

Gendered threads: Policy barriers to sustainable textile lifecycles

Tiziana Ferrero-Regis^(a), Chamari N. N. Pushpamali^(b)

a) Queensland University of Technology, Brisbane, Australia

b) Honorary Fellow, University of Queensland, Brisbane, Australia

Keywords: Fashion; Textiles; Australia and Queensland; Gender; Policy.

Abstract: This research into global and Australian policy in textile circularity focusses on Queensland as a case study. Queensland is still lacking a comprehensive roadmap to textile circularity and does not have a strategy for used clothing collection. These activities are left to charities, which benefit from tax breaks, and industry, which is heavily subsidized with public money, ignoring the reality of an industry that is made of micro and small businesses and is predominantly female. Policies that are not scrutinized through a gender lens could continue to create gender disparities, inequalities and systemic barriers, leaving behind women who want to enter the formal repair economy.

Introduction

The textile sector is vital to any economy, creating jobs, driving prosperity, and influencing cultural values (Textile Exchange, 2023). However, each phase of the textile value chain faces significant environmental challenges, highlighting the need for more sustainable practices in the fashion industry. Over 100 billion garments are produced each year, with 92 million tonnes ending up in landfill (Earth.Org, 2023). Polyester remains the most produced fibre globally, accounting for 57% of total fibre production, with 500,000 tonnes of plastic microfibres annually contaminating oceans and threatening the food chain (Ellen MacArthur Foundation, 2017). Statistics indicate that the global textile market is expected to reach nearly \$3 trillion by 2030, growing at an annual rate of 5.8% (Leal Filho et al., 2024).

To address these issues, systemic approaches to circularity, including sustainable design, extended use, repair and textile recycling offer solutions to the environmental and social challenges of the fashion industry. Governments and organizations like the European Union and the United Nations have introduced various policies and frameworks at global and national level (European Commission, 2022). The focus of those policies is on resource management through closing resource loops at scale. New industrial and chemical plants that sort, disassemble, shred or chemically transform old textile making it into new textile or feedstock for

other uses and products have been established. These activities are often supported by significant investment, which have led to the establishment of a new “waste management paradigm” (Hannon and Zaman, 2018).

Despite all policies that have been surveyed in this study, including making textiles more durable, repairable and recyclable, or applying eco-design and extended producer responsibility (EPRS) for all fashion brands, they still neglect the potential of slowing the material and energy loop. This involves minimizing the flow of material into the amount of material entering the economy by focusing on practices such as refuse, reuse, repair and remake to ensure that materials retain their value for as long as possible (Bocken et al., 2022).

This paper takes the case of Queensland, Australia, to address gaps and barriers in current policy initiatives that privilege textile recycling under the broad strategy of resource management. The aim of this study is to gain insights into policies that promote the extension of textile life (ETL) through repair and upcycling in selected regions and countries that explicitly support a circular textile sector through the promotion of higher-order R strategies. The absence of gender perspectives on the CE of fashion and textiles has been acknowledged (Palm et al 2024), making a study on policies that promote gender equality an even more crucial area for future research.

Queensland does not have a road map to support the fashion and textile sector. Within the Queensland Resource Recovery Industry Development Program (RRIDP), innovative projects that include textile recycling are funded, however, small businesses must compete against large industrial entities. National initiatives like Seamless (Australian Fashion Council, 2023) claim to support ETL and reuse strategies, but most funding focuses on lower-order practices like recycling. Queensland's policies and other state strategies still lack system-wide approaches to prolong textile life.

This analysis leads us to the heart of the argument: is policymaking gendered? A focus on recycling over ETL favours a singular narrative and voice, which remains confined to processed materials that are destroyed to yield lower value. The process of circularity is, in fact, creative rather than destructive. The recycling process, its industrial scale and attendant policies, while part of the mix in dealing with waste, flows in one direction. That system focusses on engineering, chemistry, materials and environmental science treating clothing as waste transforming it into a new resource. In this sense, the recycling system maintains the current flow of resources in a single direction and makes no change to the current system. On the other hand, the generally small-scale approach to taking fashion production and extending the life of the current product into new product via creativity is an important strategy that creates new engagement with how we wear and use clothes. This reset of the engagement with clothes critically alters the fashion system, while the recycling process relies on passive consumption and the maintenance of the waste flow-through process. Policy and funding must reflect the important contribution of ETL.

Method

An exploratory, qualitative comparative policy analysis was conducted on international and Australian policies, with a focus on Queensland. The analysis involved desktop

In the CE, resource management strategies, also known as R ladder (Bassens et al., 2020, p.9), prioritizes "refuse, rethink, and reduce", followed by practices such as "reuse, repair,

research to identify relevant policies published by the government and reputed organisational websites in the English language. Using key phrases and synonyms such as "Policy on Textile Sector in [region/country/state]" or "[Country/State] policy/strategies/actions for Textile Waste", only officially released proposals by government agencies or respected bodies that are pertinent to the subject were included. Twenty-seven documents were found that capture the most advanced policies in extending the life of textile products. This sample provides a benchmark for the pressing need to advance policies in Australia.

Findings were cross-referenced with official reputable publications and reports to ensure accuracy and reduce bias. An Excel database was created to extensively map and record key information such as the policy name, state/country/region, publication date, objectives and sources. Given the emphasis of the study on ETL, the analysis categorised policies by region detailing their aims, promotion of textile lifespan extension, and recommendations for a circular textile sector. A summary was created for a fast visualisation of the state of play (See Table 1 in the appendix).

Extending the Life of Products

The circular economy (CE) offers a sustainable solution to the environmental and social challenges of the textile industry by transforming linear processes into closed-loop systems, where fibres, materials, and products retain their value throughout their lifecycle and avoid landfills (Ellen MacArthur Foundation, n.d.-a). Circular textile business models emphasize longevity and durability by extending garment lifetimes through repairable designs, customized production, and repair/maintenance services. However, despite the identification of these areas as fundamental to closing the loop, policies have predominantly targeted the outer loop (recycling) than the inner loop (repair, upcycle, reuse) (Puglia et al. 2024). Policies in the outer loop are more mature, and thus attract more attention (Puglia et al., 2024).

refurbishment, remanufacturing, and repurposing" to extend product lifespan, with recycling and recovery applied as last-resort measures for non-reusable materials. Research on the R ladder emphasises

extending product life (Potting et al 2017), instead of focussing solely on recycling, which with the zero-waste myth has attracted criticism (Hannon and Zaman, 2018). Global waste statistics suggest that despite four decades of substantial investment in the well-established “waste hierarchy principles, there are still major obstacles to achieving the foremost goals of reduce, reuse, repair and remanufacture” (Hannon and Zaman, 2018; Valenzuela & Böhm, 2017). Globally, only 8% of clothes are reused, and 10% are recycled, highlighting the need for improved textile management (Business Waste, n.d.). A Life Cycle Analysis (LCA) by Trzepacz et al. (2023) reveals that reuse generally outperforms recycling in reducing environmental impacts, particularly when it offsets CO₂ emissions and the need for new garment production.

Exploring Global Initiatives and Approaches towards a Circular Textile Sector

The global adoption of CE principles in the textile sector highlights various approaches to sustainability and waste reduction. These initiatives reflect a global commitment to circular textile practices, emphasising collaboration, innovation, and policy alignment to achieve sustainability and reduce environmental impact.

The 'EU Strategy for Sustainable and Circular Textiles' aims for durable, recyclable and eco-friendly textile products by 2030, incorporating eco-design, extended producer responsibility (EPR) and support for and ETL (European Union, 2022). France pioneered EPR for textiles in 2007 and enhanced regulations in 2022 to mandate recycled materials and incentivise repairs through the Fashion Repair Program (SGS, 2023; République Française, 2023). The Netherlands implemented EPR, targeting 50% textile reuse or recycling by 2025, and 75% by 2030, supported by innovations from the Dutch Circular Textile Valley (DCTV) (Ministry of Infrastructure and Water Management, 2023). The Nordic Region is focussing on separate textile waste collection by 2025, promoting repair and innovative recycling through initiatives like the Nordic Textile Collaboration (Munkholm et al., 2023). California is the first US state to adopt an EPR strategy for the recovery of textile waste through the recent bill Responsible Textile Recovery Act, which emphasises garment

lifecycle management to enhance recovery, repair, and recycling (Senate District 29, 2024).

This brief survey of global policies is not intended to provide a detailed analysis of the funding initiatives that resulted from these policies. A comprehensive analysis would yield valuable insights into the allocation of funding related to these policies. However, it provides a benchmark for the analysis of policies and funding allocation in Australia and Queensland.

The Australian fashion industry and the Queensland case

Australians are avid consumers of fast fashion and cheap imports, resulting in high volumes of waste. Current domestic clothing production stands at approximately 3% of total new clothes sold (Allan and Allan, 2022), highlighting the country's heavy reliance on imports to meet consumer demand. On average, Australians buy 56 new apparel items a year (more than the US, the UK and China), equal to 14.8 kilograms per person (Allan and Allan, 2022), and discard 23 kilograms to landfill each year (Australian Fashion Council, 2023). The Australian fashion and textile industry faces several challenges to circularity. Due to manufacturing delocalisation in the 1980s, Australia is a prime producer of high-quality raw fibre (cotton and wool), but has little manufacturing infrastructures (Payne and Ferrero-Regis, 2019). Other challenges point to high levels of part time and casual workers, and shortage of skilled workers. Yet, with an industrial concentration in New South Wales and Victoria, the Australian fashion industry is made of 88% small business (Piller Westover, 2023), employs more workers than in the mining sector, contributing 1.5% to the national GDP.

The Seamless National Clothing Product Stewardship Scheme (Australian Fashion Council, 2023) promotes circularity through eco-modulated levies and investments in collection and recycling infrastructure, aiming to divert 60% of textile waste from landfills by 2027. The Scheme is voluntary with a vision that acknowledges four areas of intervention: circular design, circular business models, closing the loop and citizen behaviour change, while including “Support for the growth of the repair industry and a resurgence in repair skills as a critical component of keeping clothing in use for longer” (Australian Fashion Council, 2023). However, the Scheme funding is directed at clothing collection, reuse and

recycling through charities and industrial transformation. Without clear provision of funding, the repair strategy is left to consumers' behaviour through national campaigns directed at consumers to take care of clothing during use (Seamless 2023, p. 18).

In Queensland, the textile sector is Australia's third-largest regional hub for textile, clothing, and footwear (TCF) manufacturing in terms of economic output and workforce (Australian Fashion Council, 2021). However, the state suffers from the same structural issues of the industry at large. Queensland has strong cotton production, but its Textile Clothing and Footwear (TCF) manufacturing sector has experienced significant decline since the introduction of free trade agreements and delocalisation in the 1980s. Like the Australian fashion industry, Queensland TCF industry is composed of micro and small businesses, with 87% relying on between 1 and 19 employees, and the remaining 13% employing from 20 people up (Ferrero-Regis et al., 2024). In an industry that is dominated by small businesses, adopting circular practices like repair and reuse aligns with social benefits and growth goals. These businesses tend to be more flexible and adaptable (Piller-Westover 2023), and can innovate faster, but they operate on tight budgets.

Within the Queensland Resource Recovery Industry Development Program (RRIDP), innovative projects that include textile recycling are funded, however, the small businesses must compete against large industrial entities, such as Blocktexx, a textile recycling plant that uses chemical separation technology to process cotton and polyester into PET pellets and cellulose powder (State Development, Manufacturing, Infrastructure and Planning, 2024). Project Boomerang is a textile sorting facility being implemented, with the capacity to sort by material type and remove buttons and zippers, allowing for further recycling and reuse (Queensland Government, 2024). In August 2024, the Boomerang Project received AUD 4.97 million, and Blocktexx has received funding from the Queensland government, the Logan City Council and the Federal Government, totaling AUD 1,746,617 (Queensland Government 2023).

Conversely, during interviews with designers for the project *Mapping fashion networks and pre-consumer textile flows for circular*

communities (Ferrero-Regis et al., 2024), it emerged that repair, alterations, upcycling and handmade businesses depend on micro-grants ranging from AUD 5,000 to 10,000, often used to help cover rent costs. These funds require navigating complex paperwork. Additionally, these grants are not specifically aimed at the fashion and textile industry; instead, they are typically directed towards broader initiatives.

At the time of writing, while states like NSW and Victoria introduce targeted actions supporting CE goals, such as Sydney's Textile Action Plan, the New South Wales Environmental Protection Agency (which mentions EPR in textiles), and Victoria's TCF Manufacturing report, the Queensland Government has not yet released a roadmap to textile circularity that could support the growth of the TCF sector within the state. Likewise, the Brisbane City Council lacks data on domestic clothing waste and does not have a strategy for used clothing collection and sorting. Queensland, like Australia, exports surplus clothing to other countries. At Australia level, an estimated 14% of donated clothes takes this route (Australian Fashion Council, 2022). Queensland is facing the same challenges related to textile waste as Australia (State Development Infrastructure and Planning, 2023), but a local system-wide textile life extension remains underdeveloped. Despite this, thriving small and micro businesses that have developed circular textile practices within their communities and neighbourhoods have been slowly transitioning to circularity for over than a decade (Ferrero-Regis et al., 2024).

Is textile policy gendered?

This analysis of Australian and states' textile policies emphasizes institutional limitations in textile policy-making that address handmade and ETL practices that slow down consumption, the use of virgin resources and the use of energy. These are practices typically associated with women's labour due to historical and cultural factors. Mending, for example, insinuates non-professional skill-intensive work, handmade and done by females (Middleton, 2014). Mending, repair and upcycle are practices rarely seen as marketable skills, which are instead associated with maintenance and care, typically self-repair (McQueen et al, 2022) and thus connected with consumers. As Middleton (2014) argues, consumers are tasked with garment care through sustaining and prolonging the life of clothing (Middleton 2014) and unpaid labour. In policymaking,

these practices fall into the category of “consumer education” or “behaviour and fail to recognize the complexities of consumption (Wang 2016). Instead, McRobbie et al (2019) argue that a case should be made for feminist fashion policy that puts female employment in fashion at the heart of public policy. Palm et al. (2024) emphasize the importance of a deep examination of gender impact in CE to promote inclusivity. Addressing local priorities may lead to the development of local legislation that can be more effectively monitored and enforced. The formalization of women’s work in the textile industry is essential, especially for countries such as India (Kanupriya 2024). Additionally, active women participation of women in policymaking (Wang 2016) can facilitate inclusive and democratic processes.

McPhail (2003) exemplifies that in social work, most policies are seen as gender neutral. Likewise, it can be said that textile policies appear unbiased while attending to the urgent problem of waste. The analysis of Australian and Queensland funding schemes reveals that policy and funding schemes support large-scale innovations, like recycling technologies, over localized repair practices. The techno-deterministic approach in textile waste reduction prioritizes waste management and privileges male-dominated industries. In addition, formal or informal repair economies, irrespective of the sector, are undervalued and face various barriers, including lack of workforce with the appropriate skillset (Australian Government Productivity Commission, 2021). In the clothing and textile sector, repair practices are still seen as an extension of women’s responsibilities for family care and resource management. In an industry largely dominated by women in low paid jobs – 77% of the workforce, and mostly made up of migrant women (Australian Fashion Council, 2021) – a gendered policy analysis would enable the recognition and formalization of ETL as a skill-based profession, offer financial incentives and support programmes that target specifically women-led enterprises. Support for ETL practices would also shift the narrative around repair from a traditionally feminine practice to a visible and formal economy that is central to sustainable living.

Conclusions

In Australia, an integrated policy at national, state and city level is essential to extend textile lifespans and reduce reliance on recycling and

waste exports (Gbor & Chollet, 2024), with a comprehensive focus on higher-order R practices such as repair, reuse, and upcycling. Ideally, implementing integrated circular principles will foster a holistic transformation of the industry. At the micro level, consumers and enterprises adopt sustainable practices like repair and reuse; at the meso level, industries collaborate through eco-industrial parks; and at the macro level, governments implement policies such as the EU Strategy for Sustainable and Circular Textiles (Warwas et al., 2021). This strategy recognizes the complexities of the system, fosters interactions between the actors and especially leverages the flexibility and adaptive agility of micro and small businesses. A system of Policy Scorecard for gender mainstreaming should be devised to achieve gender equity, as suggested by Keleher (2013) in health policy. The focus on reuse and repair along with the strategy of extending the lifespan of clothing items should be included in the funding system to genuinely address the problem of clothing waste and create true circularity. The heavy emphasis on large scale recycling processes does not provide a viable pathway to circularity in and of itself.

Acknowledgments

This research was supported with funding from Queensland University of Technology Resilience Centre.

References

- Allan, P. and & Allan, J. (2022). National Clothing Product Stewardship Scheme: Clothing data report. Australian Fashion Council. <https://ausfashioncouncil.com/wp-content/uploads/2023/05/AFC-NCPSS-Data-Report.pdf>
- Australian Fashion Council (2021). From high fashion to high vis. <https://ausfashioncouncil.com/wp-content/uploads/2021/05/From-high-fashion-to-high-vis-EY-final-report-31-May-2021.pdf>
- Australian Fashion Council. (2023). Roadmap to clothing circularity. Retrieved October 18, 2024, from <https://ausfashioncouncil.com/wp-content/uploads/2023/06/Roadmap-to-Clothing-Circularity.pdf>
- Australian Fashion Council (2023). Scheme design report. Transforming how clothing is made, used, reused, and recycled in Australia to create circularity by 2030. <https://ausfashioncouncil.com/wp-content/uploads/2023/06/Scheme-design-report.pdf>

- content/uploads/2023/09/Seamless-Scheme-Design-Report.pdf
- Australian Government Productivity Commission. (2021). Right to repair. Inquiry report. 97, 29 October.
<https://www.pc.gov.au/inquiries/completed/repair/report/repair.pdf>
- Bassens, D., De Boeck, S., Kęłowski, W., Lambert, D., & Reinhardt, H. (2020). Toward a circular economy scan: Measuring circular practices among retailers in the Brussels-Capital Region. ResearchGate.
https://www.researchgate.net/publication/348415963_Toward_a_Circular_Economy_Scan_Measuring_Circular_Practices_among_Retailers_in_the_Brussels_Capital_Region
- Bocken, N. M. P., Niessen, L., & Short, S. W. (2022). The Sufficiency-Based Circular Economy—An Analysis of 150 Companies [Original Research. *Frontiers in Sustainability*, 3. doi: 10.3389/frsus.2022.899289
- Business Waste. (n.d.). Fashion waste facts and statistics. Retrieved December 5, 2024, from
<https://www.businesswaste.co.uk/your-waste/textile-recycling/fashion-waste-facts-and-statistics/>
- Ferrero-Regis, T. Lindquist, M., Van Lunn, C., Hopper, C. (2024). Mapping fashion networks and pre-consumer textile flows for circular communities, *International Journal of Sustainable Fashion and Textiles*, 3:3, pp. 155-178.
https://doi.org/10.1386/sft_00045_1
- Gbor, N. and Cholle, O. (2024). Textile waste in Australia. Reducing consumption and investing in circularity. May.
https://connectqutedumy.sharepoint.com/personal/narayan6_qut_edu_au6DH9MOWYKKKU1VXAQLD2FQ/Documents/QUT_RC/Reports/The-Australia-Institute-Textiles-Waste-In-Australia-Web.pdf
- Earth.Org. (2023). *Statistics about fast fashion waste*. Retrieved December 5, 2024, from
<https://earth.org/statistics-about-fast-fashion-waste/#:~:text=92%20million%20tonnes%20of%20textiles,on%20landfill%20sites%20every%20second>
- Edge Environment. (2023). The state of fashion: Textile circularity in Western Australia. Edge Environment.
https://s37430.pcdn.co/wp-content/uploads/sites/2/2023/08/The_State_of_Fashion_Textile_Circularity_in_WA.pdf
- Ellen MacArthur Foundation. (2017). A new textiles economy: Redesigning fashion's future.
https://emf.thirdlight.com/file/24/uiwtaHvud8YIG_uiSTauTIJH74/A%20New%20Textile%20Economy%3A%20Redesigning%20Fashion%E2%80%99s%20future.pdf
- Ellen MacArthur Foundation. (n.d.-a). Fashion and the circular economy - deep dive.
<https://www.ellenmacarthurfoundation.org/fashion-and-the-circular-economy-deep-dive> Retrieved October 17, 2024, from
- European Parliament. (2020). The impact of textile production and waste on the environment (infographics).
<https://www.europarl.europa.eu/topics/en/article/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infographics>
- European Union. (2022). EU Strategy for Sustainable and Circular Textiles. Retrieved from
https://ec.europa.eu/environment/publications/eu-strategy-sustainable-and-circular-textiles_en
- Guzzo, D., Pigosso, D. C. A., Videira, N., & Mascarenhas, J. (2022). A system dynamics-based framework for examining Circular Economy transitions. *Journal of cleaner production*, 333, 129933.
- Hannon, J. and Zaman, Atiq U. (2018). *Exploring the phenomenon of Zero Waste and future cities*. Urban Science, 2, 90; doi:10.3390/urbansci2030090, pp. 1-26.
- Kanupriya. (2024). Linkages among trade, gender and environment: A review in the context of India's textile sector. *Decision* (September 2024) 51(3):397–409.
<https://doi.org/10.1007/s40622-024-00397-w>
- Keheler, H. (2013). Policy scorecard for gender mainstreaming: gender equality in health policy. *Australian and New Zealand Journal of public health*, (37), 2, pp. 113-117. doi: 10.1111/1753-6405.12027
- Leal Filho, W., Dinis, M. A. P., Liakh, O., Paço, A., Dennis, K., Shollo, F., & Sidsaph, H. (2024). *Reducing the carbon footprint of the textile sector: an overview of impacts and solutions*. Textile Research Journal, 00405175241236971.
- Lewe, E. (2023). *Extended producer responsibility in the textiles industry*. FINIX Project. Retrieved October 17, 2024, from
<https://finix.aalto.fi/extended-producer-responsibility-in-the-textiles-industry/>
- McQueen, R. H., McNeill, L. S., Huang, Q., & Potdar, B. (2022). Unpicking the Gender Gap: Examining Socio-Demographic Factors and Repair Resources in Clothing Repair Practice. *Recycling*, 7(4), 53.
<https://doi.org/10.3390/recycling7040053>
- McPhail, B. A. (2003). A feminist policy analysis Framework. *The social policy journal*, 2-3, p. 38-61. DOI:10.1300/J185v02n02_04
- McRobbie, A., Strutt, D., & Bandinelli, C. (2018). Feminism and the politics of creative labour enterprise in London, Berlin and Milan.

- Australian Feminist Studies*, (34) 100, p. 131-148.
- Middleton, J. (2014). Mending, In Fletcher, K. Tham and Tham. M (eds), *Routledge Handbook of Sustainability and Fashion*, Routledge: London.
- Ministry of Infrastructure and Water Management. (2023, April 14). *Decree rules extended producer responsibility for textile products*. Government of the Netherlands.
- Mullen, M. (2023). Sweden's circular fashion industry. Circular Innovation Lab. <https://www.government.nl/topics/circular-economy/documents/decrees/2023/04/14/decreed-rules-extended-producer-responsibility-for-textile-products>
- Munkholm, L., Lindberg Laursen, B., Christensen, A. C., Trab Munk Christensen, A., Slater Christensen, B., Dam Larsen, J., & Tønder, R. A. (Miljøstyrelsen) (2023). Mapping Sustainable Textile Initiatives in the Nordic Countries. Nordic Council of Ministers. <https://pub.norden.org/temanord2023-502/temanord2023-502.pdf>
- Palm, J., Lazoroska, D., Valencia, M., Bocken, Södergren N. (2024). A gender perspective on the circular economy. A literature review and research agenda. *Journal of Industrial Ecology*, (28), pp. 1670-1683. DOI: 10.1111/jiec.13554
- Payne, A. & Ferrero-Regis, T. (2019). Sustainable fashion in Australia: Raw fiber, fast fashion, and new localism. In Gwilt, A, Payne, A, & Ruthsichling, E A (Eds.) *Global perspectives on sustainable fashion*. Bloomsbury Visual Arts, United Kingdom, pp. 180-190. DOI: 10.5040/9781350058170.ch-005.1
- Piller Westover, Lisa. (2023). Designing for circularity: sustainable pathways for Australian fashion small to medium enterprises. *Journal of Fashion Marketing and Management* 27(2), pp. 287-310. DOI:10.1108/JFMM-09-2021-0220
- Potting, J., et al., (2017). Circular Economy: Measuring Innovation in the Product Chain. https://www.researchgate.net/publication/319314335_Circular_Economy_Measuring_innovation_in_the_product_chain
- Puglia, M., Parker, L., Clube, R. M. K., Demirel, P., Aurisicchio, M. (2024). *The circular policy canvas: Mapping the European Union's policies for a sustainable fashion textile industry*. Resources, Conservation & Recycling, May. <https://doi.org/10.1016/j.resconrec.2024.107459>
- Queensland Government (2024) Textile recycling business to divert 50,000 tonnes of landfill waste and create 140 jobs over four years. State Development, Infrastructure and Planning. <https://www.statedevelopment.qld.gov.au/news-and-events/textile-recycling-business-to-divert-50,000-tonnes-of-landfill-waste-and-create-140-jobs-over-four-years>
- Queensland Government (2024). Project Boomerang – Salvos Stores textile recycling hub. <https://www.qld.gov.au/environment/circular-economy-waste-reduction/funding-grants/salvos-textile-recycling>
- Republic Française (2023). Repair bonus: Financial assistance to patch your clothes and shoes. <https://www.service-public.fr/particuliers/actualites/A16951?lang=en>
- Senate District 29. (2024). Responsible Textile Recovery Act of 2024 signed by governor. https://sd29.senate.ca.gov/news/press-release/responsible-textile-recovery-act-2024-signed-governor?utm_source=substack&utm_medium=email
- SGS. (2023). France updates requirements for the textile fashion industry. <https://www.sgs.com/en/news/2023/01/safeguards-1023-france-updates-requirements-for-the-textile-fashion-industry>
- State Development, Manufacturing, Infrastructure and Planning 2024. <https://www.statedevelopment.qld.gov.au/industry/critical-industry-support/resource-recovery/industry-development-program>
- Textile Exchange (2023). Materials Market report. <https://textileexchange.org/app/uploads/2023/11/Materials-Market-Report-2023.pdf>
- Trzepacz, N., Bekkevold Lingås, D., Asscherickx, L., Peeters, K., van Duijn, H., Akerboom, M. (2023). LCA-based assessment of the management of European used textiles, Norion. January. https://euric.org/images/Position-papers/lca-based-assessment-of-the-management-of-european-used-textiles_corrected.pdf
- United Nations Environment Programme. (n.d.). Circular economy presentation. World Trade Organization. https://www.wto.org/english/tratop_e/tessd_e/07_circ_economy_1_presentation_by_unep.pdf
- Valenzuela, F., Böhm, S. (2017), Against wasted politics: A critique of the circular economy. *Ephemera: Theory and politics in organization*, (17) 1, 23-60. <https://ephemerajournal.org/contribution/against-wasted-politics-critique-circular-economy>
- Wang, S. (2016). *Green practices are gendered: Exploring gender inequalities caused by sustainable consumption policies in Taiwan*. Energy Research and Social Science. (18). 88-95.

<http://dx.doi.org/10.1016/j.erss.2016.03.005>

Warwas, I., Podgórnjak-Krzykacz, A., Przywojska, J., & Kozar, Ł. (2021). Going green and socially responsible–textile industry in transition to sustainability and a circular economy. *Fibres & Textiles in Eastern Europe*, (3) 147, 8-18.

Zero Waste Europe. (2022). Factsheet: Finland textiles. https://zerowasteurope.eu/wp-content/uploads/2022/11/ZWE-EWWR2022-factsheet_Finland-textiles.pdf

Appendix

Region/ Country	Strategy/ Plan/Action/Policy	Does it explicitly support/ discuss ETL?
European Union	EU Strategy for Sustainable and Circular Textiles- 2022	
	Transition Pathway for the Textiles Ecosystem- 2023	
	Extended Producer Responsibility (EPR) for Textiles	
France	EPR	
	France's Fashion Repair Program	
The Netherlands	EPR for Textiles	
	The Dutch Circular Textile Valley	
Sweden	EPR & Business Models	
Denmark	Sectoral agreement for a more circular industry	
	EPR	
	Separate textile collection	
Finland	Separate textile collection	
California	The Responsible Textile Recovery Act, or SB 707	
Australia	National Clothing Product Stewardship Scheme-SEAMLESS	
	National Waste Policy 2018	
QLD	Waste Management and Resource Recovery Strategy	
	Queensland Resource Recovery Industries- 10-Year Roadmap and Action Plan	
	Resource Recovery Industry Development Program (RRIDP)	
	Recycling Enterprise Precincts A "How To" Guideline	
	Queensland procurement strategy- 2023	
	Queensland Government Procurement Statement 2024/ Buy Qld	
	Final Review Report Waste Management and Resource Recovery Strategy- July 2024	
	Queensland's waste disposal levy	
	Project Boomerang - Salvos Stores textile recycling hub	
SA	South Australia's Waste Strategy 2020-2025	
NSW	NSW Waste and Sustainable Materials Strategy (2041). (Stage 1: 2021–2027)	
	NSW Environmental Protection Authority (2024)	
	Textile Action Plan for Sydney Councils 2021	
Tasmania	Tasmanian Waste and Resource Recovery Strategy 2023-2026	
WA	Waste Avoidance and Resource Recovery Strategy 2030	
	The State of Fashion & Textile Circularity in WA	
ACT	ACT Waste Management Strategy 2011-2025	
	ACT Circular Economy Strategy and Action Plan 2023-2030	
Northern Territory	Northern Territory Circular Economy Strategy 2022 - 2027	
Victoria	Recycling Victoria: A New Economy (2020)	
	Insider Tips on Running a Textile Waste Program	
	Victorian Textile, Clothing and Footwear (TCF) Manufacturing: Future Jobs, Technology, and Economic Growth	

Legend

Does it explicitly support/ discuss ETL?

- Yes, it does support & discuss ETL
- Yes, it does support ETL
- It does support & discuss ETL to some extent
- No, it doesn't support or discuss ETL

Table 1: Summary Table of ELT Strategies/Plans/Actions/Policies