Enabling energy justice through place-based approaches to expanding transmission infrastructure

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for Energy Consumers Australia

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Introduction

This desktop review, authored by Alexandra O'Mara (Sustainable Solutions Advisory Pty Ltd) for Energy Consumers Australia, considers the challenges and opportunities of this major transmission infrastructure expansion happening in the National Electricity Market through the lens of energy justice and place-based and community-empowering approaches.

Part One looks at research that discusses the challenges underlying transmission infrastructure expansion and explores why we need to look at it through a different lens. It explores the broad range of concerns raised by stakeholders and the conflict characterising transmission infrastructure expansion.

Part Two considers research into how energy justice can assist in navigating the need for social licence.

Part Three investigates research that explores how broader place-based approaches enabled by new forms of energy governance can realise true transformational opportunities.

Lastly, the key learnings uncovered in the report are outlined for consideration by governments, networks, market bodies and policy makers.

Executive Summary

Australia's transition to a net zero future is urgent. The Australia Energy Market Operator's 2022 Integrated System Plan identifies that an additional 122 GW of utility-scale variable energy is forecast to be installed in the National Electricity Market by 2050.[1] Anna Collyer, Chair of the Energy Security Board, has identified the magnitude of transmission infrastructure investment proposed:

> *"We are talking about an eight-fold increase in large-scale wind, solar and hydro generation. There is insufficient transmission network capacity to accommodate this. Investment in, and access to, the national transmission system is a key enabler of a successful transition."* [2]

There is significant investment going into new transmission, generation and storage in Australia. While the transmission infrastructure expansion will benefit consumers broadly, we know that the impacts are likely to involve significant change for some regional communities and places. Regulators have noted that "the timely delivery of those projects will rely on community and public support."[3] This desktop review considers how energy justice perspectives can unlock new approaches that leverage the potential opportunities to create long term public value for community. With change comes opportunity – an opportunity for transformation for affected communities, but for that opportunity to be realised, we need to lift our gaze.

In a recent speech to the Committee for Economic Development of Australia, the Chief Executive Officer of the Australian Energy Market Operator, Daniel Westerman concluded by saying:

> *"Regional and rural communities are being asked to shoulder the burden of construction and hosting transmission, while the benefits are shared with populations hundreds of kilometres away, even interstate. What we must do is to put the processes and resources in place to hear and understand communities' concerns and come up with a better way to work together and benefit together. It is upon us all in the energy sector to build the relationships…and the social licence…that enables the infrastructure that enables the energy transition to serve all Australians. Because in this energy transition, people matter most. And we all have a shared objective of safe, reliable and affordable energy."* [4]

However, currently, transmission infrastructure expansion often involves conflict, with concerns about a lack of trust, meaningful engagement and about outcomes for affected communities.[5] Energy justice perspectives give us insights into the land use conflict surrounding the transmission infrastructure expansion and a framework to inform a way forward. Proactive steps could be taken now to adopt holistic place-based approaches that embrace new forms of energy governance. There is no time to waste in risking approaches that perpetuate the risk of a lack of social licence because this in turn increases distrust, conflict and delay and, in doing so, the costs to consumers. Key here is shaping the conversation around people rather than the system. The question we need to consider is whether current approaches are sufficient or whether "energy policy lacks the transformative approach necessary to address climate change and its uneven impacts".[6]

There is consensus across policymakers, regulators and the broad spectrum of stakeholders that social licence is key to the transmission infrastructure expansion. However, it is not yet clear how or whether that social licence will be obtained or as Professor Fiona Haines asks, "who determines when a social licence has been granted?"[7] It is also clear that instrumental approaches to social licence as something to be extracted aren't working and create a risk that existing inequalities and vulnerabilities will be exacerbated by the transition. They are also a missed opportunity to unlock the potential to enable a just transition with improved social, environmental and economic outcomes, leveraging the significant investment that the transition involves.

This desktop review explores how place-based approaches informed by the principles of energy justice can support the transmission infrastructure expansion. Communities are concerned about the impacts on their place. This also means that the solution to those concerns cannot come solely from the energy system or from an economic focus. Even if a community ultimately ends up with transmission infrastructure, a broader approach can identify opportunities for that place informed by community priorities. This could include demand-side solutions as well as solutions that extend beyond energy to ensure that we collectively leverage the potential opportunities that can be enabled by the transition. However, for this to be achieved, we need to move away from a project based and siloed ways of working to a place-based approach enabled by resolution of structural barriers in policy and regulatory frameworks and informed by genuine engagement and innovation.

Communities need to be engaged both in the problem and the solution. Current communication about energy transition is a barrier – information is complex, with high levels of assumed knowledge. Much of the information begins with the system or is framed solely around the economy and jobs. Engaging people in the community in meaningful conversations about why this is important, their concerns and how they can shape the outcome through genuine partnerships is more likely to enable a shared vision for the future. This requires a new approach to engagement that moves away from old models of consultation based on a few focus groups or a Community Consultative Committee and towards a fundamentally better engagement model that enables democratisation and deliberation. Rather than starting with the system, it's about a dialogue that starts with what matters to the community about their place, engages them in the challenge involved in the energy transition and a shared vision for the future, and addresses what the community sees as constraints and opportunities.

There are examples of positive steps being taken by Governments to undertake better engagement, share benefits, reform policy, undertake strategic assessments and facilitate partnerships with community. The question is whether we are aiming high enough or moving quickly enough to drive fresh approaches that will result in different outcomes on the ground.

There is an opportunity to adopt a place-based approach to transmission infrastructure expansion that seeks to empower communities. Renewable energy zones (REZs) inherently involve a place-based model. Where transmission infrastructure expansion is occurring within REZs, there is a real opportunity now to take a bolder, holistic approach that looks beyond transmission infrastructure and finds ways to enable investment in those communities to put them in a stronger position for the future, investment that engages with broader considerations. New forms of energy governance can enable communities to shape that positive future and ensure that existing inequalities are not exacerbated, and possibly addressed.

Fresh approaches to energy governance could enable joint priorities to be agreed – for example, opportunities to take strategic approaches to protect important biodiversity or agricultural land or empower First Nations communities. It could involve opportunities to address poor quality housing and deliver more sustainable buildings or education or health or improved public space. Taking a broader lens could also involve demand-side opportunities. The priorities for a community could involve cheaper energy or increased electrification or digitisation and perhaps reframing energy as a service could unlock opportunities for better health outcomes, for example such as the heat-as-a-service pilot undertaken by Energy Systems Catapult.[8]

The perspectives of the business community are key here too – for example the potential loss of workers, implications for local jobs and industry, transport and housing availability. Where transmission infrastructure expansion is occurring within REZs, pooling of funds may also allow for longer-term investment in things that matter to that community– for example, roads or health or social and affordable housing – and deliver real benefits for communities over the longer term.

There are opportunities to trial community benefit-sharing initiatives that allow the community to take a stronger sense of ownership or leverage the momentum of community-led initiatives already underway. There is also the opportunity to learn from regenerative place-based approaches in other contexts, governance models that enable communities to articulate priorities in partnership with Government and commitments to drive inter-agency action to deliver on agreed outcomes. International experience is also relevant to the ideas being explored.

The National Energy Transformation Partnership, the establishment of the Rewiring the Nation Office and the First Nations Clean Energy Strategy create a real opportunity to drive better outcomes, achieve greater consistency across the National Electricity Market in relation to transmission: to improve engagement, to leverage planning systems more effectively, to address structural barriers, to introduce innovation, to respond to what matters to communities and integrate environmental, social and economic perspectives. Ultimately, it allows for an increased focus on ensuring that energy justice informs our transition to a net zero future. State and Local Governments, networks and industry have a critical role to play. Fresh governance approaches that enable shared decision-making, diverse perspectives and genuine partnerships between community, industry, networks, Local Government, State and Federal government can take us forward.

There are examples of Governments taking steps in the right direction but generally responses remain focused on the energy system through an economic lens and while aspirations are high, they are yet to be realised in terms of concrete outcomes. There are still structural barriers that are preventing real change. The proposed transmission infrastructure expansion has profound implications because of the scale of change involved, the urgency of the situation Australia finds itself in and the disproportionate effect that will be felt by those communities where transmission infrastructure is sited.

Acting now to pilot place-based approaches, informed by the principles of energy justice and powered by new forms of energy governance and innovation can unlock a better, stronger future for our communities.

Key opportunities identified in the desktop review

The desktop review research identified a number of opportunities for all three levels of government, networks, industry and community. More context is provided at the end of this report in the 'Key Learnings' section.

Place-based approaches that leverage innovation:

1. Regulators and policy-makers should consider taking proactive steps to enable broader place-based approaches to the transmission infrastructure expansion across the National Electricity Market, particularly within planned renewable energy zones, informed by:
    - Principles of energy justice as central to the transition
    - Approaches that engage with place-based solutions, concerns and priorities for that community (for example, impacts on farming, biodiversity, housing, transport, health and demand-side energy initiatives), rather than project-based or siloed approaches that start with the energy system
    - Fresh approaches to meaningful engagement with community
    - Ensuring that networks, industry and local Government are enabled and incentivised to engage in meaningful early engagement and place-based approaches
    - Innovative approaches to funding, (such as pooled resources or reprioritisation of Government service delivery consistent with community priorities); benefit-sharing and new forms of governance
    - Bringing agencies together to solve problems and identify solutions at a place-based scale.
2. The National Energy Transformation Partnership; Rewiring the Nation and the First Nations Clean Energy Strategy provide opportunities for innovative approaches. Governments should leverage these opportunities to drive improved outcomes for communities where transmission infrastructure will be sited through holistic place-based approaches; removing structural barriers; prioritising strategic assessments; leveraging the potential of planning systems to achieve better outcomes; driving greater consistency across jurisdictions; and ensuring that learnings from fresh approaches are shared across jurisdictions to enable continuous improvement.

Community Engagement:

3. Engagement with community in relation to transmission infrastructure expansion should be meaningful, early, inclusive, continuing and focused on building trust.
4. Engagement should be grounded in a dialogue with the community in a shared vision for the future of their place, and the broader reasons for the change required to their place and ensure that diverse perspectives are heard, including in relation to challenges that involves for their place and the opportunities for the future.
5. First Nations perspectives should inform genuinely place-based approaches to transmission infrastructure expansion and renewable energy zones through First-Nations led engagement and a commitment to enabling opportunities for First Nations communities, including through the First Nations Clean Energy Strategy.
6. Where there are existing community initiatives, engagement processes should consider how to tap into existing momentum and community-led action to drive place-based change and create a sense of ownership of the change process. Local business should also be engaged.

Partnerships, benefit-sharing and new forms of energy governance:

7. Policy and rule makers need to ensure that the policy and regulatory frameworks for the transmission infrastructure expansion effectively and adequately support the consideration of economic, environmental and social factors, support meaningful engagement, benefit-sharing and new forms of energy governance.
8. Networks and industry need to take proactive steps towards partnerships and benefit-sharing and explore opportunities for community ownership of transmission infrastructure through new forms of energy governance.
9. The valuable role that Local Government can play should be integrated into place-based approaches to transmission infrastructure expansion, benefit-sharing and partnerships and new forms of energy governance.
10. Governments should enable, encourage and incentivise networks, industry and Local Government to implement partnerships, benefit-sharing and new forms of energy governance.

To crystallise those opportunities will require Governments at all levels, networks, industry and community to work genuinely and respectfully together to shape the future of our places. If we are on a journey, it is critical that we arrive together. Acting now to pilot place-based approaches powered by new forms of energy governance can unlock a better, stronger future for our communities.

Part One: Challenges with transmission infrastructure expansion in the National Electricity Market

Australia's transition to a net zero future is pressing. The Australia Energy Market Operator's (AEMO) 2022 Integrated System Plan (ISP) identifies that an additional 122 GW of utility-scale variable energy is forecast to be installed in the NEM by 2050.[9]

The 2022 ISP proposes the installation of more than 10,000km of new transmission.[10] It notes that the proposed transmission projects within the Optimal Development Path will enable the transformation, add $28 billion in value, and are forecast to return around 2.2 times their cost of approximately $12.7 billion, representing "just 7% of the total investment in NEM generation, storage, and network to 2050" which will "optimise benefits for all who produce, consume and transport electricity in the market". The plan states that this will provide both investment certainty and the flexibility to reduce emissions faster if needed, thereby managing risk. It calls for all actionable projects in the ISP to progress as urgently as possible.[11] The 2023 Transmission Expansion Options Report outlines transmission expansion options to inform the development of the 2024 ISP, including a new cost forecasting approach and also outlines its proposed approach to social licence.[12] AEMO has flagged that transmission constraints are limiting cheaper energy sharing and that increasing amounts of solar and wind generation are being curtailed because there's not enough transmission capacity to support it.

The Australian Energy Market Commission's (AEMC) Transmission Planning and Investment – Stage 2: Final Report released in October 2022, identifies that Australia is undergoing a transformational shift to net zero and that there is "broad consensus that transmission is a critical enabler for the transition to net zero".[13] The AEMC concluded that there was a need to provide greater clarity around social licence outcomes in the national framework, recognising that transmission network service providers, local communities and other stakeholders affected are critical partners in the delivery of major transmission projects.[14]

The AEMC recommended that the Australian Energy Regulator (AER) provide additional guidance to stakeholders on how the costs associated with building and maintaining social licence for major transmission projects should be considered and assessed as part of the regulatory process. It also recommended changes to the Rules and AER guidance to clarify the expectations on transmission network service providers to engage and consult with local communities and stakeholders at key stages of the planning process for major transmission projects.[15]

The AEMC has also published its final report for Stage 3 of the Transmission Planning and Investment Review, with recommendations to improve the regulatory process for projects identified in the AEMO's ISP. Key are recommended rule changes in relation to the economic assessment process to encourage transmission network service providers (TNSPs) to undertake more planning activities earlier in the economic assessment process, with the AEMC noting that this could reduce later delays by securing social licence and earlier identification of potential project barriers. It will provide greater cost recovery certainty to TNSPs for early works.[16]

Key initiatives at the Commonwealth level in relation to transmission infrastructure include the announcement of a Rewiring the Nation Office,[17] $20 billion in low-cost finance with the Rewiring the Nation Fund for the urgent upgrade and expansion of Australia's electricity grid at lowest cost; and a $1.9 billion Powering the Regions Fund to provide dedicated support to make sure traditional and new industries in regional Australia can harness the economic opportunities of decarbonisation.[18]

Another key initiative is the National Energy Transformation Partnership, a framework for Commonwealth, State and Territory governments to work together on reforms to help transform Australia's energy system to achieve net zero by 2050. Established in August 2022 through an agreed national plan between the states, territories, and the Commonwealth, it is underpinned by this shared vision:

> *"Australian governments will work together to maximise the economic opportunities of the clean energy transformation, ensure reliable and affordable electricity, and deliver the greatest benefits for Australian households, businesses and communities."* [19]

Priority actions under the partnership include agreeing Rewiring the Nation to provide concessional finance and facilitate the timely delivery of major transmission projects, offshore wind projects and Renewable Energy Zones; co-designing a First Nations Clean Energy Strategy to help ensure First Nations people have a say in the energy policies and programs in the transition to net zero; and progressing a National Energy Workforce Strategy.

The First Nations Clean Energy Strategy is currently being developed over a 12-18 month period in collaboration with partners including the First Nations Clean Energy Network.[20]

Action is being taken in jurisdictions such as NSW, Victoria, and Queensland to roll out Renewable Energy Zones (REZs), and to undertake transmission infrastructure expansion. For example, the Central-West Orana Transmission Project is a REZ network infrastructure project and the Environmental Impact Statement has recently gone on exhibition.[21] Transmission expansion is also occurring as part of the Marinus Link project in Tasmania, for example.[22] AEMO's 2023 Inputs, Assumptions and Scenarios Report outlines the transmission support policies in place in NSW, Victoria and Queensland.[23]

Stakeholder perspectives

Across Government, industry, environment and community groups, there is broad acknowledgement of the importance of social licence as an enabler of transmission infrastructure expansion and the energy system transformation more broadly. There is also consensus that change is required to address the current levels of conflict that have characterised transmission infrastructure expansion.

However, Energy Consumers Australia's June 2023 Consumer Sentiment Survey research showed that only 35% of households said they are confident the market is working in their interests, down by 9% in the past year.[24] Households trust in electricity companies fell from 53% to 47% over the past year.[25] There was an even steeper fall in small business trust in electricity utilities from 62% to 50% along the same timeframe.[26]

The 2022 Annual Report to the Australian Parliament from the Office of the Australian Energy Infrastructure Commissioner identified significant challenges and systemic issues relating to transmission.[27] Since March 2021, the office has received a total of 155 cases related to major transmission projects. In the 2021 report, the Commissioner flagged the level of conflict and the broad range of issues of concern for communities currently experiencing transmission infrastructure expansion.[28] In both reports, issues related to the process of engagement, planning and design processes, acquisition processes and the inadequacy of compensation for transmission were frequent among the complaint cases. Both reports also noted issues of concern relating to bushfire risk, the natural environment, visual amenity, reduction of productive agricultural land, health and safety.[29]

The 2022 Commissioner's report also identified steps taken by the Office (for example, advocating for new harmonised guidelines for farming practices in transmission easements) and noted that the office had presented to the Energy Ministers meeting on key issues to be solved to enable the timely and effective deployment of major transmission projects as well as recommendations for next steps to implement solutions, for example, reforms to the Regulatory Investment Test for Transmission (RIT-T) process.[30]

There have been a range of reports from peak stakeholder groups and industry in the renewable energy sector in recent years which consider how to improve social licence and build trust in relation to transmission infrastructure, with recommendations covering a broad a range of areas including the nature of engagement, compensation, environmental protection and community benefit-sharing.

In October 2022, Environmental and Climate NGOs made joint recommendations to the Federal Government for Rewiring the Nation. Recommendations included tying funding to better social and environmental processes and outcomes and funding the gap between the actual cost of transmission projects and what the Regulatory Investment Test for Transmission allows. Another recommendation was to respect and recognise the sovereignty of First Nations people and for transmission to be a key component of the First Nations Clean Energy Strategy.

Further recommendations called for collaboration by the Commonwealth, States and Territories through the new National Energy Transformation Partnership to ensure best practice standards for community engagement and benefit sharing; policies and procedures that protect and enable sustainable development and protect the environment; and action to realise the opportunity to create a green metal industry through Rewiring the Nation.

In the longer term, they recommended strategic land-use mapping across the National Electricity Market that considers areas that are significant for First Nations, agricultural producers, local communities and biodiversity value, and for this to inform future integrated system plans and national energy planning. They also called for a commitment to Commitment to a National Distribution Network Plan for distribution networks to enable greater levels of distributed energy resources, small-medium scale generation, storage and energy trading solutions.[31]

A report commissioned by the Clean Energy Council and Energy Networks Australia in August 2022 found that social licence through community support was critical to successful transmission but difficult to properly fund and foster under current frameworks. It found that the rigidness of the process was leading to communities feeling frozen out of decisions. The report recognised concerns around gold-plating and the need to focus on the cost of transmission build for consumers but noted that delays in transmission would drive up prices, place long-term reliability at risk, arguing Government should bridge the financial gap. [32]

Energy Grid Alliance, in its August 2022 report '*Acquiring Social Licence for Electricity*' recommended reform of policy and investment tests, engagement models, and argued for a community-first framework and community-owned transmission, noting the alarming level of opposition to overhead transmission:

> *"As the climate emergency worsens, there is too much at stake to adopt the current 'decide, announce, defend, compensate' model of infrastructure roll-out."* [33]

In June 2022, the Australia Institute and Sydney University released '*Renewables and rural Australia*' which considered REZs generally but with insights for transmission. The report found that successful outcomes depend on a proactive problem-solving approach to "deeply felt local concerns about adverse impacts including disruption to tourism, property values, damage to environment, cultural and Aboriginal heritage, change to loved landscapes, and physical harm".[34]

It emphasised the opportunity for a coordinated approach that maximises sustained benefits, noting that success will depend on building on existing good practice in NSW and initiating "REZ-specific socio-economic innovations, so that rural and regional communities can be long-term beneficiaries in the clean energy transition".[35] It highlighted opportunities that could arise from pooling of funds and noted that energy generation is not a job-rich activity in host areas.[36]

First Nations communities in Australia are severely impacted by the energy transformation and face disproportionate barriers and structural disadvantages to decarbonise. In November 2022, the First Nations Clean Energy Network, formed to ensure First Nations people both play a central role in and harness the opportunities from Australia's energy transformation, developed a list of ten principles to be considered by all groups involved in the development of energy projects and infrastructure.

The principles, which include respectful engagement, cultural heritage, country and environment protection, fair sharing of economic benefits and promotion of social benefits for communities, "highlight best practice and reflect local conditions and legislation, as well as international frameworks and norms for engagement with First Nations communities, including the United Nations Declaration on the Rights of Indigenous Peoples".[37]

More recently (May 2023), they shared a list of eight actions that can be taken by Australian governments to partner with First Nations in this journey to net-zero. These include ensuring energy security for all First Nations families and community-driven clean energy solutions and there is a clear call on governments to plan for Country, culture and people to facilitate mutually beneficial outcomes.

As First Nations people across Australia are being approached on multiple fronts by project proponents, they need to be and feel supported "to explore building deeper partnerships and work towards the development of projects that work within the values of Country, people and culture".[38]

RE-Alliance, in its 2021 report *Building Trust for Transmission*, outlined a program for reform to enable social licence, including expansion of the cost benefit analysis for the Regulatory Investment Test for Transmission to include consideration of social and environmental costs and benefits on local communities, improved landholder compensation and community benefit sharing, noting that:

> *"Local rural communities affected by new transmission infrastructure, and other stakeholders, deserve to be able to participate in how these projects are deployed and derive benefits from this new infrastructure and not just bear its costs and localised impacts."* [39]

In 2023, RE-Alliance reviewed what had been achieved since their 2021 report, stressing that without community acceptance, new transmission infrastructure may not be built at all and that proper consultation with host landholders and communities is crucial, as is ensuring they receive adequate benefits from the projects. RE-Alliance noted that in the 18 months since their report was released, some recommendations had been implemented by various State and Federal Governments, energy market bodies and transmission companies, however, some recommendations remain unaddressed.[40] They outlined a 'to do' list including:

- at a Commonwealth level, the RIT-T Review which involved expanding the RIT-T to include the social and environmental costs and benefits to local communities and pursuing policies; and also, regulations that protect and enable sustainable development, including adoption of key recommendations from the Samuel Review
- State reforms to allow transmission companies to use community benefit-sharing models to distribute financial benefits of new transmission developments into affected communities
- transmission companies to substantially expand existing community development and partnership programs
- the AER to provide guidance on consultation requirements, early engagement with stakeholders and developing formal advice regarding efficient social licence related cost. [41]

A July 2023 report released by Net Zero Australia notes that transmission infrastructure expansion needs to progress at unprecedented pace and scale to enable Australia's transition to a net-zero future, and social licence and community support for those projects is critical. If Australia is to decarbonise and decentralise in the most efficient and least cost way possible for all consumers, then there needs to be a monumental effort from governments, market bodies, networks, and other market participants towards building trust and strengthening collaboration through participatory processes that contribute to securing social licence with Australians. Regulatory change, benefits sharing, and central planning is required to upscale.

The report found that communities play a central role in the energy transformation, and we need to expand what social licence really means and how it can be addressed; social licence is dependent on fairness, acceptance, confidence, collaboration and trust. Without trust as a foundation, social licence will not be achieved.[42]

In August 2023, the Victorian Energy Policy Centre released the report *No Longer Lost in Transmission*, putting forward a potential Plan B for Victoria's Electricity Transmission Network High Level Concept Plan, arguing that expanding transmission need not be at the expense of landholders, renewables, investors, communities, consumers and the environment.[43]

Similar challenges are being experienced internationally. Environmental groups in the US released the *Principles for Accelerating Clean Energy Development Through a Transmission Buildout in an Equitable Clean Energy Future* 2022 and a White Paper in 2023, highlighting that the transmission bottleneck leaves huge climate benefits on the table and calling for policy reform and improvement of the rules for planning, paying for and siting transmission. However, they also stress that urgency cannot become a pretext for gutting the requirements of environmental review and public engagement as the US embarks on what could be the greatest US infrastructure build in nearly a century:

> *"To build transmission smarter and more fairly, we need smart reforms that target the drivers of the transmission bottleneck while preserving critical environmental, health, and community protections and enhancing community engagement."* [44]

Industry initiatives

Industry peak groups and some TNSPs are taking steps to improve engagement with communities. For example, Powerlink has a Community Engagement Strategy that includes commitments such as "be an active community member: engage early and often."[45] Transgrid appointed a Landowner and Community Advocate, who undertook a review of the Humelink engagement process in 2021. Transgrid implemented the recommendations, and the Advocate published a report noting initiatives undertaken by Transgrid to reshape its engagement strategies such as the establishment of community consultative committees.[46]

In September 2021, the Energy Charter launched the '*Energy Charter Better Practice Guide for Landholders and Communities',* a "better together collaboration" between TNSPs, landholder representatives and other community stakeholders including farming stakeholders. It signalled a commitment to fair and equitable compensation processes and commitments about how industry will behave in circumstances where land acquisition is required.[47]

From this collaboration, in May 2023, the Energy Charter published the "Better Practice Social Licence Guideline", co-developed by landholder and community representatives with a group of electricity transmission businesses to "build a shared understanding of the impacts and potential benefits associated with hosting energy transmission infrastructure, and provide practical social licence guidance to mitigate negative impacts and prioritise shared value through the energy transition".[48]

The Clean Energy Council has also released *Community Engagement Guidelines for Building Powerlines for Renewable Energy Developments* which outline expectations for proponents and contractors involved in building network connections. [49]

Part 1 has outlined the current context in relation to the transmission infrastructure expansion.

The next sections (Part 2 and Part 3) explore energy justice as a framework to assist in understanding current issues and to successfully navigate the transition. We will delve deeper into specific energy justice considerations and explore potential and practical solutions that can lead to a more inclusive, equitable and sustainable energy transition in Australia.

Part 2: How can energy justice help us navigate this challenge?

What is energy justice and why does it matter?

What do we mean by energy justice? There are three broad components.

- **Distributional justice** is concerned with the spatial impacts of the energy system. The transmission infrastructure expansion will affect some communities more significantly than others. There is also a temporal element, which considers the pace of change as well as impacts on future generations. While the general community will benefit from the proposed transmission infrastructure expansion, some communities and places will bear a much greater burden in enabling that transition.
- **Recognition justice** is focused on which voices are being heard and perhaps more importantly, which voices are being ignored, disadvantaged or excluded – for example, the voices of First Nations communities, young people, or rural or regional communities.
- **Procedural justice** considers whether there are processes in place to enable fair and representative decisions. Does the process truly allow for engagement in decision-making or is it simply about going through the motions of informing or consulting the community, identifying their views and going ahead with what was originally proposed?

Considering the transmission infrastructure expansion through an energy justice lens can assist us in understanding whether externalities are being fairly shared, whether the transition is being executed through means that are as low impact as possible, and whether decision-making processes are representative.

Distributional justice encourages consideration of inequitable distribution of impacts arising from the energy system. The concerns articulated by a broad range of stakeholders in relation to the transmission infrastructure expansion highlights that it is affecting, and will continue to affect, some communities disproportionately. Some of those communities are less likely to have the capability or influence to articulate their needs and concerns with the same impact as others involved in the process. The concept of just transition focuses us on ensuring that the transmission infrastructure expansion doesn't exacerbate existing inequities or increase the vulnerability of particular places or social groups.

Communities who express concerns can be positioned as caring less about the public good than impacts on biodiversity or heritage or what they value about their place. The Energy Grid Alliance report notes that when speaking with stakeholders in the energy industry and those living in more urbanised environments, "reactions suggest a level of confusion. Comments often conveyed indicate it's difficult to comprehend why people would not accept payment for the burden they are expected to carry" such as:

> *"They are only transmission lines."*
> *"We drive past them every day to work, what's the issue?"*
> *"This is the price we must all pay for progress and to reduce our impact on the climate."*
> *"Transmission towers remind me of our engineering mastery."*
> *"It's only farmland, plant your potatoes somewhere else."* [50]

Lacey-Barnacle identifies that vulnerable communities might not be primarily concerned with lowering their carbon emissions but other opportunities might appeal to those areas. He argues that, with an approach informed by restorative justice, new infrastructures can form part of regenerative efforts and plans, bringing further cycles of benefits for communities. [51] Understanding inequalities relating to income, education and housing, which have often been considered out of scope in the context of energy policy, can assist in understanding the potential impacts of energy policy on local communities as well as potential opportunities.

These challenges are also being experienced internationally. A recent paper noted that the US Government is increasingly emphasising the importance of a just energy transition by considering the social impacts of energy and environmental justice, but also noted that there were no studies they could locate that investigated how to site wind and transmission infrastructure to meet energy transition goals while considering environmental / natural resource and energy and environmental justice factors.[52]

It is clear that some Governments are signalling, at a high level, commitment to some of the concepts underpinning energy justice. For example, the Victorian Transmission Investment Framework: Preliminary Design Summary For Communities noted that VicGrid understood that communities expect tangible and long-lasting benefits from REZ development, through fair and meaningful processes.[53] The Victorian Transmission Investment Framework: Final Design Paper indicates that feedback from the consultation affirmed that existing transmission planning processes

do not adequately incorporate Traditional Owner, community, land use and environmental considerations, including local benefits.[54]

How can we ensure a voice for communities likely to be affected by transmission infrastructure such as First Nations communities or regional and remote communities? A recent report by Monash University and Royal Holloway University of London on *Just Transitions in Australia* notes that in arguments for accelerating renewable energy production, practitioners and policy makes often cast land in remote areas as "available", sometimes denying the ongoing presence of and cultural value of such land for Aboriginal communities. It identifies concerns in relation to representational justice for First Nations communities, flagging that communities are often constrained by a weak negotiating position and varying degrees of political influences and organisational capacity to advocate.[55] It referred to the Queensland Government's community consultation paper on planned Queensland REZs as going some way towards addressing this.[56] The Queensland Regional Energy Transformation Partnerships Framework released for consultation in October 2022 outlined principles to ensure that communities and people are at the centre of the transition, one of which is to empower First Nations people and build local capability.[57]

The NSW Network Infrastructure Strategy released in May 2023 references the NSW Government's First Nations Guidelines which set out an approach to increasing income and employment opportunities from electricity infrastructure projects. The NSW First Nations Guidelines have been developed with input from First Nations people and communities and outline a place-based approach to engagement and delivery as best practice consultation.[58]

The First Nations Clean Energy Strategy will also respond to this challenge and the First Nations Clean Energy Network provides guidance on First Nations engagement, as outlined above.[59]

Energy justice supports a move from passive models of consultation that fail to involve communities close to energy infrastructure, and towards active citizen engagement. This can be achieved through new forms of governance that can rectify injustice and enable wider regeneration efforts that allow communities to benefit from the infrastructure associated with low carbon transitions.[60] Deliberation is key here – rather than parties coming to the table with fixed views, partnerships focused on genuine engagement have the potential to enable learning by Government, industry and community.

The rapid pace of change proposed in relation to transmission infrastructure expansion also has the potential to exacerbate inequalities. The Just Transitions report highlights that care needs to be taken with the timescales for transition towards decarbonisation in Australia. A place-based approach would allow consideration of which societal processes require speed and which processes can unfold over a longer timeframe. It also includes consideration of the fairness for future generations. Tasmania has taken steps to introduce young people's perspectives into Tasmania's Renewable Energy Coordination Framework.[61]

Social licence

The concepts of energy justice discussed above provide a useful lens for understanding why there may be a lack of social licence. Research commentators have expressed concerns about an "instrumental bias" noting that approaches to social licence can be more focused on ticking a box than genuine engagement where "the desire to reduce local resistance prevails over public education, local capacity building, and energy justice."[62] The work undertaken on social licence by Professor Haines and others through the Melbourne Energy Institute stresses the need to focus on substance rather than terminology - that social licence can open up discussions, lay down ground rules, emphasise the necessity of continuing dialogue and broaden the conversation.

However, the report finds to achieve these outcomes social licence must include robust, inclusive conversations within communities to address key questions and concerns because, without this, the term becomes part of the conflict and a source of division. They highlight that addressing concerns, and keeping the focus on how communities can thrive now and into the future, is critical.[63]

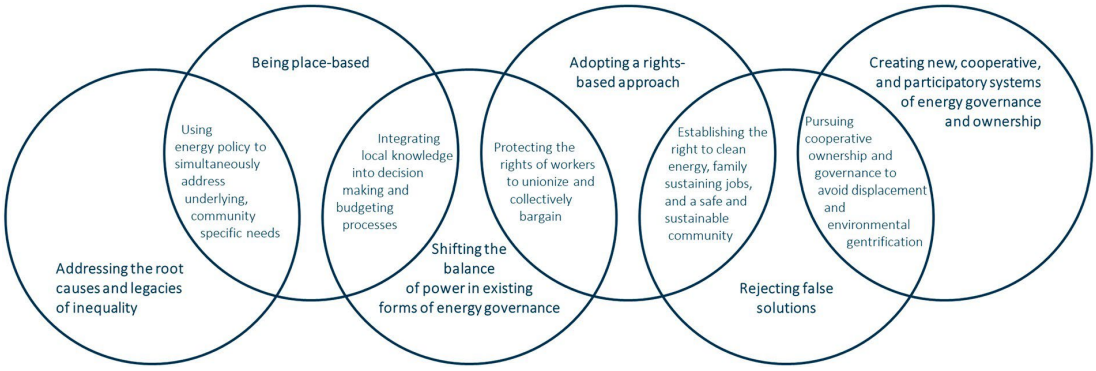
The learnings on social licence from resources projects are that genuine social licence relies on trust, high quality relationships and fair processes. Interestingly, the quality of interactions between company personnel and community members, and procedural fairness were found to be stronger predictors of trust and acceptance than perceptions of impacts.[64] Building the energy literacy of local communities is also a crucial element in designing successful energy transition and strengthening rural resilience.[65]

Part 3: Energy justice in practice

Elmallah and others have highlighted the risk that some areas may become "sacrifice zones" where the health and liveability of communities is sacrificed for the energy demands of others. They advocate for a move away from "just enough" consultation to alternative models where government, companies and communities are engaged as partners. These models involve identifying opportunities through new participatory systems of energy governance and ownership to build local economies that maximise prosperity and uplift communities that have been historically excluded from wealth-building".[66]

They outline six principles for a just energy future recently: (1) being place-based, (2) addressing the root causes and legacies of inequality, (3) shifting the balance of power in existing forms of energy governance, (4) creating new, cooperative, and participatory systems of energy governance and ownership, (5) adopting a rights-based approach, and (6) rejecting false solutions. They also identify the links between the six principles of just energy future, advocating for an integrated approach as outlined in the diagram below – for example, using energy policy to simultaneously address underlying, community specific needs and establishing the right to clean energy, family, sustaining jobs and a safe and sustainable community.[67]

Figure 1. Links between the 6 identified principles of a just energy future



Place-based approaches

Place-based approaches generally involve a focus on local needs and solutions and the unique attributes of a place. [68] They enable energy policy to address underlying community specific needs and the root causes and legacies of inequality, allowing for transition pathways "of places" rather than in places.[69] An integrated focus on clean energy, family-sustaining jobs and a safe and sustainable community can direct us away from false solutions which are unlikely to result in better outcomes. The Energy Grid Alliance report on acquiring social licence for transmission argues that an understanding of sense of place provides critical policy insights, for example, that place attachment to one's home and local area is beneficial, in terms of positive health and community participation outcomes and that:

> *"…deep attachment reflects a sense of responsibility to care for the place, a love and intimate understanding of the land and water, and the intertwining of one's identity with a place through personal investment in the land."* [70]

There are opportunities to learn from other contexts. David Adamson and others in *Sustainable Places* highlight the importance of place as a scale we can understand, allowing us to map issues and design solutions, where we can engage in social and economic experiment, where we feel the collective and neighbour. They argue that the State has a critical role to play in ensuring a just transition, referencing the Just Transition Commission in Scotland.[71] They advocate for a total place model, noting that as social problems become more wicked, connections are more complex which means that abstract or siloed solutions are less likely to succeed, and reference examples of real projects undertaken in Wales that sought to "deliver public services to communities in a holistic, integrated and collaborative way".[72]

A recent example of a place-based approach in another context is The Islander Way, a regenerative tourism living lab for Flinders Island in Tasmania involving a holistic systems approach, enabled through a co-design process with and for the community in response to community concerns about over-tourism. While the project began with a

focus on tourism, it enabled a shift in mindset towards regeneration of that place which involved a place-based approach that considered a broad range of systems that are impacting it, such as waste and circular economy.[73]

There is also a question about role of the planning system in creating a shared vision for the future. While planning systems have begun to grapple with transmission infrastructure and the concept of REZs, generally speaking planning systems are not fully engaging with the risks and opportunities presented or developing integrated place-based solutions – to the extent that they do, this is largely through the lens of economy and jobs.

Strategic planning that makes the connection between renewable energy and opportunities to deliver broader benefit to the community and prioritises and enables what is important to that community, could help to inform a place-based approach. This could be enabled through strategic assessments and bespoke assessment pathways. Consideration could be given to nationally consistent planning pathways for transmission infrastructure and REZs.

It is interesting that the proposed transition to net zero essentially involves a place-based model in relation to REZs. Transmission infrastructure expansion can sometimes form part of a REZ. The question is whether the execution of that transition will genuinely involve a place-based approach. Some steps are being taken by Government and industry towards place-based approaches.

The Victorian Transmission Investment Framework: Final Design Paper confirms that there will be a place-based approach to community engagement in Victoria that is more participatory and fosters greater community support from the outset by incorporating community views and land-use planning early and new community benefits that can give back to impacted Traditional Owners and host communities and deliver jobs and development opportunities.[74]

NSW released its Network Infrastructure Strategy in May 2023, identifying the need to balance energy market and community considerations and outlining a commitment to respect for communities and the issues they face. It notes that new transmission infrastructure must be delivered in a way that minimises the impacts on and maximises the benefits for the communities and landowners that will host it. It recognises that the primary community concerns are securing tangible benefits for local communities hosting infrastructure, including more reliable local electricity and telecommunications, more local infrastructure and services, managing demand on local services and infrastructure such as workforce accommodation, skilled workforces, roads and traffic management and waste management and maintaining a strong community voice throughout the planning and development process.

The NSW Network Infrastructure Strategy sets out the principles of consultation that apply in NSW during all stages of a project: that is, to encourage collaborative, transparent and open consultation to deliver a project which meets the network need to provide reliable and affordable energy supply in a way that secures the best possible outcomes for communities and minimises impacts as far as practicable.[75]

The First Nations Guidelines released by Energy Co in NSW 2022 recommend that Roadmap proponents follow a place-based approach to engagement and delivery with First Nations communities. It supports innovative, locally appropriate, long-term solutions to deliver a common vision for the place.[76] This approach could be adopted for transmission infrastructure more broadly. Where transmission infrastructure is proposed within a REZ, there is an opportunity to integrate this with a place-based approach for the REZ.

The question is whether real action will be taken to empower communities, enable broader perspectives and embrace new forms of governance to enable challenges to be solved. There remains a high level of conflict and a lack of trust. [77] However, as Dan Cass notes, there is potentially an opportunity arising from the pooling of funds in REZs:[78]

> *"The national pilot REZ in Central-West Orana and the New England REZ that is following close behind are leaders in a bold vision for Australia's clean energy transition. If they are used as a policy test bed for innovative participation, benefit sharing and equitable development planning, there will be significant benefits for other communities hosting REZs and for Australia as a whole."* [79]

With REZs about to be rolled out in jurisdictions throughout the National Electricity Market, there is an opportunity to take a bolder place-based approach – each place is different. Bespoke solutions codesigned with communities create an opportunity to integrate local knowledge into decision-making and budgeting processes and allow communities to shape priorities for that place.

A place-based approach for transmission infrastructure could allow for the consideration of opportunities to create local jobs to enable a just transition and to avoid impacts on local communities such as increased prices for housing. It could consider the sustainability of housing or energy as a service. It could involve strategic approaches to ensuring that important biodiversity, productive agricultural land, visual amenity and important heritage is protected. It could involve a focus on public space or community facilities or digitisation.

Could the long-term investment involved in a REZ enable genuine investment in social and affordable housing over the long term as a benefit of the energy transition? Interestingly, in Tasmania, social housing tenants benefited from Tasmania's first community microgrid in Nubeena with solar and Tesla batteries.[80] Energy Ministers have recently committed to investing in Australia's adaptation and resilience to climate change as a key priority and climate threat assessments are important to enabling that.[81] What are the opportunities to support business innovation? Can funds be pooled to enable investment in things that matter to the community for the long-term?

A place-based approach could unlock innovation around demand-side initiatives and community batteries. Energy Consumers Australia has previously identified that remote communities in Australia are at "at the vanguard of the energy transition" [82] and the need for a resilient system in the context of a developing tension between the large-scale and the local. While localised, community-centred forms of generation can be more complex, they will be critical in creating a system that is less radial and more networked. Among such forms will be community batteries, virtual power plants and co-located small-scale generation and storage facilities that are embedded within communities. When power comes from a large number of diffuse and diverse sources it is less vulnerable to failure caused by a single catastrophic event and so is more resilient.[83]

People first – starting with people and sharing the benefits

In her book, *How to talk about Climate Change in a way that makes a difference,* Rebecca Huntley highlights the flaws of engaging with communities in a "one way communications style, where scientists and experts relate information directly to "a clueless public" - where information is delivered in complex language, using jargon and presuming a certain level of understanding of specific concepts. She notes that there are many flaws in this approach, the biggest being "its failure to recognise that we are dealing with human beings".[84] The complexity of the energy system and the level of assumed knowledge that characterises most of the discussion about energy acts as a barrier to genuine engagement. If people can't understand what is happening, what is proposed and what they can do to influence it, engagement is not meaningful.

Some stakeholders have highlighted that current approaches can lack empathy:

> *"Communities are not upset that their concerns haven't been heard as there is no doubt opposition has been voiced. Communities are upset because their concerns are not being understood, listened to or respected, with collaborative action being taken to understand and accommodate this opposition to bring about a more mutually beneficial outcome…In fact, pushing the 'talk to them early and pay them more' agenda is very likely to further dilute trust, increase opposition and dissolve any credible opportunity to acquire social licence."* [85]

Huntley makes the important point that while we might understand climate change to some degree, most of us need a larger story– both to the issues we care about and the social group we belong to – to be motivated to do something. She references the work of Lieserowitz who argues for the need to create a positive, alternative vision of the future noting that, "we've been much better at describing what we're against that what we're for… we don't tell an alternative story of a better world we want to live in."[86]

Huntley draws on work by a team of Australian research who developed the developed the term "objects of care", which have the capacity to be connectors, making the issue of climate change seem personally relevant to an individual, including people and places.[87] One example she gives is the work of Lynsy Smithson-Stanley at Yale University which leveraged people's love of birds as a catalyst for action.[88] For regional communities that might be impacted by the roll-out of transmission infrastructure, enabling meaningful conversations anchored in what is important to those communities may help to build trust. This involves conversations with the local business community too.

Restorative justice, informed by place-based approaches anchored in genuine engagement, can inform the pathway forward. For example, in relation to engagement, RE-Alliance recommended that transmission companies move their consultation style along the IAP2 spectrum of public participation, away from inform, consult or involve and towards "more actively collaborating and empowering their local communities".[89]

The tension between people and populations was discussed by Daniel Westerman, CEO of AEMO in his 2023 address to the Australian Clean Energy Summit. He acknowledged the need to address "the concerns that are genuinely held in local communities who are being asked to host the infrastructure of Australia's energy future, while they share the benefits with others in densely populated cities far, far away. It's about the concessions we are asking individuals and small local communities to make for the greater good, and how we reconcile them."[90]

The report '*Renewables and rural Australia'* outlined the importance of Government and project developers having more meaningful conversations with communities and better addressing their concerns. For example, they note that communities don't yet own the concept of REZs. They recommended inclusive planning and benefit-sharing to improve equity and help build and maintain the social licence of REZ policy.[91]

A broad range of stakeholders have called for improved benefit-sharing arrangements and some governments have taken steps in this context. NSW, Victoria and Queensland have introduced a Strategic Benefit Payment for landowners hosting transmission infrastructure, in addition to the compensation landholders receive under acquisition frameworks.[92] However stakeholders such as Re-Alliance have emphasised that while this is critical, "on its own it won't be enough".[93]

Stakeholders such as Energy Grid Alliance argue that community owned transmission should be explored because it provides "opportunities for neighbours and regional communities to benefit financially, rather than carry the burden".[94] They give the example of a REZ that will host a range of privately owned renewable generation and storage facilities where a single high voltage transmission line will connect it to existing transmission infrastructure in the State's grid. They acknowledge the reality that while the community's preference "may be for the transmission line to be built elsewhere, this may not always be feasible" but that by inviting those impacted to "invest in transmission assets represents an opportunity for impacted landholders, neighbours and communities to receive tangible … benefits by strengthening local economies, building community participation, resilience & empowerment, creating investment opportunities and involving the public in creating a sustainable future." [95]

A range of Governments are considering new benefit-sharing arrangements, for example, NSW, Queensland and Victoria. For example, the NSW Network Infrastructure Strategy also references the need to share the benefits of the renewable energy transformation, through community benefit sharing schemes to fund community initiatives within the REZs, including public services or infrastructure, health services, accommodation or housing, local or regional energy programs, environmental programs, parks and recreation infrastructure, education programs or research, arts, cultural and tourism programs, First Nations programs, or other services that benefit the local community. The schemes are funded from access fees paid by energy generation and storage developers who connect to new REZ network infrastructure. Also referenced are the employment and training programs that implement the recommendations of the Renewable Energy Sector Board.[96] The NSW Government recently announced that will commit an additional $800 million to the Transmission Acceleration Facility to connect the state's Renewable Energy Zones to the grid sooner and bring forward the benefit schemes for communities.[97]

The *Victorian Transmission Investment Framework: Final Design* indicates that proposed benefit-sharing mechanisms for transmission infrastructure through community funds will build on the application of the Victorian Government's existing Social Procurement Framework and Local Jobs First Policy Framework to the procurement of REZ transmission infrastructure, which will deliver jobs, skills and local development opportunities through the construction and operation of transmission infrastructure. It also notes that socio-economic outcomes will be integrated into tender and negotiation processes and that other social procurement objectives may also be determined according to the issues raised by local communities through the engagement process.[98]

The Queensland Regional Energy Transformation Partnerships Framework released for consultation in October 2022 outlined 7 principles to ensures that communities and people are at the centre of the transition, to enhance energy driven social benefits and to deliver on opportunities for regional Queensland. These principles are to drive genuine and ongoing engagement; share benefits with communities; buy local and build local; increase jobs and secure work; preserve Queensland's environment; empower First Nations people and build local capability.[99] The draft Queensland Renewable Energy Zone Roadmap released for consultation in July 2023 outlines pathways to support community involvement and to create long-term benefits for regional communities.[100]

There have been calls from a broad range of stakeholders for the funding of transmission infrastructure to ensure that social, climate and environmental considerations are included and are informed by genuine engagement with affected communities much earlier in the process. [101] RE-Alliance has argued that defining "what efficient costs are is at the heart of the issue" of how to build and maintain social licence for transmission infrastructure."[102] They noted that there is broad consensus that current compensation arrangements under legislative compensation schemes for transmission infrastructure is not commensurate with what landholders receive for hosting similar infrastructure such as wind turbines. Cost clearly is a key priority, particularly in the current context of rising energy prices.

However, the AEMC in its recent 2023 *Transmission Expansion Options Report* indicates that for regulated network augmentations, only those matters which can be costed can be included within the cost-benefit analysis that AEMO and TNSPs are required to undertake – this can include the cost of complying with planning and environmental regulations (such as securing a biodiversity offset). However, where an impact, or cost, is not included as a relevant consideration in the regulations, the regulations do not permit these matters to be considered, such as broader social and environmental impacts.[103] Arguably, this represents a structural barrier.

Affordability must be a constraint and this needs to be balanced with energy and environmental justice. Key is value for money infrastructure, at the same time as consumer expectations about the security and reliability of electricity being met. A recent US study has identified some challenges in bringing these considerations together

and the need, for example, for further research to identify which energy and environmental justice considerations should be identified and prioritised across communities.[104] The question of efficient cost should be resolved with a clear line of sight to the benefits it will deliver. Energy justice perspectives can help to ensure that a fair balance is struck.

The Australian Infrastructure Energy Commissioner has pointed out the vital importance of ensuring appropriate investment in building and maintaining effective relationships with landholders and community, as well as keeping an eye on emerging and maturing technologies that may enable alternative solutions. 105

The CEO of the Clean Energy Council Kane Thornton in his opening address to the July 2023 Clean Energy Summit said:

> *"The transmission grid is being augmented and built out. The best time to plant a tree was 15 years ago, the second best is today, and the same goes for planning and building our transmission system. We should have started a decade ago, but we finally have our skates on…Ten thousand kilometres of new transmission lines in less than a decade is a mammoth task. But the bigger challenge rests in how it's done.*
>
> *"Communities and landholders deserve respect. We need to pay a lot more attention to the community, our engagement practices and community participation in clean energy projects and the network…First Nations communities have an enormous role in Australia's clean energy future, and the renewable energy sector must continue to build understanding, respectful and effective practices and models for genuine partnership.*
>
> *"There is clearly room for improvement in the planning policies and regimes around the country to ensure they are fit for purpose."* [106]

New forms of energy governance

New forms of energy governance shifting the balance of power in existing forms of governance from a top-down approach to a partnership approach that is rights-based in the sense that it is informed by representational and procedural justice. Delivering on place-based solutions is likely to require new approaches to governance that go beyond the establishment of Community Consultative Committees. Genuine partnerships between community, industry, local Government, State and Federal government have the potential to shift the dial.

Through the Clean Energy for All Europeans package, European policymakers have embedded a requirement for expect community energy initiatives to enable justice in the European energy transition. The Renewable Energy Directive requires member states to "provide an enabling framework to promote and facilitate the development of renewable energy communities."[107] The EU model of energy communities is focused on "citizen-driven energy actions that contribute to the clean energy transition, advancing energy efficiency within local communities."

The Rural Energy Community Advisory Hub was launched in June 2022 and is focused on assisting citizens, rural actors and local authorities in setting up a Citizen Energy Community or Renewable Energy Community in rural areas through technical and administrative advice and encouraging their development, with emphasis on empowering, mobilising and engaging citizens who can be play a key role in energy transition.[108]

Creating new co-operative and participatory systems of energy governance and ownership can enable community empowerment – or harness the momentum already emerging. In NSW, there are community-led initiatives such as Electrify 2515 which aims to be Australia's first electric community, a volunteer-driven initiative dedicated to advancing climate action in that community and throughout Australia."[109] The model of "Transition Towns" is another example operating in many countries, including Australia.[110]

Community batteries are also gaining momentum. The Orange Community Renewable Energy Park is 5MW solar installation enabled through the Central West NSW Cooperative. Its website states that "it is the largest crowd-funded PV project", with construction planned to start in 2023 on the Mitchell Highway in Orange. Enabled through Energy Democracy, it offers cooperative share parcels for purchase, and anyone can invest after becoming a member of the Central West NSW Cooperative.[111] It received support from the Regional Community Energy Fund.[112]

Catapult in the UK has provided guidance on building a governance framework for local area energy planning – a Local Area Energy Plan (LAEP) sets out the change required to transition an area's system to net zero in a given timeframe noting that many of the decisions and investments required to deliver net zero - in the built environment, in new infrastructure and in transport systems, have a strong local dimension. Local leadership is therefore critical.[113] It makes the interesting point that "currently, the decisions made by these stakeholders are often made in isolation and lack coordination with the wider energy system.[114]

An example from a different context is the Local Decision-Making Framework under the Ochre Plan in NSW. The Murdi Paaki Local Decision-Making Accord II between the Murdi Paaki Regional Assembly and the NSW Government identified key priority areas including economic development, law and justice, early childhood and school education. The NSW Government agreed to allocate resources to identified priorities, lead the delivery and implementation of Accord commitments and drive inter-agency collaboration to achieve that.[115] Interestingly, Government agreed to be legally bound in respect of its accord commitments.

This model is innovative because it is fundamentally based on a partnership where the community articulated priorities for Government - and Government committed to inter-agency collaboration to deliver place-based outcomes based on those priorities. Importantly, rather than requiring new funding, it involved Government realigning or reprioritising service delivery and infrastructure investment based on community priorities. This was about Government working in a more integrated and place-based way to deliver on community priorities. There is an opportunity to consider a place-based accord model for REZs which brings together Government (ideally Government at all levels) and community, leveraging this kind of approach. There is also an opportunity consider how industry could form part of such an accord.

There is also opportunity for to enable cross-border consistency or a national approach to the planning and approval of transmission infrastructure expansion and REZs more broadly. The National Energy Transformation Partnership, the establishment of the Rewiring the Nation office and the First Nations Clean Energy Strategy provide opportunities for innovative approaches that enable greater consistency across jurisdictions. They also provide an important opportunity to consider new governance models, engagement, benefit sharing, innovation funding approaches and place-based sequencing of Government services and infrastructure.

Lifting our gaze: seeing the bigger picture and aiming high

There is no option for Australia other than a rapid and orderly transition to a renewable energy future. The question is how we get there. There are broad calls for reforms to the way transmission infrastructure is delivered to put us on the right path to ensure a successful transition to a net zero future. Many stakeholders have called for change that empowers communities and there are important examples of Governments taking a leadership role to drive new approaches. The question is whether our response will seize the opportunity as those new approaches are implemented.

Mariana Mazzucato, Professor in the Economics of Innovation and Public Value at University College London argues for a "mission based" approach that requires Government to work across its usual silos. She notes that while specific missions are being framed in relation to particular areas, targets need to foster as much cross-sector innovation and investment as possible, which is why it's important to frame them widely and inspire ambition. She argues that a green transformation is "not just about renewable energy", instead "it's about achieving a cross-sectoral approach to innovation".[116]

The Just Transitions Report echoes this, identifying the urgent need for cross-cutting approaches to transition arguing "we ought to learn from recent examples where transitions have taken place with limited consideration of the wider impacts".[117]

Mazzucato also argues that firms benefiting from public finance should be subject to conditions that align their business activities with green industrial objectives, fair labor practices and other priorities.[118] Steps taken by the NSW Government and AEMO's Consumer Trustee in relation to the recent NSW Electricity Tender with mandatory criteria relating to planning considerations, community engagement, industry and Aboriginal participation are a step in this direction.[119] Mazzucato provides the following insights in relation to cost:

> *"A bold view of the role of public policy also requires a change in the metrics used for evaluation of those policies. Today's typical static cost-benefit analysis is inadequate for decision which will inevitably have many indirect consequences….to recognize that the public sector creates value we must first find ways to assess that value… In sum it is only by thinking big and differently that government can create value – and hope."* [120]

The CEO of AEMO Daniel Westerman in acknowledging the need to engage with the concerns genuinely held in local communities who are being asked to host the infrastructure of Australia's energy future, also recognised that "*we might sometimes fail to see what's right in front of us":*

> *"Today, because of the extensive and ongoing investment the energy transition requires, Australia is on the cusp of a vast, new economic opportunity, the likes of which we haven't seen for decades…Not since nation-building projects of decades past…*
>
> *We need to progress this energy transition to realise all the benefits that it will bring, and .. to manage the tensions in this energy transition to help maximise the benefits for all Australians."*[121]

Key learnings from the desktop review

Our transition to a net zero future is as much social and environmental as it is economic. The discussion about the expansion of transmission infrastructure needs to be grounded in a larger dialogue about the future we want for our communities, anchored in a sense of place. Communicating with communities in a way that brings them into a dialogue about their future is the heart of this. What we need is a shared understanding of the challenge and a shared vision for change.

New governance approaches based on genuine partnerships between community, industry, local Government, State and Federal government can take us further.

The scale of change required to enable our net zero transition is so significant and so urgent that proactive and innovative approaches are required. The review of the current state of transmission infrastructure expansion paints a picture of a difficult transition characterised both by conflict, but also by consensus about the importance of getting it right.

There have been a range of positive steps taken by Governments, networks, industry, stakeholders and communities to seek to enable a better way forward for the transmission infrastructure expansion. However, the current level of concern, mistrust and confusion in relation to transmission infrastructure indicates there is a long way to go to engender the levels of trust required for wholesale and rapid change to be achieved.

Instrumental approaches to social licence have the potential to create further conflict, and with that comes further delay and further cost. Ultimately, the costs of delivering transmission infrastructure ends up on consumers' bills. Instead, what's required are positive strategies that create an alternative vision for the future.

Investment in place-based approaches informed by the principles of energy justice can enable a move away from the potential for communities impacted by transmission infrastructure projects seeing themselves as "sacrifice zones,"[122] and towards positive partnerships to regenerate their places for the future. The reasons people are concerned about transmission infrastructure expansion often aren't about energy, so the solution can't come from energy alone. To move things forward may require an approach that looks beyond the energy system, or a specific project and its economic benefits, and considers the broader issues for a community to enable a just transition.

Beginning with a shared vision for the future for their place can unlock solutions. Further, REZs essentially involve a place-based model – some have already started, and they are about to be rolled out across the National Electricity Market. Where transmission infrastructure expansion is occurring as part of a REZ, there is a real opportunity now to take a more integrated place-based approach. Some Governments are signalling a commitment to fresh approaches, and rolling out reform, but successful implementation that genuinely embraces change will be key.

Regulators and policy makers should consider taking proactive steps to enable broader place-based approaches to transmission infrastructure expansion across the National Electricity Market, particularly within planned renewable energy zones.

Holistic place-based approaches allow those involved to see the bigger picture and respond in a more meaningful way. Key here is that principles of energy justice are central and that the energy transition is informed by social, environmental and economic perspectives.

There are opportunities for Governments to pilot new governance approaches that enable communities to articulate future priorities. There are also opportunities for Governments to move beyond silos to deliver on the priorities of a particular community, for example, health or housing. Planned renewable energy zones inherently provide an opportunity for a place-based approach. For this to be achieved will require Government agencies to move away from silos. Government will need to work differently, bringing agencies together to solve problems and identify solutions at a place-based scale.

Policy and rule-makers will need to ensure that the policy and regulatory frameworks for the transmission infrastructure expansion effectively and adequately support the consideration of economic, environmental and social factors, and support meaningful engagement and benefit-sharing.

Place-based approaches could involve demand side initiatives or community ownership of transmission infrastructure or investment by industry in benefit sharing. It could involve pooling of resources across a REZ to fund community priorities. There are also important debates about the costs and benefits of investment in transmission infrastructure - what is an appropriate amount to spend, how it can be funded and the need to move beyond an economic lens to consider social and environmental factors. It could also involve new forms of energy governance.

Networks, industry and local Government need to be enabled, encouraged and incentivised to engage in meaningful early engagement and place-based approaches.

The National Energy Transformation Partnership, the establishment of the Rewiring the Nation office and the First Nations Clean Energy Strategy provide opportunities for innovative approaches. Governments should leverage these opportunities to drive improved outcomes for communities where transmission infrastructure projects will occur through holistic place-based approaches that:

- adopt energy justice as a framework for ensuring people are central to the transition and that social, environmental and economic perspectives inform that transition;
- continue to embrace and expand commitments to place based approaches, genuine engagement, benefit sharing, governance models that enable democratisation, deliberation and partnership;
- embrace innovation by considering broader solutions and opportunities such as reprioritisation of service or infrastructure delivery or pooled funding from renewable energy projects;
- address structural barriers in regulatory and policy frameworks and leverage the potential of the planning system to achieve better outcomes, for example, through strategic assessments;
- drive greater consistency across jurisdictions and ensure that learnings from fresh approaches are shared across jurisdictions to enable continuous improvement; and
- bring together agencies to solve problems and identify solutions at a place-based scale.

Also important is the need to have meaningful conversations with the community. These conversations will be more effective if they are based on empathy and help communities make the link between the places they love, the places they live and work, and why there is a need to act. Engagement based on collaboration is key.

There needs to be a new approach to engagement in respect of the transmission infrastructure expansion by:

- **investing in engagement** that enables more meaningful communication with communities that creates a shared vision for the future;
- **ensuring that diverse perspectives are heard**, including in relation to the challenges for their place and the opportunities for the future;
- **committing to early, inclusive and continuing engagement with communities** that is built on trust and enables deliberation, and which is positioned at the “collaborate” and “empower” end of the IAP2 spectrum of the International Association for Public Participation; and
- **considering opportunities to integrate community initiatives** and to support renewable energy communities, learning from other contexts, for example, the EU renewable energy community model.

In particular, Governments and networks should take proactive steps to ensure that First Nations perspectives inform genuinely place-based approaches to transmission infrastructure expansion and renewable energy zones through First-Nations led engagement and a commitment to enabling opportunities for First Nations communities, including through the First Nations Clean Energy Strategy. This could be informed by insights from the First Nations Clean Energy Network Best Practice Principles for Clean Energy Projects and the eight steps articulated by the Network to attract investment and build First Nations engagement in Australia’s clean energy transformation.

Community initiatives are also an important part of the solution, as they provide the ability to tap into existing momentum and community-led action to drive place-based change. Impacts on, and opportunities for, local businesses should also be integrated.

Networks and industry need to take proactive steps towards partnerships and benefit-sharing and explore opportunities for community ownership of transmission infrastructure and new forms of energy governance.

Governments should enable, encourage and incentivise networks, industry and Local Government to take proactive steps to implement partnerships, benefit-sharing and new forms of energy governance.

The valuable role that Local Government can play should be integrated into place-based approaches to transmission infrastructure expansion, benefit-sharing and partnerships and new forms of energy governance.

Proactive steps need to be taken now to progress place-based approaches that can position communities for a stronger future. There is also a risk that, if we don’t move quickly enough, existing inequalities will be exacerbated by transmission infrastructure projects. There is no time to waste in adopting fresh approaches to realise those opportunities in the context of the transmission infrastructure expansion that is underway.

Governments and networks to take immediate steps to undertake place-based pilots for transmission infrastructure projects supported by new forms of energy governance that:

- **engage the community in a shared vision** for the future through effective communication about climate change and what it means for that place, ensuring diverse perspectives are heard;
- **empower communities by piloting new approaches** to energy governance that enable partnerships between Government (Federal, State and local), networks, community and industry and consider benefit-sharing and integration of existing community-led initiatives;

- take **a holistic and integrated approach** that identifies priorities for that community (for example, biodiversity, climate change and adaptation, agriculture land, visual amenity, housing, health and education, demand side initiatives such as community batteries or energy as a service) and considers the broader social, environmental and economic issues experienced by communities and opportunities for the future;
- **leverage the potential of the planning system** to achieve better outcomes;
- **adopt innovative approaches to funding** opportunities, such as pooled resources and community-owned infrastructure or benefit-sharing mechanisms, and reprioritisation of Government service delivery that is consistent with community priorities; and
- **monitor and evaluate new approaches** to enable continuous improvement.

To crystallise those opportunities will require Governments, networks, industry and community to work genuinely and respectfully together to shape the future of our places. If we are on a journey, it is critical that we arrive together.

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[121] AEMO, CEO Daniel Westerman, Speech at Australian Clean Energy Summit, 18 July 2023, above n90.

[122] Elmallah S, Reames T, Spurlock A, above n6, p 2.