



# NSW Industry Policy Green Paper

**A KPMG ESG perspective**

**KPMG Australia**

June 2022

# Contents

**01****Executive Summary**

03

**02****Recommendations**

06

**03****Key Insights**

09

**04****Key Authors**

19

# 01

## Executive Summary

# Executive Summary

KPMG Australia (KPMG) is pleased to have had the opportunity to respond to Investment NSW's Industry Policy green paper.



**CURTIS DAVIES**

Partner, NSW Government  
Lead, KPMG Australia



**DANIELLE WOOLLEY**

Partner, Policy Program &  
Evaluation, KPMG Australia



**ADRIAN KING**

Partner in Charge, Climate Change  
& Sustainability, KPMG Australia



**DUNCAN STEVENS**

Partner, Climate Change &  
Sustainability, KPMG Australia



**BARRY STERLAND**

Partner, Energy Transition  
Leader, KPMG Australia

This submission provides an overview of the environmental, social and governance (ESG) related opportunities and challenges that KPMG considers are likely to be faced by industry over the coming decade that the NSW Government should consider supporting. Given the evolving breadth of issues pertinent to the ESG space, KPMG has chosen to focus on the two crucial areas of climate change and gender equity.

The discussions on ESG have moved past whether to act, and on to how to take action in a way that addresses the expectation of regulators, shareholders, and workforce.

Companies across all industry sectors are already leading the way on climate change and gender equity issues. Others are working hard to catch up. KPMG considers that those that do not catch-up face being left behind in gaining access to debt and equity capital and being uncompetitive in an increasingly uncertain global marketplace, especially in needing to attract and retain the best talent, particularly women.

For this to be realised, KPMG recommends that the NSW Government continue to demonstrate that it, too, is an ESG leader, including by supporting industry's desire to tackle both climate change and the structural inequalities and social norms that disadvantage women and diverse social groups.

More detailed consideration of what this means for industry and government, including KPMG's recommendations, are found below. Please do not hesitate to reach out to follow up on any specific issues.

[Contents](#)[Executive summary](#)[Recommendations](#)[Key Insights](#)[Key Authors](#)

# Background

## About KPMG

KPMG is a global organisation of independent professional firms, providing a full range of services to organisations across a wide range of industries, governments and not-for-profit sectors. We operate in 146 countries and territories and have more than 227,000 people working in member firms around the world. In Australia, KPMG has a long tradition of professionalism and integrity combined with our dynamic approach to advising clients in a digital-driven world.

# 02

## Recommendations

# KPMG Recommendations

1

## Recommendation 1

NSW Government dedicate resources to ensuring that a detailed and up-to-date understanding of the changing geopolitical landscape is a central element of its industry ESG strategy for the future, including by monitoring international trade policy and rules development affecting NSW's exports.

2

## Recommendation 2

NSW Government embed ESG into every facet of government operations, including government procurement and departmental operations and financial reporting.

3

## Recommendation 3

NSW Government develop sustainable development and environmental policies and programs, similar to, for example, those in other Australian states, from which industries will be able to benefit and utilise for their ESG strategies.

4

## Recommendation 4

NSW Government consider how to continue to increase and support women's participation and gender equity in the workforce, including bringing an intersectional lens to workplace inclusion, diversity and equity strategies and drawing from the NSW Treasury's review into Women's Economic Opportunities.

5

## Recommendation 5

NSW Government lead the way on transparently reporting against all state government targets from net zero to renewable energy. This could include aligning policies, practices and regulations to the United Nations Sustainable Development Goals and reporting on the government's performance.

6

## Recommendation 6

NSW Government provide additional incentives to attract businesses and industries that contribute to the green economy. These could include metrics that these companies report against to satisfy the 'green criteria' and access this funding and/or incentives.

[Contents](#)[Executive summary](#)[Recommendations](#)[Key Insights](#)[Key Authors](#)

7

**Recommendation 7**

NSW Government investigate building on existing and developing new initiatives to encourage the creation of ACCUs, including for rural landholders, and building natural capital in rural and urban areas.

8

**Recommendation 8**

NSW Government develop solutions to rapidly decarbonise the transport sector, including driving investment to increase the production of renewable biofuels, utilising feedstocks grown on degraded land, and, working nationally, implementing consistent fuel standards.

9

**Recommendation 9**

The NSW Government develop policies and programs, including through government procurement, that incentivise and support decarbonisation of the built environment. In particular, the government can commit to net-zero and carbon positive buildings and infrastructure to drive the next wave.

10

**Recommendation 10**

NSW Government consider building on its policies and programs to create a shared vision across the public and private sectors to harness opportunities and reduce the risk of a fragmented approach as we transition to a circular economy such as social, economic, and environmental objectives, supporting local production, and optimising resource use.



03

**KPMG Insights**

# KPMG Insights

## Adoption of environmental, social and governance (ESG) strategies

KPMG considers that for the NSW Government to sharpen industry's domestic and international competitive edge, it needs to take advantage of the opportunities in supporting businesses to develop and deliver ESG strategies. This is particularly significant in terms of climate change and gender equity.

The global commercial landscape is changing dramatically. Escalating geopolitical tensions are making it harder for companies to navigate and adapt to an increasingly complex international market. This strategic competition is also playing out in the ESG space, with major markets such as the United States (US) and European Union (EU) raising ESG standards in the way they implement trade and investment rules. This serves several purposes, including tackling global environmental challenges and social inequality, while strengthening their industries' commercial competitive advantage. Thus, in this rapidly changing geopolitical context, KPMG considers that ESG credentials are essential requirements for industries that seek to maintain access to major global markets, and to sources of capital.

Public and private organisations that transform their business models over the next decade, and put ESG front and centre of their operations and culture, will reap the rewards and have the best chance of navigating these volatile economic and geopolitical forces. Organisational stances on key ESG issues, particularly climate change, and gender equity and diversity, will also be vital to attracting and retaining top talent.

With industry taking greater strides in this direction, it is up to government to walk alongside and support this leadership group. This includes transitioning to renewable energy, providing credible carbon offset opportunities and driving gender equity and diversity. Governments can provide the enabling environment through regulation, incentives and leading within the public service itself.

KPMG's new report and survey "30 Voices on 2030: The ESG Revolution" finds that collaboration between industries, all levels of government and communities is critical if Australian organisations are going to meet ESG targets.<sup>1</sup> Almost 60 per cent of global CEOs state they are experiencing an increasing demand for ESG reporting and transparency.<sup>2</sup> At the 2021 Bloomberg Data and Tech Summit, 81 per cent of respondents reported that their firms had experienced increased demand for ESG data over the 2020-2021 period.<sup>3</sup> Demand for ESG data is also growing among individual consumers and employees, who seek information on corporate, social and environmental activities.<sup>4</sup> 65 per cent of international dealmakers report that ESG is a key consideration when making investments and in mergers and acquisitions (M&A) decisions.<sup>5</sup>

In KPMG's view, a combination of regulatory push at the federal and state levels mandating ESG disclosures, and pull from a range of international and domestic public and private actors will increase the stakes in ESG action or inaction. This includes mandates across the EU and US as well the United Nations (UN) Sustainable Development Goals (SDGs). As such, while there are many ESG related issues that the NSW Government could assist to address, this submission has focused on climate change and gender equity.

International organisations such as the Task Force on Climate-related Financial Disclosures (TCFD), the UN, International Sustainability Standards Board (ISSB) and the World Economic Forum (WEF) are all aiming to standardise international disclosure requirements. Additionally, in recognition of the financial risks of losing the natural environment, the Taskforce on Nature-related Financial Disclosures (TNFD) is developing a risk management and disclosure framework for organisations to report and act on nature-related risks.

1 <https://home.kpmg/au/en/home/insights/2022/06/30-voices-esg-australia.html#fullreport>

2 KPMG Australia, KPMG Australia CEO Outlook: Plugged-in people-first, purpose-led, 2021.

3 Bloomberg, How ESG Data is Going Mainstream, July 2021.

4 Harvard Business Review, An ESG Reckoning Is Coming, March 2021.

5 Smart Company, How poor ESG performance can stop a merger or acquisition in its tracks, June 2021.

The EU is one of the drivers for a standardised process, with Taxonomy Regulation outlining a classification that systematises which economic activities are environmentally sustainable.

The EU's Carbon Border Adjustment Mechanism (CBAM) will put a carbon price on specified imports and is a key policy in the EU's journey to carbon neutrality by 2050. This will have significant commercial implications for organisations that will have to purchase carbon certificates to demonstrate that the cost of carbon pricing has already been incurred.<sup>6</sup> While the CBAM may not affect large numbers of Australian companies, it demonstrates a growing global trend where organisations will need to adopt ESG strategies to remain globally competitive.

New ESG trade policy measures adopted in the United States also represent challenges and opportunities for NSW organisations. The Lacey Act (1990, with revisions in 2008) requires extensive due diligence be performed on imports of timber and plant products, while the Uyghur Forced Labor Prevention Act (2021) bans goods produced "wholly or in part" in the Xinjiang Uyghur Autonomous Region (XUAR). The XUAR is a major link in textile value chains, producing more than 20 per cent of the world's cotton.

KPMG expects that the demand for transparent and proven ESG policies and practices will lead to the introduction of mandatory ESG ratings and certification processes.<sup>7</sup> It would be prudent for the NSW Government to lead on these issues now to ensure industry policies support and underpin ESG strategies.

KPMG believes that NSW Government support for companies seeking to achieve their ESG objectives could facilitate a faster and less burdensome transition while increasing innovation, productivity and hence domestic and international competitiveness. This could include implementing programs like those in Victoria,<sup>8</sup> and adopting more ambitious targets to reaching net zero within the public service – akin to the Federal Government's commitment to net zero carbon emissions across the public service by 2030.<sup>9</sup>

#### **Recommendation 1:**

NSW Government dedicate resources to ensuring that a detailed and up-to-date understanding of the changing geopolitical landscape is a central element of its industry ESG strategy for the future, including by monitoring international trade policy and rules development affecting NSW's exports.

#### **Recommendation 2:**

NSW Government embed ESG into every facet of government operations, including government procurement and departmental operations and financial reporting.

#### **Recommendation 3:**

NSW Government develop sustainable development and environmental policies and programs, similar to, for example, those in other Australian states, from which industries will be able to benefit and utilise for their ESG strategies.

6 Australian Institute of International Affairs, EU Carbon Border Adjustment Mechanism Compliance With WTO Rules, August 2021.

7 See for example, *Confusion to Clarity: A plan for mandatory TCFD-aligned disclosure in Australia*, June 2021

8 <https://breakthroughvictoria.com/>

9 <https://www.alp.org.au/policies/powering-australia> and <https://keystone-alp.s3-ap-southeast-2.amazonaws.com/prod/61a9693a3f3c53001f975017-PoweringAustralia.pdf> (noting exceptions for Defence and other national security agencies).

---

## Gender equity in the workforce

---

KPMG has seen within its own workforce that ESG strategies are increasingly becoming a key motivator of employees seeking to join and stay in a company or industry. As competition for a highly skilled workforce intensifies, company and government efforts to progress workforce gender equity are becoming ever more important. In particular, attracting and retaining a skilled workforce of women in a manner that addresses systemic and ingrained economic and social inequalities is both demanded and expected from women and, increasingly, men. It is also being requested, and increasingly expected, by investors who want to see gender diversity at the senior executive and board levels across all industries.

As the pressures for workplace gender equity increases so, too, matures the conceptualisation of what these initiatives must look like and who they must support and benefit. Shifting away from the term 'gender equality', there is a push to instead strive for 'gender equity'. While gender equality is often framed as offering all people with the same opportunities regardless of gender, gender equity instead seeks to acknowledge the gendered barriers inherent in societal and workplace structures, and then correct them.<sup>8</sup> Similarly, gender equity no longer only refers to men and women, but to people of all genders, including trans and gender diverse people.

The continued focus of women's participation in the workforce is imperative as it was calculated by the [World Economic Forum in 2020](#) that gender parity would not be attained for 99.5 years. This means we cannot lose focus on improving the economic participation and opportunity for women, but it also means we cannot wait to look at diversity beyond gender. In striving for workplace equity, government and business must also consider the broader diversity of people's identities and lived experiences; this is often referred to as taking an intersectional<sup>10</sup> lens and allows for the consideration of the way people's social identities can overlap and inform how they experience inequality.

This includes creating workforces that are inclusive, and supportive of Indigenous Australians, LGBTIQ+ people, people from culturally- and linguistically- diverse backgrounds, and people with disabilities. It is important to incorporate intersectionality into any workplace equity initiatives, in order to effectively address barriers preventing the workforce participation of people from all backgrounds.

In practice, this attention means that efforts, such as attracting and retaining a skilled workforce in a manner that addresses systemic and ingrained economic and social inequalities, are both demanded and expected from women and, increasingly, from the entire community.

In short, KPMG considers that gender equity expectations are becoming entrenched across society and in the workplace. Larger workplaces, in both the government and private sectors, should strengthen their leadership and set the standard for all. If not, the expected standard may, in any case, be imposed on them: firstly, from workers themselves; and secondly, from ethical investors who already look at the climate and gender equity credentials of companies. Another notable trend is that ethical investors also look to the integrity of supply chains from a modern slavery perspective, something that is now a legislated obligation under the Modern Slavery Act. KPMG sees that such ethical requirements are now extending to workplace gender equity practices and policies.

KPMG considers that government and business need to actively shift expectations and perceptions so that women's workforce participation, in particular, is accepted as vital to economic growth and stability. This will ensure that taking parental leave, for example, is not seen as career limiting for caregivers. Caregivers will increasingly demand better childcare support and early childhood education, so they are enabled to participate in the workforce to their chosen level.

---

10

See [Kimberlé Crenshaw on What Intersectionality Means Today | Time & Kimberlé Crenshaw on Intersectionality, More than Two Decades Later | Columbia Law School](#)

It should also play an increasingly important part in workplace considerations, such as if caregivers are being disadvantaged by post-covid expectations to return to the office, or if working from home leads to caregivers becoming both 'invisible' in the workplace and still taking on more home duties.

Likewise, government and business will need to be more proactive in supporting and encouraging women-run business, in order to take full advantage of the largely untapped economic growth and increased productivity potential of women entrepreneurs and women-run business.

In this context, KPMG welcomes the NSW Government's recent 2022-23 Budget and Women's Opportunity statement, particularly enhancements to childcare, early childhood education, paid parental leave and support to women entrepreneurs through access to venture capital. These are excellent steps that should have positive impacts that can be measured and promoted to ensure ongoing economic and social progress. They also provide ongoing signals to the business community that societal expectations are indeed rising, and that government and business should be in lock-step in driving positive change.

**Recommendation 4**

NSW Government consider how to continue to increase and support women's participation and gender equity in the workforce, including bringing an intersectional lens to workplace inclusion, diversity and equity strategies and drawing from the NSW Treasury's review into Women's Economic Opportunities.

---

## The generation and use of clean energy

---

The NSW Government is a leader in Australia's energy transition. KPMG sees the transition to a low-carbon future as an opportunity rather than a threat. Undeniably, it is inevitable.

NSW can be a manufacturing powerhouse, utilising clean energy sources such as solar, wind, pumped hydro and hydrogen. The NSW Government is providing considerable financial and regulatory support through its Electricity Infrastructure Roadmap to building out and securing the state's grid. There is now an opportunity to work with the Commonwealth to extend and deepen this through linking these initiatives with the newly elected Federal Government's Rewiring the Nation initiative. This provides a once in a generation opportunity in the heart of the National Electricity Market to modernise the electricity transmission system to bring renewable energy into the vicinity of existing Hunter valley coal-fired power stations. From there, the existing transmission system, as augmented under the NSW Government's upgrading plan, will be able to transport electricity to major population centres.

Firming capacity for renewables could be provided by a combination of pumped hydro from new distributed developments and Snowy 2.0, a large expansion in batteries, and backup from gas peaking generators. Increased demand flexibility also has a clear role.

Hydrogen hubs have a role to play in providing new zero carbon options for chemicals, heat processes, heavy transport, while also playing a balancing role in the electricity grid.

These new energy sources and innovations could sustain decarbonised operations at the Tomago aluminium smelter and other existing manufacturing facilities in the Hunter Valley and beyond. They could also attract new mineral processing projects and manufacturing activities to the Hunter region. Possibilities include the processing of lithium and nickel and the manufacture of electric vehicles, and components for the hydrogen supply chain.

NSW incentives for clean energy technology will be complemented by signals as the Federal Government implements its policy to tighten the Safeguard Mechanism. As the affected industries seek to reduce their emissions, the NSW Government's commitment to decarbonisation will increase the state's attractiveness for these operations.

### Recommendation 5

NSW Government lead the way on transparently reporting against all state government targets from net zero to renewable energy. This could include aligning policies, practices and regulations to the United Nations Sustainable Development Goals and reporting on the government's performance.

### Recommendation 6

NSW Government provide additional incentives to attract businesses and industries that contribute to the green economy. These could include metrics that these companies report against to satisfy the 'green criteria' and access this funding and/or incentives.

## The creation of carbon offsets

Following a review to ensure the integrity of Australian Carbon Credit Units (ACCUs), KPMG expects the carbon market to gather significant momentum as businesses draw on carbon offsets to help meet their commitments under Australia's domestic Safeguard Mechanism. While businesses affected by the Safeguard Mechanism will prioritise the reduction and abatement of emissions, offsets will be needed for those emissions that are very difficult to reduce or abate.

Furthermore, businesses that are not subject to the Safeguard Mechanism will seek to reduce their emissions in accordance with their ESG obligations. Numerous businesses committed to achieving net-zero emissions by or before 2050 in the lead-up to COP26 at Glasgow last year. Industry associations including the Business Council of Australia (BCA), Australian Industry Group (AiG), the Australian Meat and Livestock Corporation and the National Farmers Federation have committed to zero net emissions.

In this context, the creation of ACCUs can be an increasing source of income for landholders in rural NSW. The Clean Energy Regulator has initiated the development of a Carbon Exchange which will increase liquidity and accelerate development of this market.<sup>11</sup> Proposals are being evaluated and it is anticipated that the Carbon Exchange will be launched some time in 2023. KPMG believes that NSW is well placed to take advantage of this rapidly evolving market by working to create ACCUs through activities such as carbon farming, revegetation of cleared land and mangrove rehabilitation.<sup>12</sup>

The Clean Energy Regulator has indicated its expectation that the Carbon Exchange will differentiate ACCUs by class, with premiums for ACCUs that also increase biodiversity and/or achieve social objectives such as the benefits to remote indigenous communities from the income generated from ACCUs from early-season savanna burning.

Further, natural capital should not only be thought of as something for regional areas. Improving natural capital within our urban environments is also an imperative. This should take place at planning stage. Placing a real value on natural capital within our urban environments can have many benefits. These include positive contributions to amenity and mental health – a significant burden on the health system, improved recovery rates in hospitals, addressing heat island effect, creating wildlife corridors, improved energy efficiency of buildings, reducing stormwater pollution and addressing air pollutants such as aromatic hydrocarbons (unburnt BTEX from vehicles are class 1 carcinogens and are not filtered out by filters in air conditioning systems) to name a few.

The NSW Government has made significant headway in its recent Primary Industries Productivity Abatement Program in signalling its intent to see land based carbon sequestration play a significant role in achieving the states emissions reduction commitments. The recent Carbon Market Scorecard Report,<sup>13</sup> produced by the Carbon Market Institute, with KPMG as a research partner, outlines a clear agenda for achieving further contributions from this important sector. This process of continual improvements becomes even more important in light of the significant demand likely to occur through the new developments with the Federal Government Safeguard Mechanism.

### Recommendation 7

NSW Government investigate building on existing<sup>14</sup> and developing new initiatives to encourage the creation of ACCUs, including for rural landholders, and building natural capital in rural and urban areas.

11 <http://www.cleanenergyregulator.gov.au/Infohub/Markets/australian-carbon-exchange>

12 See KPMG's report on the potential to create ACCUs: <https://assets.kpmg/content/dam/kpmg/au/pdf/2021/carbon-credits-australias-next-big-sunrise-industry.pdf>

13 <https://carbonmarketinstitute.org/app/uploads/2022/04/Carbon-Farming-Scorecard-Report.pdf>

14 Such as [Home | BCT \(nsw.gov.au\)](https://www.home.gov.au/bct)



## Decarbonising the transport sector

The transport sector heavily relies upon the use of fossil fuels, not only during the construction of the infrastructure but also during the operational lifecycle of the assets. In addition, many of the vehicles (both road and rail) that use these systems are also reliant on fossil fuels. Whether this is from fuels burnt in the vehicles themselves or the electricity used to operate them (such as trains), the alternatives are few and far between. Decarbonisation should avoid coming at the cost of other environmental or social issues and occur, wherever possible, in tandem with them.

KPMG considers that a balanced and measured approach should be taken to ensure that the outcomes are equitable across all material issues and Australians are provided with just and resilient solutions for the transport sector. Many recommendations and opportunities are highlighted in the recently released report *The journey to net-zero – Inspiring climate action in the Australian Transport Sector* commissioned in partnership by Roads Australia (RA), Australasian Railways Association (ARA) and Infrastructure Sustainability Council (ISC) authored and sponsored by KPMG with additional sponsorship from Arup.<sup>15</sup> These recommendations go far and wide, however a key recommendation that the NSW Government could support is outlined as follows.

Whilst NSW is a leader in decarbonising certain transport sectors such as the passenger train service, with Sydney trains already operating on 100 per cent renewable energy, the regions for example, rely heavily on diesel. KPMG believes that rapid decarbonisation of the sector is required if we are to meet our obligations of net-zero by 2050. However, deployment of the infrastructure for Electric Vehicles (EVs) charging or hydrogen fuel cell vehicles (HFCEV) is underway, albeit a long way off, underway, while transitioning whole vehicle fleets including heavy haul vehicles, freight and prime movers will take time. The deployment of infrastructure plus the replacement of fleets is likely to take 15 years plus and we need a solution now. A practical, cost-effective solution is required to bridge this gap.

KPMG believes that this presents a huge opportunity for the NSW Government to incentivise a solution that will tackle several issues and rapidly assist the state to decarbonise.

For example, the NSW Government could create several policies, and drive investment to increase the production of renewable biofuels, utilising feedstocks grown on degraded land. KPMG considers that Australia has sufficient feedstock – without using arable land – to replace all mineral diesel and secure stability for fuel supplies into the future. This renewable diesel can be run in conventional engines and transported/stored in conventional infrastructure.

This solution counters climate change in several ways. By improving and greening degraded land, biodiversity is enhanced, soil carbon content is increased, thereby sequestering carbon, not only in the soil but also in the plants grown. The feedstocks provide a renewable solution to replace mineral diesel which can be used in current infrastructure across the country. This approach can complement existing government efforts to deploy EV and HFCEV infrastructure while benefiting businesses by removing the need to replace their fleets in a short time frame. At a regulatory level, consistent fuel standards across state borders would need to be determined.

KPMG believes that this proposal also provides a practical workable interim solution to decarbonise the construction industry (which invariably runs off diesel) as well as the transport sector while solutions such as battery electric and Hydrogen fuel cell (HFCEV) are being deployed across the whole fleet and the necessary infrastructure is built to serve them.

Once established, this approach would assist in rapid decarbonisation of the built environment including the transport sectors enabled emissions and the plant and equipment used to construct the buildings and infrastructure. Moreover, this solution presents a real, practical, and large-scale Circular Economy solution to a wicked problem for Australia, which would also create new jobs and stimulate economic growth in regional areas of NSW.

### Recommendation 8

NSW Government complement its existing electric vehicle strategy with additional solutions to rapidly decarbonise the transport sector, including driving investment to increase the production of renewable biofuels, utilising feedstocks grown on degraded land, and, working nationally, implementing consistent fuel standards.

15

<https://roads.org.au/new-report-to-drive-action-on-transport-journey-to-net-zero/#more-14138>



## Decarbonising the built environment

Transforming our built environment to achieve net zero is one of the most significant challenges that we face. Simultaneously, it is also an opportunity to stop and rethink our approach to improve the impact that the sector has on society, the environment, our culture, and our climate.

KPMG suggests several opportunities for the NSW Government to consider, including:

- the role of renewable biofuel/diesel for the construction of new assets, especially outside urban areas (as outlined previously);
- integrating methods and approaches to assess buildings across a variety of material issues and infrastructure early in the project lifecycle;
- the electrification of buildings – the Green Building Council of Australia (GBCA) is now promoting 100 per cent electric buildings and moving away entirely from gas;
- moving beyond GBCA's net-zero buildings to carbon positive buildings that direct energy back to the grid;
- regulated design principles that ensure our urban environments and infrastructure are built with climate change and resilience in mind; and
- the role of natural capital in increasing biodiversity and carbon sequestration both in regional areas and in our urban spaces.

As government did in the early 2000's by mandating government agencies lease spaces in NABERS and Green Star rated buildings, now is the chance to increase this support for established green rating systems across all agency bodies.

Government can commit to net-zero and carbon positive buildings and infrastructure to drive the next wave.

Due to the significant spending power of government, policies and investment that drive the uptake of sustainable materials should also be considered. These policies, procurement strategies and targets to drive the uptake of sustainable materials in development can improve the assets coming to market and stimulate manufacturing in NSW.

Investment in this area for construction can provide support and assistance to businesses that are focused on new cleaner materials, low carbon products and the use of rapidly renewable solutions required for the transition to a low carbon economy.

### Recommendation 9

NSW Government develop policies and programs, including through government procurement, that incentivise and support decarbonisation of the built environment. In particular, the government can commit to net-zero and carbon positive buildings and infrastructure to drive the next wave.

## The transition to a circular economy

KPMG notes that our current linear ‘take-make-waste’ economy is leading to resource scarcity, supply challenges and price volatility that is unsustainable, especially when factoring in the expected population growth in years to come.

A solution to these challenges is to adopt a circular economy. A circular economy is one that is restorative by design, where value and economic growth is decoupled from the consumption of virgin resources, thus extending the lifespan of goods, and reducing our reliance on scarce resources.

Enablers of a circular economy such as circular design, new resource management methods and business models, will all be supported through collaboration between government, industry, and research institutions to best leverage NSW’s diverse thinking and create meaningful change. For further clarity, this means:

- **Circular design** ensures that circular principles are applied when we design goods, products, services, and systems. This ensures that maximum resource value is captured, and that waste is designed out of systems from the outset.
- **New resource management methods** are required to baseline, measure, and communicate material flow, which is important to plan and execute the transition to circular models.
- **New business models** are necessary to create the industrial symbiosis that is required to achieve a true circular economy. An example of this is circular marketplaces, where materials are sold for re-use rather than being disposed of.

KPMG notes that the NSW Government is already very active in this space and there is great potential to lead, alongside industry, in this space. KPMG has supported the creation of the Regional Circularity Co-operative, a consortium of organisations that are delivering circularity initiatives across the Bega Valley region. The project’s ambition is to build the most circular region in Australia and lay out a model for the rest of Australia and the world to follow. Other recent examples of KPMG’s work in circularity across NSW include working with industry partners and universities to investigate the development of a material flow analysis solution for both research and operational use, and the delivery of a Smart Water Management and Biodiversity Solution Proof-of-Concept

in rural NSW which tested multiple use cases to help landholders manage resources using more circular and sustainable methods.

KPMG suggests that NSW Government policy should strive to maximise the circular opportunity by minimising comparative material usage, maximising resource use by keeping resources circling in value chains for longer, diversifying resource use and protecting the integrity of resources to increase their productive value.

KPMG recognises that no one organisation or industry can go circular alone. If we are to achieve a circular economy, we must standardise and regulate the steps that we need to take to get there, and allow NSW to benefit from the social, economic, and environmental prosperity that the circular economy offers. As this submission highlights, the future presents many challenges relating to decarbonisation and our transition to a circular economy. However, out of adversity comes opportunity. Creative and critical thinking can provide solutions to these challenges, and the NSW government is well placed to benefit from the subsequent opportunities they present.

NSW Government could focus their attention on building capacity and education around systems thinking. Taking a systems-level approach, integrating methods and strategies to assess these challenges (including gender equity, climate change, biodiversity and habitat loss, transport, built environment etc.) across a variety of material ESG issues, will ensure adverse outcomes are minimised.

As an example, in the infrastructure space this would include the use of whole of life assessments, shadow carbon pricing and including other material issues to ensure comparison of options during early business case stage results in a balanced outcome that is not driven solely by capital cost.

### Recommendation 10

NSW Government consider building on its policies and programs to create a shared vision across the public and private sectors to harness opportunities and reduce the risk of a fragmented approach as we transition to a circular economy such as social, economic, and environmental objectives, supporting local production, and optimising resource use.

# 04

## Key Authors

[Contents](#)[Executive summary](#)[Recommendations](#)[Key Insights](#)[Key Authors](#)

## Key authors and contacts

**JAMES MABBOTT**

Partner in Charge,  
KPMG Futures

**JENNIFER DOHERTY**

Director, NSW Government Business  
Development, Business Services

**MERRIDEN VARRALL**

Director,  
Australia Geopolitics Hub

**CURTIS DAVIES**

Partner,  
NSW Government Lead

**JANINA HARPER**

Director,  
Management Consulting

**JON BERRY**

Associate Director,  
Australia Geopolitics Hub

**DANIELLE WOOLEY**

Partner,  
Management Consulting

**ALISTAIR COULSTOCK**

Director,  
Climate Change and Sustainability

**PETER KOMOCKI**

Associate Director,  
Corporate Affairs

**ADRIAN KING**

Partner in Charge,  
Climate Change and Sustainability

**BRIONY FLAUS**

Manager,  
Management Consulting

**OLIVIA SPURIO**

Senior Consultant,  
Corporate Affairs

**DUNCAN STEVENS**

Partner,  
Climate Change and Sustainability

**SARAH COX**

Inclusion Manager,  
Business Services

**BARRY STERLAND**

Partner, Energy Transition Leader,  
Management Consulting

**DANA THROSSELL**

Consultant,  
Management Consulting

**KPMG.com.au**

The information contained in this document is of a general nature and is not intended to address the objectives, financial situation or needs of any particular individual or entity. It is provided for information purposes only and does not constitute, nor should it be regarded in any manner whatsoever, as advice and is not intended to influence a person in making a decision, including, if applicable, in relation to any financial product or an interest in a financial product. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

To the extent permissible by law, KPMG and its associated entities shall not be liable for any errors, omissions, defects or misrepresentations in the information or for any loss or damage suffered by persons who use or rely on such information (including for reasons of negligence, negligent misstatement or otherwise).

©2022 KPMG, an Australian partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

Liability limited by a scheme approved under Professional Standards Legislation.

July 2022. 921921243ESG