



Embedding Circular Economy Strategies in Sri Lankan Businesses

*Preparing for the Emerging Extended Producer Responsibility
(EPR) Landscape*

A Perspective for Boards, Executives and Sustainability Leaders

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1. Introduction

Circularity, or the concept of a circular economy, refers to an enviro-economic model that is designed to increase the usability and longevity of raw materials and end products while maintaining their quality and simultaneously restoring the natural systems on which the economy depends.

Only 6.9% of material flowing through the global economy is noted to recycle back from secondary sources, indicating that almost 93% still comes from virgin extraction¹. Interestingly, linear systems of production and consumption have led to approximately €25.4 trillion a year in lost value, which is nearly 31% of global GDP, as seen through phases such as processing losses, premature disposal, underused assets and end-of-life waste².

Circular economy serves as an alternative model to a traditional linear model of extraction, production, consumption and disposal. In practice, this means that even when a product reaches the end of its life, the aim should be to reuse, repair, recover, refurbish or recycle its parts and give them a new purpose while adding more value to the environment and economy. Essentially, circularity focuses on wasting as little as possible.

1.2. Challenges to businesses in Sri Lanka with respect to circularity

The idea of circularity i.e., wasting less, reusing, recycling, spending smarter, makes sense on paper but when it comes to transitioning in practice, businesses in Sri Lanka face several structural and strategic challenges. The financing gap is a major bottleneck – projects with underlying circularity principles, require upfront investment and capital and take longer to pay off. In addition, accessing capital through financial institutions like banks are tough as these ventures are seen as untested and novel. Secondly, there is a considerable knowledge gap within businesses itself in terms of translating circularity as a concept to concrete operational on-ground practice. Businesses therefore lack the expertise required redesign products, have closed-loop supply chains and maintain robust and measurable KPIs to support circularity performance.

There are also challenges within the larger waste ecosystem – waste management infrastructure remains largely informal and underdeveloped, regulatory frameworks that could push forward circularity is still in the making, value chains are fragmented and there is weak coordination among various stakeholders. For companies, such gaps

¹Circle Economy and Deloitte Netherlands, Circularity Gap Report 2026.

²Ibid.

increase the cost, making it more complex to recover materials and implement circularity, causing their commercial viability to drop significantly. The challenge is amplified by Sri Lanka's reliance on imported raw materials across key industries. As these materials often get lost rather than recirculated, businesses remain exposed to global commodity price fluctuations and currency volatility. At the same time, Sri Lankan exporters are facing pressure from international customers and brands to embed circularity targets into supplier requirements, audits and procurement standards.

1.3. Business case of circularity

Companies that embrace circular principles and practices are better positioned for long-term success. The infographic below summarizes the key drivers that businesses in Sri Lanka should consider for prioritising circularity:



Figure 1: Key drivers for businesses to prioritise circularity.

2. Sri Lanka's Circular Economy and EPR Landscape

Sri Lanka's policy foundations for circularity rests on three pillars already in place, namely, the National Action Plan on Plastic Waste Management 2021-2030, developed by the Ministry of Environment with support from UNEP and the Government of Japan; a National Policy on Waste Management; and a National Policy on Green Procurement, which directs public procurement toward more sustainable material choices.

Building on these policy foundations, Sri Lanka has now moved towards establishing Extended Producer Responsibility (EPR) as a statutory requirement.

The ongoing proposed amendments to the National Environmental Act will introduce EPR as a legal obligation, initially targeted at plastic and polythene packaging eventually increasing its scope to other material streams over time. Sri Lanka is revamping the deposit-return scheme for plastic bottles by including EPR principles (i.e., deposit charged at purchase and refunded on return) in the amended National Environmental Act. This was a scheme which previously was a standalone voluntary mechanism, is now being reintroduced with a stronger statutory backing, indicating that participation will no longer be optional.

The regulation aligns closely with international EPR models: a legal obligation on producers (rather than only importers or retailers), collection and recycling targets scaled over a transition period, mandatory reporting to a central authority, and an

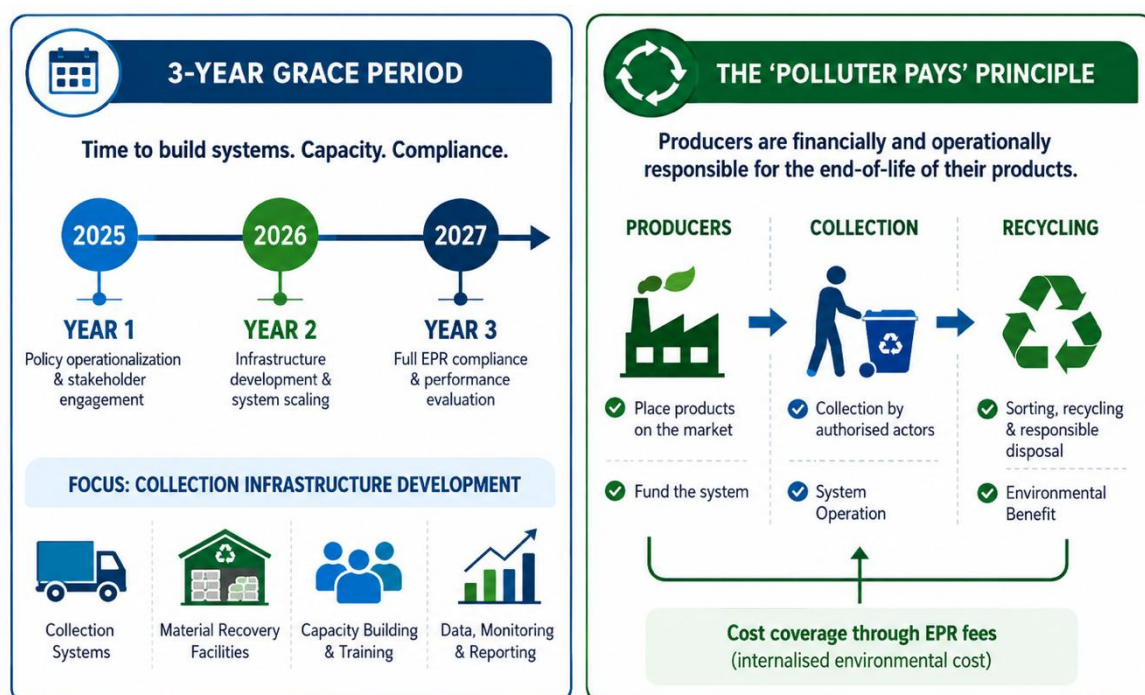


Figure 2: EPR roadmap in Sri Lanka.

expectation that producers will work through collective compliance structures such as Producer Responsibility Organisations rather than each building parallel collection systems.

The following table outlines the trajectory of Sri Lanka's ongoing transition to circular economy model and its subsequent implication for companies.

Period	Development	Circularity significance
2007 onwards	Sri Lanka restricts and bans selected single-use plastics.	First institutional signal to prioritise waste prevention.
2010s–2020	Municipal collection and recycling infrastructure expands nationally.	Groundwork laid for circularity, though collection and segregation remain fragmented.
2021	Ministry of Environment launches the National Action Plan on Plastic Waste Management 2021–2030, with support from UNEP and Japan. The policy instrument is built on the 3R hierarchy, with EPR piloted as one of its goals.	Sri Lanka's circular economy roadmap developed in collaboration with circular economy bodies.
2021–2023	Supporting measures follow, including the National Policy on Waste Management and sustainable procurement rules.	Circularity expands from waste handling into sourcing and lifecycle thinking.
2024–2025	Policy debate shifts from managing waste to holding producers accountable for it.	The centre of gravity moves from collection to producer responsibility.
Jan–Apr 2026	Cabinet approves an EPR clause inside draft amendments to the National Environmental Act; the bill is gazetted on 22 April 2026.	EPR moves from concept to legislation in progress.
May 2026	Parliament amends the National Environmental Act for the first time in 24 years, formally enacting EPR and strengthening the Central Environmental Authority's enforcement powers.	EPR is now law therefore producers must collect and recycle a set share of what they put on the market, with a three-year grace period before penalties apply.

Table 1: Sri Lanka's circularity and EPR landscape and implications for businesses.

3. Embedding Circularity Across the Value Chain

Circularity focuses mainly on five interventions in the value chain which includes: how products and packaging are designed, how inputs are procured, how operations run sustainably, how materials are recovered from the product once it reaches the end of life, and how consumers are engaged throughout the stages.

Figure 3 illustrates the transition from a traditional linear value chain to a circular value chain. It highlights how circularity is embedded across the product lifecycle through five key interventions - design for circularity, sustainable procurement, circular operations, reverse logistics, and consumer engagement. These interventions help extend product life, improve resource efficiency, recover valuable materials, and create long-term business value.

The sections below examine each in detail:

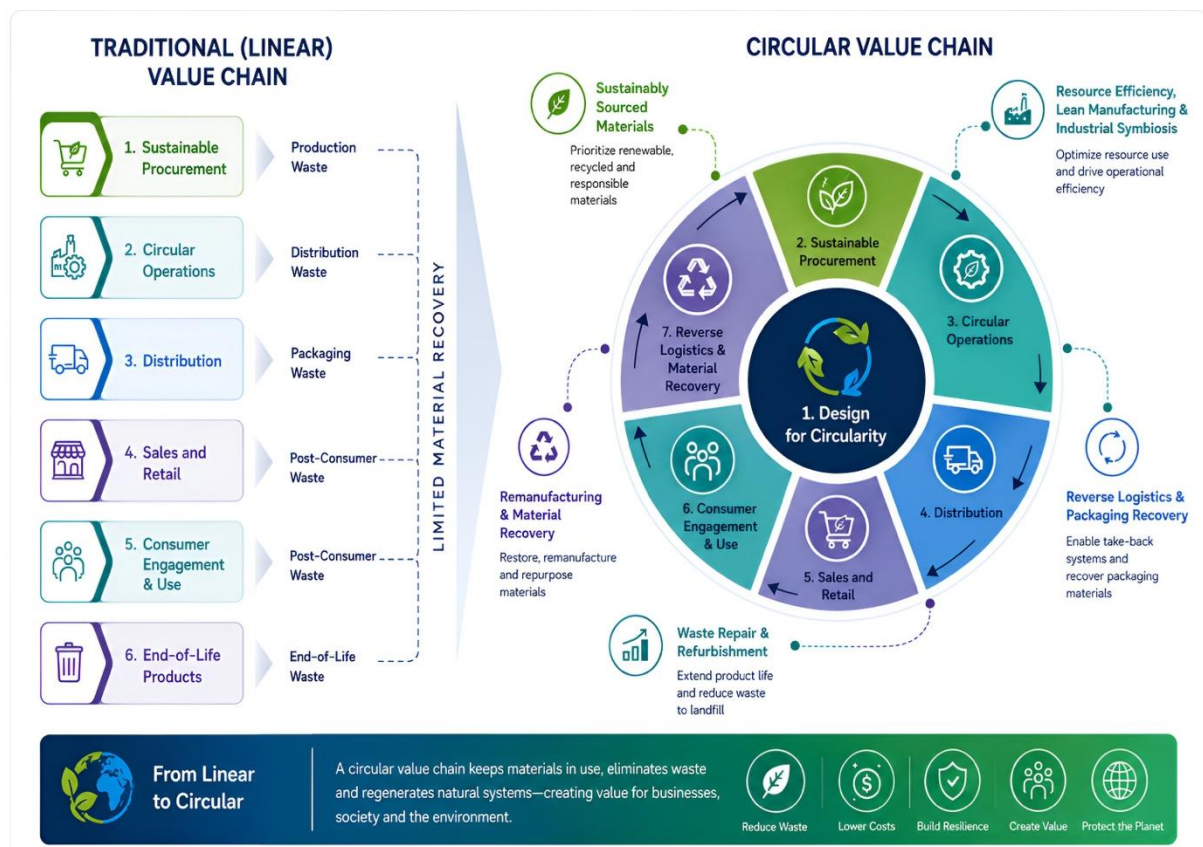


Figure 3: From linear to a circular value chain.

3.1. Design for Circularity

The design stage of the product and packaging should be seen as the foundation of a circular operating model. The design stage determines how efficiently materials are used, how long products are durable and remain in circulation, and how easily they can be repaired, disassembled, reused, recovered or recycled at end of life. Designing products as well as packaging that uses fewer materials and are sustainable, can help businesses reduce consumption and wastage while preserving the recyclability value of the material.

As Sri Lanka's circular economy agenda continues to evolve, companies that embed circular design principles early on are more likely to be better positioned to manage future regulatory requirements and evolving expectations from stakeholders. Designing products and packaging for reuse and recyclability, integrating recycled inputs where possible, and ensuring formats are in sync with already existing collection and recovery systems can reduce operational costs, improve resource security, and strengthen supply-chain resilience.

3.2. Sustainable Procurement

Sustainable procurement is often seen as buying “green” products, however it’s much more than that. It is a kind of approach that focuses on strategic sourcing taking into account the environmental, social, and economic impact of buying decisions across the entire lifecycle of a product or service. In practice, it means looking beyond price and constantly critically analysing the long-term consequences as well as the opportunities that come with every purchasing decision.

Sustainable procurement promotes innovation by compelling suppliers and firms to reimagine materials, processes, and resource consumption. As stakeholders demand responsible business practices, procurement has fast become one of the most powerful levers for building enduring commercial value while also addressing wider environmental and social objectives.

3.3 Circular Operations

3.3.1. Resource efficiency and waste minimisation

Resource efficiency and waste minimisation have become essential to industrial competitiveness, not just environmental initiatives. As manufacturers face rising costs

of raw materials, resource limitations, and changing stakeholder expectations, improving the use of materials, water, and energy delivers both economic and environmental benefits. Many organisations now prioritise preventing waste through process optimisation, better inventory management, smarter resource planning, and more efficient production, rather than managing waste after it occurs. This proactive approach aligns with resource-efficient and cleaner production principles, which aim to maximise value while minimising resource use and waste generation.

3.3.2. Industrial symbiosis and energy recovery

Industrial symbiosis helps transform industrial zones from simply being units of individual facilities into interconnected collaborative ecosystems. It allows neighbouring industries to work together and exchange by-products according to the needs, such as share and water resources or utilise excess energy. In comparison to what a single facility could achieve independently the exchange system allows industries to carry out their circular operations more effectively and efficiently. Because what could be waste for one phase in an operation for an industry could be a valuable input addition for another, reducing disposal costs and lowering demand for virgin raw materials and resources. This collaborative approach is increasingly recognised as a practical way to support circular strategies like decarbonisation, maintaining resource security and improving the overall productivity of different industrial clusters.

3.3.3. Lean manufacturing

Lean manufacturing focuses on reducing waste at its source by systematically eliminating activities that do not add value to the final product. Practices such as minimising work-in-progress inventory, reducing overproduction, preventing defects and improving process flow help manufacturers use fewer resources while enhancing operational performance. Although lean programmes are often introduced to improve quality, cost and delivery outcomes, they also generate significant environmental benefits by reducing material losses, energy consumption and unnecessary production activities. It fosters a culture of continuous improvement and operational discipline; lean manufacturing enables organisations to improve productivity while simultaneously advancing broader sustainability and circular economy objectives.

3.4. Reverse Logistics

Reverse logistics is a process where products, packaging, or materials move backward in a reverse order through the supply chain after they have been used, sold, or discarded, so they can be reused, repaired, refurbished, recycled, or disposed of responsibly.

A traditional supply chain has goods moving forward from manufacturer, distributor, retailer to the customer. In reverse logistics, however, the flow happens in the opposite direction: customer/waste source, collection point and recycler, repairer or manufacturer.

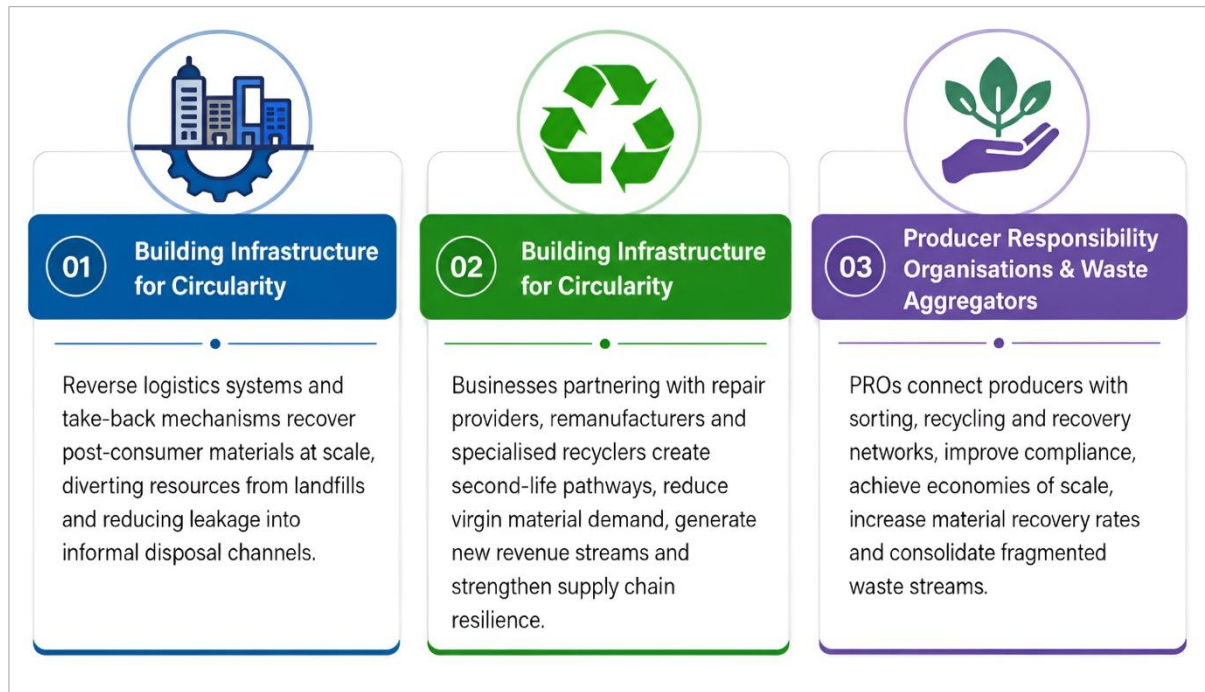


Figure 4: Three categories of Reverse Logistics.

3.5. Consumer Engagement

Consumer engagements are crucial not just as a sustainability enabler in translating collection targets into recovery volumes but also as a strategic lever for long-term value creation. As consumers become more and more informed and connected to the purpose of circularity, firms could also simultaneously work on strengthening loyalty by embedding values such as transparency, participation, and shared accountability into the consumer journey.

Rather than treating consumers as end users, organisations should position them as active partners in value creation, encouraging behaviours such as product reuse, repair, return, and responsible consumption. Companies that successfully align commercial objectives with evolving consumer expectations will be better placed to build trust, enhance brand equity, unlock new revenue streams, and create more resilient and sustainable growth models.

4. EPR as an Enabler of Circularity

Extended Producer Responsibility is often seen by companies as a compliance cost, however, in addition to that, it is a policy lever that is able to convert circular ambition into circular infrastructure, because it attaches a specific financial and reporting indicator to each point in the value chain where circularity would otherwise stall.

4.1. How EPR enables each circular strategy

Circular strategy	How EPR enables it
Product design	Creates a direct financial incentive to design for easier disassembly and recycling, since recovery cost is borne by the producer.
Packaging	Drives sustainable usage of materials thereby reducing the volume and complexity of packaging placed on the market.
Collection	Funds producer-financed recovery infrastructure, shifting cost away from already-strained municipal budgets.
Recycling	Creates a more stable, contractually secured feedstock supply for domestic recyclers, improving investment viability.
Data	Forces traceability of material flows through mandatory reporting
Partnerships	Formalises the role of Producer Responsibility Organisations, converting informal collector networks into accountable, auditable partners.
Innovation	Incentivises investment in alternative materials and reuse models by internalising the cost of end-of-life management.

Table 2: How EPR enables circular outcomes across the value chain.

4.2. Business Readiness for a Circular Transition

While the roadmap outlines the sequence of actions required for EPR compliance and circular transition, organisations must first understand their current level of readiness. The table below provides a structured way to assess current capability across five pillars, and to locate their organisation on a four-level maturity scale, so that investment can be sequenced deliberately rather than reactively.

Strategy	Circular KPIs embedded in corporate strategy, visible leadership commitment, and time-bound circularity targets set at board level.
Product	Eco-design principles, packaging optimisation and innovation pipelines oriented toward recyclability, reuse and material reduction.
Operations	Waste reduction, resource efficiency and reuse embedded into manufacturing processes and facility-level performance metrics.
Ecosystem	Active, structured relationships with suppliers, Producer Responsibility Organisations, municipalities and consumers across the value chain.
Data & Governance	Material tracking systems, ESG reporting discipline and EPR compliance metrics that are audit-ready rather than reconstructed after the fact.

Table 3: The five pillars of circular readiness.

These pillars are deliberately ordered to reflect dependency: Strategy sets direction and mandate; Product and Operations translate that direction into physical practice; Ecosystem extends capability beyond the organisation's own walls; and Data & Governance underpins credibility across all four, since none of the other pillars can be verified, reported or defended to regulators and investors without it.

The five pillars provide the foundation for assessing an organisation's readiness for circularity and EPR compliance. However, understanding the current state is only the first step. Organisations must also identify the sequence in which capabilities should be developed to enable a structured and practical transition.

The roadmap below outlines a phased approach for Sri Lankan businesses to strengthen these capabilities, progressing from establishing internal strategy and product design, to

embedding circular operations, building ecosystem partnerships, and finally institutionalising data, governance, and compliance. This staged approach enables organisations to prioritise investments, manage implementation risks, and build circular capabilities progressively rather than attempting transformation all at once.

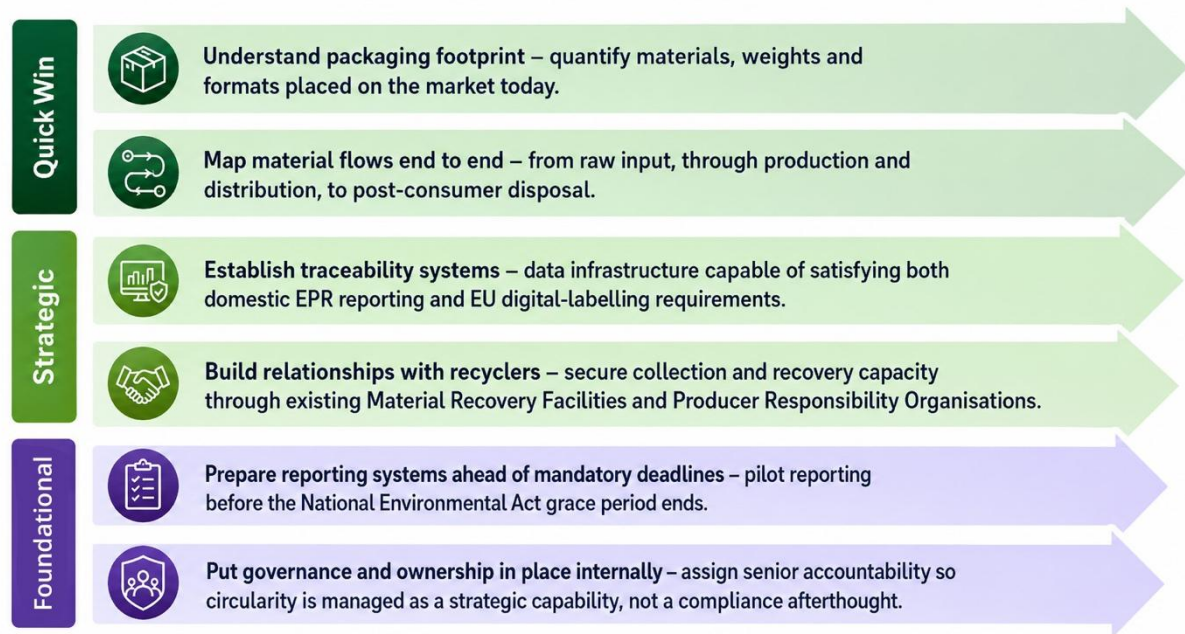


Figure 5: Business readiness roadmap for EPR compliance and circular transition.

A maturity model will enable organisations to evaluate their current level of capability across each of the five pillars, identify capability gaps, and define the next stage of action. Together, the readiness assessment, roadmap, and maturity model provide a practical framework for planning, implementing, and measuring the transition towards a circular economy.

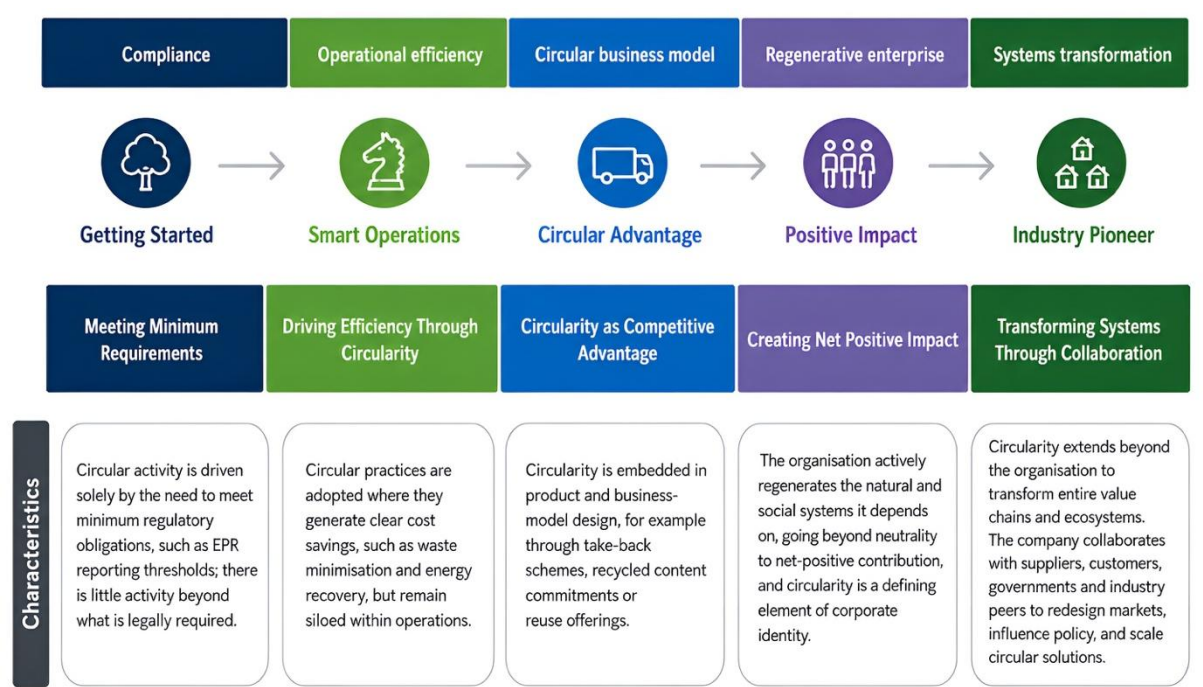


Figure 6: Circular readiness maturity levels.

5. Conclusion

Extended Producer Responsibility marks a shift in how businesses manage products beyond the point of sale. For Sri Lankan companies, the immediate focus will be compliance with emerging regulatory requirements. Over time, the greater opportunity lies in using EPR to improve product design, strengthen material recovery, build resilient supply chains and reduce dependence on virgin resources.

Businesses will need reliable data, clear ownership, strong partnerships across the value chain and systems that track materials from production to end of life. These capabilities form the foundation of a circular economy where resources remain in use for longer and waste is treated as a valuable input rather than an unavoidable output.

The paper provides a practical way to assess where an organisation stands today and identify the capabilities needed for the next stage of its circular journey. Organisations that invest early in these capabilities will be better prepared for regulatory change, better placed to respond to market expectations and better equipped to create long-term value through circularity.



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