Journal of Circular Economy (2026) 4:1, 584-602
https://doi.org/10.55845/joce-2026-41290

RESEARCH ARTICLE

Context-Dependent Implementation of Circular Economy: The Case of Australia

Jacqueline Cramer[1*], and Usha Iyer Raniga[2]

Received: 5 February 2026 / Accepted: 28 February 2026 / Published: 27 March 2026

Abstract

As the circular economy entails system-wide transformation, no single actor can deliver this change alone. Integrating public governance with network governance is therefore expected to enhance implementation effectiveness. This paper adopts a dual governance perspective, drawing on insights from transition management and public administration. Empirical evidence on the effectiveness of this governance model within a specific national context remains lacking. This study examines the context-dependent implementation of CE in Australia, with a focus on the textiles and building sectors. A mixed-methods approach was employed, including a literature review, workshops and interviews, engaging approximately 2,000 stakeholders over a three-year period. The findings indicate that while the national-level analysis provides a general overview of CE governance, greater insight emerges at the sectoral level, where implementation occurs in practice. The analytical framework used to investigate dual governance across levels proved comprehensive for the purposes of this study. This understanding can also assist practitioners.

Keywords Public Governance · Network Governance · Circular Economy · Country-Specific Context · Australia · Textiles Sector · Building Sector

1. Introduction

A widely advocated response to contemporary global environmental challenges is the transition towards a circular economy (CE) (Ellen MacArthur Foundation, 2013). Moving from a linear to a CE model constitutes a profound systemic transformation (Ritzén & Ölundh Sandström, 2017), requiring greater resource efficiency and more responsible production and consumption practices (International Resource Panel, 2019). A recently published ISO standard defines CE as "an economic system that uses a systemic approach to maintain a circular flow of resources, by recovering, retaining, or adding to their value, while contributing to sustainable development" (ISO 59004, 2024). This definition is adopted here as a concise synthesis of the diverse conceptualisations of CE in the literature, which range from narrow environmental interpretations to broader approaches incorporating socio-economic dimensions (Kirchherr et al., 2017).

CE gained increasing policy attention from the 1990s onwards, particularly in Europe, Japan and China (Mazur-Wierzbicka, 2021; Ogunmakinde, 2019; Su et al., 2013). Over the 21st century, other countries followed, including Taiwan and South Korea, which embedded the CE in national policy in 2016 and 2020, respectively. Today, many governments have adopted policies to support the transition towards a CE (Kumar Ghosh, 2020; Van Hoof and Aguilar-Hernandez, 2025; Zhang et al., 2025).

* Corresponding Author: j.m.cramer@uu.nl
[1] Faculty of Geosciences, Utrecht University, Vening Meinesz Building A, Princetonlaan 8a, 3584 CB Utrecht, The Netherlands
[2] School of Property, Construction and Project Management, RMIT University, GPO Box 2476, Melbourne VIC 3001Australia

Nevertheless, research indicates that shifting away from a linear economic model is challenging. A key difficulty for governments lies in developing coherent, consistent and stable policy frameworks, including sector- and region-specific measures (Zhang et al., 2025). While CE transitions are inherently long-term, political instability and electoral cycles often lead governments to prioritise short-term objectives (Van Hoof and Aguilar-Hernandez, 2025). Although governments play a central role in enabling CE, implementation depends on the involvement of a broader range of actors (Halog & Anieke, 2021; Köhler et al., 2019; Ogunmakinde, 2019). As CE entails system-wide transformation, no single actor—public or private—can deliver this change alone (Cramer, 2020a; Ghisellini et al., 2016). The circular ecosystem with close collaboration between diverse actors is critical to the sector's CE transition success (Evertsen & Knotten, 2024.).

To address the limitations of top-down public governance, scholars increasingly advocate complementary network-oriented approaches that mobilise bottom-up initiatives by businesses, citizens and other societal actors (Cameron et al., 2023). By combining public governance with a formal governance through networks (here called network governance), CE implementation is expected to become more effective (Cramer, 2020). This paper builds on the dual governance perspective, drawing on insights from transition management and public administration.

Research has shown that dual governance arrangements cannot be applied uniformly across countries, as socio-economic, cultural and political contexts vary considerably (Cramer, 2022). Emerging economies, for example, face challenges related to resource constraints, policy capacity and consumer behaviour that differ markedly from those of developed economies (Patwa et al., 2021). Waste management systems also differ, with informal collection and recycling playing a central role in many developing countries, while formal public or private systems dominate in developed contexts (Kalmykova et al., 2017). Consequently, CE governance is highly context-dependent, yet the implications of these place-based differences for effective CE implementation remain underexplored (Ddiba et al., 2020; Kalmykova et al., 2018; Zhang et al., 2025).

This paper addresses this knowledge gap by examining the state of the art of CE implementation in Australia and exploring pathways to enhance its potential within the country's specific socio-economic, cultural and political context (Iyer-Raniga & Cramer, 2026). Recognising that CE governance is both place-based and sector-specific, the study analyses two sectors: clothing/textiles and building/construction (hereafter referred to as the textiles and building sectors).

The paper is structured as follows. First, the theoretical foundations are outlined, drawing on transition management and public administration literature, and used to develop the analytical framework. The methods section then explains the sector selection and data sources, including a literature study, 21 one-to-one interviews, individual and small-group discussions, structured sector-oriented workshops and a large series of other participatory, action-oriented events across the country, involving in total approximately 2000 people. The results section analyses Australia's placed-based and sector-specific governance dynamics. Finally, the findings are discussed in relation to the research question, followed by conclusions and recommendations for future research.

2. Theoretical framing

Transition management constitutes the first theoretical perspective adopted in this paper. It is a well-established governance approach that emphasises long-term thinking, systems perspectives and multi-actor involvement, with learning processes at its core (Loorbach, 2007). As Carlsson and Sandström (2008) note, many societal challenges—particularly those related to sustainability—are too complex to be addressed through formal government problem-solving structures alone. Transition management therefore foregrounds the role of actors and agency in sustainability transitions (Fischer & Newig, 2016), as well as the influence of power dynamics within multi-actor networks (Farla et al., 2012; Jakob et al., 2020).

Given that firms and citizens are often reluctant to undertake substantial change, niche actors play a critical role in initiating experimentation and enabling innovation (Köhler et al., 2019; Meadowcroft, 2009; Pollitt et al., 2007). Such experiments should not be understood as isolated initiatives, but as interventions within broader multi-actor transformation processes (Germes et al., 2025; Ghosh et al., 2021). These frontrunners develop novel ideas and business models that can subsequently diffuse to wider actor groups when their

strategies are adopted by a growing number of stakeholders and receive targeted policy support (Cramer, 2023; Provensi & Sehnem, 2025).

Public administration scholarship similarly recognises that governments are no longer the sole actors capable of addressing complex societal challenges (Klijn & Koppenjan, 2016; Lange et al., 2013). While governance was traditionally associated with formal state institutions (Hill & Lynn, 2005), it has evolved into a shared responsibility among the state, market and civil society. This shift does not signal the erosion of government authority, but rather the coexistence and interaction of multiple governance modes (Driessen et al., 2012). These complementary modes of governance are commonly conceptualised in public administration scholarship as network governance (Klijn & Koppenjan, 2016).

Drawing on insights from transition management, this paper conceptualises network governance as the deliberate, bottom-up efforts of coalitions of willing stakeholders who recognise the urgency of transformational change and share a commitment to collaboration in pursuing that change. As frontrunners, these coalitions take innovative steps forward, mobilise an expanding group of followers, and advise government on how their initiatives can be scaled up. By engaging with such coalitions of the willing, governments can more effectively align policy actions with the requirements for achieving system-wide change over time (Cramer, 2020a). Given the complexity of transition processes, independent intermediaries—referred to as transition brokers—may be engaged to help orchestrate change in ways that overcome differences and support alignment among stakeholders, thereby accelerating progress. Transition brokers can also facilitate alignment between the network's governance practices and those employed by federal and state governments (Cramer, 2020b).

Growing attention to network governance has often been linked to liberal democratic processes to include a wider range of actors (Bogason & Musso, 2006). However, evidence suggests that network governance is also relevant in more authoritarian or hybrid political systems. Studies of Russian governance demonstrate that even where civil society actors are relatively weak, the state remains dependent on interactive arrangements with non-state actors (Davies et al., 2016). Similar conclusions have been drawn in relation to China, where non-state actors and networks play an increasingly important role in governing complex issues such as climate change (Lo et al., 2018). These findings align with broader claims that new forms of governance constitute a global trend (Koppenjan & Koliba, 2013; Osborne, 2010; Pierre, 2000), albeit one that evolves differently across societal contexts (Cramer, 2022; Pollitt & Bouckaert, 2004).

Despite advances in transition management and public administration research, empirical evidence on the effectiveness of new governance models across diverse socio-economic, cultural and political contexts remains lacking (Ddiba et al., 2020; Jones, 2020; Zhang et al., 2025). This paper seeks to contribute to this gap by building on Cramer's (2022) first explorative, comparative study of 16 countries, including Australia. That study identified four key dimensions influencing the effectiveness of circular economy (CE) governance:

- Strength of governmental leadership on CE, capturing long-term commitment and proactive policy action.
- Involvement of relevant actors, particularly industry, in CE initiatives.
- Receptivity to network governance, referring to the openness of a country to network governance.
- Additional drivers of CE governance, including contextual incentives and enabling conditions linked to public or network governance.

Governmental leadership was assessed through an analysis of relevant policy documents and interviews with key stakeholders. Interviewees also provided data on actor involvement and additional enabling factors. To identify factors influencing countries' receptivity to network governance, Cramer (2022) drew on Hofstede (2007) and Schneider & Barsoux (2003) regarding cultural differences in management and political culture. Of the seven dimensions examined, two socio-cultural and political factors were particularly salient: autocratic versus pluralistic government, and antagonistic versus consensus-oriented societies, especially the degree of cooperation between industry and government. The study found that countries characterised by pluralistic governance and consensus-oriented societies encounter fewer challenges in implementing network governance.

On this basis, Cramer (2022) developed an analytical framework to assess the effectiveness of CE governance across different socio-economic, cultural and political contexts (see Fig. 1).

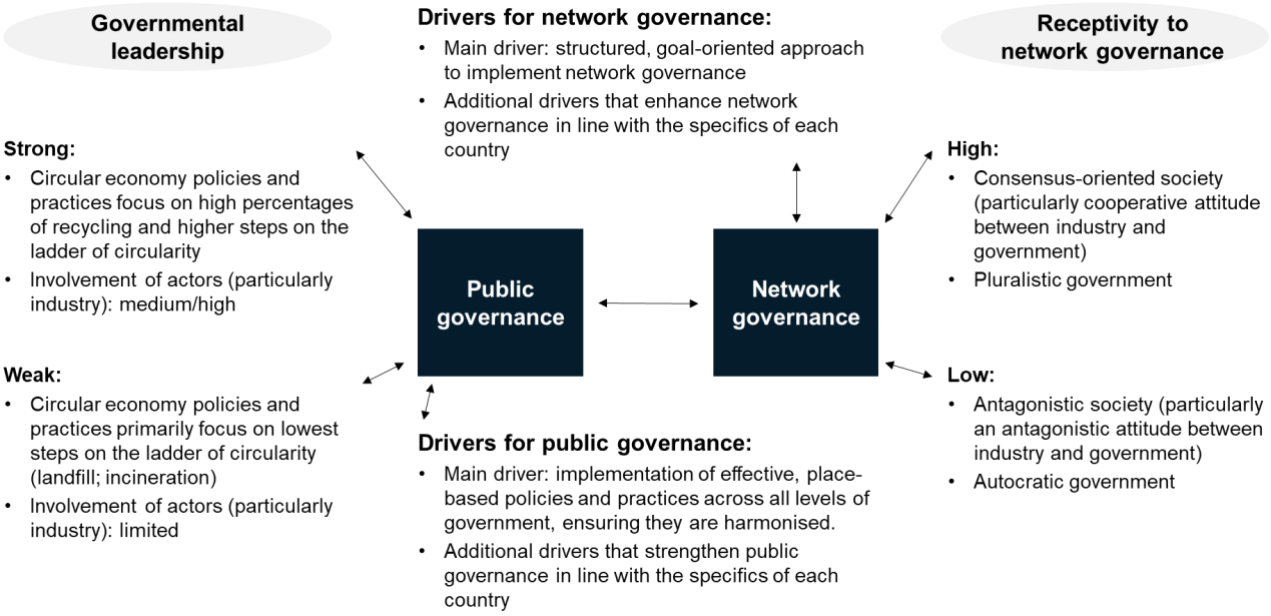

Figure 1. Analytical framework to assess the effectiveness of government leadership and network governance for a CE governance across different socio-economic, cultural and political contexts

The Australian case is examined below using the analytical framework summarised in Figure 1. The main questions addressed are as follows:

1. Does the analytical framework presented in Figure 1 provide sufficient guidance to assess the effectiveness of CE governance in Australia?
2. What do the two sector-specific cases — textiles and building — contribute to the broader insights gained at the national level?
3. What are the theoretical and practical implications of the Australian place-based and sector-specific analysis of dual governance dynamics?

3. Methods

To analyse the effectiveness of circular economy (CE) implementation in Australia, this study first examines place-based CE governance at the national level, before focusing on two sectors: textiles and building. These sectors were selected because they exhibit distinct governance arrangements and stakeholder configurations.

The focus on textiles reflects Australia's particularly high levels of waste generation in this sector (approximately 300 kt annually), its substantial environmental impacts, and the significant potential for CE interventions. Australia is the world's second-largest per capita consumer of clothing after the United States, purchasing an average of 56 new items per person each year. While an estimated 62 per cent of donated clothing is exported for reuse, a considerable share ultimately ends up in landfill overseas (Iyer-Raniga & Cramer, 2026).

The building sector was selected due to the scale of waste it generates—approximately 27 million tonnes annually, representing 44 per cent of total waste in Australia—as well as its substantial contribution to CO_2 emissions, particularly during construction and use phases owing to carbon-intensive materials such as concrete and steel (Ernst and Young Australia, 2021). The sector's economic significance and projected growth further underscore its relevance.

Data on place-based CE governance at the national level were collected across the dimensions outlined in Figure 1, drawing on multiple sources. The study commenced with a research visit conducted between July and August 2022. A large series of participatory, action-oriented lectures (including dialogue sessions), workshops and individual conversations was organised across major cities (Melbourne, Sydney, Canberra and Brisbane), regional areas (Gippsland, Bega Valley and south-west Queensland), and at the federal level (Canberra). Most events were held in person, with some hybrid formats and a small number conducted entirely

online. In total, more than 1,500 participants attended. The events were organised by the authors in collaboration with local partners, including Planet Ark and the Embassy and Consulate of the Kingdom of the Netherlands in Australia. Notes were recorded for all events.

Sector-specific governance challenges in textiles and building were examined primarily through workshops. Structured, sector-specific workshop sessions were used to collectively assess governmental leadership, the potential for network governance, the roles of different actors, and sector-specific drivers of circularity, as illustrated in Figure 1. The workshops also examined the ambition of CE initiatives across the 10R hierarchy of circularity (Cramer, 2017), ranging from refusal and reduction to redesign, reuse, repair, refurbishment, remanufacturing, repurposing, recycling and energy recovery.

To supplement the qualitative data collection, an extensive literature review was undertaken, complemented by 21 one-to-one online interviews conducted between June and October 2024. Most interviewees had attended at least one event in 2022 and were therefore familiar with the concept of CE and network governance. Following the synthesis of the findings (Iyer-Raniga & Cramer, 2026), preliminary conclusions were discussed during a second round of events held from 12 to 30 August 2025. All meetings were formally minuted and informed a modest revision of the final conclusions.

The qualitative data collection process is summarised in the flow chart presented below (see Table 1).

Table 1. Flow Chart of Research Methodology

Activities	Type and number of participants	Data collected	Period of execution
35 lectures, including dialogue sessions	Multi stakeholder engagement (about 1100 people).	General understanding of stakeholder interest in CE and transitioning to CE.	July - August 2022
6 place-based workshops	Multi stakeholder engagement (about 150 people) in Sydney, Melbourne, Brisbane, Canberra, Bega and Gippsland.	The current state of CE in Australia, their respective roles in the transition, the dual form of network - and public governance, and drivers enabling systemic change.	July - August 2022
22 individual conversations	Representatives from all levels of government (including ministers and heads of government), industry, civil society and NGOs across Melbourne, Bega, Canberra, Sydney, and Brisbane.	The current state of CE in Australia, their respective roles in the transition, the dual forms of governance, and drivers and barriers enabling systemic change.	July - August 2022
3 workshops on textiles	Over 100 representatives of the innovative textile sector, the textile peak body and academia in Brisbane, Melbourne and Sydney.	Collective assessment of governmental leadership, the potential for network governance, the roles of different actors, sector-specific drivers of circularity actors, sector-specific drivers of circularity and the ambition of CE initiatives across the 10R hierarchy of circularity.	July - August 2022
6 workshops on circular building and 2 workshops on circular planning of the built environment	About 250 representatives of industry, recycling and materials supply, government departments, peak bodies, property councils, research institutes and NGOs in Brisbane, Melbourne and Sydney.	Collective assessment of governmental leadership, the potential for network governance, the roles of different actors, sector-specific drivers of circularity and the ambition of CE initiatives across the 10R hierarchy of circularity.	July - August 2022
Scholarly and grey literature study		In depth analysis of the general socio-cultural and political context and current state of CE policies in Australia.	February 2023 – December 2024
21 interviews	Representatives of industry (12), state government (5), local government (3) and academia (1).	Challenges in governing the CE transition within Australia's socio-economic, cultural and political context.	June - October 2024

Table 1 (cont.). Flow Chart of Research Methodology

Activities	Type and number of participants	Data collected	Period of execution
Synthesis of the findings	Authors of this study.	Book (Iyer-Raniga & Cramer, 2026).	June 2023- January 2025
Second round of events: 20 small-group or individual meetings and 15 workshop presentations (including dialogue sessions)	About 500 representatives from government at all levels, business and non-governmental organisations, particularly within the textile and building sector.	Testing the preliminary findings, particularly within the textile and building sector This has led to a modest refinement of the final results.	12 - 30 August 2025

4. Results

4.1. Place-based governance at national level

4.1.1. Assessment of the analytical framework To test whether the analytical framework presented in Figure 1 provides sufficient guidance to assess the effectiveness of Australian CE governance, Cramer's comparative study of 16 countries, including Australia, was used as a starting point. The study found that Australia exhibits limited federal government leadership, low engagement from industry and other stakeholders, and weak receptivity to network governance, making the initiation of CE challenging.

The six place-based workshops and 22 individual conversations largely confirmed this conclusion, while also providing additional nuance. Workshop participants suggested that Australian society can be characterised as relatively pluralistic and, at times, antagonistic, reflecting a misalignment between public governance and network governance. There is limited natural alignment between government and industry in pursuing shared objectives. The government typically establishes policy frameworks to which industry often responds with minimal engagement.

Cooperation among industry actors is also limited due to competition law constraints, compounded by a highly competitive business culture and concerns about breaching financial market integrity regulations. Industry partners are often reluctant to shift from an individualistic "what's in it for me?" perspective to a collective systems-change approach. Consequently, participation in joint circular initiatives is rarely regarded as a pre-competitive space in which industry actors can collaborate. Government relationships with NGOs are frequently cooperative, but can also become oppositional or even adversarial. Similarly, NGOs may adopt either collaborative or critical positions towards industry. As a result, the implementation of network governance in Australia can be characterised as moderately to highly challenging.

The 21 interviewees further deepened the insights gained from the workshops. They emphasised that Australia's political environment has historically provided limited support for CE, particularly due to weak regulatory drivers and the perceived costs of transition. As one interviewee stated, "Unless the Commonwealth Government takes charge, Australia will continue to fail". Another commented: "The maturity is quite low in Australia around the use of economic value and in terms of CE, it's a gap". Similarly, one of the interviewees added: "The economics of what we do is fundamentally flawed (…). Redesigning our economic system within our planetary boundaries, while a mammoth task, is fundamental.

Stronger regulation was widely viewed as essential to enabling network governance and incentivising collaboration. However, interviewees noted that forming effective partnerships in the Australian context is difficult, as a strong culture of cooperation is not embedded. There is no natural alignment between government and industry working towards shared objectives. Nevertheless, interviewees from industry and local government highlighted that knowledge sharing through networks and collaborative platforms can provide both evidence and motivation for broader CE adoption. As one participant observed,: "Having a bit more of a consistent approach on how we share knowledge across the states I think would really help". Despite these barriers, the importance of network governance, supported by independent transition brokers was consistently emphasised, echoing insights from the three workshops and events conducted in 2022 and 2025.

4.1.2. Political, socio-economic and cultural context To understand the additional drivers for CE implementation identified in Figure 1, the data collected through the 21 interviews were supplemented by a review of scholarly and grey literature examining the political, socio-economic, and cultural context.

With respect to the political context, federal engagement with the CE agenda has intensified only recently, partly driven the waste management crisis triggered by China's 2018 ban on waste imports ("National Sword"). In response, the Australian Government released the National Waste Policy Action Plan in 2019 (Australian Government, 2019), setting a target of an 80 per cent average resource recovery rate by 2030. A major policy milestone was the publication of Australia's National Circular Economy Framework in late 2024 (DCCEEW, 2024a), which aims to double national circularity by 2035. Key targets include reducing Australia's material footprint—currently the highest among G20 countries at 31 tonnes per capita in 2023—by 10 per cent, and increasing resource recovery from approximately 63 per cent to 80 per cent. These ambitions are significant given that Australians generate almost 76 million tonnes of waste annually, much of which is landfilled (Pickin et al., 2022).

The federal government has identified four priority sectors for CE action: industry, the built environment, food and agriculture, and resources. However, effective implementation will depend on coordination across governance levels, which are not always aligned between the national government, six states and two territories and 537 local governments. Prior to the national framework, several states, cities and firms had already initiated CE-related actions, among others driven by the urgent need to identify alternatives to landfilling, particularly in densely populated areas. Many existing sites are approaching full capacity, while developing new ones is becoming increasingly unfeasible due to the high transport and maintenance costs.

Examples include collaboration between the New South Wales Government and the Hunter Joint Organisation (a group formed by 10 councils collaborating around the transition to CE) and Victoria's support for five Regional Circular Economy Plans following its 2020 CE policy. These plans frequently emphasise behavioural change among industry and consumers, highlighting the centrality of stakeholder engagement. At the local level, initiatives such as those in Bega Valley Shire (Courtney, 2024) and Hume City Council (Hume City Council, 2022) demonstrate the potential of place-based CE strategies to foster innovation and investor confidence.

Further insights were gained regarding the socio-economic and cultural context. Notably, Australia is a high-income country with a relatively small population (approximately 26.5 million) dispersed across a large landmass, Per capita resource consumption is high by international standards. In recent decades, Australia's manufacturing base has largely declined, as offshore production has become more cost-effective. The country's geographic remoteness and low population density further constrain economies of scale in manufacturing and goods distribution (Productivity Commission, 2020; Productivity Commission, 2025). As a result, many consumer goods are imported, and repair is often uneconomic, contributing to high levels of material waste. Consumer awareness of waste challenges and the limited availability of reuse options remains relatively low. As one interviewee observed, "I think that in Australia the maturity is much lower in terms of circular thinking than in Europe, and that is one of the challenges we have with the community. (…) Within Australian culture, we are not programmed to be like that." Consequently, a key challenge lies in aligning CE initiatives with this socio-economic and cultural context.

Interviewees also strongly emphasised the need for meaningful engagement with First Nations Australians. For over 65,000 years, First Nations peoples lived in close harmony with the natural environment, practising mobile and adaptive land management systems that enabled ecological regeneration (Clarkson et al., 2017). European colonisation began in 1788 with the establishment of British penal colonies, later expanding into free-settler societies. These developments significantly transformed the landscape, with sheep and cattle grazing, mining, and manufacturing becoming dominant economic activities. Prior to colonisation, First Nations peoples were custodians of the land. As one interviewee noted, "I firmly believe that Aboriginal people are the first and best CE practitioners we will ever see, and we have much to learn from them."

The place-based analysis, summerised above, made use of the analytical framework presented in the theoretical framing section. The dimensions distinguished in the framework provided sufficient guidance and was complete to get a general picture of the dual governance dynamics in Australia. However, the data gathered were insufficient to assess the effectiveness of CE governance in practice, as the implementation primarily occurs at sector level. Therefore, two sectors (textiles and building) are examined in more detail below, using the analytical framework presented in Figure 1. Each case is examined by subsequently describing the strength of governmental leadership, role of other actors, receptivity to network governance and additional drivers, ending with reflections on promising avenues for a CE transition.

4.2. Pathways for a CE transition in textiles

4.2.1. Strength of governmental leadership

At the federal level, policy instruments targeting circular textiles have been hardly implemented to date, except for the provision of financial support. Some initiatives have emerged at the state level. For example, the Victorian Government supported the Circular Economy Business Innovation Centre, including a CE Innovation Fund with early grants focused on textiles. Queensland has invested in developing textile recycling capacity and supported First Nations communities in textile-related employment, reflecting a culturally inclusive approach to CE. Tasmania and South Australia are the leading contributors to clothing donations in Australia, with 67 kg and 56 kg per capita respectively (Charitable Reuse Australia, 2024).

Local governments play a critical role in shifting waste management away from landfill towards reuse and recycling by establishing collection and sorting infrastructure, enabling recycling frameworks and raising consumer awareness. However, local initiatives in the textiles sector remain limited, with only a small number of councils, such as the City of Ballarat (City of Ballarat, 2024), actively promoting reuse and recycling.

4.2.2. Industry-led support for circular textiles At the national level, the most significant driver of circular textiles is the industry-led National Clothing Product Stewardship Scheme, Seamless (DCCEEW, 2025). Established as an independent Product Stewardship Organisation, Seamless aims to facilitate the transition to CE across the full range of R-strategies in the textiles sector. It provides a platform for scaling small-scale circular initiatives and encourages established fashion brands to adapt their business models. The scheme draws on international best practice while being tailored to the Australian context (Seamless Australia, 2025).

Between 2021 and 2023, the Australian Fashion Council received AUD 1 million in federal funding to develop Seamless in collaboration with consortium partners (Allan & Allan, 2022). The Seamless Roadmap to 2030 prioritises circular design, circular business models, closed-loop systems and consumer behaviour change (Australian Fashion Council and Consortium, 2023). As Seamless was launched only in 2024, its impact cannot yet be assessed. Participation is voluntary, and a key challenge remains achieving sufficient industry uptake to generate system-wide change.

4.2.3. Receptivity to network governance Clear signs of network governance are emerging in the textiles sector. A growing number of bottom-up initiatives operate across Australia, ranging from non-profits, community organisations and charity networks to collaborations between established brands and smaller enterprises, as well as entrepreneurial start-ups. While some multinational retailers operating in Australia—such as H&M and Zara—have introduced take-back schemes, these initiatives are typically managed within global corporate structures rather than local networks. For example, the H&M Group aims to use 30 per cent recycled materials in its products by 2025 (Khan et al., 2023).

The more than 100 participants of the workshops held in 2022 expressed a strong willingness to collaborate through networks, despite Australia's generally antagonistic and siloed political culture. They emphasised the importance of independent intermediaries, or transition brokers, in aligning stakeholders and accelerating progress.

Across all levels of the 10R hierarchy, circular textile networks are emerging, highlighting significant opportunities for transition. At the higher levels of the hierarchy, initiatives such as Buy Nothing New Month, established in 2011, and the television series The New Joneses providing tips, insights and advice reflect the growing influence of the "conscious citizen" (Iyer-Raniga and Cramer 2026). While design for circularity remains nascent, several Australian frontrunners are demonstrating innovative approaches. Garment reuse is currently the most prevalent circular strategy. Charitable organisations manage the majority of clothing donations, with sorting facilities in all major cities. However, a substantial share of donated textiles is unsuitable for resale or reuse, resulting in high sorting and landfill costs for charities (Allan and Allan, 2022). Repair, refurbishment and adaptation are supported by local mending groups, repair cafés and community workshops across the country (Griffith University, c.2025). Progress has also been made in textile recycling, with start-ups downcycling materials or producing recycled yarns and non-woven products. A notable example

is BlockTexx, which has developed onshore capacity to separate polyester and cellulose (Iyer-Raniga and Cramer 2026). However, these recovered materials are largely processed overseas due to limited domestic manufacturing and remanufacturing capacity.

Overall, the circular textiles movement shows strong potential for scaling, provided that supportive circular ecosystems and viable business models are developed.

4.2.4. Additional drivers Australia has several contextual advantages that could accelerate circularity in the textiles sector. During the workshops the following advantages were prioritised:

- Indigenous knowledge – First Nations knowledge systems can inform sustainable material use and support cultural preservation.
- Reshoring production – Re-establishing domestic textile manufacturing could reduce environmental impacts, mitigate supply-chain risks and create jobs.
- Sports culture – Australia's strong sports culture provides opportunities to promote circular sportswear and raise public awareness.
- Research and innovation – A strong research base is already collaborating with industry to develop sustainable solutions.
- Public procurement – Government purchasing of uniforms, carpets and textiles can stimulate demand for circular products (DCCEEW, 2024b).

4.2.5. Reflections on promising avenues for transitioning to CE Political leadership in circular textiles has historically been weak, but recent federal support for the voluntary Seamless scheme represents an important shift. Making the scheme mandatory would reduce free-riding and create a more level playing field. This viewpoint was echoed during the workshops and related events on circular textiles. "Drawing on European experience, Seamless must be reinforced through complementary legislation to drive measurable outcomes, and ensure certainty, scale, and a level playing field", chief executive officer of Seamless admitted. She referred to circular public procurement, enhanced transparency and traceability requirements, circular design standards and clearer industry performance criteria. "Federal leadership in promoting reshoring and remanufacturing would further strengthen the transition", she added.

At the state level, circular initiatives have focused primarily on recycling and charitable reuse. During the workshops held in Melbourne, Brisbane and Sydney, participants identified the following key drivers for more effective public governance of circular textiles:

- Stronger and more coordinated policy interventions to accelerate the CE transition, particularly at the local level, where circular textile initiatives remain limited.
- Education, together with broader engagement and awareness programs, for addressing social, cultural and stakeholder barriers.
- Continued—and preferably strengthened—state and local government support for the not-for-profit sector to ensure adequate infrastructure for the collection, sorting and recycling of textiles (DCCEEW, 2025a).

Beyond Seamless, the growing community of regional, bottom-up circular textile initiatives constitutes a critical nucleus for change. Despite Australia's siloed political culture, these networks exhibit a high receptivity to network governance and strong potential for scaling across all stages of the R-ladder of circularity. To maximise impact, the regional networks could be linked at the state level and foster partnerships nationwide. Integrating social responsibility principles—such as decent work and increased employment opportunities for First Nations peoples—would further strengthen outcomes. Closer alignment between these networks and the Seamless scheme, including participation in shaping post-2030 pathways, would accelerate the transition, particularly if the scheme were to become mandatory.

4.3. Building

4.3.1. Current role of government Until recently, the Australian Government's involvement in CE within the building sector has been limited. The release of Australia's Circular Economy Framework in December 2024 marks a significant shift, identifying building as a priority sector and recognising its potential to reduce greenhouse gas emissions by an estimated 3.6 million tonnes of CO_2 annually by 2040 (DCCEEW, 2024a). However, the Framework assigns primary responsibility to state, territory and local governments for setting material and product standards and using public procurement to stimulate markets for circular and sustainable goods and services (DCCEEW, 2024b). It also highlights Australia's established building-rating systems and regulatory frameworks—such as Green Star, NABERS and the National Construction Code (NCC)—which are overseen collectively by planning authorities, regulators, procurers and investors.

At the state level, targeted support for circular business initiatives has emerged, particularly in New South Wales (NSW), Victoria and South Australia. NSW has taken a leading role through the release of Circular Design Guidelines for the Built Environment in 2023, supported by $356 million in funding to 2027 (Office of Energy and Climate Change, 2023). Victoria's Recycled First Policy (Victoria's Big Build, 2020), introduced in 2020, represents another notable example by mandating the use of recycled materials in major infrastructure projects (Victorian State Government, 2024). In contrast, most other states continue to focus primarily on waste management. Many jurisdictions remain oriented towards landfill disposal, while only a small number of local governments have embedded CE principles into land-use and development planning. Although interest in circular measures exists at local and regional levels, implementation capacity and practical knowledge remain limited.

4.3.2. Industry-led support for circular building Except for a small number of frontrunners, the Australian building sector has been slow to engage with CE principles. This reflects the sector's traditionally conservative practices and its highly fragmented structure. While some builders have delivered high-profile circular demonstration projects, these remain isolated examples rather than mainstream practice. These observations were consistently expressed during the eight workhops on circular building.

Various peak industry bodies—including the Green Building Council of Australia (GBCA), the Infrastructure Sustainability Council (ISC), the Australian Institute of Architects and Engineers Australia—are the primary drivers of circular change in the sector. These organisations typically engage with government through formal consultation processes but, at times, exert more direct influence on policy development. For example, the GBCA has developed circularity standards that have been adopted in federal procurement, with the intention of encouraging uptake by state governments. The chief executive officer of the GBCA explained: "As a purpose-driven GBCA's role is to accelerate Australia's transition to a more sustainable and circular built environment. We have heavily consulted with industry to bring in new circularity credits, and even a new category in our Fitouts tool as the time for change is now". While engagement with the 10R circularity hierarchy varies across peak bodies, circularity is increasingly recognised as a strategic priority.

4.3.3. Receptivity to network governance Despite the emergence of exemplary projects, scaling circular building remains a major challenge. Findings from eight workshops held in 2022 indicate that interest in circular practices is growing, led primarily by some proactive firms and peak industry bodies. Outside these groups—apart from the research sector and intermediary organisations involved in education, training and transition support (such as Planet Ark and Circular Australia)—engagement with CE remains limited. Workshop participants consistently identified the need to scale and mainstream circular initiatives. While industry was seen as responsible for creating commercial value, governments were expected to provide regulatory support, financial incentives and leadership in planning new developments, alongside long-term policy certainty.

Network governance and collaboration supported by independent transition brokers are increasingly recognised by the workshop participants as necessary yet remain underdeveloped in practice in the building sector. The idea of circular transition as a collaborative, shared endeavour between government and industry was unfamiliar to most participants. This reflects a broader sectoral culture characterised by competition rather

than cooperation and by adversarial government–industry relations. The highly regulated nature of the industry encourages compliance with minimum standards rather than innovation, while competition law frameworks do not readily accommodate the collaboration required for systemic change. Together, these factors constrain experimentation and collective action in support of CE. As in the textiles sector, stakeholders emphasised that funding transition brokers could significantly increase the likelihood of successful CE transition.

4.3.4. Additional drivers The workshop participants identified several drivers specific to the Australian context that could accelerate the uptake of circular building practices:

- Economic imperatives, including the short lifespan of Australian housing, rapid urban growth, limited adoption of multi-use buildings and heavy reliance on global supply chains.
- Landfill constraints, particularly in metropolitan areas, where existing sites are nearing capacity and new facilities face escalating transport and operational costs.
- Indigenous knowledge, which offers culturally and environmentally grounded insights for rethinking the built environment, including through the use of bio-based and regenerative materials.
- Sectoral expertise, represented by a growing cohort of CE specialists capable of supporting transition through knowledge sharing, education, training and transition brokerage roles.

4.3.5. Reflections on pathways for transition While the building sector offers substantial opportunities to reduce waste, CO_2 emissions and broader environmental impacts, federal leadership on CE remains limited. Only three states have adopted CE policies beyond waste management, and relatively few local governments have embedded circular principles into policy frameworks. Nonetheless, awareness and momentum are gradually increasing. Accelerating CE engagement is more complex due to regulatory intensity, sectoral fragmentation and lack of coordinated leadership from both federal and state governments. Changes to performance standards in the National Construction Code (NCC) require federal action and subsequent state-level implementation. Embedding circularity criteria in NCC-related procurement and tendering processes would be a key lever for change.

Until such amendments occur, industry leadership remains critical. Peak industry bodies are in a strong position to lead the change. These bodies have prior experience in establishing sector-wide, industry-based initiatives, such as the development of the Green Star system and NABERS, which could be expanded to include circularity measures. Such joint efforts represent an important first step towards a transition to a CE. This can also help scale up isolated exemplar projects led by innovative private builders into broader implementation.

Finally, large-scale, locally driven circular master-planning initiatives could provide a practical pathway forward by embedding circular principles—such as local material reuse and design for disassembly—at the outset of development. These initiatives could serve as demonstrators for wider sectoral adoption, informing standards, policy and practical tools. To support such projects, use can be made of the widely available expertise, including indigenous knowledge.

5. Discussion

5.1. Focus of the study

This paper examines the context-dependent implementation of CE, using Australia as a case study. The analysis explores pathways to enhance the effectiveness of CE implementation through an integrated framework that reflects the key dimensions of governance from both dual-network and public-governance perspectives. The general place-based analysis of Australia is complemented by two sectoral case studies in the textile and building sectors.

The main research questions addressed were as follows:

1. Does the analytical framework used as a starting point provide sufficient guidance to assess the effectiveness of CE governance in Australia?

2. What do the two sector-specific cases — textiles and building — contribute to the broader insights gained at the national level?
3. What are the theoretical and practical implications of the Australian place-based and sector-specific analysis of dual governance dynamics?

5.2. Place-based, Australian context

The analytical framework described in Figure 1 provided initial guidance for assessing the effectiveness of Australian CE governance. By gathering data on the degree of government leadership, the actors involved, receptivity to network governance, and additional socio-economic and cultural drivers, the general place-based approach could be undertaken. The findings indicate that the effectiveness of CE governance has recently increased. Leadership across federal, state, and local governments has strengthened, stimulating greater industry and broader stakeholder engagement. However, the durability of this recent increase in governmental leadership remains uncertain. In democratic systems such as Australia's, political change can weaken long-term commitment to CE objectives (Van Hoof & Aguilar-Hernandez, 2025; Zhang et al., 2025). Moreover, effective CE implementation requires coordination across governance levels, which are not always well aligned in Australia. While the federal government has introduced the National Circular Economy Framework (DCCEEW, 2024a), responsibility for implementation largely rests with states and local governments, resulting in fragmented and uneven policy landscapes.

Participants in the many events organised as part of this study clearly recognised the need to complement public governance with network governance, supported by independent transition brokers. However, limited clarity remains regarding how this dual-governance model should operate in practice, as such arrangements are not yet embedded in Australian governance culture. Additional socio-economic and cultural drivers identified through the analysis further contributed to understanding the effectiveness of CE governance in Australia.

The analysis revealed that Australia's high material footprint, shaped by prevailing consumption patterns and living standards, reduces societal demand for circular practices. Relatively low consumer awareness of waste challenges and the limited availability of reuse options also negatively influence CE implementation. Moreover, the economy's strong reliance on resource extraction, with much processing occurring offshore, and its limited domestic manufacturing capacity present structural barriers. At the same time, these characteristics may create economic opportunities (e.g. by improving resource productivity and attracting investment in circular businesses), reduce exposure to supply-chain disruptions, and deliver environmental and social benefits (PWC, 2021; Schandl et al., 2023). Finally, the need for meaningful engagement with First Nations Australians as custodians of the land was identified as a positive driver. Drawing on experiences spanning more than 65,000 years, First Nations peoples can offer culturally and environmentally grounded insights into the prudent stewardship of natural ecosystems.

Applying the dimensions identified in the analytical framework generated a broad scope of information. These data provided sufficient guidance to develop a general overview of CE governance in Australia. However, this place-based assessment is insufficient to determine the effectiveness of CE implementation. Implementation primarily occurs at the product chain level. Therefore, the textiles and building sectors were analysed in greater depth.

5.3. Sector-specific context

Comparing the results of the two sectoral case studies in the textile and building sectors clearly demonstrates the context-specific nature of pathways towards a CE transition. Based on the dimensions identified in the analytical framework, the potential for effective implementation through dual governance can be clearly articulated.

In the textile sector, the industry-led National Clothing Product Stewardship Scheme, Seamless, represents an inspiring driver of circularity. Although currently voluntary, the scheme serves as a key platform for scaling small-scale circular initiatives and encourages established fashion brands to adapt their business models. The flourishing bottom-up network of circular initiative, ranging from non-profits, community organisations, charity networks to innovative businesses is receptive to collaboration and encompasses the full spectrum of the 10R circularity strategies. They also emphasise the importance of independent transition brokers, in

aligning stakeholders and accelerating progress. Moreover, various states and some local governments actively support circular textile initiatives. Several additional drivers could further strengthen CE implementation, including the adoption of Indigenous knowledge, the reshoring of production, leveraging Australia's strong sporting culture to promote circularity, engaging strong research partnerships, and integrating circularity into public procurement policies.

In contrast, the building sector reveals only a limited number of positive drivers to enhance the effectiveness of CE implementation. Peak industry bodies are the primary drivers of circular change in this sector. They act as intermediaries between industry and government and can, at times, directly influence policy development, for instance through the introduction of circularity standards. While engagement with the 10R circularity hierarchy varies across peak bodies, circularity is increasingly recognised as a strategic priority. However, the building sector has traditionally been reluctant to change, aside from a small number of frontrunners who demonstrate isolated examples of best practice. Collaboration within the sector, supported by transition brokers remains uncommon due to competition law frameworks and its highly fragmented structure, both of which make network governance challenging. Adversarial government–industry relations further reinforce siloed modes of operation. The Australian Circular Economy Framework, released by the federal government in 2024, prioritises circular building but assigns primary responsibility for setting standards and implementing circular public procurement to state, territory and local governments. Government leadership in advancing CE implementation remains limited, with some exceptions at the state and local levels. Additional drivers can be identified, including economic benefits, landfill constraints, the added value of indigenous and sectoral expertise and of large-scale, locally driven circular master-planning initiatives. However, these drivers are not widely recognised within the building sector.

The context-specific characteristics of the textile and building sectors illustrate that the effectiveness of governing the CE transition differs considerably between them. Government leadership at all levels, receptivity to network governance, and the involvement of industry and civil society are more pronounced in the textile sector. In addition, enabling drivers are more readily recognised as supportive of the CE transition. In both sectors, peak bodies play an influential role. These differences help to explain why the implementation of circularity is more challenging in the building sector, where greater persistence and sustained effort are required to identify and advance viable pathways for change.

Building on the analytical framework presented in Figure 1, the potential for effective CE governance in the textiles and building sectors is summarised in Figures 2 and 3.

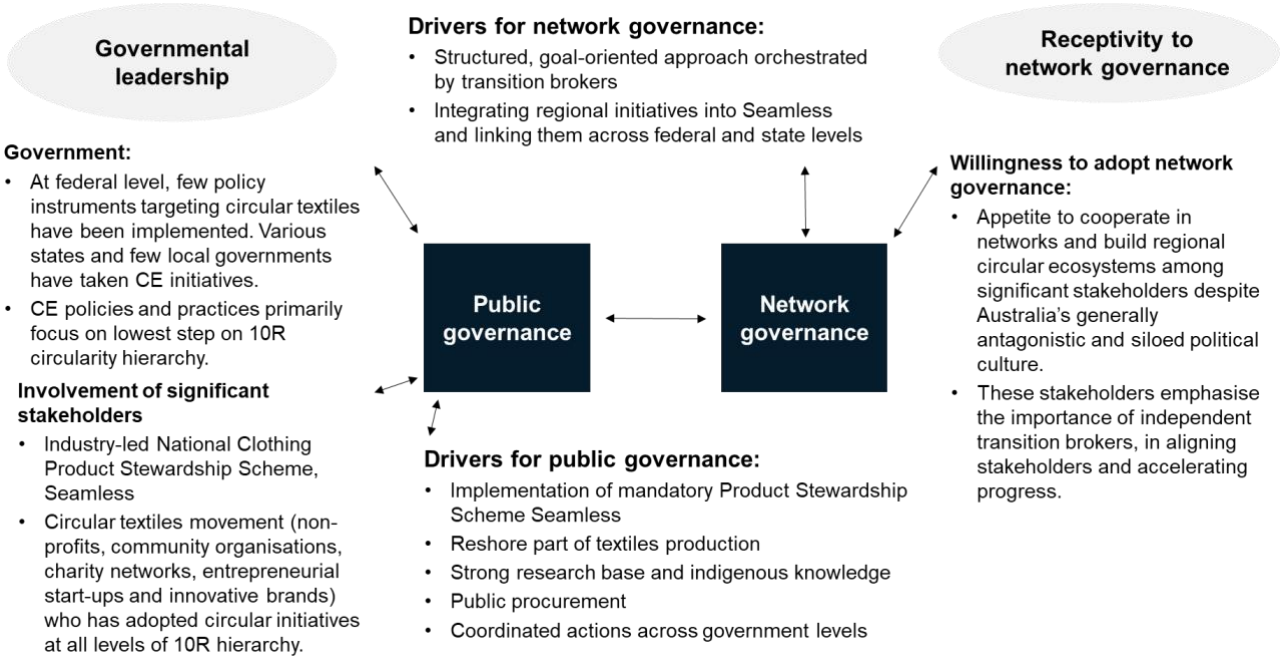

Figure 2. Potential for effective CE governance in textiles sector

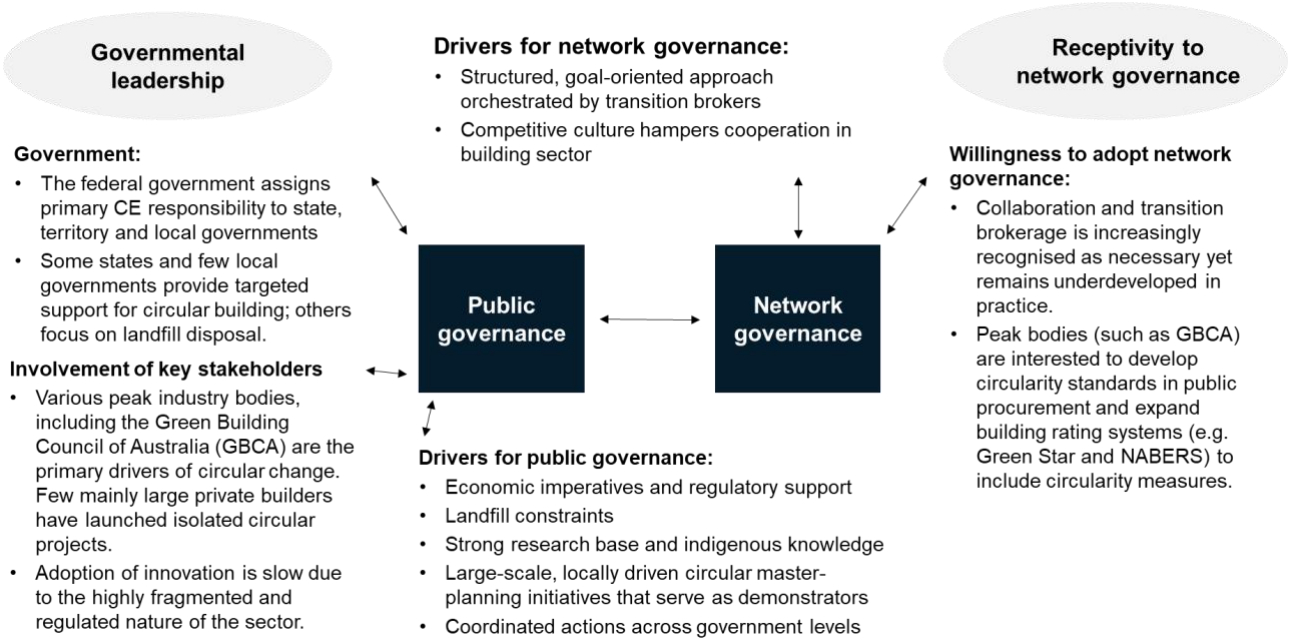

Figure 3. Potential for effective CE governance in building sector

6. Conclusions

6.1. Conclusions of the study

From the empirical case study of Australia, the following conclusions can be drawn.

First, country-level assessments provide valuable contextual insights, but meaningful implementation occurs primarily at sectoral, and potentially local or regional, levels. At these levels, it is possible to identify key stakeholders, patterns of cooperation across actors and governance levels, and the main drivers of change. Such insights enable key stakeholders to more effectively initiate CE transitions.

Second, the case studies indicate that the potential for effective CE governance is higher in the textiles sector than in the building sector and explains why. This suggests that even within a shared national context, opportunities for CE transition vary across sectors, which is hardly investigated before.

Third, the identified governance potentials (Figures 2 and 3) should be viewed as starting points for orchestrating sectoral CE transitions. The next step is implementation, ideally supported by independent transition brokers who can align actors and accelerate change. Whether these governance potentials are realised will depend on the capacity of leading actors and their followers to sustain momentum and achieve the initial circular ambitions. As such, transitions typically unfold over many years, this implementation phase lay beyond the scope of the present study.

6.2. Theoretical contribution and practical implications

This study is the first of its kind and offers a theoretically novel contribution. The analytical framework adopted as a starting point was tested and confirmed to be compehensive for the purpose of developing a general overview of CE governance in Australia and specifying the context of CE implementation at sector level.

The theoretical implications of the Australian place-based and sector-specific analysis of dual governance dynamics are threefold. First, the paper contributed to research on country-specific, place-based CE governance which was lacking until today (Cramer, 2022). While existing studies examine policy instruments (Milios, 2018; Ranta et al., 2018), barriers and drivers (Ölund Wingqvist & Slunge, 2013; Russell et al., 2019), and stakeholder engagement (Ghiselini et al., 2016; Halog & Anieke, 2021; Ogunmakinde, 2019), the governance of CE implementation under country-specific conditions has received little attention.

Second, the complementary role of network governance alongside public governance in CE transitions has been insufficiently explored. Although network governance is widely advocated in public administration literature for complex system change, its practical application remains under-researched. Similarly, transition management studies often focus on product chains or local and regional contexts without explicitly considering this dual governance approach. This study addresses this knowledge gap.

Third, differences in how public and network governance interact across sectors within a single country are rarely examined. The sectoral analyses presented here highlight the need for tailored transition management approaches grounded in a detailed understanding of sector-specific actors, conditions and drivers.

The study also has practical implications. The dimensions presented in Figures 2 and 3 are instrumental in identifying the main characteristics of governing the CE transition within a particular sector and provide broader insights than a solely place-based overview of Australia. This understanding can assist practitioners in assessing the effectiveness of the CE transition.

Although the role of independent transition brokers remains relatively unfamiliar in Australia, its importance was widely acknowledged among the stakeholders involved in this study. Appointing such intermediaries, while simultaneously developing expertise in this emerging profession, would be beneficial for the practical implementation of the CE.

6.3. Limitations of the study

The study acknowledges that it is limited to the Australian context. For further research, comparisons across countries would deepen understanding of how diverse public and network governance arrangements shape CE implementation. Such studies should extend beyond national-level analyses to include sectoral and local or regional cases. This broader evidence base could support refinement or extension of the analytical framework tested here. In addition, future assessments of CE implementation should move beyond statistical data from Eurostat and the OECD on CE policies and Circular Gaps reporting, to incorporate empirical data on the implementation of CE from a dual governance perspective.

Funding No Funding Received

Data availability It can be refered to: Iyer-Raniga, U. and Cramer, J., 2026. Building a Circular Future in Australia: What, Why and How? CRC Press, Florida. doi: 10.1201/9781003370765.

Declarations

Competing Interests The authors declare no competing interests.

References

Allan, P., and Allan, J., 2022. National Clothing Product Stewardship Scheme, Australian Fashion Council, Darlinghurst, NSW, Australia. https://ausfashioncouncil.com/wp-content/uploads/2023/05/AFC-NCPSS-Data-Report.pdf.

Australian Fashion Council and Consortium, 2023. Scheme Design Report, Milestone 3.4 for the National Clothing Product Stewardship Scheme (Seamless), Australian Fashion Council. https://ausfashioncouncil.com/wp-content/uploads/2023/06/Seamless-Scheme-Design-Summary-Report.pdf.

Australian Government, 2019. National Waste Policy Plan 2019, Department of Climate Change, Energy, the Environment and Water, Canberra, Australia. https://www.dcceew.gov.au/sites/default/files/documents/national-waste-policy-action-plan-2019.pdf.

Australian Government, 2024. Australian's Circular Economy Framework: Doubling our Circularity Rate, Department of Climate Change, Energy, the Environment and Water, Canberra, Australia.

Bogason, P., and Musso J.A., 2006. The democratic prospects of network governance. Amer. Rev. Pub. Admin. 36, 1, 3-18. https://doi:10.1177/0275074005282581.

Carlsson, L. and Sandström, A.C., 2008. Network governance of the commons. Int. J. Commons. 2, 1, 33-54. https://doi:10.18352/ijc.20.

Charitable Reuse Australia, 2024. Charitable impact, Charitable Reuse Australia. https://www.charitablereuse.org.au/education/charitable-impact/.

City of Ballarat, 2024. Waste as a resource: Our circular economy strategy, City of Ballarat, Australia. https://mysay.ballarat.vic.gov.au/circular-economy-strategy.

Clarkson, C. Jacobs, Z., Marwick, B., Fullagar, R., Wallis, L., Smith, M., Roberts, R.G., Hayes, E., Lowe, K., Carah, X., Florin, S.A., McNeil, J., Cox, D., Arnold, L.J., Hua, Q., Huntley, J., Brand, H.E.A., Manne, T., Fairbairn, A., Shulmeister, J., Lyle, L., Salinas, M., Page, M., Connell, K., Park, G., Norman, K., Murphy, T., Pardoe, C ., 2017. Human occupation of northern Australia by 65,000 years ago. Nature, London, 547, 7663, 306-310. https://doi:10.1038/nature22968.

Courtney, P., 2024. Bega's bid to become a circular economy to reduce waste, ABC News. https://www.abc.net.au/news/2024-07-21/bega-circular-economy-renewable-target-sustainable-waste/104108834.

Cramer, J., 2017. The raw materials transition in the Amsterdam metropolitan area: Added value for the economy, well-being, and the environment. Environment. 59, 3, 14-21. https://doi:10.1080/00139157.2017.1301167.

Cramer, J., 2020a. How Network Governance Powers the Circular Economy: Ten Guiding Principles for Building a Circular Economy, Based on Dutch Experiences, Amsterdam Economic Board, Netherlands. https://amsterdameconomicboard.com.

Cramer, J., 2020b. The function of transition brokers in the regional governance of implementing circular economy– A comparative case study of six Dutch regions. Sustainability. 12, 12, 5015, 21 pages. https://doi.org/10.3390/su12125015.

Cramer, J., 2022. Effective governance of circular economies: an international comparison. J.Clean.Prod., 1 April 2022, 130874 https://doi.org/10.1016/j.jclepro.2022.130874.

Cramer, J., 2023. New forms of governance to accelerate circular textiles in the Netherlands, in: M

Charter, M., Pan, B., Black, S. (Eds.), Accelerating Sustainability in Fashion, Clothing & Textiles. 1st edn, Routledge Taylor &Francis Group, London, pp. 268-278. https://doi:10.4324/9781003272878-27.

Davies, J.S., Holm-Hansen, J., Kononenko, V., Røiseland, A., 2016. Network governance in Russia: An analytical framework. Eas. Europ. Politi. 32, 131–147. https://doi:10.1080/21599165.2016.1168300.

Department of Climate Change, Energy, the Environment and Water (DCCEEW), 2024a. Australia's Circular Economy Framework: Doubling our circularity rate, Canberra, Australia. https://www.dcceew.gov.au/sites/default/files/documents/australias-circular-economy-framework.pdf.

Department of Climate Change, Energy, the Environment and Water (DCCEEW), 2024b. Sustainable procurement, Canberra, Australia. https://www.dcceew.gov.au/environment/protection/waste/sustainable-procurement.

Department of Climate Change, Energy, the Environment and Water (DCCEEW), 2025. Product stewardship schemes and priorities, Canberra, Australia. https://www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes.

Ddiba, D., Andersson, K., Koop, S.H.A., Ekener, E., Finnveden, G., Dickin, S., 2020. Governing the circular economy: Assessing the capacity to implement resource-oriented sanitation and waste management systems in low- and middle-income countries. Ear. Syst. Govern. 4, 100063. https://doi: 10.1016/j.esg.2020.100063.

Driessen, P.P.J., Dieperink, C., van Laerhoven, F.,. Runhaar, H.A.C., Vermeulen, W.J.V., 2012. Towards a conceptual framework for the study of shifts in modes of environmental governance — Experiences from the Netherlands. Environ. Poli. Govern. 22, 143–160. https://doi.org/10.1002/eet.1580.

Ellen MacArthur Foundation, 2013. Towards the Circular Economy .Vol. 1: An Economic and Business Rationale for an Accelerated Transition, Cowes, Great Britain, United Kingdom.

Ernst and Young Australia, 2021. From High Fashion to High Vis: The Economic Contribution of Australia's Fashion and Textile Industry, Ernst & Young Australia, Australia.

European Parliament, 2024. Right to repair: Making repair easier and more appealing to consumers, European Parliament, Brussels, Belgium. https://www.europarl.europa.eu/news/en/press-room/20240419IPR20590/right-to-repair-making-repair-easier-and-more-appealing-to-consumers.

Evertsen, P.H. and Knotten, V., 2024. Toward a collaborative circular ecosystem within the built environment. SCP. 52, 95–110. https://doi.org/10.1016/j.spc.2024.10.019.

Farla, J., Markard, J., Raven, R., Coenen L., 2012. Sustainability transitions in the making: A closer look at actors, strategies and resources. Technol. Forecast. Soc. Chang. 79, 991–998. https://doi:10.1016/j.techfore.2012.02.001.

Fischer, L.B. and Newig, J., 2016. Importance of actors and agency in sustainability transitions: A systematic exploration of the literature. Sustainability. 8, 5, 476. https://doi.org/10.3390/su8050476

Germes, L.A.M.H., Wiekens, C.J., van der Windt, H.J., 2025. Role of social networks in upscaling energy communities: Experiences from the Netherlands. Energy Policy. 206, 114792. https://doi.org/10.1016/j.enpol.2025.114792.

Ghosh, B., Kivimaa, P., Ramirez, M., Schot, J., Torrens, J., 2021. Transformative outcomes: assessing and reorienting experimentation with transformative innovation policy. J. Public Policy. 48, 5, 739–756. https://doi-org.utrechtuniversity.idm.oclc.org/10.1093/scipol/scab045

Ghisellini, P., Cialani, C., Ulgiati, S., 2016. A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. J. Clean. Prod. 114: 11–32. https://doi.org/10.1016/j.jclepro.2015.09.007.

Griffith University, c.2025. Australian Repair Network, Australia. https://www.griffith.edu.au/law-futures-centre/our-research/australian-repair-network.

Halog, A. and Anieke, S., 2021. Review of circular economy studies in developed countries and its potential adoption in developing countries. Circ. Econ. Sust. 1: 209–230. https://link.springer.com/article/10.1007/s43615-021-00017-0

Hill, C.J. and Lynn, L.E., 2005. Is hierarchical governance in decline? Evidence from empirical research. J. Pub. Admin. Res. Theo. 15, 173–195. https://doi:10.1093/jopart/mui011.

Hofstede, G., 2007. Dimensionalizing Cultures: The Hofstede model in context. Online readings in Psychology and Culture. 2, 1. https://doi:10.9707/2307-0919.1014

Hume City Council, 2022. Hume SEED Roadmap, Hume City Council, Hume City, Victoria, Australia. https://www.hume.vic.gov.au/files/sharedassets/public/v/2/business/local-jobs-for-local-people/hume-seed-roadmap.pdf.

International Resource Panel (IRP), 2019. Global resources outlook 2019: Natural resources for the future we want, United Nations Environment Programme, Nairobi, Kenya. https://www.resourcepanel.org/reports/global-resources-outlook-2019.

ISO, 2024. ISO 59004:2024: Circular economy: Vocabulary, principles and guidance for implementation, International Organization for Standardization. https://www.iso.org/standard/80648.html.

Iyer-Raniga, U. and Cramer, J., 2026. Building a Circular Future in Australia: What, Why and How? CRC Press, Florida. doi: 10.1201/9781003370765

Jakob, M., Flachsland, C., Steckel, J.C., Urpelainen J., 2020. Actors, objectives, context: A framework of the political economy of energy and climate policy applied to India, Indonesia, and Vietnam. ERSS. 70, 101775. https://doi.org/10.1016/j.erss.2020.101775.

Jones, S., 2020. Waste management in Australia is an environmental crisis: What needs to change so adaptive governance can help? Sustainability. 12, 21, 9212. https://doi:10.3390/su12219212

Kalmykova, Y., Sadagopan, M., Rosado, L., 2018. Circular economy — From review of theories and practices to development of implementation tools. Resour. Conserv. Recycl. 135, 190–201. https://doi.org/10.1016/j.resconrec.2017.10.034.

Klijn, E.H. and Koppenjan, J., 2016. The shift toward network governance: Drivers, characteristics and manifestations., in: Van de Walle, S. and Groeneveld, S. (Eds), Theory and Practice of Public Sector Reform, Routledge, New York/London, pp. 158–177.

Koppenjan, J.F.M. and Koliba, C., 2013. Transformations towards new public governance: Can the new paradigm handle complexity? Intern. Rev. Pub. Admin. 18, 2, 1–8. https://doi: 10.1080/12294659.2013.10805249

Khan, M.I., Wang, L., Padhye R., 2023. Textile waste management in Australia: A review. Resour. Conserv. Recycl. 18, 200154. https://doi:10.1016/j.rcradv.2023.200154.

Kirchherr, J., Reike, D., Hekkert, M., 2017. Conceptualizing the circular economy: An analysis of 114 definitions. Resour. Conserv. Recycl. 127, 221-232. https://doi:10.1016/j.resconrec.2017.09.005.

Köhler, J., Geels, F.W., Kern, F., Markard, J., Onsongod, E., Wieczorek, A., Alkemade, F., Avelino, F., Bergek, A., Boons, F., Fünfschilling, L., Hessi, D., Holtz, G., Hyysalo, S., Jenkins, K., Kivimaa, P., Martiskainen, M., McMeekin, A., Mühlemeier, M.S., Nykvist,B., Pel, B., Raven, R., Rohracher, H., Sandén, B., Schot, J., Sovacool, B., Turnheim, B., Welch, D., Wells, P., 2019. An agenda for sustainability transitions research: State of the art and future directions. Environ. Innov. Soc. Transit./Trans. Environmental Innovation and Societal Transitions 31, 1–32. https://doi.org/10.1016/j.eist.2019.01.004.

Kumar Ghosh, S., (ed.). 2020. Circular Economy: Global Perspective, Springer Nature, Singapore, Pte Ltd.

Lange, P., Driessen, P.P.J., Sauer, A., Bornemann, B., Burger, P., 2013. Governing towards sustainability — Conceptualizing modes of governance. J. Env. Pol. Plan. 15, 403–425. https://doi:10.1080/1523908X.2013.769414

Lo, A.Y., Qianqing Mai, L., Ka-yin Lee, A., Francesch-Huidobro, M., Pei, Q., Cong, R., Chen, K., 2018. Towards network governance? The case of emission trading in Guangdong, China. Land Use Policy. 75, 538–548. https://doi.org/10.1016/j.landusepol.2018.04.021.

Loorbach, D., 2007. Transition management: New mode of governance for sustainable development. Dutch Research Institute for Transitions (DRIFT). Energ Policy. 35, 6060-6074.

Mazur-Wierzbicka, E., 2021. Circular economy: advancement of European Union countries. Environ Sci Eur. 33, 111. https://doi.org/10.1186/s12302-021-00549-0.

Meadowcroft, J., 2009. What about the politics? Sustainable development, transition management, and long term energy transitions. Policy Sci. 42, 4, 323–340. https://doi-org.utrechtuniversity.idm.oclc.org/10.1007/s11077-009-9097-z

Office of Energy and Climate Change, 2023. Circular design guidelines for the built environment, State of New South Wales through Office of Energy and Climate Change, New South Wales, Australia. https://www.energy.nsw.gov.au/sites/default/files/2023-02/NZP_Circular_Design_Guide_2023_0.pdf.

Ogunmakind, A.E., 2019. A review of circular economy development models in China, Germany and Japan. Recycling. 4, 27. https://doi:10.3390/recycling4030027.

Osborne, S.P., 2010. The New Public Governance? Emerging Perspectives on the Theory and Practice of Public Governance, Routledge, London.

Patwa, N., Sivarajah, U., Seetharaman, A., Sarkar, S., Maiti, K., Hingorani, K., 2021. Towards a circular economy: An emerging economies context. J. Busin. Res. 122, 725–735. https://doi.org/10.1016/j.jbusres.2020.05.015.

Pickin, J., Wardle, C., O'Farrell, K., Stovell, L., Nyunt, P., Guazzo, S., Lin, Y., Caggiati-Shortell, G., Chakma, P., Edwards, C., Lindley, B., Latimer, G., Downes, J., Axiö, I., 2022. National waste report 2022, Department of Climate Change, Energy, the Environment and Water and Blue

Environment, Pty Ltd. https://www.dcceew.gov.au/sites/default/files/documents/national-waste-report-2022.pdf.

Pierre, J., 2000. Debating governance: Authority, Steering, and Democracy, Oxford University Press, Oxford.

Pollitt, C. and Bouckaert, G., 2004. Public Management Reform; A Comparative Analysis. Oxford University Press, Oxford.

Pollitt, C., van Thiel, S., Homberg, V., 2007. New Public Management in Europe, Palgrave, Basinkstoke. https://doi.org/10.1016/j.spc.2025.05.009

Productivity Commission, 2020. PC Productivity Insights: Can Australia be a Productivity Leader? Canberra, Australia. https://www.pc.gov.au › ongoing › productivity-insights.

Productivity Commission, 2025. Opportunities in the circular economy, Canberra, Australia. https://www.pc.gov.au/inquiries/current/circular-economy/interim.

PricewaterhouseCoopers (PWC), 2021. Building a more circular Australia: The opportunity of transitioning to a circular economy, PWC Australia. https://www.pwc.com.au/assurance/esg/building-a-more-circular-australia.pdf.

Provensi, T. and Sehnem, S., 2025. Toward circular transition: Exploring the role of circular start-ups. SCP. 57, 46–60. https://doi.org/10.1016/j.spc.2025.05.009.

Ritzén, S. and Ölundh Sandström, G., 2017. Barriers to the circular economy — Integration of perspectives and domains. Procedia CIRP. 64, 7–12.

https://doi: 10.1016/j.procir.2017.03.005

Schneider, S.C. and Barsouw, J.L., 2003. Managing across cultures, second ed. Prentice Hall, New Jersey.

Seamless Australia, 2025. Addressing clothing waste by transforming the way we choose, enjoy and recycle clothing in Australia, Seamless Australia. https://www.seamlessaustralia.com/.

Su, B., Heshmati, A., Geng, Y., Yu, X., 2013. A review of the circular economy in China: Moving from rhetoric to implementation. J. Clean. Prod. 42, 215–227. https://doi.org/10.1016/j.jclepro.2012.11.020.

Van Hoof, B. and Aguilar-Hernandez. G.A., 2025. Circular economy policy resilience and robustness in Latin America and the Caribbean. J. Clean. Prod. 529, 146755. https://doi.org/10.1016/j.jclepro.2025.146755

Victoria's Big Build, 2020. Recycled First Policy, State Government of Victoria. https://bigbuild.vic.gov.au/about/ecologiq/recycled-first-policy.

Victorian State Government, 2024. Victorian Recycling Infrastructure Plan, State Government of Victoria. https://www.vic.gov.au/victorian-recycling-infrastructure-plan.

Zhang, A., Zhang, C., Munir, H., Seuring, S., 2025. Circular economy policies in China and Europe: A systematic literature review. Circ. Econ. Sustain. 5, 5581–5612.

https://doi.org/10.1007/s43615-025-00689-y