What Regions Need

on the Path to Net Zero Emissions

Dr Amanda Cahill
April 2022

The Next Economy

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by Dr Amanda Cahill, April 2022

Acknowledgement of Country

We wish to acknowledge the Jagera and Turrbal Peoples, traditional custodians of the land on which this report was prepared. We pay our respects to their Elders, past and present, and offer our solidarity and support to First Nations groups across the country working towards economic sovereignty and justice.

About The Next Economy

Communities and organisations all over the country are feeling the burden of economic change, often bearing the brunt of policies that don't appreciate the true value of regional economies. Change is inevitable, and with that comes great anxiety. But it also comes with great opportunities. We work alongside communities, industries and governments to harness those opportunities that will work for people and the planet on which we all depend.

Find out more at: www.nexteconomy.com.au

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Executive Summary

Between February 2021 and March 2022, The Next Economy engaged with 505 people across Queensland, New South Wales, Victoria, Western Australia and the Northern Territory to assess the types of support regions with close ties to the fossil fuel industry need to diversify their economies and manage the transition to net zero emissions. Participants included representatives of all levels of government, the energy sector, a range of different industries, environment organisations, unions, economic development agencies, social services, universities and training institutions, Traditional Owners and First Nations representatives, and community members.

The Next Economy found that public sentiment regarding the inevitability of the energy transition and the need to decarbonise the economy shifted significantly over the twelve month engagement process in response to a series of events including announcements regarding the early closure of coal fired electricity plants in the Hunter and Latrobe Valleys, Australia's trading partners adopting more ambitious emissions reduction targets at COP26, increasingly frequent and severe weather events fuelled by climate change such as the recent East Coast floods, and the rapid expansion of large-scale renewable energy projects and green hydrogen and metal processing proposals across many parts of Australia.

Until late 2020 and early 2021, at least half of the participants in regional engagement activities hosted by The Next Economy expressed some scepticism about the need to plan for the decline of fossil fuel use. By the end of 2021, the overwhelming majority acknowledged that fossil fuel use would eventually be phased out and that Australia is shifting to renewable energy. People continue to disagree about how long Australia will rely heavily on coal export revenue, but most accept that the use of coal in the domestic energy system will drop significantly over the next decade.

As the conversation in regional areas shifted from widespread scepticism about the need to plan for the decline of fossil fuel use to a growing acceptance that regions need to manage this change to grasp emerging economic opportunities, so did the questions people wanted to explore, such as:

- What are the risks and opportunities related to changes in the energy sector and efforts to decarbonise all sectors of the economy for regional areas?
- How can regions take advantage of the changes necessitated by decarbonisation to build stronger and more diversified economies?
- What are the key challenges to managing the energy transition?
- What is the role of different levels of government in managing change and how does this differ from the roles of other stakeholders, such as industry?
- What can we learn from the experience of other countries that have taken a more proactive approach to managing the transition?
- What does good coordination and planning look like?
- What support do regions need to better manage the transition?

This report provides a summary of what people across regions with close ties to fossil fuels around Australia are saying they need to better manage change as fossil fuel use declines and renewable energy generation ramps up.

Despite the high degree of diversity represented by those engaged by The Next Economy in terms of geographic reach, sectors represented and political views, there was a surprisingly high level of consensus across all groups with regards to five key themes that emerged across the engagement activities:

1. The expansion of renewable energy and decarbonisation of Australia's economy offers an historic opportunity to create a wide range of new industries and jobs in renewable energy generation, storage and transmission; critical minerals mining and processing; renewable energy component manufacturing; batteries; biofuels; and food and fibre processing. These industries are well suited to regional areas. We need more open and inclusive ways to bring people together so that they can move beyond politics to understand the range of economic opportunities on offer.
2. It is not enough to just focus on attracting investment to develop new renewable energy powered industries. Additional planning, regulation and investment is needed to manage the eventual decline of fossil fuel use which is impacting both the domestic energy sector as well as the international demand for Australian thermal and metallurgical coal exports.
3. The lack of government leadership and policy certainty at a national level is making it difficult for investment to flow and for new industries to develop. Even industry leaders are now calling for the Federal Government to develop

the national targets, policy settings and regulations needed to de-risk investment and ensure development outcomes are positive and lasting.

4. Managing the decarbonisation of the entire economy (not just the energy sector) necessitates a more proactive, iterative, regionally led and inclusive approach to planning and coordination, one that is led by independent and well-resourced transition authorities with the power to coordinate change across all levels of government and across different sectors.
5. While there is already an abundance of investment opportunities across regional Australia and plenty of international finance available to invest in efforts to decarbonise the economy, we need more creative, diverse and responsive financial mechanisms to be able to meet the needs of regional communities in a meaningful and timely way.

The findings presented in this report are based on a qualitative analysis of a diverse range of views expressed during interviews, surveys, discussions, workshops and other participant observation activities conducted by The Next Economy. By drawing on qualitative data, the insights presented in the report are grounded in the experience of those leading the energy transition in regions across Australia – voices that are all-too-often drowned out by the noisy and generally misleading national debates about climate and energy policy.

By no means is this analysis meant to represent all views, nor erase deep rooted differences in opinions that continue to polarise sections of the community. Instead, this report highlights the recurring themes around which many people across different regions, industries, civil society groups and levels of government are coalescing.

Our goal is to help make sense of the complex and rapidly shifting contexts regions find themselves in as the world accelerates efforts to decarbonise the economy by elevating the voices of those who are the most informed and most impacted by changes that are already occurring in many parts and sectors of Australia – industry leaders risking their wealth and reputation as they strive to adapt to changing market conditions; public servants grappling with outdated and inconsistent policies and regulations across all levels; workers in fossil fuel industries concerned about their jobs; Traditional Owner groups and social service organisations exploring how the disruption to the economic status quo could lead to opportunities to address entrenched disadvantage; environment groups holding decision makers to account; and community members who just want to find a way to ensure a thriving, resilient and prosperous future for their children.

Introduction

Australia has finally committed to a net zero emissions target by 2050. Not only does this mean changing how we produce and use energy but a transformation of every economic sector we rely on at a pace and change not seen since the Second World War.

The way in which the transformation of Australia's economy is managed holds serious and long-term implications for the ongoing prosperity and resilience of Australia's regions, particularly those with close ties to fossil fuel industries.

The good news is that regional areas are well placed to take advantage of the many economic opportunities related to the work we need to do to reduce and absorb carbon emissions across all sectors of the economy, given Australia's abundance of renewable energy resources, technical expertise, infrastructure and proximity to Asian markets. Whether Australia can capitalise on its natural advantages to capture these economic opportunities and become a global 'renewable energy superpower' is not, however, inevitable. The toxic political debate that has plagued national energy and climate policy in Australia over the last decade continues to generate social, economic and political roadblocks on the path to net zero that are hampering Australia's regional capacity to navigate change.

This report explores the types of support regions most impacted by the transition to net zero need to overcome these challenges and seize the many economic opportunities on offer that could ensure not only the future prosperity of our regions, but the entire nation. The recommendations in the report are grounded in the experience of those leading the energy transition[1] across Australia – voices that are all-too-often drowned out by the noisy and generally misleading national debates about climate and energy policy.

Between February 2021 and March 2022, The Next Economy engaged with 505 people[2] across Queensland, New South Wales, Victoria, Western Australia and the Northern Territory to assess the types of support regions with close ties to the fossil fuel industry need to manage the transition to net zero emissions. Participants included representatives of all levels of government, the energy sector, a range of different industries, environment organisations, unions, economic development agencies, investors, social services, universities and training institutions, Traditional Owners and First Nations organisations, and general community members.

Public sentiment regarding the inevitability of the energy transition and the need to decarbonise the economy shifted significantly over the twelve month engagement process in response to a series of events including announcements regarding the early closure of coal fired electricity plants in the Hunter and Latrobe Valleys, Australia's trading partners adopting more ambitious emissions reduction targets at COP26, increasingly frequent and severe weather events fuelled by climate change such as the recent East Coast floods, and the rapid expansion of large-scale renewable energy projects and hydrogen proposals across many parts of Australia.

1 The words 'transition', 'transformation' and 'change' are used interchangeably throughout this document to refer to changes related to the decarbonisation of Australia's economy and the shift from a reliance on fossil fuels to renewable energy.

2 Over 600 people participated in research activities or attended events The Next Economy held between February 2021 and March 2022, however some participants attended multiple activities. The number of separate individuals The Next Economy engaged with is 505 people.

Until late 2020 and early 2021, at least half of the participants in regional engagement activities hosted by The Next Economy expressed some scepticism about the need to plan for the decline of fossil fuel use. By the end of 2021, the overwhelming majority acknowledged that fossil fuel use would eventually be phased out and that Australia is shifting to renewable energy. People continue to disagree about how long Australia will rely heavily on coal export revenue, but most accept that the use of coal in the domestic energy system will drop significantly over the next decade.

With this growing acceptance of change has come an increased awareness of and interest in the range of emerging economic opportunities associated with the expansion of renewable energy, as well as questions about how regions will manage change to mitigate risk. This shift is reflected in the types of questions commonly raised in workshops and other engagement activities including:

- What are the risks and opportunities related to changes in the energy sector and efforts to decarbonise all sectors of the economy for regional areas?
- What are the key challenges to managing the energy transition?
- What is the role of different levels of government in managing change and how does this differ from the roles of other stakeholders, such as industry?
- What can we learn from the experience of other countries that have taken a more proactive approach to managing the transition?
- What does good coordination and planning look like?
- What support do regions need to better manage the transition and diversify their economies in the process?

Research and engagement activities conducted by The Next Economy between February 2021 and March 2022 included:

- A review of the international literature on how regions across Australia and other countries are managing change in the energy sector (March–December 2021)
- Interviews and panel discussions with professionals working to support fossil fuel regions across Australia, including in Central Queensland, the Latrobe Valley and Geelong in Victoria, the Hunter Valley in New South Wales, and the Collie Region of Western Australia (March–September 2021)
- In-depth interviews with six Australian regional economic development experts and five energy transitions experts from Germany, Poland and the United Kingdom (December 2021–February 2022)

- Workshops and interviews with participants attending the Central Queensland Energy Futures Summit. This included 147 stakeholders from across all levels of government, the energy sector, industry, unions, environment groups, training institutions, Traditional Owner groups and other community members. (March–April 2021)
- Meetings and workshops with 137 local, state and federal government representatives, as well as a range of energy regulators and agencies that support decision making at a State and Federal Level (May–December 2021)
- Surveying 28 senior representatives of local government, energy generators (fossil fuel and renewable energy), industry, economic development agencies, unions, environment groups, training providers and researchers who are directly engaged in managing changes in the energy sector (December 2021)
- An international roundtable discussion with 43 academic, union, climate and economic practitioners involved in developing policy and supporting regions to manage changes in the energy sector across Australia, Germany, Poland and the United Kingdom (February 2022)
- Participation in the 'Just transition from Coal in Australia' roundtable discussion hosted by Sydney University with 24 leaders from across academia, unions, environment groups and policy think tanks to explore the policy options for supporting an orderly and just transition for Australia's coal regions (March 2022)
- Workshops with 74 professionals working in the fossil fuel, renewable energy and hydrogen industries across Queensland (March 2022)
- Community forums on the impacts of the energy transition attended by 153 residents in the Hunter Valley, Northern Territory and Central Queensland (February 2021–April 2022)

A full list of the organisations represented across the different engagement activities is listed in Appendix A. This list is interesting for two reasons. The first is the level of diversity represented in the list, not only in terms of geographic reach and sectors represented, but also in terms of the range of political views held by participants. The second point is that despite the level of diversity represented, there was a surprisingly high level of consensus across all groups with regards to five key themes:

1. The expansion of renewable energy and decarbonisation of Australia's economy offers an historic opportunity to create a wide range of new industries and jobs that are suited to regional areas. We need more open and inclusive ways to bring people together so that they can move beyond politics to understand the range of economic opportunities on offer.
2. It is not enough to focus on attracting investment to develop new renewable energy powered industries. Additional planning, targets, regulation and investment is needed to manage all aspects of a changing energy system, including the decline of fossil fuel use which is impacting both the domestic energy sector as well as the international demand for Australian thermal and metallurgical coal exports.
3. The lack of government leadership and policy certainty at a national level is making it difficult for investment to flow and for new industries to develop. Even industry leaders are now calling for the Federal Government to develop the national targets, policy settings and regulations needed to de-risk investment and ensure development outcomes are positive and lasting.
4. Managing the decarbonisation of the entire economy (not just the energy sector) necessitates a more proactive, iterative, regionally led and inclusive approach to planning and coordination, one that is led by independent and well-resourced transition authorities with the power to coordinate change across all levels of government and across different sectors.
5. While there is already an abundance of investment opportunities across regional Australia and plenty of international finance available to invest in efforts to decarbonise the economy, we need more creative, diverse and responsive financial mechanisms to be able to meet the needs of regional communities in a meaningful and timely way.

The findings presented in this report are based on a qualitative analysis of the views expressed during interviews, surveys, discussions, meetings, workshops and other participant observation activities conducted by The Next Economy. This analysis diverges from many reports and policy papers recently produced by think tanks, industry bodies and universities on the energy transition, in that

the qualitative nature of the data provides a more nuanced perspective on the sometimes-contradictory responses uncovered by polling, surveys and other quantitative methods.

By no means is this analysis meant to represent all views,[3] nor erase deep rooted differences in opinions that continue to polarise sections of the community. Instead, this report highlights the recurring themes around which many people across different regions, industries, civil society groups and levels of government are coalescing.

Our goal is to help make sense of the complex and rapidly shifting contexts regions find themselves in by elevating the voices of those who are the most informed and most impacted by changes that are already occurring in many parts and sectors of Australia as the energy system changes – industry leaders risking their wealth and reputation as they strive to adapt to changing market conditions; public servants grappling with outdated and inconsistent policies and regulations across all levels; workers in fossil fuel industries concerned about their jobs; First Nations and social service organisations exploring how the opportunities provided by the disruption to the economic status quo could address entrenched disadvantage; environment groups holding decision makers to account; and community members who just want to find a way to ensure a thriving, resilient and prosperous future for their children.

3 In attempting to synthesise the main themes emerging from hundreds of conversations across Australia, the perspectives presented in this report do not necessarily represent the views of any specific individual, nor the official position of any organisations listed in Appendix A.

Getting Clear About What's at Stake

The conversation in regional Australia about the transformation of the energy sector has shifted significantly since the last Federal election.

Even two years ago, most participants in public forums convened by The Next Economy were concerned with questions regarding whether regions needed to confront the energy transition at all. Industry and government representatives met behind closed doors to discuss the emerging changes across the energy sector but were hesitant to speak publicly about their plans. Environment and climate groups were the main voices advocating for plans and targets to accelerate the expansion of renewable energy, support workers and attract new industries to regional areas.

One of the main factors that has contributed to the increasing public acceptance of the energy transition over the last twelve months is the growing awareness of what is at stake for regional Australia in terms of economic risks and opportunities. This awareness has been heightened by the impacts of a range of external shocks including the ongoing COVID pandemic, increasingly frequent announcements of early coal plant closure dates, long term investment in thermal coal mining projects slowing,[4] shifting international demands for fossil fuels,[5] the introduction of trade tariffs on carbon intensive exports,[6] increasingly severe and frequent weather events exacerbated by climate change and increasing global insecurity.

4 While the recent increase in the coal price has led to a surge in coal export revenues, investment in new thermal coal mines is slowing. See: https://www.abc.net.au/news/2022-04-04/australian-coal-exports-to-break-record/100964414

5 For recent analysis of the slowing demand from China for Australian coal imports see: https://www.abc.net.au/news/2022-04-21/china-coal-imports-drop-australia-exports-wane-report-finds/101007068

6 For an analysis of the impact of increasing tariffs, see: https://australiainstitute.org.au/report/carbon-border-adjustments/

These threats have highlighted Australia's vulnerability to external shocks, sparking conversations across many regional communities about the need to build greater resilience, including in the energy sector. These discussions have coincided with the release of a series of reports[7] that detail the range of economic opportunities that are emerging as Australia expands renewable energy generation and tackle the task of decarbonising the economy. While reports differ in their assessment of the scale of potential economic revenue and job creation, they are consistent in terms of describing the types of economic opportunities that are on offer that could benefit regional communities.

> **Things are changing. We should have started this ten years ago. We're already behind.**
>
> (ALUMINA PLANT WORKER)

Table 1: Reports on Economic Opportunities in Decarbonising Australia

Year	Organisation	Report Title
2021	Accenture on behalf of ACF, ACTU, BCA and WWF	Sunshot: Australia's opportunity to create 395,000 clean export jobs
2021	Alpha Beta on behalf of The Climate Council	Clean Jobs Plan
2022	Beyond Zero Emissions	Gladstone Renewable Energy Industrial Precinct
2022	Beyond Zero Emissions	Hunter Renewable Energy Industrial Precinct
2020	Beyond Zero Emissions	The Million Jobs Plan
2020	The Next Economy	What Queensland Wants: Regional perspectives on building a stronger economy
2020	Climateworks	Decarbonisation Futures: Solutions, actions and benchmarks for a net zero emissions Australia
2020	Deloitte Access Economics	A New Choice: Australia's climate for growth
2022	Per Capita on behalf of the Electrical Trades Union	A Blueprint for Better, Cleaner Jobs: Industrial strategies for the post-carbon economy

7 For a summary of recent reports, see Table 1.

> **Most people worry about losing coal jobs, but what they don't know is that we already have a labour and skills shortage. We don't have enough people, and the ones we have don't have all the right skills... We need to make some hard choices about what we are training people up to do, especially if we want these new industries.**
>
> (LOCAL GOVERNMENT OFFICER)

The reports emphasise not only the thousands of jobs that are already being created in renewable energy construction, generation, storage, transmission, but also in the development of renewable export industries such as green hydrogen and ammonia, batteries, renewable energy parts, electric vehicles, biofuels and green metals processing.

The diversification of the mining sector into the exploration, extraction and processing of minerals needed for renewable industries (such as copper, zinc, nickel, lithium, cobalt, and vanadium) also offers export revenue and job creation opportunities, even as the international demand for Australian coal, gas and other fossil fuel commodities are expected to decline over the next few decades.

Renewable energy generation capacity along with technological advances in automation and digitisation are creating new opportunities for regional manufacturing and processing not only in the renewable energy space, but also in terms of food, fibre and chemicals processing; opportunities that offer Australia the potential to strengthen national sovereignty and self-sufficiency at a time when global supply chains are under enormous pressure.

In addition to the direct jobs created in the renewable energy sector are the indirect employment opportunities in service industries such as finance, supply logistics, engineering and design, research and development, training, environmental services and other project management related industries.

The need to reduce and absorb emissions is generating new opportunities in economic sectors beyond energy, including the land-use and agriculture, transport, housing, digital technology and waste sectors. These opportunities hold the potential to unlock trillions of dollars of new investment into regional Australia. Additional investment and work opportunities in climate adaptation are also emerging to support regions to develop greater resilience to climate impacts.

Changing land management practices and farming methods to support the drawdown of carbon are starting to receive more serious attention, given the international investment poised to support initiatives to restore land and water systems and draw carbon out of the atmosphere. Innovations such as carbon farming and more regenerative farming techniques, expansion of protected areas

and nature corridors, more holistic approaches to land rehabilitation, kelp farming, mangrove planting and wetlands protection, programs that support Indigenous land and sea management, and the development of local food hubs and local processing initiatives to shorten supply chains, are offering new ways to build not only climate and food resilience, but a fairer and more equitable agricultural system.

Often missed in discussions of these nature-based climate solutions is that they are not only effective in drawing carbon out of the atmosphere but could also address a range of other urgent challenges facing agriculture and land-use sector more generally such as declining biodiversity and soil health, domestic supply chain disruptions, labour shortages in agriculture, and the ongoing economic marginalisation of First Nations people.

The emphasis in recent reports on a much wider range of economic opportunities tied to a changing energy system and climate action has been a welcome intervention in a national debate which only a few years ago was unhelpfully stuck on arguments about how many jobs in the coal industry could be replaced by renewable energy projects.

Some community members remain sceptical about these new economic opportunities and maintain that we should instead be doubling down on the chance to be the last bastion of coal production, particularly given the recent increase in the international coal price, but increasingly these voices are in the minority. Most people The Next Economy has been engaging with, including people working for fossil fuel energy companies, now acknowledge that the world is moving away from fossil fuel use and that it is inevitable that we need to act to not only decarbonise our own economy, but find alternative exports that can replace our dependence on coal and gas revenue. Industry representatives in particular point out that we need to make some hard choices about which industries we invest in for the future, given that there are already skills and labour shortages that will undermine the development of new industries unless we are able to phase out fossil fuel production and use. The decisions we make now about the types of training and infrastructure we invest in will set our course for decades to come. It is now time to choose what kind of economy we want.

I'm a realist. I know climate change is real and we have to change. But I'm an optimist too. We've got lots of opportunities.

(RETIRED COAL PLANT WORKER)

Capturing the benefits of change

As conversations have shifted and more people have started to understand the range of opportunities available, more nuanced analyses about the specific prospects of different regions have emerged. Resource communities, who are no strangers to the impact of boom-and-bust cycles, are starting to question the economic opportunities on offer in terms of the kinds of development they want to see happen in their communities.

In addition to wanting to see new industries and jobs, community representatives have started to emphasise that it is not just the quantity but quality of economic opportunities that matters. From economic development officers in local councils to workers in coal plants, people emphasise investing in things that not only contribute to individual wellbeing, but create the conditions for long term economic resilience, greater equity and fairness, and improved community cohesion such as:

- Programs to support greater economic diversification across regions. While most people express support for large scale industrial development, they also emphasise the need to invest in a variety of sectors, as well as in small and medium sized enterprises.
- Improved access to services across regions, particularly health, education, aged care childcare and emergency services. Workshop participants have suggested that these services are not only important for individual wellbeing but are a determining factor in attracting new industries and workers to a region over the long term.
- Regional universities and training institutions, as well as industry sponsored apprenticeships and traineeships to ensure local employment opportunities.

If maternity [services] are so bad you can't even have a baby here, in a place with a population of over 60,000 people, are you going to move your whole family here when you're offered a job, or just fly in from Brisbane?

(LOCAL GOVERNMENT OFFICER)

- Addressing employment conditions to improve people's standard of living and make work more accessible to those who have been largely excluded such as women, young people, First Nations people and people living with a disability. Examples offered by workshop participants have included shortening working hours (in particular, changing the 12-hour shift for heavy industries), addressing the increasing casualisation of contracts and protecting pay and conditions.
- Improved digital access in regional areas to support learning and commerce.
- Supporting community and collective ownership models to keep essential services and businesses in regions and capture profits locally. Examples cited included the potential for expanding community-owned renewable energy and infrastructure to support community level processing and manufacturing (such as maker labs).
- Establishing community funds to support local economic and social initiatives that existing and emerging industries contribute to.
- Ensuring circular economy principles are embedded across systems to reduce waste and sustainably develop new materials and products such as biofuels, packaging and construction materials. One interviewee extended this principle even further to suggest the government develop material-service systems to retain ownership of the critical minerals needed to support renewable energy.[8]
- Some community members also advocated for a new approach to welfare by embracing the Universal Basic Income model or the Universal Services Guarantee, citing the benefits of widely available JobSeeker payments during the early stages of the COVID-19 pandemic.

> **Something simple we could do is set up regulations to ensure that all companies are operating to the same ESG requirements**
>
> (RENEWABLE ENERGY COMPANY REPRESENTATIVE)

Emerging risks as things change

Growing concerns about the risks of not managing change well and missing out on the economic opportunities on offer have also been a very strong theme over the last twelve months. Participants have repeatedly expressed concerns that if Australia does not establish the right policy settings, incentives and coordination processes to sufficiently ramp up new economic opportunities tied to renewable energy generation while managing an orderly phase out of fossil fuels we risk:

8 For more information on this concept see: Aurisicchio, M. (2019) Material-Service Systems for Sustainable Resource Management. Available at: https://link.springer.com/chapter/10.1007/978-981-15-6779-7_7

- An increasingly unstable electricity supply and sudden and disorderly exit of existing coal fired electricity plants, with a severe and negative impact on workers and communities.
- Competition between regions leading to increased economic inequality, with regions and segments of the workforce closely tied to fossil fuel industries becoming increasingly marginalised.[9]
- Exacerbating existing labour and skills shortages by failing to develop appropriate training programs and incentives for workers to move into emerging industries.
- Current standards of work conditions falling even further if the right regulations are not put in place to protect workers moving into new industries.
- Rising energy costs which will not only impact households but will determine whether existing and new industries will be globally competitive.
- Failing to attract the right investment to develop the infrastructure, supply chains, markets and skills for new industries, such as green hydrogen, ammonia, renewable energy parts, biofuels and green metals processing.
- Concern that new industries won't be properly regulated and held to high enough ESG standards, with rapid industrial development leading to negative social and environmental impacts and inequitable distribution of benefits.
- Existing industries becoming less competitive as our trading partners reduce their reliance on Australian coal and gas imports and start to impose penalties (such as the European Union's Carbon Border Adjustment Mechanism) on countries not doing enough to reduce fossil fuel use.[10]
- Not acting fast enough to keep global warming below 1.5 degrees Celsius, leading to long term impacts on agricultural production, and higher costs associated with increasingly severe natural disasters and rising insurance premiums

It's not just about the number of jobs, but the types of jobs. There's no guarantee that any of the [new] jobs will be good jobs, with the same pay and conditions we've got now.

(POWER STATION WORKER)

9 For an analysis of how different regions will be impacted by the energy transition, see: Smith, W. & Phillips, T. (2022) Who's Buying? The Impact of Global Decarbonisation on Australia's Regions. Centre for Policy Development, Melbourne.

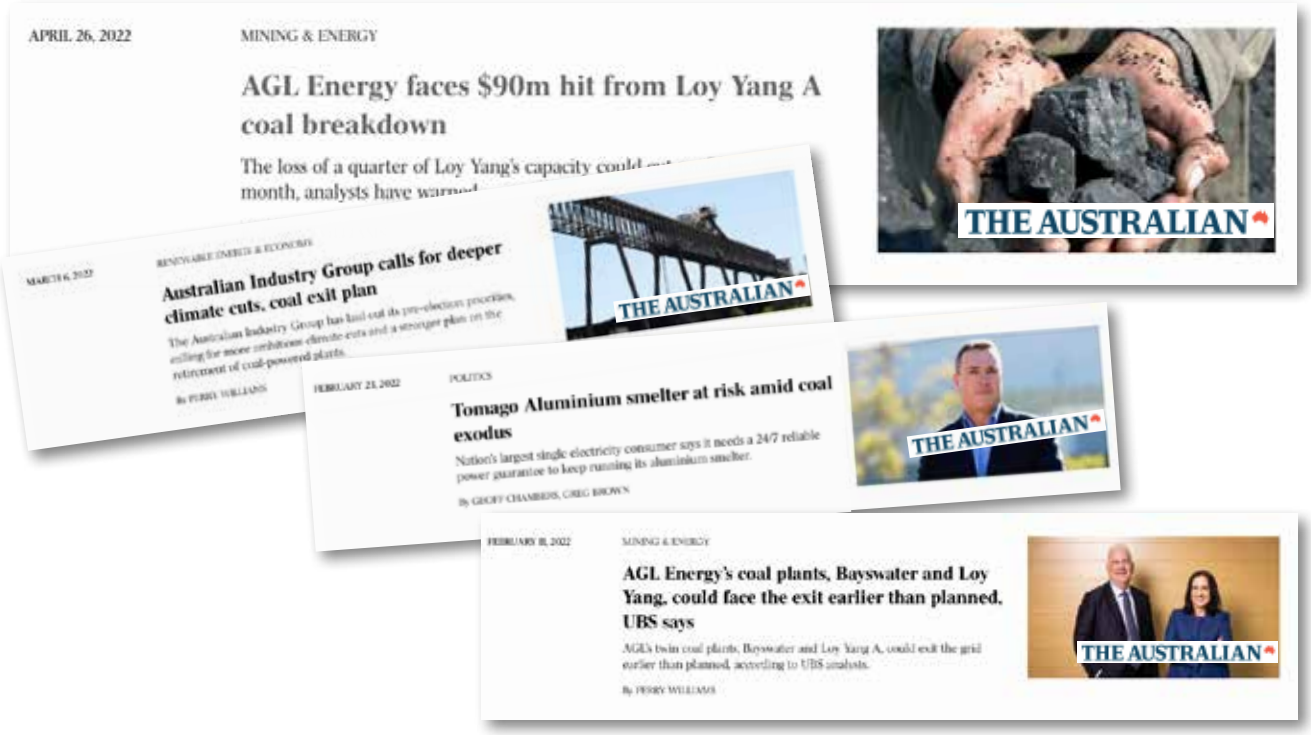
10 A number of other countries including the US, Japan and Korea are considering introducing similar tariffs to the European Union's Carbon Border Adjustment Mechanism.

> **There's so much misinformation and lies spread by politicians and activists and the media. Who can you trust?**
>
> (HUNTER COMMUNITY MEMBER)

If regions are to take advantage of the economic opportunities on offer and do it in a way that creates more liveable, vibrant and resilient communities, it's not enough to just know that the opportunities exist. The complexity of managing change so that regions can mitigate risk and take advantage of economic opportunities to build long term resilience and prosperity cannot be understated. Regions need to be able to come together for inclusive and constructive conversations about what they want for their future if they are to successfully navigate the long and winding path to net zero emissions. Managing this is a huge and complex task that requires of level of leadership, vision, honesty, coordination, planning and financial investment that Australia hasn't seen in decades.

> **We don't want to see a repeat of the LNG experience, when even the local doctor couldn't afford to live in town. [The LNG boom] didn't leave much of a positive legacy in terms of jobs or infrastructure. And there's been lots of social problems that have come with that – domestic violence. Drug use. We have got to do this differently this time round.**
>
> (LOCAL GOVERNMENT WORKER)

> **I used to feel like the bad guy, but now seeing there's all these new opportunities, I can see how I can be part of the future.**
>
> (COAL MINER)



Regions Getting On With It

People asking questions and expressing curiosity about both the risks and opportunities as Australia decarbonises means that we are at a critical juncture as a nation. Whether these concerns translate into the pressure and momentum needed to develop new industries and jobs, or into even further social polarisation and opposition to new developments depends on whether communities can come together to talk openly about what is happening and what they want for their future.

The toxic politics and misinformation that has plagued climate and energy policy over the last decade has made the types of conversations and planning we need nigh impossible. The ongoing denial by many Federal politicians that the energy system is changing has divided and confused the public, while also eroding confidence among investors, industry executives and public servants at all levels of government. While the Federal Government's commitment to net zero emissions, recent announcements of large-scale renewable energy projects and a growing awareness that the world is rapidly moving away from coal has started to consolidate public acceptance that Australia needs to transform its economy, mixed messages abound. New coalmines continue to be approved despite others closing or failing to attract funding, and while both major parties talk about the importance of coal in the energy mix, companies continue to announce early closure dates for coal plants because they can no longer compete with renewable energy generation. The lingering effects of ten years of obfuscation continues to undermine the confidence of decision makers and the public alike.

One industry executive described this lack of confidence and confusion as 'a cancer affecting decision making at every level', both within government and the business sector and noted that while there are increasing numbers of announcements, whether projects are realised is far from given.

The last twelve months of engagement provides some insights into how regions and industries have started to take action at a local level and the types of support required for people to move from a paralysing 'wait and see' attitude to having a sense of security, faith and permission to act on emerging opportunities.

One example that captures how quickly things can shift when people have the space and confidence to come together is the Central Queensland Energy Futures Summit. The Next Economy hosted the Summit in Gladstone in April 2021 in response to hearing concerns from industry, energy companies, local and state governments, union and environment representatives that

they couldn't have an open and productive conversation about their plans to support Central Queensland to manage the energy transition. Across all groups, leaders expressed concern that while new investment opportunities and large infrastructure development and projects were being proposed for the region, no politically safe forums existed to openly discuss how different groups could work together to capture new opportunities and manage risk in a coordinated way. Industry players were particularly worried that if they couldn't share their development plans publicly, they might miss out on investment opportunities.

The hesitancy across all groups stemmed from violent scenes that occurred in Central Queensland in the lead up to the 2019 Federal Election, when supporters of the Adani Carmichael Coalmine led by a group of conservative politicians clashed with environmental protestors, landing an elderly woman in hospital.[11]

Two years later, industry and energy players did not want 'to be seen to be getting political', government employees were concerned about 'keeping their jobs', and union and environmental groups did not want to be responsible for 'a repeat of what happened in 2019'. Yet everyone agreed that if the region were to capture the economic benefits on offer, the first step was to be able to at least talk about the changes that were coming over the horizon.

In response to hearing from various groups that there was a need for a public conversation about changes in the energy sector, The Next Economy hosted the Central Queensland Energy Futures Summit in Gladstone.

Sponsored by Stanwell Energy, CleanCo, The Australian Conservation Foundation, Clean Energy Finance Corporation and the Central Queensland University, the

11 https://www.abc.net.au/news/2019-04-28/adani-protester-injured-in-clermont/11052940

Summit successfully brought together 147 representatives of energy companies, heavy industry, all levels of government,[12] unions, environment groups, Traditional Owners and training institutions to discuss how the region could better manage the impacts of change in the energy sector across Central Queensland.

The risks taken by some participants to attend, let alone participate in this conversation in Central Queensland cannot be overstated and pre-Summit meetings with potential participants were dominated by fear and scepticism. As one company executive shared 'we weren't sure even until the day before [the Summit] that we would show up, because of the risk of how people might perceive us.' When asked what he was worried about, his fears ranged from sending a false message to the community that their operations might close because of their dependency on coal, to being too closely associated with 'a green agenda'.

Other participants were also concerned about how the discussion might be reported on and that they might end up losing their jobs if they were perceived to be 'anti-coal' by association.

Some of these fears were realised, when a CEO of a major energy company unexpectedly resigned two days after making the following statement at the Summit:

> Australia is undergoing a major energy transition and it's happening at a rapid pace... Over the coming years, [we] will respond to the renewable energy needs of our large commercial and industrial customers through the introduction of new low or zero emission generation technologies. We will also strive to play a central role in the emerging green hydrogen industry. We are taking early steps to bring our people, communities, unions and government together to put plans in place. These plans will help ensure that as we eventually retire our coal-fired assets from service, our people have choices in relation to retraining, redeployment and – where it is their preference – retirement.[13]

While the CEO in question resigned of his own volition, the high level of national media coverage[14] that followed demonstrated the sensitivities surrounding the energy discussion. As one Summit participant later reflected:

> Most people are wanting to openly discuss the issues we face and to collaborate on the solutions going forward. But the lesson is to find a safe way for all people to present their views.... The consequences for some individuals was quite drastic. Just shows today's society struggles with the truth.

12 State and Federal political representatives were not invited to the Summit, although local councillors and staff working for local, state and federal government departments were invited to attend.

13 For the full media statement, visit: https://www.stanwell.com/our-news/media/stanwell-reveals-future-focus-at-cq-energy-futures-summit/

14 For one example, see:https://www.afr.com/chanticleer/mystery-surrounds-stanwell-ceo-s-exit-20210426-p57mj0

Despite this unfortunate turn of events, the overwhelming feedback on the Summit was that for many people who attended, it was a relief to finally be able to discuss what was happening across the region and what changes in the energy system could mean for the future. The general sentiment in feedback forms was captured in the reflections of a First Nations representative:

> Just so grateful that I was able to attend a productive and energetic summit. There was a good feeling of consensus that there is much work to be done and we are the ones to do it. As someone who has been feeling powerless about climate change for so long, it was encouraging to see the commitment from industry to change direction. I believe that renewable energy projects and downstream industries in regional and remote communities are critical components for the kind of economic transformation that will close the gap forever.

The feedback on the positive impacts of the Summit continues even a year later, with many participants reporting that the Summit was a key turning point in local discussions because it created an opportunity for people from across different sectors to have an honest discussion about the changes occurring across the region. As one industry representative reflected:

> What was great was the level of openness from industry and that there was a good broad cross section from the community with most groups represented. Everyone was willing to listen to everyone's point of view. Facts could be sorted from myths, so maybe reality may start to triumph over spin and public relations or blind ideology.

The outcomes of the Summit extended beyond its influence on the public conversation about energy futures and in the months that followed, participants informed The Next Economy that the Summit had created a 'new space' and 'permission' for companies and investors 'to act'. Actions that attendees attributed at least in part to the confidence they had gained through participating in the Summit included:

- The Gladstone Regional Council starting a community engagement process to develop a transition roadmap to guide decision making as the energy sector changes over the next ten years.
- Key industry players such as Cement Australia and Rio Tinto announcing and commencing processes to decarbonise their operations in the region soon after the Summit.
- Advocacy by local government and industry from across the region for the establishment of a Central Queensland Transition Authority.
- Investors from Korea and Japan approaching Trade and Investment Queensland to learn how they could invest in the region after hearing about the Summit.

When asked why the Summit had been so catalytic in creating the conditions for local governments, companies and others to commit to more ambitious action to manage the changes in the energy sector, attendees suggested a number of factors including:

- The presentations and discussions were grounded in the latest and best possible evidence related to how the energy sector was changing at a global and national level and presented by experts in their field.
- The power of gathering people in the same room to not only hear the same evidence-based data, but then analyse it together based on their experience in the region.
- The focus of the discussion was primarily on the opportunities available to the region as things change. In this way, the focus was on what people want to happen, rather than what they want to avoid.
- Most of the time was spent in working groups so that people from across different sectors could brainstorm the work required to support the region as things change. In this way the planning processes were led by regional decision makers who know and are invested in Central Queensland.
- People were invited to be honest and share their perspective in a respectful way, even when they disagreed with others.
- State and federal politicians were not invited to attend the Summit but public servants were, so the focus of the discussion could turn to practical rather than political issues.
- An honest acknowledgement at the start of the Summit that no-one has all of the answers and that there is still a lot of uncertainty, but that regardless, people could start exploring their options to build greater economic resilience based on what they do know.

The problem with current approaches

The impact of the Summit in creating spaces for constructive conversations[15] highlights a crucial element that regions are saying they need if they are going to successfully navigate the transition to net zero emissions – a more inclusive, place-based and regionally led approach to planning.

The majority of community members participating in forums hosted by The Next Economy over the last twelve months have expressed very high levels of frustration with both the lack inclusive planning approaches, as well as with government consultation processes that one community member described as 'superficial processes that are just rubber stamping what [government] has already decided to do'.

While respondents noted that state and local governments have initiated some planning processes (for example the development of the Renewable Energy Zones in New South Wales and Queensland and the establishment of regional authorities to support transition efforts in Victoria, Western Australia and New South Wales), most expressed a high level of frustration with the lack of leadership, commitment and coordination at a federal level.

Most people were unaware of the planning efforts undertaken by Federal Government agencies,[16] as well as by some companies, port authorities and councils to develop transition or decarbonisation plans. This is not surprising, given that most of this work is not publicly available nor has been developed in consultation with a wide range of stakeholder groups.

The work currently being undertaken by governments and industry groups is extremely important in that it provides the foundation for industries to adapt and explore the emerging opportunities that will support regions into the future, yet these efforts are not enough on their own. Missing from current efforts to manage change in the energy sector are clear processes to facilitate communication and coordination across different sectors, state and federal government departments and other groups with a stake in the energy transition.

Nor are the results of planning and consultation efforts always shared publicly to facilitate informed decision making and accountability. This lack of holistic coordination and planning is already starting to create challenges for different regions as cited by a range of stakeholder groups The Next Economy has engaged with over the last twelve months.

15 Similar outcomes in terms of greater community cohesion and action have been reported by those hosting public conversations about changes in the energy sector in other regions such as the Hunter Renewal group and Hunter Jobs Alliance in the Hunter Valley, and the G21 Alliance in Geelong.

16 Consultation undertaken at a federal level over the past year has included submission processes related to the Energy Charter; the Energy Security Board's review of the Post-2025 Electricity Market Design; and closed workshops on the concept of Clean Energy Industrial Precincts.

Common challenges raised by local government representatives included:

- The current lack of a coherent vision or plan at a regional or state level that considers the impacts and opportunities of the energy transition is making it difficult for local governments to assess the appropriateness of new developments and to work out how to capture benefits for the local community.
- Competition is emerging between regions for funding and the attention of government, developers and investors. Many are concerned that some areas will be left behind as the larger centres like Gladstone, Townsville and Newcastle attract the attention of investors.
- Concerns that infrastructure will be developed in a piecemeal fashion and not be designed in a way that benefits multiple industries or regions over time.
- A lack of clarity about where the funding will come from to manage change over the long-term. While there is significant funding to support some aspects of the energy transition (eg: hydrogen hubs), other funding is piecemeal and difficult to locate.
- Concerns that the progress councils are making to apply circular economy and local procurement principles won't be integrated into the energy transformation at all levels.
- Concerns that in the absence of an honest public conversation about the energy transition, continuing misinformation will fuel confusion and social division at a regional level.

Common concerns raised by industry representatives, investors and business leaders about the lack of planning and coordination include:

- The challenges faced by industry in building new and adapting existing industries fall across different government jurisdictions, which is extremely difficult for even experienced developers to navigate.
- Competition between companies is stymying the flow of information and coordination needed to build new industries and sectors.
- As the energy system evolves, new policies and regulations will be needed to 'level the playing field', de-risk investment and protect the integrity of emerging industries.
- The government is not investing enough to ensure that there are enough workers with the right skill sets to meet the needs of emerging industries.
- The lack of clear targets and a plan as to how government will manage the phase out of coal fired electricity generation as renewable energy generation and storage and energy efficiency measures ramp up.

Other groups with a stake in the transformation of the energy sector such as unions, environment groups, Traditional Owners, social service sector organisations and community groups have also raised concerns about the current lack of coordination and planning to manage change, particularly at a regional level. Common concerns relate to questions about:

- Where the responsibility lies for managing environmental and social risks (such as impact of industry development on water quality, land-use and biodiversity, cost of living and housing prices).
- How workforce changes will be managed across different industries and regions as work on fossil fuel projects declines over time and automation and competition for workers in new industries expand. A strong theme in community forums is that any new jobs are well-paid local jobs, and that more work needs to be done to address ongoing skills shortages across a range of sectors (eg: construction, financial services, agriculture and health and community services).
- Whether the emergence of large-scale industrial development can be leveraged to support other local businesses and services through procurement policies and formal benefit sharing agreements.
- How communities will be able to hold decision makers to account over time if there is no clear plan or targets.
- Increasing conflicts over land and water in relation to the development of new renewable energy industries.

- Whether the transition will be managed fast enough to sufficiently mitigate climate impacts, and how regions will adapt to climate change.

Even state and federal government officers expressed dissatisfaction with the way planning is being approached, suggesting that current approaches that rely on submission processes and discrete points of consultation to develop plans and targets are not fit for purpose because they cannot deal with the complex and shifting context regions are grappling with as the energy system changes. As one government officer commented:

> We're tired of the way [consultation] is done, with high paid consultants coming in, and writing a report that just sits there. We've got so many reports. We need a new way, one that leads to communities owning it and taking action.

A new approach to planning

A new approach to planning and coordination is needed, with representatives from across all levels of government, industry and civil society groups emphasising the importance of planning approaches that ensure meaningful, timely, ongoing and equitable participation of all stakeholders[17] in processes. In particular, they emphasise that any approach to planning should be:

Place-Based and Regionally Led: Almost all stakeholders agreed that more support is needed to enable greater coordination and planning at a regional level. Nearly all respondents warned against 'top-down' planning models and emphasised that any planning and coordination efforts must be place-based, as each region is distinct, with different needs and opportunities. As one professional supporting transition planning in the Hunter Valley reflected:

> The 'all places are different' aphorism is really a defining factor here. Efforts such as worker support or regional diversification and investment attraction actually require deep knowledge of local conditions, as well as high level technical skills.

The work that TNE is doing shows the power of facilitating discussion and opening up difficult topics in a productive way. Social repair and relationship building is still so necessary in these regions to create the social conditions that will enable a successful transition.

(AUSTRALIAN TRANSITIONS RESEARCHER)

17 Stakeholders include all levels of government, government agencies and energy regulators, industry, Traditional Owners, education and training institutions, unions, environment groups, social services, and the broader community.

Continuous and Iterative: Some respondents noted that planning and coordination processes need to be cyclical and iterative, with mechanisms in place to continually communicate with the community on the changing context and ensure broad input into decision-making processes. They emphasised that this was key to not only to understanding the context and being able to make timely decisions, but in developing and maintaining relationships, trust and respect across the region. As one government officer commented: 'This is not a case of set and forget planning.'

Holistic: Some stakeholders also noted that planning and coordination efforts need to be incorporate a wide range of considerations that extend beyond the energy sector. Managing change in the energy sector is not only limited to ensuring energy security and affordability, but also economic diversification, industry adaptation, workforce development, environmental health and community benefits. Planning approaches need to be flexible enough to deal with a wide range of interconnected issues and avoid a 'siloing effect'.

Participatory, Inclusive and Equitable: Representatives of civil society groups such as unions and environment groups, as well as many working in local government, emphasised the importance of more inclusive and participatory planning approaches to enable a wider range of stakeholders to provide input into planning, program design, monitoring and evaluation processes. Suggestions included expanding on standard consultation processes (such as surveys, focus groups and community workshops), to include more informal discussions, mapping techniques, art and citizens juries to reach a wider array of stakeholders such as young people, First Nations and linguistically and culturally diverse groups.

> **There needs to be a vision. Planning early will help. All parties need to be part of the economic transformation conversation. Coal to clean energy is coming, we just need to harness all the opportunities and provide solutions and certainty to the communities affected. Communities need to have their say.**
>
> (INDUSTRY REPRESENTATIVE)

The depth and breadth of consultation is crucial to the success of any transition planning activities because the quality, timing and depth of input by key stakeholders in the planning and decision-making processes determines whether the broader community can accept, own and successfully champion actions and outcomes. Greater participation can also help to protect decision making against the influence of vested interests.

This finding is supported by international evidence from countries like Germany that are navigating the path to net zero emission more quickly and with less social conflict than Australia. In an international roundtable discussion hosted by The Next Economy, one German researcher who had been involved in the German Government's Coal Commission reflected:

> [The energy transition] is not a matter of debate anymore. We had that discussion, openly as the nation in 2018. There is no question. Now it is about the policies, how we do it.

Regions cannot lead these processes on their own and if they are to successfully navigate their way to net zero emissions, they need a level of support and policy certainty that only state and federal governments can provide.

Building employee acceptance for change takes time and money, and previous periods did not provide evidence that moving away from coal brings economic benefits to employees. The matter requires understanding and respect for employees from coal-dependent sectors.

(INTERNATIONAL TRADE UNION REPRESENTATIVE)

National Leadership and Policy Certainty

The strongest theme that has emerged from engagement activities over the last twelve months has been the growing sense of frustration with the Federal Government's willingness to coordinate action and investment to manage change in the energy sector. People have continually lamented the Federal Government's reticence to speak openly and in detail about how they plan to support regions as fossil fuel use declines over time and renewable energy expands across the country at a record pace. Across different sectors and the political spectrum, people across regional areas are starting to ask: Where is the plan? What are our options? Who has our back? Who can we trust?

The concerns we are hearing from people across Australia were recently summed up in a recent exchange with a coal plant worker at a workers' forum in Central Queensland. My colleague asked the worker whether he was feeling positive about the latest green hydrogen announcement.

'You've got to be joking right?' was the look of total disbelief on the coal plant worker's face.

He went on to explain that he wasn't personally against hydrogen or any of the other industries that were being proposed for the region. He strongly suspects his power station will close years earlier than planned and he wants to see new industries and jobs developed before that happens. But he also wants any new jobs to be 'good jobs' with at least the same pay and conditions he has now, and he doesn't trust the billionaires announcing the new projects to do the right thing. Will they follow through on their announcements? If they do, will they employ locals and invest in the region, or just take what they can get and 'piss off like the gas companies?'

He, along with other workers at the forum, also had questions about how much land new renewable energy projects will take away from agriculture, where the water for electrolysis will come from, and if we can even use and transport hydrogen safely.

The worker is not alone in his concerns. All along the East Coast and across to Western Australia, coal regions are grappling with an accelerated pace of change as they come to terms with what getting to net zero emissions really means. They accept that things are changing but want to know how workers will be taken care of, regional economies will be diversified, industry will be regulated to reduce any impacts and benefits will be shared over the long term. And they want to know why they are not seeing more leadership from government, especially at a federal level.

As articulated by the coal plant worker, communities with close ties to fossil fuels want to know 'someone's got our backs', that there is a plan, and that government is doing everything it can to attract new industry and hold it to account to ensure the economic, social and environmental benefits flow to regional Australia.

Community members and workers are not the only ones asking. Investors and major industry players are also asking for government to step in to support better coordination, planning and regulation to de-risk investment, develop shared infrastructure, set new industry standards and level the playing field in terms of ESG requirements.

Time and again, The Next Economy has heard from participants in workshops, forums, interviews and surveys that what regions need most on the path to net zero emissions is greater leadership from the Federal Government. When asked what they mean by leadership, the same three themes emerged:

1. Stop denying that the energy system is changing and be open and honest about what this means for regional Australia.
2. Develop a clear and detailed plan, with appropriate targets, policies and regulatory frameworks to guide investment and action.
3. Protect and strengthen democracy.

> **Regional people can see a transition to a low carbon economy is coming and want the Federal government to stop pretending that they have any control over foreign contracts for coal. Regional communities want to be involved in determining their future. We're not asking for handouts. We want the government to help us build sustainable, thriving and diverse regional communities.**
>
> (HUNTER COMMUNITY MEMBER)

1. An honest conversation

When asked what they want from government, the majority of participants in engagement activities stated that they wanted more openness, honesty and consistency in the national discussion about the future of the energy system.

> How can they keep denying this? Didn't they commit to net zero already?
>
> (CENTRAL QUEENSLAND COMMUNITY MEMBER)

Many people pointed to the difficulties in tackling practical issues like addressing workforce needs while government continues to send mixed signals about the future, especially now that many communities are already experiencing the impacts of change in terms of early closure notices and new mines failing to attract investment.[18] Some shared concerns that the level of misinformation and confusion is fuelling a sense of polarisation and fear, particularly in coal regions. As one community member noted:

> People don't know who to believe and some people [at the mine] are starting to wonder whether they should move now, before it gets bad. That would be so bad for the small towns that are already struggling to keep their schools and other services.

18 Industry representatives, people working in local government and community members in both Central Queensland and the Hunter Valley have reported that there are an unspecified number of coalmines that have been granted approval but have not proceeded because they cannot attract private investment. The decreasing appetite among investors for new coalmines (particularly thermal coal) has reportedly contributed to the Federal Government investing in infrastructure to make projects more attractive. For one example, see: https://www.theguardian.com/environment/2021/jul/01/deeply-irresponsible-federal-government-loan-for-new-queensland-coalmine-criticised-by-campaigners

Others reflected that the government's hesitancy to set clear targets and plans to deal with the inevitable closures of mines and coal fired power plants is creating challenges for local governments trying to attract new industry and investment.

> We need acknowledgement that while there is opportunity for jobs and economic growth, there will also be job and business losses for those not able to adapt and retrain – this process will also need to be part of the planning process.
>
> (LOCAL GOVERNMENT OFFICER)

While some acknowledged that is difficult for government to be clear about what is happening given the high degree of uncertainty that remains about the future of the coal industry, a few people expressed frustration that that government continues to deny key trends that are increasingly well accepted at a community level including:

- Power stations are closing earlier than the end of their technical life, with increasingly frequent announcements of early closure dates.
- Effective climate action means that the world needs to start reducing the use of fossil fuels within the next few years.[19]
- Our main trading partners and many large companies are responding to the need for urgent climate action by increasing their emissions reductions targets. Some countries are also introducing tariffs on high carbon products. This will dramatically affect the international demand for Australian coal and gas exports.
- Green hydrogen and other technologies will eventually replace metallurgical coal.
- While no-one knows exactly how long the demand for coal will last, we need to start to build new export industries that will replace coal and gas revenue now.
- Regions are already proactively planning and building new industries and jobs. But they need far more support at a Federal and State level if they are going to be able to properly manage the risks they are facing and capture the economic benefits for the long term.

> **Like all revolutions, this [transitions workshop] was step 1. The momentum is there to push through to the next level, even if the current government is in denial about the energy transition and its speed of impact.**
>
> (COMMUNITY MEMBER)

19 IPCC (2022) Climate Change 2022: Mitigation of Climate Change. Available at: https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/

2. A national plan with targets, policies and regulations

Since the Federal government adopted a target of net zero emissions by 2050 in October 2021, people across different sectors and the political spectrum have expressed frustration with a lack of a detailed plan, interim targets and policy settings to help industry and communities achieve this goal.

Despite this frustration, the main message from both from both major political parties in the lead up to the 2022 Federal election is one emphasising the role of industry and that 'government should get out of the way'.

Surprisingly, some of the loudest advocates for greater national government leadership during workshops and meetings have been industry players and investors, who argue that they need the right policy settings, targets, regulations and incentives in place to:

- Send the right signals to the market that the government is supportive of efforts to decarbonise the economy to de-risk investment in new industries.
- Align and standardise systems and regulations across different states, especially given the electricity market operates nationally.
- Ensure that the right infrastructure is developed in an efficient manner.
- Develop new supply chains and market demand.
- Protect the long-term viability of nascent industries by ensuring new industries are developed in a way that maximises economic, social and environmental outcomes and that all companies are held to the same ESG requirements.

The failure of the Federal Government to develop appropriate regulation and standards is already becoming evident in the renewable energy sector, with companies having to work out how to develop the new industry while dealing with outdated and sometimes contradictory regulatory requirements. As one senior industry executive reflected:

> Government is always talking about its role as needing to regulate to deal with market failures, but now we've got a situation that industry has to act to deal with policy failures. We can't do this on our own.

An energy sector representative reflected on the danger of companies operating to different ESG requirements and 'industry policing itself' because as he saw it, 'it only takes one bad apple to risk the reputation of the whole industry'.

An employee of a resources company took this point further when reflecting on whether companies were serious about meeting their net zero commitments, confiding that:

> Companies need to look like they are doing the right thing because of the pressure they are getting from shareholders. But they are not loyal to communities. They don't really care. They need pressure to do the right thing.

Community members and local governments have also advocated for better policies and regulatory frameworks, as they are no strangers to boom-and-bust cycles and know what can happen when competitive market forces are left to determine the shape, scale and pace of development.

Many cited the still relatively recent LNG boom experience as a case in point, reflecting on how the rapid expansion of the industry not only created many jobs, but also contributed to a range of problems including housing unaffordability and cost of living increases, a FIFO workforce instead of local jobs, increasing social dislocation, degradation of public infrastructure such as roads and services, and increased environmental pressures.

When asked what they wanted government to do, participants in engagement activities hosted by The Next Economy cited targets, policy settings and regulatory frameworks that would:

- Ensure energy security, stability and affordability as coal fired electricity declines and renewable energy is ramped up. This includes planning for plant and mining closures well in advance.
- Support workers in fossil fuel industries with appropriate financial packages, training, and redeployment opportunities.
- Support regions to develop transition plans and action them to manage change and attract new industries well in advance of any closures.

> **We need to keep trying to have a balanced conversation with various entities and hopefully to get everyone to have a relatively common understanding of the issues and hopefully spend more time on looking for solutions to achieving a low emissions sustainable and growing economy. Leadership and boldness will be required to create the next generations of jobs.**
>
> (ENERGY COMPANY REPRESENTATIVE)

- Ensure working conditions for everyone (in both existing and new industries) are fair and adequately support the wellbeing and resilience of workers, families and communities.
- Support existing industry to decarbonise and electrify their operations.
- Ensure adequate investment in universities and training institutions in regional areas to expand research, development and training capacities.
- Develop appropriate infrastructure, such as common use infrastructure needed for new industries such as green hydrogen, Renewable Energy Industrial Precincts[20] to expand regional manufacturing capacity and transport infrastructure (eg: port and rail expansions, EV charging stations).
- Address growing conflicts and tensions around land use and ensure that land and water resources are properly protected and remediated.
- Capture new forms of revenue to fund decarbonisation processes.[21]
- Ensure that the basic services on which we rely – health, education, childcare and aged care services– are accessible across regional Australia. Not only is this important for liveability, but also determines where companies invest and whether workers locate permanently to regions.
- Ensure genuine emissions reduction across all sectors at a pace that will limit global warming to 1.5 degrees Celsius.
- Requires the benefits of new developments to be shared with communities through mechanisms like local procurement contracts, community funds, commitment to local jobs and the development of new training opportunities.

3. Protecting and strengthening democracy

A surprising theme that has emerged throughout the engagement process over the last twelve months has been the growing concerns people from all walks of life have expressed about the health of Australia's democracy. Even in the most conservative regions, people are calling for greater transparency and

20 For more information on Renewable Energy Industrial Precincts, see Beyond Zero Emissions at: https://bze.org.au/repowering-australian-manufacturing/

21 There was a surprisingly high level of support among industry representatives and investors for carbon pricing mechanisms, with some acknowledging that they are already factoring the introduction of a carbon price into their forecasts.

accountability from government at all levels. Points raised in workshops and forums have included calls for:

- Protecting public servants and decision making from political interference
- Banning political donations
- Establishing a national corruption watchdog
- Greater diversity in political representation to reflect the general population
- More independents in Parliament who represent the interests of their region rather than their political party

People have also cited the need for more participatory approaches such as participatory budgeting, online voting tools and citizen juries to enable people to directly contribute to decision making at all levels of government.

Without greater honesty, transparency and leadership from government (particularly at a national level), many expressed fears that the level of polarisation and division in the community around energy futures will continue to fester, leading to more serious conflict in the future.

Governments played the central role in building the current energy and economic system and they will need to play a central role in constructing the new one as well. A failure to do so risks future generations inheriting a fragmented, inequitable, expensive and ineffective system.

If, however, we are to navigate the most significant transformation of our economy since the Second World War in a way that strengthens and diversifies regional Australia for long term economic resilience, we need to establish the right leadership, goals and systems to support change processes. Other countries have achieved this by establishing independent national transition authorities.

We need to work out the details around future jobs in the changing industry. You can never start to plan too early!

(UNION REPRESENTATIVE)

Managing Change Well: The Need for Transition Authorities

National transition authorities have proven crucial in helping regions to manage the impacts of a changing energy sector in Germany, Canada and Spain, with new initiatives more recently developed in the United Kingdom and United States.[22] These bodies are responsible for setting national plans and targets and for channelling resources and support to the regions most impacted by change.

In the absence of a national plan and transition authority in Australia, some state governments have established regional transition authorities in areas impacted by the closure of coal fired electricity plans and coalmines. The Latrobe Valley Authority, which was established after the announcement of the closure of the Hazelwood Power Station in Victoria is the most well-known example. Similar approaches to transition planning have also been adopted by the Western Australian government with the formation of the Collie Delivery Unit and the newly established Hunter Expert Panel which will oversee the distribution of the Royalties for Rejuvenation program in the Hunter Valley.[23]

The need for greater coordination at a national level by an independent body like a transition authority was a recurring theme across all regions during the engagement activities undertaken by The Next Economy over the last twelve months. The majority of those interviewed and surveyed agreed that while regionally based authorities were crucial in developing plans, attracting investment and coordinating action, current efforts were being hampered by a lack of support at a national level. The intention behind establishing a new national authority would not be to replace regional transition authorities, but instead to support and strengthen their efforts by providing access to funding and setting the right national policy frameworks and targets to facilitate planning and action on the ground.

The role of Regional Transition Authorities

At a regional level, the main role of a transition authority is to work with affected communities and key stakeholders to strengthen and diversify regional economies as fossil fuels are phased out and renewable energy expands. While the scope of responsibilities for regional transition authorities across Australia and the world varies, a review of the literature and interviews with transition experts suggests that they fulfil three main functions.

22 Because of the high level of interest in transition authorities, The Next Economy undertook research between December 2021 to January 2022 to assess the need for Australia to establish regional, state and national level transition authorities. This included in-depth interviews and a survey with key decision makers and experts across government, industry, economic development agencies, unions, academia and environment groups in Australia, as well as interviews with transition experts in Germany, Poland and the United Kingdom. This section on transition authorities draws heavily on this work.

23 Further Expert Panels have been announced for the Illawarra, Lithgow and Wollongong regions of NSW.

The first responsibility of a transition authority is to facilitate long-term regional planning and coordination to reduce the negative impacts associated with the phase out of fossil fuels and to facilitate new economic opportunities.

The second main role of a transition authority is to ensure that all stakeholders[24] can meaningfully participate in decision making processes and in the design of new plans and programs to decarbonise the economy, and that they remain informed and able to participate as change unfolds over time.

With a strong regional presence and working relationships across different sectors and levels of government, the third responsibility of the transition authority is to be across all aspects of the energy transition to enable the flow of information and resources to enable effective, timely and regionally appropriate investment and action. This includes working with the relevant agencies and groups to facilitate:

1. **Energy Security, Stability and Affordability:** Working closely with relevant agencies, technical experts, regulatory bodies and industries responsible for ensuring energy security, stability, affordability and accessibility. While transition authorities may not be responsible for the technical aspects of energy generation, storage and transmission, they contribute to planning, decision making and coordination processes.
2. **Regional Workforce Support and Planning:** Coordinate long-term support to workers in fossil fuel industries well in advance of closures, including overseeing the development of training programs, redeployment schemes, income support, and early retirement schemes. This also includes ensuring companies meet their responsibilities to workers in terms of redundancy payments and entitlements and supporting education institutions to train workers in the skills they need for current and future industries.
3. **Economic Diversification:** Support industry and small and medium sized enterprises to adapt to changes in the energy sector and build on and promote the strengths of the region to attract new investment and jobs. This includes working with relevant agencies, industry bodies and economic development agencies to develop markets, supply chains and local procurement policies.
4. **Investment in Regions:** Provide a vehicle to attract and channel public, private and philanthropic funds into transition initiatives designed to reduce negative impacts and build long-term resilience, wellbeing and prosperity across the region.

24 The list of relevant stakeholders includes all levels of government, industry, workers, Traditional Owners, education institutions, regional economic development agencies, social services, environment groups and other community groups.

5. **Infrastructure Development:** Work with industry and government to identify regional infrastructure needs and leverage investment to ensure that new developments benefit the whole region. This includes supporting existing industries to access to what they need to adapt (upgrade and strengthen shared infrastructure such as roads and water infrastructure) and contribute to the planning of new initiatives such as Renewable Energy Industrial Precincts.
6. **Research and Development:** Identify and commission research activities and expertise as needed to support decision making processes and identify pathways to develop technical solutions for emerging industries.
7. **Land and Water Management:** Work with the relevant agencies, industries and community groups to maintain, protect and regenerate land and water resources as fossil fuel generation and mining is phased out and renewable energy capacity is expanded. This includes working with the relevant agencies to ensure adequate and timely decommissioning, rehabilitation and repurposing of power plants and mine sites.
8. **Community Benefits:** Liaise with social service organisations, government agencies and local governments to mitigate the negative impacts of the transition on the community and ensure that financial benefits generated by new developments are shared widely, particularly with those already economically marginalised such as young people, women, First Nations communities, the long term unemployed, people with disabilities and those from linguistically and culturally diverse backgrounds.
9. **Policy and Regulatory Frameworks:** Work with state and federal governments to identify and develop appropriate regulations, policies and targets to manage the decarbonisation process in a way that builds long-term economic resilience.

The role of National Transition Authorities

When asked, almost every interview and survey respondent supported the need for regionally based staff to coordinate and manage change. Given, however, the wide range of issues that a transition authority would need to deal with across many different sectors and jurisdictions, most respondents also agreed that regional bodies would benefit greatly from support at a state and federal government level, ideally from a national transition authority.

A national transition authority working in concert with state governments would bolster efforts at a regional level by ensuring:

- Highly technical decision making (eg: decisions about energy infrastructure such as managing the electricity grid) are managed by experts at a state

or national level, but with direct input and feedback from regional staff to tailor solutions to the needs of each region.

- Key organisational processes are not unnecessarily duplicated in each region by providing centralised administration support, research capacity and technical expertise.
- The ability to move resources and staff between regions when specific expertise is required to respond to changing needs (eg: power station closure).
- Easier access to Federal and State Government departments and key agencies than regional authorities might otherwise have.
- A more efficient and consistent flow of information and resources to aid decision making at all levels.
- Increased cooperation between regions for investor attention and resources is managed well by building on each region's comparative strengths.

Almost all of those surveyed and interviewed by The Next Economy emphasised that given the complexity of the task and the politics surrounding energy policy, a national transition authority should be established as an independent entity -

ideally a statutory authority. The main reason given for establishing a separate authority rather than placing the responsibility within an existing government department was that no single department has the responsibility or authority to manage change across all of the different areas impacted by the energy transition (ie: energy security, regional economic diversification, workforce development, environmental impacts and community benefits). Furthermore, there is currently no clear or formal mechanism in place to ensure that departments work together or share information about changes in the energy sector, especially in relation to managing the impacts on regional development.

Consequently, it is often unclear where the responsibility for decision making lies regarding issues that fall across traditional departmental boundaries and there was a general sense that some things could end up 'falling through the cracks' as things change.As one government officer reflected:

> In a perfect world all government agencies would work together to solve local issues, like you see happen in response to natural disasters. But when the disaster is over, they all seem to return to their respective silos. We need a mechanism to hold them in that mode of place-based cooperation when the timeframes may be longer, but the consequences are no less dire.

Others noted the need for it 'to be somebody's job to deal with these challenges', noting that the scale of the challenge facing regions is even more complex than the rapid expansion of the LNG industry. The level of investment in market and supply chain development, industry adaptation, infrastructure and workforce development needed to be able to scale up not one, but multiple industries powered by renewable energy is unprecedented. This cannot be managed in a top-down fashion but requires coordinating and mobilising a wide range of government, industry and other stakeholders to develop long term regional plans tied to national and state level strategies and targets.

A few government interviewees expressed doubts about whether a new, independent body was needed, or whether an office within an existing government department would suffice. Their concerns included the expense involved in setting up a new agency and that it could complicate things further if it ended up adding another layer of bureaucracy or competing with the role played by existing departments.

Despite these doubts, they agreed with others that more effort is needed to manage change and aid coordination across the government departments with responsibilities for different aspects of the energy transformation, given that no single department or agency is currently equipped to deal with all aspects of the changes regions are already grappling with.

Establishing a Transition Authority: Design considerations

While transition authorities can adopt different forms, the experience of other regions and countries suggests that successful models share a common set of design features. Interestingly, five of these common features were also identified by participants in TNE's engagement activities as fundamental to the design of any new transition authority, regardless of whether it was operating at a regional, state or national level.

1. Clear and legislated mandate

It is important that the mandate clearly specify that the role of the transition authority is to support regions impacted by the decarbonisation of the economy to develop long-term economic, social and environmental resilience and prosperity.

Many respondents emphasised the need for the authority's powers to be clearly defined to avoid regulatory overlap and duplication and being in competition with government. Furthermore, the mandate should clearly outline the authority's responsibilities to both government and regional communities to develop plans, coordinate the flow of information and resources, and provide advice to government.

Specifying the mandate clearly in legislation offers a degree of protection against political interference so that transition authorities can serve the long-term needs of regions and make difficult and unpopular decisions when necessary.

> The Authority needs to have sufficient funding to liaise closely with companies, communities and workers to enable it to be seen as a well-informed body but also one which is an advocate, if not a champion, for change. In addition it must be able to draw upon the expertise of [government] departments, universities, TAFE, business and unions and put that expertise to work. It must also be a player in the education and training area where it puts forward solutions which will lead to better skilling outcomes, for workers and companies.
>
> (UNION REPRESENTATIVE)

2. Durability

For a transition authority to be most effective, they need to be established with a long-term mandate and be operational well in advance of any closures so that transition plans are already in place and investment, support programs and infrastructure projects are already underway. Given the number of changes that are likely to occur in the coal industry alone over the next decade, many of those surveyed and interviewed suggested a minimum timeframe of ten years. Some respondents suggested that we should be looking to establish an authority for

fifteen to twenty years, however others suggested that it may be wiser to limit the duration of the authority to however long it takes to complete its mandate (rather than specifying a specific time period).

> These are long run problems that can't be addressed over political cycles. Time, credibility and space must also be created, and community trust built, as there will invariably be failures. The wins and genuine effort must be seen to outweigh the losses otherwise community support will diminish. There are different ways of securing durability, but funding, legislative or other governance security, ensuring ongoing community support are essentials.
>
> (AUSTRALIAN TRANSITIONS EXPERT)

3. Power, authority and independence

Many of the interview, focus group and survey respondents emphasised that if a transition authority were to be successful, it needs sufficient power and authority to lead coordination and planning efforts and to convene the right players at the right time.

> It needs sufficient clout to influence government but enough independence to not get tied up in bureaucracy.
>
> (LOCAL GOVERNMENT REPRESENTATIVE)

Respondents also emphasised how important it is that a transition authority is able to act independently to pursue its mandate, make difficult decisions and provide 'frank and fearless' advice to government. As one government agency representative explained:

> We learned that lesson – if you don't have a separate authority with clear mandate, it's not future proofed and is at whim of ministers. It needs genuine legs and the right governance and authorising environment. It can't be linked to government processes, it needs independence, with right checks and balances to hold it to account.

One energy company representative also emphasised the importance of an independent authority but noted some of the challenges in ensuring the required level of autonomy:

> One of the challenges is how to make any kind of authority truly independent. Does government know what this truly means?

Most of those interviewed and surveyed agreed that a statutory authority model was ideal, as it offers a high degree of autonomy and power to carry out its mandate (offering a degree of protection from political interference) but can still work closely with government as defined by legislation, funding and reporting arrangements. Statutory authorities are able to escalate issues within government as needed to get a timely response and also have access to a separate budget.

> A statutory authority puts the responsibility and funding of coordination onto the government, which is best placed to do so (as demonstrated through global experience) – this means government is accountable to the public. Independence from government is important to take politics or change of government out of the frame.
>
> (ENERGY AGENCY REPRESENTATIVE)

4. Generous, long-term public funding

Another key success factor cited in the literature and across the interviews, focus groups and surveys was the need for the authority to have access to discrete, generous and long-term funding from government, as well as the ability to corral additional resources and expertise from across a range of government departments, private investors and philanthropists as needed. Some suggested that budgets should be allocated for at least ten years, with review periods built in every three to five years.

> Funding needs to be allocated and committed for a significant length of time. It should not be at risk or contestable on an annual basis. The Authority needs to be focussed on the task not surviving financially.
>
> (LOCAL GOVERNMENT OFFICER)

Having an independent, publicly funded budget that at least covers operational costs (at a minimum) not only allows flexibility to respond to what is needed on the ground in a timely way and to innovate as needed, but also ensures a degree of accountability to government through reporting requirements.

> Long-term funding that is expended at the discretion of the authority and free from political influence is critical.
>
> (RESEARCHER)

One of the government officers interviewed also noted the importance of public funding in protecting decision making processes from corporate and other interests that might not align with the long-term wellbeing of the region.

5. Calibre of key staff and leadership team

A strong theme throughout the engagement process was how crucial it is to appoint the right people to lead an authority, with participants emphasising the need for staff who are:

- Experienced professionals, with skills in planning, community engagement, economic development, or similar facilitation/change management processes.
- Have excellent interpersonal skills and can garner the trust and respect necessary to build strong and lasting relationships with people across all stakeholder groups and levels of government.
- Politically neutral and savvy enough to be able to navigate and rise above politics so that they can deliver on the mandate to decarbonise the economy while building long-term economic prosperity.
- Without strong links any specific political party so that people trust that they are neutral in their decision making and recommendations.
- Personally robust and courageous enough to make difficult decisions that are in the region's long-term interests.

As one regional economic development worker commented:

> The main job of the transition authority is stakeholder engagement and management...not dropping to petty politics. The right people will get the right result re participation, etc. A statesperson is required to be at the helm initially, [someone who is] universally respected.
>
> (REGIONAL ECONOMIC DEVELOPMENT EXPERT)

As the experience of communities across Australia and the world have shown during times of massive industrial change, whether regions can minimise economic disruption and take advantage of new economic opportunities is not inevitable, even if change is. A national transition authority could accelerate and amplify regional efforts to better manage economic change as the energy system is transformed. The question that remains is how much it will cost and where will the resources come from?

Financing The Future

Funding the transformation of our economy from one dependent on fossil fuels to one powered by renewable energy is an expensive exercise, particularly if the goal is to ensure that the regions most impacted by change benefit over the long term. Given the immense economic contributions regional Australia continues to make to the national economy, there is a strong case for generous, flexible and ongoing investment in the infrastructure, services and industries needed to build long term economic resilience and prosperity.

Effective and long-term economic development requires significant funding to support:

- Coordination and participatory planning efforts by transition authorities and others to facilitate long term regional benefits
- Regional training programs and worker support packages as industries close
- Investment attraction
- Infrastructure development across a range of sectors, including transport, communication and agriculture
- Full rehabilitation of sites and ongoing environmental protection and regeneration of land and water systems
- Research, development and innovation
- Health, education, childcare and aged care services to improve liveability and attract new workers and industries
- Businesses to adapt by providing access to financial support, market linkage support, and business development expertise[25]
- Innovative approaches to create greater local resilience to future shocks associated with climate change and global economic fluctuations

Other countries and some parts of Australia offer insights into the scale of resourcing that will be required to support regions on the path to net zero emissions.

Germany has been the most proactive in funding the energy transition, allocating $3.2 billion[26] in 2020 and 2021 to strengthen regional research institutions, transport links and infrastructure, foster tourism and improve health, education and digital services across the region. This is only a fraction of the $64 billion

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

26 All figures are quoted in Australian dollars.

that state and federal governments have committed to support economic diversification efforts in coal regions across Germany.[27]

The European Union has also established a Just Transition Fund to support European countries to develop and implement transition plans to the tune of $27.7 billion. This is only a fraction of the $1.6 trillion committed to supporting decarbonisation efforts across Europe as part of the EU's Green New Deal.[28]

In the Canadian Province of Alberta, the government allocated $195 million from the province's carbon levy to create a Coal Workforce Transition Fund and Coal Community Transition Fund to support workers and regions negatively impacted by the phase out of coal-fired electricity generation. These funds were used to cover income support, career advice, labour market studies and economic diversification projects. The Canadian Federal Government provided an additional $30 million to support transition programs for workers in Alberta's resource sector.[29]

27 Barrett, T., Downey, L et al (2021) From the Ground Up: A Blueprint for Economic Diversification in Regional Australia.
28 https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
29 Parkland Institute (2019) Alberta's Coal Phase Out – A Just Transition?

In Australia, the Victorian State Government committed $335 million in initial funding to support the Latrobe Valley in the wake of the Hazelwood Power Station closure. This included $20 million to establish the Latrobe Valley Authority; $22 million for redeployment and retraining; $20 million for a Worker Transfer Scheme; $174 million for a Community Infrastructure & Investment Fund; $7.8 million to upgrade public housing; $5 million for energy efficiency upgrades for low-income households; $17 million for a Hi-Tech Precinct. An additional $345 million was allocated to upgrade the Gippsland Rail Line.[30]

The Western Australian government has committed $100 million to support the Collie region across two funds – $20 million designed to facilitate economic diversification through the Collie Futures Fund and $80 million allocated to the Industry Attraction and Development Fund.[31]

By contrast, the New South Wales government has allocated $25 million per year through the Royalties for Rejuvenation program to be administered by an 'Expert Panel' in the Hunter, with additional panels announced for Lithgow, Wollongong and North-West New South Wales.

In terms of the funding needed to support regions nationally, estimates vary considerably. The Blueprint Institute proposes funding regional transition authorities to the tune of $20 million to cover initial staffing, operations and initiatives, with ongoing access to 5% of coal royalties to support initiatives on the ground.[32]

A contrasting figure of $5 billion is advocated in a recent report commissioned by the Business Council of Australia, WWF, Australian Council of Trade Unions and Australian Conservation Foundation,[33] however this figure includes costs associated with not only the disruption caused by the decline of fossil fuels, but also to support the development of new industries.

Managing change in the energy sector is expensive, however it is becoming increasingly clear that the cost of failing to decarbonise our economy and take effective climate action will be far greater than the cost of a well-managed transition that benefits everyone over the long-term. More work is needed to model the costs of establishing both a transition authority as well as additional regional authorities in impacted regions.

30 Wiseman, J. Workman, A. et al (2020) After the Hazelwood coal fired electricity plant closure: Latrobe Valley regional transition policies and outcomes 2017–2020. CCEP Working Paper 2010.
31 Collie Just Transition Plan (2021).
32 Barrett, T., Downey, L. et al (2021) From the Ground Up: A blueprint for economic diversification in regional Australia.
33 Accenture (2021)Sunshot: Australia's opportunity to create 395,000 clean export jobs.

Given the amount of support regions need to manage change well, many respondents noted that additional revenue will need to be sourced to adequately cover the cost of transition related activities and suggested a range of measures including the introduction of:

- Increasing or channelling existing royalties from fossil fuel exports to support the regions that have generated so much wealth for the state for decades.
- Re-directing subsidies from fossil fuel industries to fund transition initiatives.[34]
- Reintroducing a price on carbon.
- Increasing or introducing new taxes on fossil fuel exports.
- Developing new taxes or royalty programs to capture profits from new industries (eg: hydrogen exports).

Additional funds could be sourced from government programs with objectives that align with specific transition objectives. Examples include funding from ARENA and the CEFC to support renewable energy initiatives, the Building Better Regions Funding to support regional development initiatives, the Northern Australia Infrastructure Facility to support infrastructure development, or the Land Restoration Fund to support initiatives in the land-use sector.

Some local government respondents noted how difficult and confusing it can be to even find out what funding is available from different departments and suggested a 'concierge service' at both state and federal government levels to support a more efficient, timely and targeted allocation of funds.

Some industry and government representatives emphasised the importance of leveraging public funding to attract private investment and philanthropic support for specific purposes, although cautioned that care will need to be taken to ensure that private or industry funds are not used to bias decision making processes.

> Funding needs to be consistent with goal of delivering positive long-term outcomes for all impacted workers and community members – and to create [a] firm foundation for creating equitable, prosperous and regenerative zero carbon regional economies. Short term funding required to support immediately impacted workers and community members needs to be augmented by long term funding for zero carbon economy infrastructure, supply chains, labour market programs and services.
>
> (TRANSITIONS RESEARCHER)

34 Campbell, R. Littleton, E., Armistead, A (2021) Fossil Fuel Subsidies in Australia: Federal and state government assistance to fossil fuel producers and major users 2020–21.

Industry, community and local governments also advocated for more creative approaches to financing the broad range of initiatives needed to support regions on the path to net zero, emphasising the need for a suite of resourcing options including:

- A range of private investment models ranging from standard debt and equity lending to more innovative impact investment, venture capital, superannuation and concessional lending models.
- Using public funding to leverage private capital and retain a share of ownership and control over new developments.
- Government grants, bonds and incentives such as subsidies, rebates and other tax incentives.
- Philanthropic investment.
- Crowd funding, including equity funding and other collective ownership and community financing models.
- Leveraging different kinds of international funds focusing on climate mitigation and adaptation (both investment and philanthropy).

Beyond brainstorming ideas for how to resource new developments, some community members questioned the long-term implications of different kinds of funding arrangements and argued for more radical thinking and approaches. The main questions raised centred on:

- Concerns about Australia losing control of important and strategic assets that many felt should be publicly owned, such as electricity utilities and key transport and other infrastructure.
- Reducing the amount of influence industry, investors, ‘billionaires’ and ‘fossil fuel lobbyists’ have over Federal Government policies and investment decisions.

- The range of opportunities for local ownership of new initiatives and infrastructure, whether through cooperatives, community ownership models, local government ownership, or communities becoming shareholders in private initiatives.
- The potential for more worker and producer owned cooperatives.
- How blockchain and cryptocurrencies could be used to capture economic benefits for communities, workers and producers.
- Whether Australia could develop material services models to retain ownership of componentry and processed minerals throughout their lifecycle.
- The need for a new approach to insurance.
- Whether participatory budgeting approaches could be used to facilitate greater transparency and accountability in government funding decisions.
- How First Nations peoples could capture investment to generate greater economic sovereignty, whether through payments for ecosystems services/ land management practices and carbon farming; investing in social enterprises; or instigating new ways to 'pay the rent'.

That such radical questions about the ownership and control of profits and resources were being raised across traditionally conservative communities indicates that Australia is ready for a more nuanced conversation about the kind of economic future we want.

Conclusion

Society is always changing – change is the only constant. But sometimes, in historic moments, we see multiple social, economic, technological and environmental changes converge. In that moment, change takes on a transformational potential, rocking institutions and systems to their core. It is in these moments that cracks start to appear and leaders and citizens have a choice – to batten down the hatches and protect the existing economic, political and social structures, or to look at how we can take advantage of the disruptions to address entrenched challenges and injustices to build a better world.

We are in one such moment. And it is time to choose how we want to respond. Because how we respond to the challenges posed by a changing energy sector risks either exacerbating environmental crises, de-stabilising our economic base, growing inequality and increasing the threat of even more social unrest, or it offers an opportunity to strengthen the economic resilience and long-term prosperity of our regions.

Now more than ever, Australia needs to embrace an honest and courageous conversation about how we can manage the changes that are already impacting regions across the country. We can no longer afford to avoid talking honestly and plainly about what the transition really means for everyday Australians, or to play political games with everyone's future wellbeing and prosperity.

We know what we need to do to decarbonise the Australian economy to achieve net zero emissions in a way that diversifies and strengthens regional economies, but it won't be easy.

We will have to take some risks not knowing how it will all pan out. But if we can bring people together around a clear vision, plan and targets, we are well placed to attract the investment needed to develop new skills and industries that will not only decarbonise our economy, but create thousands of new jobs and economic benefits for regional areas.

It's time to move past the petty politics that has defined the last decade of climate and energy policy and fix our collective gaze firmly on the road ahead as we navigate the path to net zero emissions. We have everything we need to manage this change well. The only thing missing is clear and decisive leadership at a national level.

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Appendix A: List of organisations

Economic / Community Development Agencies

Advance Rockhampton

Burnett-Mary Regional Group

Central Highlands Development Corporation

Red Earth Community Foundation

Regional Development Australia – Central and Western Qld

Regional Development Australia - DDSW

Regional Development Australia – Mackay-Isaac-Whitsundays

Townsville Enterprise Limited

Education, Research and Training Organisations

Australian National University

CQ University

CSIRO

Energy Skills Queensland

German Institute for Economic Research (DIW Berlin) (Germany)

IASS Potsdam Institute (Germany)

Institute for Employment Research, Kiel University

Instytut Badań Strukturalnych (IBS) (Institute for Structural Research) (Poland)

James Cook University

Kings College London (UK)

MCC Berlin

Queensland University of Technology

Ruhr-Universität Bochum (Germany)

TAFE Queensland

University of East Anglia (UK)

University of Melbourne

University of Newcastle

University of Queensland

University of Sydney

University of Technology Sydney

Energy Sector

ACCIONA

APLNG – ConocoPhillips

Australian Energy Market Commission

Australian Energy Market Operator

Australian Energy Regulator

Australian Gas Infrastructure Group

Clean Energy Council

CleanCo

Community Power Agency

CS Energy

DP Energy

Energetic Communities

Energy Estate

Energy Security Board

Ergon Energy

Energy Queensland

Goldwind Australia

Origin

Pace Energy

Powerlink

QGC-Shell

RE-Alliance

RES

Smart Energy Council

Stanwell Energy

Sunshine Hydro

United Green

Zen Energy Retailers

Environment Organisations

Arid Lands Environment Centre

Australian Conservation Foundation

Climate Action Network Australia

Environment Centre of the Northern Territory

Environment Victoria

Friends of the Earth

Gladstone Conservation Council

Lock the Gate

Queensland Conservation Council

World Wildlife Fund

First Nations Organisations

Indigenous Peoples Organisation
Gidargil Development Corporation
Gooreng Gooreng Representatives
Nhulundu Health Service Gladstone
Original Power
Port Curtis Coral Coast Trust
Suunto

Government – Local

Banana Shire Council (Qld)
Central Highlands Regional Council (Qld)
Central Queensland Region of Councils (Qld)
Gladstone Regional Council (Qld)
Hunter Joint Organisation (Qld)
Isaac Shire Council (Qld)
Kempsey Shire Council (NSW)
Lake Macquarie City Council (NSW)
Latrobe City Council (Vic)
Livingstone Shire Council (Qld)
Mt Isa City Council (Qld)
Newcastle City Council (NSW)
Port Macquarie-Hastings Council (NSW)
Rockhampton Regional Council (Qld)

Government – State

Department of Agriculture and Fisheries (Qld)
Department of Environment and Science (Qld)
Department of Employment, Small Business and Training (Qld)
Department of Energy and Public Works (Qld)
Department of Premier and Cabinet (Qld)
Department of Regional Development and Manufacturing (Qld)
Department of Resources (Qld)
Department of State Development, Infrastructure, Local Government and Planning (Qld)
Economic Development Queensland
Office of the Coordinator-General (Queensland)
Queensland Treasury
Queensland Treasury Corporation
Trade and Investment Queensland

Government – Federal

Department of Agriculture, Water and the Environment
Department of Industry, Science, Energy and Water

Transition Authorities / Organisations

Collie Delivery Unit
Geelong Region Alliance
Hunter Expert Panel
Hunter Jobs Alliance
Hunter Renewal
Latrobe Valley Authority

Industry

Alpha HPA
APA Group
Arup
Attexo Group
Aurizon
Bechtel
Boyne Smelters
Cement Australia
Contract Resources
CQH2 Alliance
Earthworker Cooperative
Forest Future Industries
Gladstone Engineering Alliance
Gladstone Industry Leadership Group
Gladstone Ports Corporation
GPA Engineering
Highreach Enterprises
Hydrogen Australia
Investor Group on Climate Change
ITM Linde
Neoen
NERA
Northern Oil Refinery
NRGGOS (Gladstone Power Station)
Orica
Peabody Energy
Queensland Resources Council
Queensland Alamine
Queensland Alumina Limited
Queensland Hydrogen Taskforce
Rio Tinto
Sumitomo Australia
Townsville Port Authority
Worley
Yarwun Alumina Refinery

Other

Calliope Cattle Company
Curtis Coast Arts Alliance
Fitzroy Basin Association

Community/Social Service Organisations

Australian Council of Social Services
Climate Justice Union WA
Groundswell Gloucester
Hunter Community Alliance
Ifok (Germany)
Jesuit Social Services
NT Council of Social Services
Polish Smog Alert (Poland)
Queensland Community Alliance
Rotary Australia (Rockhampton)
Stowarzyszenie BoMiasto (Poland)
Stowarzyszenie Ekologiczne/Ecological Association (EKO-UNIA) (Poland)
Voices of the Valley

Think Tanks

Agora Energiewende (Germany)
Beyond Zero Emissions
Centre for Policy Development
COREO
Instrat Foundation (Poland)
The Australia Institute

Unions

Australian Council of Trade Unions
Australian Manufacturing Workers Union
CFMEU – Mining and Energy Division
Electrical Trades Union
Labor Environment Action Network
Queensland Council of Unions
The Services Union
Trade Union Alliance (KADRA) (Poland)
United Workers Union
Victorian Trades Hall Council

Community Members

Alice Springs
Darwin
Emerald
Gladstone
Kempsey
Livingstone Shire
Lower Hunter
Newcastle
Port Macquarie
Rockhampton
Townsville
Upper Hunter

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