tax burdens.

5. Building Human Capital

The development of the skills of the current and future workforce is central to further advances in the economic and social well-being of NSW, and in securing the state's long-term sustainability and prosperity. The State Government therefore has a critically important role in improving education and skills to enhance productivity and optimise workforce participation. Ai Group recommends the following key actions:

- Address declining investment in VET
- Increase apprentice and trainee commencements
- Develop a Manufacturing Skills Development Plan
- Enable continuous renewal of existing workers' skills
- Enable renewal in schools
- Strengthen regional training options

5.1 Address Declining Investment in VET

In its 2019 paper, Realising Potential, Ai Group identified the key issues hampering the VET sector. These challenges are similarly recognised by the Productivity Commission's Discussion Paper which addresses the need for improved relationships between VET and industry sectors to ensure training meets industry needs and considers greater flexibility in delivery to help develop better interactive skills. Ai Group also highlighted the lack of funding policy coherence between the states and the Commonwealth; the inequitable funding arrangements between VET and higher education; and the lack of coherence between the two systems as barriers to effective outcomes.

A well-coordinated and well-funded, strong national system with cooperative state relations will facilitate shared responsibilities for improvement. In August 2019, First Ministers agreed through

COAG to a new shared vision for VET which couples national consistency with flexibility to meet local needs. Actions resulting from the Joyce Review at the Commonwealth level include a National Skills Commission, a National Careers Institute and new Skills Organisations. With effective industry involvement these new structures promise better policy direction, funding coherence, forecasting and governance of the system, as well as quality of careers information and support.

It is particularly critical for NSW to address declining investment in VET in cooperation with the Commonwealth to ensure that it is best placed to meet the emerging vocational skill needs of industry. Australia's VET system is vital to ensuring industry has the skilled workforce it needs to grow and to compete internationally. It provides the technicians, the tradespeople, the supervisors and the paraprofessionals that form a large part of Australia's workforce.

The former federal Department of Jobs and Small Business estimated that 90 percent of new jobs over the next five years to 2023 will require post-school education.¹ Four of the six occupations projected to have the largest increase in employment are at ANZSCO skill level 4 occupations. The following chart shows that almost 55 percent of projected employment growth to 2023 can be serviced by vocational education and training.

Ai Group welcomes the additional investment by the NSW Government in the state's TAFE system and vocational education and training in the 2019-20 Budget, including fee-free apprenticeships/traineeships for young job seekers and free TAFE qualifications and career counselling for mature-aged workers. However, at a universal level, there are persistent concerns that the funding of the overall VET system continues to be inadequate, in terms of both the level and composition of its funding.



Chart 1: Projected employment growth ('000) for ANZSCO skill level by occupation, 2019 - 2023

Source: Department of Jobs and Small Business (2018), Employment Outlook to May 2023²

¹ Department of Jobs and Small Business, *Future jobs growth to favour skilled workers*, 16 October 2018, <u>https://www.employment.gov.au/newsroom/future-jobs-growth-favour-skilled-workers</u>

² Labor Market Information Portal, 2018 Employment Projections - for the five years to May 2023 http://lmip.gov.au/default.aspx?LMIP/GainInsights/EmploymentProjections

The levels of total VET funding are not sufficient to meet existing and future skills needs of the workforce. The level is too low in absolute terms and relative to the funding arrangements in both the higher education and school sectors. The growth in occupations estimated by the former Department of Jobs and Small Business is not reflected in the stagnation in funding over the past decade. It also contrasts with steady growth in funding for other sectors of education.

Additionally, the composition of public funding for VET, or more precisely the shared contributions of the Commonwealth, States and Territories, has created additional issues. The funding by the jurisdictions has fallen in absolute terms since 2013 and relative to Commonwealth expenditure. A recent finance report from the NCVER highlights a continuing decline in government expenditure which amounts to a 15 per cent decrease between 2012 and 2016.³

The relative funding shares between the Commonwealth and the jurisdictions vary significantly. These differences have been aggravated by the introduction of differential student training entitlement funding models by all states and territories. The jurisdictions have used in-built flexibility parameters resulting in differences in the eligibility requirements, the courses eligible for an entitlement, course subsidy levels, the quality requirements of providers, and the information provided to students.⁴





Source: Productivity Commission, Report on Government Services 2019; ABS, Government Finance Statistics, Education, Australia, 2016-17; NB: State expenditure includes VET in schools funding

The shared funding arrangements are impacting on the effectiveness of the VET system. Different mixes of Commonwealth and States and Territories funding and different ways of funding each VET system are causing confused messages for employers engaging with the system, particularly those

³ NCVER, Financial information 2017, November 2018

⁴Kaye Bowman and Suzy McKenna (2016), *Jurisdictional approaches to student entitlements: commonalities and differences*, NCVER

operating nationally. In some instances, within individual state systems the needs of industry, businesses and students have not been met.

Industry requires a steady supply of VET graduates to the workforce and has expressed difficulty in recruiting trades and technician workers among other occupations. Ai Group's latest Workforce Development Needs Survey found that 75 per cent of employers experienced skills shortages in the last 12 months, and that the majority of skills in demand fell into those two categories⁵.

5.2 Action on Increasing Apprentice and Trainee Commencements

More action is needed to improve commencement numbers for apprentices and trainees, and more action is needed to arrest the decline in completion rates. Specifically, there is an urgent need to:

- Implement further measures to ensure apprenticeships and traineeships meet current and emerging occupational needs.
- Develop strategies to facilitate greater participation by schools and industry in school-based apprenticeships and VET in schools.
- Provide supervisory workshops for employers of apprentices
- Provide targeted funding to GTOs to support their activities to help disadvantaged groups, and to help SMEs participate in the apprenticeship system, similar to the previous Joint Group Training Program.

VET programs delivered in schools can have a positive impact on apprenticeship commencements but remain problematic. Across Australia, the number of school students in VET dropped by 4.3 per cent from 2017 to 2018. The number of school-based apprentices or trainees (SbATs) declined by 8.9 per cent for the same period. In NSW, SbATs declined by 3.8 per cent and overall school students in VET declined by 4.6 per cent.⁶ NSW SbATs made up only 5.3 per cent of all NSW school students in VET in 2018.

 ⁵ Ai Group (2018), *Skilling: A National Imperative*, Workforce Development Needs: Survey Report 2018
 ⁶ NCVER (2019), *Australian vocational education and training statistics: VET in Schools 2018 Data slicer*, NCVER, Adelaide.

Chart 3: NSW VET in Schools and School-based Apprentices & Trainees, 2014 – 2018



Source: NCVER (2019), VET in Schools 2018: data slicer

There needs to be a sponsored review of SbAT and VET programs delivered in school arrangements to determine the reasons for the under-utilisation of these pathways and develop strategies to assist schools and industries to more actively participate. The Head Start Apprenticeship program in Victoria, which adds an extra year of schooling for SbAT students, is one initiative worth investigating. The extra year means participating schools can offer more flexibility in their timetables, which is attractive to employers when apprentices can spend more time in the workplace.

Given the overall decline in VET in schools, Ai Group was concerned to learn that the NSW Education Standards Authority (NESA) announced in August 2019 that the Metal and Engineering Curriculum Framework will be discontinued.⁷ This framework establishes a HSC exam for students undertaking a VET in schools or SbAT program in the manufacturing and engineering sector. The exam means these students can attain a score that contributes to their ATAR and is an important way of making the program more attractive to prospective students and their parents. Removing this incentive may encourage these students in to another sector or out of VET training entirely. In 2018, there were 940 students in NSW undertaking a metal and engineering VET program with 50 undertaking a SbAT.⁸ Most employers that take on apprentices operate small businesses. These employers need to be supported to help their apprentices complete. They need help to improve their recruitment practices and help to improve how they manage their apprentice after they commence, including understanding their obligations. Professional development workshops for apprentice supervisors have been available in NSW for some years; however, they have not always reached those employers who need help the most. Encouragement for new employers to attend a workshop could help extend the intended

⁷ Education Standard Authority, Metal and Engineering, NSW Government <u>https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/vet/metal-</u> <u>engineering-syllabus</u>

⁸ NCVER (2019), VET in Schools 2018: data slicer

audience. Some countries, including Germany, the Netherlands and Switzerland make targeted training mandatory for apprentice supervisors.⁹

Group training organisations (GTOs) can assist small businesses employ and support apprentices. Collectively, group training is the largest employer of apprentices in Australia, employing almost 24,000 apprentices and trainees across the country and over 6,500 in NSW.¹⁰ GTOs have been operating for nearly 40 years and provide important support for SMEs. GTOs will rotate apprentices to different work sites so they gain broad exposure to skills that smaller companies can't offer, and they can guarantee continuity of employment for apprentices and trainees when companies operating on short-term projects cannot. GTOs also provide mentoring support and specialise in helping disadvantaged people into apprenticeships and traineeships.

The Australian Government previously supported GTOs in their activities through the Joint Group Training Program, so-called because of joint funding arrangements with state governments. National funding was discontinued in 2015/16, but some states continue to provide funding. Targeted funding of GTOs to support their activities to help disadvantaged groups, and to help SMEs participate in the apprenticeship system may help improve commencement and completion numbers.

5.3 Develop an Industry Skills Development Plan

The need to increase the numbers of apprentices and trainees within NSW industry has been evident for some time. Across industry sectors, current employment opportunities and career options are often undervalued by the community due to a limited understanding. More needs to be done in providing current and accurate careers information to students, teachers and parents to support NSW Government's initiatives to increase apprenticeships. In addressing this issue, we recommend the development of sectoral specific skill plans.

Manufacturing is one key sector where there is still much to be done. We believe that there is a need for Government to continue to work with industry to overcome the negative perceptions which many people have regarding the manufacturing sector, despite advanced manufacturing being identified in the recently released NSW 2040 Economic Blueprint as a sector with significant future jobs potential for the State.

Ai Group would welcome the opportunity to work closely with the NSW Government to implement a manufacturing skills development plan which should serve as the basis for a more comprehensive response to skills shortages more broadly across sectors in NSW. Under this plan, we would recommend that it embody key elements of the successful MARS (Macarthur Apprentice Recruitment Strategy). MARS commenced as a Campbelltown project in 2003-04 as a partnership between Ai Group, TAFE SW Sydney Institute and Macarthur Group Training (now My Gateway) to address skill shortages and the critical need for skill development opportunities and the employment of apprentices

⁹ OECD (2018), Seven Questions about Apprenticeships: Answers from International Experience

¹⁰ NCVER (2019), Apprentices and trainees 2019: March quarter - data slicer

and trainees. In working to increase the number of apprenticeships it had a focus on overcoming such barriers as:

- The school and community perception that manufacturing was finished as an industry;
- The lack of information on manufacturing industry careers for students and career advisers/parents;
- The lack of connections between employers' and schools; and
- The lack of interest by schools generally in promoting VET careers.

The MARS project was supported by a governing Steering Committee and a full-time project officer, engaged under the Federal Government's Regional Industry Careers Advice (RICA) program. Through the guidance of the Steering Committee and the work of the project officer, fact sheets and other materials were developed. These were aimed at parents, students and career advisers and presented vital information on wages, salaries, and cumulative income by comparing an apprentice/tradesperson with a lawyer from age 18 to age 35. The result was that local companies were able to recruit sufficient quality apprentices within three years of the commencement of MARS in Macarthur from 2003 to 2006.

5.4 Enable continuous renewal of existing workers' skills

With technological change affecting nearly all industries, different skills and new practices need to be adopted by existing workers throughout their working lives. Workers more capable of undertaking productive and engaged roles are better able to contribute to innovation in the workplace, while displaced workers represent a clear social and economic cost to Australia. In the twelve months to February 2018, 289,000 or 15 per cent of workers who changed jobs, did so involuntarily.

Australia needs more than the current one-fifth of workers aged 15-64 years to be studying.11 Linking lifelong learning to workforce productivity is now essential. A 2014 UNESCO statement makes the direct link between lifelong learning and economic growth and prosperity.12 Without efforts by government, education and training sectors and industry to normalise cultures of continuous learning in the workplace the Australian economy will not prosper to the extent that is necessary for our future.

Because of constant change workers will need to take ownership of their own learning and have the opportunity to undertake training and development as they move through working lives. A 2018 Deloitte study found that study-interested workers prefer education and training linked closely to their job and industry.13

The acquisition of new skills by existing workers and the refreshing of existing skills needs to be available in a range of environments (virtual, physical) and through access to shorter form training.

¹¹Australian Bureau of Statistics, *Education and Work* (cat. no. 6227.0), Australia, May 2018

¹² UNESCO, Education Strategy, 2014

¹³ Deloitte (2018), *Higher Education for a changing world*

The introduction of micro-credentials by education institutions to meet on-demand learning must increase.

In terms of re-skilling, Ai Group's research shows that employers are currently prioritising managers for digital technology training and changes anticipated or caused by its rollout. However, re-skilling extends beyond digital skills development in order to equip workers with the broader capabilities required in more autonomous workplaces. The digital economy requires a cultural change in the way work is done and managed. In the past, much of the role of a senior manager was tied up in expertise and knowledge. Now that is becoming less important and instead it is the ability to locate knowledge, assess how valid it is and then put it to use in collaboration with other people.

Businesses will need to assess their own capabilities and train when necessary using education and training partners, supervisors, managers and leaders. These companies will develop employees more capable of taking control of their roles, needing less supervision and better able to contribute to innovation in the workplace. However, support is needed for industry to develop digital strategies and workforce plans, assess existing workers' capabilities and train where necessary. Industry, focussing on SMEs needs increased support to assist with workforce planning to continue re-skilling its transitioning workforce.

On future skills more broadly, particularly those linked to digitisation and Industry 4.0, there may be great value in providing an additional quarantined **fund for emerging skill curriculum development**. Ai Group has observed an institutional bias in current funding arrangements for VET that can incentivise the provision of existing skills over emerging skills. This is a function of the perceived risk to training providers (particularly public providers) in investing in development of material for skills markets that are yet to mature yet may not quickly develop without a skills ecosystem building in parallel to support them.

Such a fund could be part of industry sector strategies as identified in the NSW 2040 Economic Blueprint.

5.5 Enable renewal in schools

The New South Wales Government's Curriculum Review14 of the school curriculum has revealed concerning findings which have been detailed in the interim report. The initiative is a response to the global changes to industry and implications for future employment possibilities. The interim report highlights an overly crowded curriculum with limited opportunities to address individual learning needs or a range of learning approaches. It recognises that teaching and learning in the senior secondary years are overly focused on university entrance and insufficiently focused on equipping students with the knowledge, skills and attributes required for further learning, life and work.15

The key reform directions identified within the broad areas of content, structure and senior school years will have a wide-ranging influence on future generations of young people and their preparation

¹⁴ <u>https://educationstandards.nsw.edu.au/wps/portal/nesa/about/initiatives/curriculum-review</u>

¹⁵ NSW Education Standards Authority (2019), *Nurturing Wonder and Igniting Passion: Designs for a future school curriculum*, NSW Curriculum Review Interim Report, October 2019

to participate in and contribute positively to work and society. Preparing for accelerating change in the world of work necessitates re-consideration of the application of knowledge, flexibility of curriculum, levels of literacy and numeracy, unrestricted pathways and foundations for lifelong learning. Greater connections with industry will build development of the human centred enterprise skills increasingly important to business.

The NSW school system must build capability for continuous learning through curricula frameworks and teaching and learning practices.

It is also important to equip those at-risk of disengagement with the necessary life skills to survive and thrive in the new economy. Developing capabilities around interpersonal, creative and decision-making tasks will be beneficial in finding employment in jobs where routine and manual tasks are increasingly performed by machines.16 The OECD advocates the need for school curricula to prioritise the development of critical thinking, collaborative skills, and personal attributes of mindfulness, curiosity, courage and resilience.17

A recent inquiry into careers advice in schools (in Victoria) heard that information provided to students does not meet their needs, and that advice is generally not administered in junior secondary years, before students tend to disengage from their studies.18

While career education has been given priority in schools through the National Career Education Strategy, much action is still required. The over-emphasis on academic success in traditional subjects has led to a lack of exposure to vocational options even when students may be better suited to, and have better work outcomes, within these pathways.

5.6 Strengthen regional training options

We also recommend that consideration be given to the integration of the Albury and Wodonga TAFE's to provide the local community with a more comprehensive range of training options and allow them to "skill-up" for the full workforce needs of industry in the border region. An integrated approach to VET in the region would mean servicing to a much higher catchment of students and increasing TAFE's ability in the region to scale and resource itself accordingly. Drawing on the example of the successful cross border health service – known as Albury Wodonga Health – the NSW Government should begin discussions with the Victorian Government to explore the opportunity of progressing a collaborative TAFE approach in the delivery of VET courses to the Border community. We would see this integrated TAFE arrangement as potentially coming under the jurisdiction of one state.

¹⁶ AlphaBeta, Mapping Australian workforce change, 2018

¹⁷ Schleicher, A., *Educating for the 21st Century*, 2015

¹⁸ Dandolo Partners, *Review of career education in Victorian government schools*, a report for Department of Education and Training, Victoria, 2017

6. Planning Reform

A range of leading practice reforms will be critical to ensure the planning system supports job creation and responds to consumer preferences. These include:

- Provide certainty to industry. A lack of certainty in the assessment process has the potential to substantially reduce investor confidence and divert investment away from NSW. It is critical to ensure clear and consistent application of land use and development policies with industry regularly informed on the status of its policies and strategies;
- Informing communities early in the planning process about the type of development that could be allowed;
- Planning and development processes are streamlined to reduce delays and uncertainty in zoning, assessments and planning approvals. Statutory time frames on approvals should also be considered to help ensure greater certainty for industry with respect to development times and costs;
- Ensure transparency and accountability in planning to improve business and consumer confidence in the planning and decision-making processes;
- All strategic phases of the planning process, not only the development assessment phase be subject to time frames that are monitored and reported with the objective of driving best practice outcomes;
- A consistent approach across councils in the requirements for development approvals and in the engagement of communities in key planning decisions.
- Integrate and rationalize approvals for all projects by creating an approvals committee with the authority to issue all relevant approvals.

There is also significant potential for improvement around levels of advice to industry and consultation processes. We recommend that consideration be given to the establishment of a dedicated office for assisting industry through the planning process, focusing on the environmental and other planning conditions, as well as assisting in effectively meeting any community and stakeholder consultation requirements.

The planning system should also be underpinned by supportive mechanisms that assist the progression of major developments (particularly projects likely to be contentious such as waste facilities and wind farms) to more certain outcomes. This would help to limit the impact of opposition groups or legislative loopholes that may obstruct developments at the final stage of a lengthy approvals process. Of further importance, is the need for the planning system to facilitate timely decision-making and ensure that consideration of project variations is proportionate to the significance of the change.

Project planning should also transcend the short-term political agenda with the Government needing to play a key role in facilitating the early engagement of industry and the community in shaping the future direction of investment. This will enable the early identification of opportunities, risks and issues on individual projects with proposals reflecting the needs of businesses and the people of NSW.

7. Environment, Climate and Energy

NSW industry and the broader community face multiple serious and interrelated challenges on climate, energy and the environment:

- NSW's commitment to net zero emissions by 2050 signals a major long-term transformation of the economy; electricity generation is an important part of this, but the implications extend much further.
- Energy prices are very high and reliability under increased pressure in the wake of retiring old assets, constrained or unreliable current assets, and fuel price pressures on gas- and some coal-fired generators. More retirements are coming and the cheapest new sources of electricity are variable renewables, making energy efficiency and demand response critical items on the menu of flexible resources to manage a changing energy system.
- There is a clear public desire and political will to reduce waste and manage it better. But while more material recovery is achievable, we have not grasped the challenge of building and sustaining markets to absorb these materials, rather than using virgin inputs.

The Discussion paper gives a generally astute and correct summary of the electricity context. One point to add is that while the closures of Northern and Hazelwood power stations were significant and proximate to the increase in wholesale electricity prices, it was the sum of all the closures from 2012 to 2017 that produced the recent tight market and stronger role for natural gas in shaping power prices.



Chart 4: Closures of Australian Coal-Fired Power Stations since 2012, by Nameplate Capacity¹⁹

The paper also notes the costs of various elements of the retail price of electricity. It is worth highlighting that the relative contribution of these elements varies widely between different sorts of energy user. Wholesale prices play a bigger role in the final price for large energy intensive businesses than for small business or households. Certain emissions-intensive trade exposed

¹⁹ Ai Group collation of publicly announced generator information

facilities are exempted from the costs of the Large-scale Renewable Energy Target (LRET), Smallscale Renewable Energy Scheme and NSW Energy Savings Scheme. Relevantly to assessing the impacts of excessively high prices, ABS data show energy users also differ widely in the final prices they pay for electricity and the significance of energy to their prosperity.



Chart 5: Australian Business Electricity Prices, 2014-15²⁰

The paper notes the risk that excessive prices lead to grid defection and a potential 'death spiral'. In practice, while distributed energy resources are increasingly important and useful, few customers are likely to be able to attain a grid-comparable level of service from purely autarkic electricity arrangements at a bearable price. Edge-of-grid customers may be an exception – and indeed regional electricity networks may be able to save all customers money by migrating more remote customers to a solar, battery and diesel-based microgrid, rather than spreading the cost of traditional service over the whole customer base.



Chart 6: Business Energy Productivity, 2014-15 – 2018-19²⁰

²⁰ Derived from ABS cat 46600 2014-15. Sector electricity spend divided by consumption.

It is correctly noted that a global energy transition is underway, involving rapid and sustained falls in the cost of renewable energy. While the Discussion paper briefly refers to these falls as driven by innovation, it is worth mentioning that recent innovation and cost reduction in solar and wind power has not been driven by laboratory breakthroughs, but by scale and learning effects brought on by ambitious policies to drive rollout (for instance in Germany) and aggressive industrial policies to encourage production (particularly in China). Uncertainty over emissions policy is indeed a significant constraint on energy investment, as the paper argues.

Ai Group analysis, based on multiple government-commissioned modelling exercises over recent years, illustrates just how large a difference the ambition and form of climate policy can make to the prospects of a given electricity generation asset.



Chart 7: Net Present Value of Example Projects Under Varying Policy Scenarios ²¹

It is also worth noting that emissions uncertainty, while very important, is not the only source of uncertainty impacting electricity sector investment: For instance:

- Technology and business models are in flux in electricity systems worldwide as variable renewables take a larger share of the market and a range of supply- and demand-side flexible resources grow in importance and availability. The rapid rate of change creates much opportunity for error, such as the failure of many investors to anticipate the shift in Marginal Loss Factors in response to rapid buildout of new generation projects along existing transmission lines.
- Fuel costs for black coal-fired and gas-fired generators are now heavily influenced by movements in international markets, rather than reflecting more predictable long-term cost-plus contracts. Traded oil, gas and coal prices are notably volatile.

In understandable response to high prices and technological change, government are making or considering major changes to market rules or intervening outside the market to bring on new assets or affect the usage of existing assets. While many of these steps may ultimately be wise and necessary

(and some may miscarry), they can substantially change the competitive landscape and the economics of individual projects. These reforms and interventions can thus delay and dissuade private investment, at least until their nature and ramifications become clear.

7.1 Electricity – policy certainty

The Discussion paper asks how NSW can work to reduce uncertainty in electricity generation and emissions reduction requirements and thereby improve the investment outlook. The most fundamental requirement to reduce uncertainty is that any integrated climate and energy policy framework is seen by investors as likely to endure. This is only partly a question of design, though policy detail can contribute to certainty, for instance by providing a clear and predictable process around the setting and updating of key parameters such as interim emissions targets. Durability is more impacted by whether the policy frame adequately grapples with the underlying climate issue; and whether broad political consent is expected to be achieved and sustained.

Ai Group and other organisations in the Australian Climate Roundtable have recognised that achieving a successful global response to climate change will eventually require most countries, including Australia, to reduce net greenhouse gas emissions to zero or below.²¹ To be seen to endure, policy frameworks have to be sufficiently scalable to contribute to this end, likely through decades of escalating targets and action.

Broad political consent is vital. Parliamentary sovereignty and the regular alternation of power make it difficult - and arguably undesirable - to design mechanisms that are genuinely irrevocable in the face of sustained opposition. Policy makers and some stakeholders have shown interest in the use of contracts and property rights, which would be expensive and legally hazardous to unpick, to constrain future governments and reassure investors. However, these approaches need extremely careful design - contracts for difference can expose the taxpayer to great risk or interact poorly with the electricity market design - and still may not dissuade a subsequent hostile government.

A different approach to durability was the National Energy Guarantee (NEG), which – as a change to the National Electricity Law (NEL) - would have required the unanimous consent of NEM jurisdictions to introduce, change or repeal. Had the NEG been agreed, no one government could have exited it without leaving the National Electricity Market - a major disincentive. Unanimous agreement is a high bar to achieve, and was not ultimately achieved to introduce the NEG. However, the approach of embedding an emissions mechanism in the NEL is promising and may be worth reviving.

Cross-party support is vital whether a policy framework is pursued by a single government subject to replacement, or by multiple jurisdictions that are never likely all to be governed by a single party for long. The Australian Climate Roundtable's joint policy principles have broad support from representatives of many segments of the community and should be a useful guide.²²

²¹ http://www.australianclimateroundtable.org.au/wp-content/uploads/2019/05/Climate-roundtable-jointprinciples-May-2019.pdf. ²² Ibid.

7.2 Electricity – reliability

Ai Group strongly supports the Commission's caution about the potential costs to consumers of excessive reliability measures. NSW energy users are still paying for the tighter network planning standards introduced in 2005. Governments of all persuasions have been extremely sensitive to supply interruptions, while business energy users are in our experience generally not keen to trade higher prices for higher reliability.

At the network level the probabilistic planning approach long used in Victoria has demonstrated its superiority to the deterministic standards that were responsible for much of the surge in NSW and Queensland network investment from 2005. Basing investment on the probability and impact of failures in the network has delivered adequate reliability at much lower cost than requiring greater redundancy throughout the system.

With respect to generation reliability, the Australian Energy Market Operator has made forceful criticisms of the current Expected Unserved Energy (USE) framework – including that the expected outcome necessarily flattens a wide range of scenarios that may have a substantial chance of occurring. The current standard is indeed at risk of being misread – an expected outcome within the 0.002% USE standard does not mean 'everything will be fine' but that the expected level of unreliability is below the level we have collectively decided is worth paying to avoid.

The best response to these criticisms is not to rewrite the generation reliability standard, which may well lead to an effective zero-tolerance approach to reliability that would be extremely expensive, but to better articulate and acknowledge what the current standard means.

There have been many recent steps by Australian governments directed at improving or sustaining reliability. We continue to support the Retailer Reliability Obligation (RRO), the reliability element of the formerly proposed National Energy Guarantee, whose emissions element we also support as a good framework for pursuing future targets. The RRO is a relatively light-touch and market-wide scheme which, if a reliability gap is projected, requires retailers to acquire financial instruments rather than direct physical assets, up to a 1-in-2 year level of electricity demand. This greatly limits the risk that the scheme will drive excessive investment and higher consumer costs.

We are concerned that the rapid review of the generation reliability standard recently announced by COAG Energy Council, and the Energy Security Target element of the NSW Government's recent Electricity Strategy, could lead to an excessively high effective standard. NSW has reassured stakeholders that it intends to avoid piling further costs on consumers or undermining market-wide standards, but both proposals will need extreme care to avoid these outcomes.

NSW's proposal involves targeting sufficient resources to fully meet 1-in-10 year demand if the state's two largest generation units are simultaneously inoperable. If NSW pursues this effectively higher standard, the excess capacity involved should be paid for from the Budget, rather than through energy prices. And the costs should be minimised by ensuring that the electricity system can access the full range of potential resources on both the supply and demand sides. The wholesale demand response rule change expected to be agreed by the Australian Energy Market Commission will be a positive element of this; further steps to accelerate market development, extend the rule to household

and small business consumers, and increase access to appliances capable of automated demand response should be high priorities. The NSW Government's proposed introduction of a new element of the Energy Savings Scheme targeting uptake of demand response is very positive.

7.3 Improving asset utilisation and demand management

Encouraging demand response is useful both to sustain reliability at lower cost and to extend the value of existing supply-side assets. Governments around Australia have been very cautious about the encouragement of cost-reflective network and wholesale pricing to small customers. This is understandable; in a static analysis, undoing the current cross-subsidies created by uniform pricing will create as many losers as winners. Many consumers already feel overloaded with information and responsibility and may not be eager for a system where they are exposed to higher costs unless they more actively manage their energy use. However, all energy users will ultimately pay higher costs than necessary unless we can bring sufficient economic incentives for better asset utilisation together with sufficient operational control to respond to those incentives.

There are many potential paths towards this. The extension of wholesale demand response participation to households would be a carrots-only step. Faster rollout of smart metering and of demand response-capable appliances is also important. Extension of time-of-use network tariffs through an opt-out approach would be helpful. Consumer education about the value they can create for themselves and the system through changed behaviour is positive. Electricity retailers are becoming more creative and motivated in their pursuit of demand response and could incorporate demand response into more mass-market products such as flat-price offers that mediate more complex network and wholesale pricing in return for some operational control to limit retailer risk. None of these elements is likely to deliver much on their own. It is only when capability and motivation are united that the demand side will live up to its potential.

Another element of network efficiency that should be noted is the potential to migrate edge-of-grid customers with a high cost of service – current spread across all customers in their distribution area – to solar, storage and diesel-based microgrids. This has been piloted in Western Australia with regional customers to great mutual benefit, maintaining or improving achieved reliability for customers previously at the end of long and fallible connections while reducing costs for all energy users. To realise this potential in the National Electricity Market, where barriers include the inability of regulated distributors to migrate customers off the main distribution network, it is very important to progress the reforms canvassed in the AEMC's review of regulatory frameworks for stand-alone power systems.

7.4 Gas supply

The price of gas is an extremely serious concern for many industrial energy users in NSW and across Eastern Australia. The market has been utterly transformed by the commencement of liquefied natural gas (LNG) exports from Queensland:

 the associated surge in production has pushed marginal new supply well up the production cost curve;

- the link to international markets makes overseas oil and gas prices key determinants of local gas prices; and
- with export demand more than double domestic demand, and major suppliers' future tied to meeting long term export contract commitments, local demand is at risk if supply falls short.

In the absence of dramatic policy change, greater local supply of gas is very unlikely to push generally available gas prices below an export parity price range. However, there is the potential that a shortfall in locally contractable gas supply sees prices rise well above export parity. This was our interpretation of the extreme prices offered to industrial gas users in the first half of 2017. The introduction of the Australian Domestic Gas Security Mechanism by the Federal Government provides a means to avoid a sufficiently-anticipated shortage, through limiting exports on a year-by-year basis, but ultimately supply and demand are going to have to align. The State's goal of net zero emissions by 2050 implies that gas consumption will either decrease dramatically or migrate to biogas or hydrogen. The anticipated price of gas will also make it at least individually rational for many energy users to either switch away from gas or curtail gas-intensive activities. Nonetheless, the scale of current gas use, the long life and slow turnover of gas-using assets, and the relatively small role of gas in the cost structures of most businesses and households is likely to mean significant gas demand persists for some time to come.

Meeting that demand given the decline of existing gas resources and the potential further expansion of exports will require additional sources of supply. The NSW Chief Scientist's review of unconventional gas found that while many fears are not well based, there are some real risks that require careful management – particularly the treatment at the surface of water produced from coal seam gas extraction, and the impact on hydrological systems of the total amount of water produced. The approach recommended by the Chief Scientist – firm regulation to ensure good engineering – should be fully implemented, enabling community confidence in the development of NSW gas resources.

The proposed LNG import terminals in NSW and elsewhere could also play a useful role as sources of additional supply that have high flexibility and put relatively little capital at risk. Gas supplied through these terminals would not be expected to undercut local Australian prices on average, since both would typically reflect international market pressures. But the additional supply would limit the risk of scarcity-based pricing.

8. Sustainable Government Finances

The Discussion Paper correctly identifies effective and sustainable government finances as a key productivity principle by allowing for the effective and sustainable provision of government services which in turn supports business investment, growth and productivity.

Over the medium to longer term it will be important that the NSW Government continues to provide sufficient funding for investment in the drivers of NSW's competitiveness and productivity such as innovation, research and development, infrastructure, exports and skills.

provide for improvements in the delivery of government programs and services. This includes evaluating agencies activities for opportunities for greater exposure to competition from the private sector.

Ai Group commends the NSW Government's four-pillar strategy to advance expenditure and balance sheet reforms, including the formal Review of Federal Financial Relations - from a state government perspective – to ensure the delivery of fair and stable revenue to NSW and positioning the State to meet future challenges.

With downward revisions to stamp duty and GST revenue placing pressures on total revenue growth, it is pleasing to note that the Government has contained growth in spending over the forward estimates to 2020-23 to a level that does not exceed growth in revenue over this period. However, there is a fine balance in the Government's revenue and expenditure forecasts which further underlines the need for high accountability through disciplined financial management. It will also require paying close attention to the level and balance of the State's assets and liabilities.

The Government's whole of government administrative and procurement 2019-20 Budget savings of \$731.4 million and \$2.8 billion of savings from changes to streamline the public service, incorporating a reduction in back-office employee numbers, a reduction in contractor expenditure and long service leave reforms are significant initiatives in resource prioritization and improving the efficiency of operations.

It will be important that the NSW Government continues to ensure that expenses are contained. The Government must also maintain a focus on increasing productivity, improving the cost competitiveness of the NSW economy and generating stronger long-term economic growth to address the need to ease fiscal pressures over time.

Of equal importance the NSW Government must:

- continue to target to achieve operating surpluses (adjusted to the state economic cycle and fluctuations in demand) and sustainable debt positions without resorting to higher taxes and charges.
- ensure NSW taxes and charges are competitive (and where possible below the average of) other states and territories. This is vital in enabling the State to grow and attract investment. This creates its own rewards in in the form of a larger tax base and a larger net revenue stream and a greater capacity to finance future public-sector services and investment.
- continue to monitor and seek out efficiencies in government department program delivery.

We would welcome the opportunity of discussing these points further with you if necessary.

Yours sincerely,

Australian Industry Group