



**Submission to The Select Committee into
Jobs for the Future in Regional Areas**

prepared by

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1. About The Next Economy:

The Next Economy (TNE) works with regional communities to facilitate economic development that is both socially just and ecologically sustainable. For the last two years, TNE has been conducting research and contributing to economic planning initiatives in regions across Australia, including supporting coal regions like Central Queensland, the Hunter Valley and the Latrobe Valley to explore the emerging economic opportunities in moving to a low carbon economy across all sectors.

This has included consultation with representatives of government at local, state and federal levels; local councils; regional economic development organisations; business councils and Chambers of Commerce; environment groups; community and social service organisations; unions; university research units; renewable energy sector; investment firms; small and medium sized businesses across a range of sectors including retail, tourism and agriculture; and workers and senior executives of companies involved in the mining and use of coal for electricity generation. The recommendations in this submission are based on results of this consultation, as well as an extensive literature review.

The Submission is split into four main sections. The first section analyses the current state of jobs in regional areas, while the second section goes into detail about the range of new job opportunities in regional area. The third section lists a number of general recommendations for stimulating economic development and job creation, and the final section provides advice on how to manage the transition away from fossil fuels to minimise unemployment and other impacts on workers and regional communities.

2. The Current State of Jobs in Regional Australia:

Regional areas face a unique set of challenges with regards to creating decent local employment opportunities including:

- Much higher rates of unemployment. Whereas the rate of unemployment in most urban areas averages to around 5%, in most regional areas it generally averages to around 10%.ⁱ This uneven distribution of work opportunities is exacerbating the growing inequality in Australia.ⁱⁱ
- High rates of underemployment and the increasingly precarious and casualised nature of work, which are not captured in the unemployment data.
- Even higher rates of youth and Indigenous unemployment, as well as high rates of youth outmigration (especially between the ages of 18-25 years).
- Ageing populations.
- Cost of living pressures, with generally lower incomes and higher levels of debt.

- Inadequate infrastructure to attract new industries and investment, especially in relation to digital communications and transport.
- Changes in employment because of increasing automation across agriculture, mining and other sectors.
- Skills shortages, especially in the areas of health, aged-care, child-care, financial services, construction and agriculture.ⁱⁱⁱ

3. Creating New Regional Jobs and Industries

In order to keep global warming below 2 degrees Celsius and avoid catastrophic climate change, Australia needs to reduce emissions by at least 50% by 2030 and net zero by 2050. This requires every economic sector to reduce and absorb carbon emissions. Embracing this mammoth task is the key to developing new industries and employment opportunities in Regional Australia.

In addition to jobs in renewable energy generation and storage, product development, energy efficiency services and equipment manufacturing, enormous potential exists to stimulate economic growth across other sectors of the economy including transport, building construction, waste management and land-use.

The range of jobs that are already being created in the shift to zero emissions across key regional sectors are described below, along with a series of recommendations to further develop employment opportunities and industries in each sector.

3.1. Energy & Resources Sector Opportunities:

Modelling by the National Institute of Economic and Industry Research shows that by taking strong action to embrace renewable energy and energy efficiency, Australia could create 1 million new jobs, increase GDP by 12.9% and reduce pollution by 80% by 2040.^{iv}

In 2017 alone, investment in large-scale wind and solar projects in Australia increased by 150% to \$12 billion in 2017, creating 5,500 new jobs^v. In 2018, the number of new jobs nearly tripled, rising to a total 13,233.^{vi} This figure is set to double again over the coming twelve months, with more large-scale renewable energy projects moving into construction phase.

The number of jobs in renewable energy sector extend beyond construction and installation, with training and employment opportunities in:

- Energy efficiency services, including the retrofitting of existing building stock
- Developing and rolling out storage solutions

- Upgrading the grid infrastructure and developing the digital systems required to manage the flow of energy
- Manufacturing of renewable energy parts and products, such as wind turbine blades, heat pumps and batteries
- Producing ammonia and hydrogen to support the export of renewable energy
- Mining and processing the minerals needed for renewable energy systems, such as lithium, copper and nickel
- Developing zero emissions commodities such as green steel and zero emissions aluminium, which are in increasing demand globally and are already being produced in other countries
- Electrifying transport and developing new transport infrastructure

While the transition to renewable energy is well underway, to ensure the sustainable growth of good jobs into the future, more is needed in the way of:

- Policy certainty to allow the flow of both private and public investment in renewable energy projects.
- Invest in traineeships and training institutions such as TAFE to ensure that there is an adequately trained workforce to service the needs of the growing industry.
- Public investment in changes to the national electricity grid, including necessary and appropriate upgrades to transmission lines to support the roll out of renewable energy technology and the installation of battery infrastructure.
- Targeted funding, training and technical support for smaller-scale, decentralised systems that are more likely to be locally-owned and benefit regional communities through the generation of profits and local jobs. This also includes additional support for community-owned, off-grid, and micro-grid renewable energy systems.
- Measures to support energy efficiency in buildings, and across all industries.
- Strong legislation and regulations to:
 - Ensure that renewable energy jobs are decent, safe and fair.
 - Renewable energy companies consult appropriately and share benefits equitably with local communities.
- Support for the local manufacturing of renewable energy components such as wind turbine blades, mirrors for concentrated solar thermal projects, solar hot water systems, and batteries.

3.2. Land-Use: Agriculture, Forestry and Fisheries Sector Opportunities:

The land-use sector is one of the most important in Australia, generating around \$48 billion each year (12.5%) in export revenues^{vii} and employing around 310,000 people.^{viii} It is a sector that is already in need of workers and this need will only increase – the combined impact of the sector growing into a \$100 billion industry over the next decade^{ix} and an ageing agricultural workforce will lead to an additional 123,000 additional workplace openings over the next five years.^x

It is also the sector with the most scope to protect and revitalise natural resources and to mitigate the impacts of climate change through careful vegetation, soil and water management practices. Ramping up efforts to sequester carbon through tree planting, protecting land from clearing, expanding agricultural practices that improve rates of soil carbon and trialling marine permaculture practices can not only reduce Australia's overall emissions, but also create new jobs.

The land-use sector also creates significant and lasting employment opportunities for Indigenous communities engaged in ecosystem services such as savannah burning and ranger programs; as well as in enterprises in the areas of eco-tourism and native foods and botanicals.

For this sector to continue to create good regional jobs that will be sustainable into the future, additional support, funding and regulation is needed to:

- Integrate best practice and climate smart agricultural practices to improve the health of ecosystems, sequester carbon, enhance nutrient recycling and strengthen resilience to the impacts of a changing climate.
- Improve financing mechanisms such as carbon credit and offsetting schemes to make financing easier to access for land managers focussed on sequestering carbon and protecting land and waterways.
- Provide adequate resources to research and extension programs at universities, agricultural institutions and the CSIRO to help land managers adapt to changing climate patterns and seasons.
- Provide economic incentives to encourage regenerative practices that restore soil quality, including measures to adequately price externalities.
- Support initiatives to add value to raw products at a local level by:
 - Researching, developing, and marketing new products such as degradable cellulose, starch-based packaging and bio-fuels.
 - Providing funding and training support to develop new business models and market supply chains.
 - Drawing on new digital technologies and cheap, renewable energy to make regional processing more competitive.

- Develop the digital communication and transport infrastructure and supply chain systems needed to access both domestic and international markets.
- Provide incentives and well-funded training schemes to support young people to build their careers in the agriculture sector in order to address projected gaps in the workforce as older farmers retire, and to develop the necessary skills to adapt to the growing automation and digitisation of the sector.

3.3. Health, Education and Social Services Sector Opportunities

The health sector is the largest employer in Australia, employing 1,680,900 people,^{xi} while education is Australia's third largest export earner, generating over \$28 billion in 2016-17.^{xii}

These job figures are projected to rise even further over the next five years, with a 16% increase in employment opportunities in health with the implementation of the National Disability Insurance Scheme and an increasing demand for aged care and child care services. Education jobs are projected to rise by an additional 12%, with a growth in the school aged population and an increasing demand in the areas of international, adult and community education.^{xiii}

For the economic benefits of this sector to continue to flow to regional Australia, more is needed to:

- For the public sector to invest in accordance with the very important role that health, education and social assistance institutions play in sustaining regional communities economically.
- Increase public investment in crucial research, infrastructure and technology to support health, education and social services.
- Re-invest heavily in universities, TAFE, and other programs that support people to train and work in regional areas such as the Rural Health Multidisciplinary Training Program.
- Provide additional investment and training support to small and medium sized enterprises to expand their capacity to service the needs of education and health facilities at regional level (for example, to support local procurement of high quality catering and cleaning services).

3.4. Processing and Manufacturing Sector Opportunities

While manufacturing has declined in Australia over the last few decades, Australia continues to process a diverse range of products including:

- Food
- Beverage and tobacco
- Textiles, leather, clothing and footwear
- Wood products
- Pulp and paper
- Chemicals (including fertilisers, pesticides, pharmaceutical, medicinal, cleaning products, toiletries, cosmetics, photographic and explosive)
- Metals and plastics
- Machinery and equipment
- Furniture

The experience of other OECD countries suggests that emerging digital technologies such as robotics and 3D printing combined with cheap renewable energy holds the potential to stimulate new, decentralised forms of processing and manufacturing in regional Australia. Examples from places such as Lille in France^{xiv} and Cleveland, Ohio^{xv} are demonstrating how small-scale manufacturing is revitalising regional areas in other parts of the world, however there is as yet limited research on the potential of these new technologies to do the same for Australia. With the right kind of funding incentives, research and industry support, Australia could capture the benefits of the current digital and renewable energy transitions to:

- Create new job opportunities to process raw materials and waste locally in a cost effective, efficient and environmentally responsible manner by drawing on circular economy principles.
- Convert food waste into new products such as nutraceuticals and new forms of packaging.
- Create value-adding opportunities to reinvigorate manufacturing and processing for light industry in regional areas.
- Replace hydrocarbons with biofuels, bio plastics and alternative fibres.
- Produce ammonia and hydrogen to enable the export of renewable energy.
- Manufacture components needed for the expansion of renewable energy, such as wind turbine blades, mirrors and batteries.

To take advantage of the emerging opportunities in the regional manufacturing space and create a range of medium and highly skilled jobs, more support is needed to:

- Develop supply chain systems and the appropriate infrastructure to better access national and overseas markets.
- Expand the availability of cheap, renewable energy in regional areas.
- Invest more in universities, TAFE and research institutions such as CSIRO to develop, trial and commercialise new products.
- Invest in tertiary education as well as traineeships and apprenticeships in regional areas.
- Establish regional hubs and maker labs to encourage local experimentation and innovation.
- Support both start-ups and existing businesses with grants, training, marketing support and incubator programs.

4. General Recommendations on Stimulating Regional Employment:

The market alone cannot deliver the type of long-term investments that regions need, and it is the government's responsibility to provide the right mix of incentives to attract investment that will stimulate regional development and create decent local job opportunities.

In order to support and accelerate the expansion of regional jobs across all sectors, more needs to be done to:

- Facilitate comprehensive and context specific economic planning to identify ways to diversify the regional economy in ways that build on the existing strengths, assets and industries in the area.
- Invest in digital communications and transport infrastructure that would support both existing and new industries to develop.
- Provide skills-based education and training, not only in renewable energy, but across all sectors, including health and aged-care, land-use and agriculture, construction, transport and small-scale manufacturing.
- Ensuring through industrial relations law, regulation, policies and institutions that adequate protections (eg: annual and sick leave, superannuation benefits) and appropriate remuneration are provided to all Australians, especially as more casual and contract-based jobs are becoming the more common forms of employment.
- Incubate businesses and projects that can move regions to zero emissions across all sectors – particularly in the areas of electricity generation,

buildings and energy efficiency, land use practices, transport systems, and waste management.

- Strengthen existing local businesses (especially SMEs) by providing access to subsidies, market linkage support, and business development expertise.¹
- Attracting services and industries into regional areas, including government services and agencies. Not only does this bring more money into regions, which in turns supports local businesses, but it also can help to address the housing affordability crisis in major cities.

5. Managing the Transition from the Old to the New

As Australia creates new low carbon jobs and industries, we will need to also actively manage the transition away from fossil fuel intensive industries, such as coal fired electricity plants and coal mining.

Australia does not have a good track record of managing structural adjustment processes, and studies of outcomes from the demise of other industries such as car manufacturing, textiles and and the logging industry have repeatedly shown that if support to workers and regions comes after closure, only a third of workers find full-time work at a similar pay rate, a third find casual or part-time work and a third remain unemployed.^{xvi}

To avoid such dismal prospects, lessons can be learned from Germany, where government, industry and unions have been working together far in advance of any closures to manage the transition from coal to renewable energy.

Achieving sustainable, fair, timely and integrated economic development in closure affected areas requires: 1) Comprehensive transition planning that builds on the existing regional assets and industries; 2) Strong coordination of transition activities by a central regional body; and 3) Support for workers.

5.1. Comprehensive Transition Planning

Effective transition planning processes involve:

- A range of participatory community engagement processes² to ensure the broadest possible input from workers and affected communities in decision-making processes.

¹ Often business incentives are designed to attract investment from large companies, whereas more could be done to strengthen and develop new small to medium sized local businesses that are not only significant employers, but are more likely to reinvest profits into the local community.

² Participatory techniques extend beyond community forums and surveys and may include techniques such as citizen juries, photo voice; personal narratives; street theatre; and participatory budgeting.

- Identifying the range of existing assets, skills, infrastructure and industries in the region as the first step towards building on them to strengthen and diversify the local economic system.
- Identifying the infrastructure gaps (for example communication and transportation infrastructure) that can stimulate business development and job creation across multiple economic sectors.
- Engaging external, professional expertise to assist in the facilitation of key planning activities to ensure that processes are as transparent, inclusive, creative and holistic as possible.

5.2. Coordinating the Transition

Because of the level of coordination required in such a complex policy space, the transition cannot be left to market mechanisms to resolve. To properly manage this transition and ensure a just transition for everyone, Australia needs a National Transition Authority. Some of responsibilities of this authority could include:

- Overseeing the funding and coordination of transition planning at both a national and regional level.
- Coordinating with other authorities and government agencies to ensure that the scale, type and pace of the transition will enable us to meet (and ideally surpass) our international climate obligations to reduce emissions.
- Coordinating an industry-wide, multi-employer redeployment scheme to provide retrenched workers with the opportunity to transfer to other power generators.
- Ensuring companies meet their responsibilities to workers in terms of redundancy payments and entitlements, retraining opportunities, and generating jobs through the full decommissioning and rehabilitation of sites.

Regional transition planning bodies such as the Latrobe Valley Authority³ need to be established to coordinate the transition in a timely and responsive manner. Regional Transition Authorities can take on the responsibility for managing different aspects of the transition including:

- Provide a range of financial and practical support to workers, including a one-stop-shop to facilitate access to employment and other services;

³ For more information, visit: www.lva.vic.gov.au

- Fund infrastructure development across a range of sectors including health, education and transport.
- Provide incentives to encourage business development and attract outside investment.
- Overseeing the training and redeployment of workers across different sectors.

Important considerations for the formation of regional transition authorities include:

- Extending their membership beyond government, industry, and unions to include representatives from diverse community groups (including representatives of Indigenous groups, key ethnic groups, faith groups and youth leaders), local business leaders, and environment groups.^{xvii}
- That they are established well in advance of any closures so that transition plans are already in place, and investment, support programs and infrastructure projects are already underway.
- They are well funded over a number of years to ensure long term, holistic planning.

5.3. Investing in Workers and Protecting Entitlements:

The types of assistance workers require are well documented^{xviii} and include:

5.3.1. Financial Assistance:

- Ensuring that workers get their full entitlements paid out by companies.
- Workers being offered decent voluntary redundancy packages.
- Additional financial assistance payments, such as business start-up loans, travel subsidies or relocation allowances.

5.3.2 Employment Assistance:

- Deploying workers from plants due to close to other power stations or into renewable energy jobs as they become available, as has been successfully applied in the Latrobe Valley and in Germany^{xix}.⁴
- Ensuring that companies properly decommission and rehabilitate sites, thus creating ongoing jobs for some workers.

⁴ Offering workers the opportunity to redeploy to other plants or into renewable energy projects, or retire early has enabled an orderly reduction of 130,300 coal mining jobs in 1990 to around 12,100 in 2014, with Germany's last black coal mine closed at the end of 2018 with no forced redundancies.

- Offering older workers dignified early retirement packages.
- Offering a range of business training, incubator support and investment to workers wanting to start their own businesses.
- Establishing one-stop-shops to facilitate easy access to employment assistance and other services.

5.3.3. Training and Education:

- Investing in additional skills-based training that serves the needs of a range of economic sectors.
- Enabling workers to undertake training while still employed.

5.3.4. Personal Support for Workers and their Families:

- Providing access to both financial and psychological counselling to individuals and families.
- Maintaining broader social protection measures such as providing access to health services and social insurances.
- Trialling innovative economic support mechanisms before closure, such as the Universal Basic Income, Universal Services Guarantees, Job Guarantees and regulating for shorter working hours for workers across all sectors.

6. Conclusion:

The sectors that already sustain Regional Australia hold the key to unlocking new job opportunities. A good starting point is addressing the skills shortages that already exist and then expanding investment in the work that needs to be done urgently to reduce and absorb carbon emissions across all sectors. The current disruption to our economy is the opportunity to create good, decent, local jobs that are well suited for regional areas.

ⁱ Labour Market Research and Analysis Division (2019) Small Area Labour Markets Australia, March Quarter 2019. Available at: https://docs.employment.gov.au/system/files/doc/other/small_area_labour_markets_-_march_quarter_2019.pdf

ⁱⁱ Jobs Australia (2018) Future of Work and Workers: Senate Inquiry February 2018. Available at:

https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Future_of_Work_and_Workers/FutureofWork/Submissions

iii DESSFB (2019) Occupational Skills Shortages Information. Available at: <https://www.employment.gov.au/occupational-skill-shortages-information>

iv ACF, ACTU (2015) Jobs in a Clean Energy Future. Available at: https://d3n8a8pro7vnm.cloudfront.net/auscon/pages/1435/attachments/original/1477355385/ACF_Jobs_in_a_clean_energy_future.Web.pdf

v Clean Energy Council (2018) Renewable Energy Employment Hits New Peak, And the Best is Yet to Come. 11 May, 2018. Available at: <https://www.cleanenergycouncil.org.au/news/2018/May/renewable-jobs-global-local-record-irena.html>

vi Clean Energy Council (2019) Clean Energy Australia Snapshot. Available at: <https://assets.cleanenergycouncil.org.au/documents/resources/reports/clean-energy-australia/clean-energy-australia-report-2019-fact-sheet.pdf>

vii ABARES (2017) Agricultural Commodity Statistics 2017. Department of Agriculture and Water Resources, Canberra: p.26. Available at: http://data.daff.gov.au/data/warehouse/agcstd9abcc002/agcstd9abcc0022017_IugZg/ACS_2017_v1.1.0.pdf

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x Regional Australia Institute (2018) Riding the Next Wave of Automation in Rural Australia: Safeguarding agriculture and rural labour markets through migrant work and skills development. The Regional Australia Institute, Canberra: p.5. Available at: http://www.regionalaustralia.org.au/home/wp-content/uploads/2018/06/RAI_Riding-the-next-wave-of-automation-in-rural-Australia.pdf

xi ABS (2018) Labour Force Trends, Australia, Detailed, Quarterly, cat. no. 6291.0.55.003. Available at: <http://lmip.gov.au/default.aspx?LMIP/GainInsights/IndustryInformation/HealthCareandSocialAssistance>

xii Department of Foreign Affairs and Trade (2017) Trade in Services Australia 2016-17 Report. Australian Government, Canberra: p.11 Available at: <http://dfat.gov.au/about-us/publications/Documents/trade-in-services-australia-2016-17.pdf>

^{xiii} Department of Jobs and Small Business (2017) Industry Employment Projections 2017 Report. Australian Government, Canberra: p.2. Available at: <http://lmip.gov.au/default.aspx?LMIP/EmploymentProjections>

^{xiv} For a recent summary of the work supported by Jeremy Rifkin in Lille and elsewhere, visit: <https://www.sbs.com.au/guide/article/2018/03/06/inside-one-mans-radical-solution-impending-climate-change-apocalypse>

^{xv} For more information on how manufacturing and processing is being revitalised in Cleveland through cooperatives, visit: <http://www.evgoh.com>

^{xvi} ACTU (2016) Sharing the Challenges and Opportunities of a Clean Energy Economy: A Just Transition for Coal-Fired Electricity Sector Workers and Communities. Policy Discussion Paper. ACTU: Melbourne.

^{xvii} Loxton, E., Schirmer, J., Dare, M. (2011) Technical Report 208 Structural adjustment assistance in the Australian forestry industry: A review of recent experience and recommendations for best practice design of future structural adjustment packages, February 2011.

^{xviii} Schultz, S., Schwartzkopff, J. (2016) Instruments for a Managed Coal Phase-Out: German and International Experiences with Structural Change. E3G Briefing Paper, July 2016. Available at: www.e3g.org/docs/Experiences_with_structural_change_EN.pdf

^{xix} Galgóczi, B. (2014) The long and winding road from black to green, Decades of structural change in the Ruhr region, International Journal of Labour Research, Vol. 6, Issue 2.