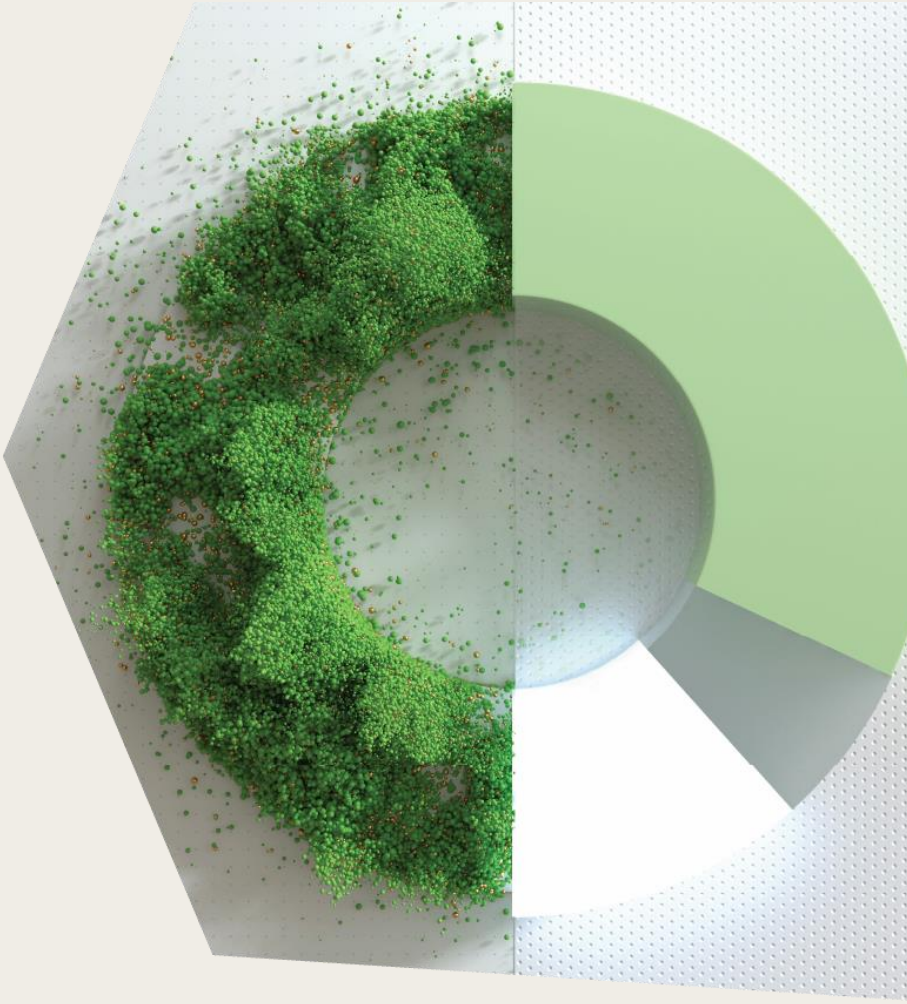

Global Circularity Protocol *for Business*

Landscape Analysis of Circularity-related Corporate Performance & Accountability and Policy & Regulation

Summary Report

July 2024

World Business Council for Sustainable Development

One planet handle with care

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Introduction

The Global Circularity Protocol (GCP) for Business is a new global initiative spearheaded by the World Business Council for Sustainable Development (WBCSD), in collaboration with The One Planet network (OPN). By 2026, the Global Circularity Protocol for Business will be the go-to action framework to guide companies in target-setting, measuring, reporting and disclosing progress on resource efficiency and circularity, combined with comprehensive and targeted policy guidance to accelerate the shift toward circular business models and a regenerative economy. The GCP will cover resource[i] flows in both the techno-sphere and the bio-sphere[1].

The development of the GCP will be undertaken in four workstreams:

1. *Circular Transition Impact Analysis*
    a. ***Landscape analysis of circularity-related Corporate Performance & Accountability (CP&A), policies & regulations***
    b. *Impact analysis of a GCP on Climate, Nature and Social Equity goals as well as business and value chain performance*
    c. *Global Circularity Protocol Design principles*
    d. *Risk and Opportunity Assessment*
2. *Corporate Performance and Accountability System (CP&A) for Circularity*
3. *Policy Framework for Circularity*
4. *Science-informed Target Setting for Circularity*

This document covers the output of the 'landscape analysis'. It includes an analysis of circularity-related corporate accountability and performance practices, policies and regulations. The aim of the landscape analysis is to identify gaps and opportunities in the circular ecosystem that can help shape the GCP.

Methodology

The landscape analysis applied an inclusive approach covering both the private and public sectors, as well as the Global South and Global North.

- **Literature review:** This included over 225 documents (75+ for CP&A and 150+ for policy) from 5 continents and over 40 countries were reviewed to shape the insights. The selection ranged from circularity and sustainability measurement frameworks to international case studies and policy reports.
- **Workshop and interviews:** The findings were individually discussed with 23 global subject matter experts, and collaboratively reviewed with the GCP Technical Working Group. The GCP Technical Working Group consists of 60+ members representing 36 companies, academia, policy and civil society organizations from Global North and South. Together, they provided their expertise and insights.
- **Validation:** Finally, the insights were validated with experts in the Business Advisory Committee, Policy Advisory Committee, and Independent Scientific Advisory Committee.

The analysis of corporate performance and accountability systems, policies and regulations was carried out between March and end of May 2024, and the sources may have been updated since. Given the evolving nature of each of these, the work may be updated in the future if deemed useful.

[i] Resources include land, energy, water and materials.

Document structure

This document provides a **summary** of the gaps and opportunities identified from the landscape analysis on CP&A and policy. For a full view of the analysis please click here for the GCP Workstream 1 Landscape Analysis. The potential impact of the GCP in advancing Climate, Nature and Social goals will be covered in a follow-up publication.

The landscape analysis findings have been grouped into **themes.** For CP&A, the themes are broken down into:

1. *Circularity can be leveraged to achieve 1. A sustainable and just* transition
2. *A resource-centric view with a focus on the full life cycle, rather than just on end-of-life, is fundamental to 2. Resource value retention and* maximization
3. *Organizational enablers can help to accelerate the transition*
4. *Harmonized valuation and risk methods are necessary to support the Finance for circular businesses* and models
5. *Consistency and harmonized reporting are critical for value chain transparency*

Each of these have a set of recommendations, followed by a CP&A **conclusion**. The policy landscape analysis themes are divided into:Harmonized reporting and value chain transparency

6. *Strategic policy levers enable the achievement of circularity objectives*
7. *Broader Ecosystem enablers complement the levers and support the transition*

These are also followed by concluding recommendations.

Main insights: CP&A landscape analysis

1. A sustainable and just transition

Companies can use circularity as an instrument to address resource scarcity, achieve net-zero, zero pollution goals, combat biodiversity loss, drive an impactful and just transition, and create economic impact.[2,3,4] However, circularity can lead to unintended consequences and rebound effects (e.g., job changes may affect communities differently, increased consumption, etc.) if not implemented deliberately and cautiously to “optimize its impact and help society reap the benefits”.[5]

Circularity can reduce negative and enable positive **environmental impacts**. Linking circular economy (CE) indicators with impact can help organizations determine risks and (avoided) impacts.[ii] However, examining the interaction between planetary boundaries[6] and CE metrics, further examined in section 2. Resource value retention and maximization, reveals that current standards include this connection to a limited extent:

- 55% of global greenhouse gas **(GHG) emissions** are related to material resource extraction and processing.[7] Reducing virgin resource extraction by 30% can keep the planet below the 2ºC limit.[8] GHG emissions metrics are increasingly covered in circular reporting standards, however the measurement of GHG emissions savings (or avoided emissions) associated with circular practices is limited to Circular Transition Indicators (CTI)[9] and Cradle to Cradle[10] (with limited measurement scope). Additionally, the GHG protocol does not highlight circular practices and their potential (see Section 5 for further examples and limitations).[11]

[ii] Acknowledging that the quantification of the CE's positive environmental impacts remains a methodological challenge at an aggregate level.

- Resource extraction and non-regenerative agricultural practices lead to **land and biodiversity** degradation.[12] Circular and regenerative practices can reverse this impact.[13] While indicators and guidance are emerging, they are mostly limited to non-circularity-specific frameworks such as the European Sustainability Reporting Standards (ESRS) E4 – Biodiversity, Science-Based Targets (SBT) for Nature[14] and Nature Capital Protocol.[15] In CE-specific standards and frameworks, CTI's Nature Impact Indicator[16] aims to measure land use impacts of material extraction and cultivation.[17]
- In a 2023 study of changes to the planetary boundaries[iii], the freshwater boundary was found to have recently been surpassed.[18] This recent overshoot makes **water impacts** increasingly apparent and important.[19] While standards and frameworks contain water usage and circularity indicators (e.g., CTI's % water circularity), they do not compare the water savings or footprint of circular over linear products.
- Minimizing pollution impact (to air, soil, and water) is highlighted by stakeholders and literature as an important value-add for CE.[20] Pollution and avoided impact associated to circularity can be assessed across the value chain[21] from sourcing until end-of-life. In general, CE-specific standards do not measure pollution.
- The rate of global resource extraction and consumption puts pressure not only on climate, nature and societies, but also on the availability of resources themselves. Circular practices will increase resource efficiency and can lead to avoided emissions and resource use.[22,23] Current CE standards partially address this, focusing in particular on critical raw materials indicators in CTI and ESRS E5. Lastly, ISO contains two measures of decoupling, a material productivity indicator and a resource intensity index which can be used at the regional or organizational level.

The circular transition should be **just** and **equitable**, and it should consider potential adverse impacts on specific population groups, geographies, and value chains. Examples of current impacts include:

- The **Global South bears the brunt** of climate and waste-related impacts, while having limited influence or control over product material choices and product design.[24]
- **Certain circular practices** may worsen conditions for some stakeholders in the value chain. For example, it may lead to increased unpaid labor due to additional efforts in the value chain (e.g., cleaning reusable items), or unsafe recycling processes using toxic chemicals.[25]
- **Bridging supply demand gaps** for production in the Global South may be more challenging due to the lack of recovery and recycling infrastructure, posing a challenge in using secondary materials which may be required by standards set in the Global North.
- The **informal economy** consisting of over 60% (2 billion) of workers globally – plays a key role in the circular economy, nonetheless:[26,27]
    - **Resources, skills and knowledge** held by informal workers are often not valued in the formal economy, and efforts are not made to build on their knowledge[28]
    - Workers are **exposed** to "numerous challenges, from low wages and job insecurity to limited access to skills development, hindering the socio-economic advancement"[29]

However, social impacts and those of informal activities, both positive and negative, go unaccounted for in reporting and are not part of companies' value chain considerations in a structured way. No circularity-specific standards and frameworks connects circular practices to social impact at a micro level. For example:

[iii] Nine planetary boundaries were first proposed and described by the Stockholm Resilience Center in 2009

- Circular Jobs Initiative[30] provides macro but no micro indicators. While CTI social impact is under development, there is currently little guidance on how to account for and/or report on.
- ISO 59020 provides guidelines on assessing value and impact and refers to complementary methods such as ISO 26000 – *Social Responsibility*, however no indicators are provided.
- Other frameworks (e.g., IRIS+, Social Life Cycle Assessment, ESRS social standards) incorporate social indicators but they do not connect them to circular performance.

Recommendations

- Following the consultation with experts, the GCP should consider how to best account for environmental and social impacts.[31] Potential indicators include:
    - Environmental: GHG emissions, land use, biodiversity, water impact, resource scarcity and pollution.
    - Social: Job creation, impact on income, minority- or women-owned procurement, product toxicity, involvement of women in design of products.[32,33,34,35,36,37]
- While global differences between the Global North and South were acknowledged, stakeholders agreed that metrics should not be different across regions, and the framework should instead aim for consistency and comparability.[38] Regional or sectoral differences could be accounted for by allowing reporting against thresholds.

2. Resource value retention and maximization

Most reporting metrics focus on end-of-life or lifespan extension (see Figure 1), and do not account for a resource-centric view, which is fundamental to decoupling, value retention and resource maximization.

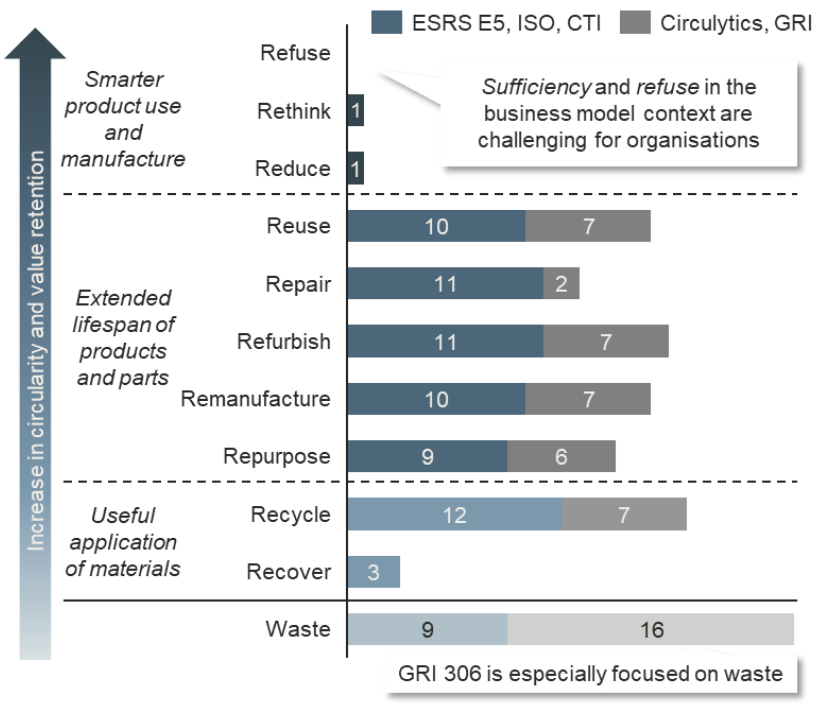

Figure 1: Reporting indicators mapped on the 10R-ladder. Source: Analysis by authors of this report.

To assess the current reporting ecosystem, existing indicators from six primary sources (ESRS E5, ISO 59020, CTI v4.0, Circulytics and GRI 301 and 306) were plotted against a 10R-ladder, see Figure 1.[39] Most metrics are skewed towards the lower (recycling, recovery) and middle (lifespan extension) interventions. This is in line with a study carried out on EU discourse, policies and actions adopted. The study showed that while the EU *discourse* is holistic (incl. wider implications of circularity), the EU's *actions and policies* are focused on "end of pipe [or life]", which is akin to the bottom of the ladder.[40] There is an opportunity to incorporate metrics in the upper steps of the R-ladder, which are associated to smarter product use and lower material use (e.g. through circular business models

and innovation), and currently lacking.[41] Doing so is important because these practices are often associated with avoided impact, however these effects can be challenging to measure.

Although the R-ladder is widely recognized and utilized, it does not provide a framework to measure against each of the circular principles that enable a systemic transition. Differing views on the top of the R-ladder include relating these strategies to “lower business value” vs “viable business opportunities”, the latter not being recognized by metrics and reporting.[42] A resource centric view focusing on decoupling, value retention and maximization for society, the planet and the end customer, is needed for a holistic framework.[43]

Mapping existing metrics to broader circularity principles, the following gaps were identified:

CE Principle[44,45]	**Narrow** *Use less*	**Slow** *Use longer*	**Close flows** *Use again*	**Regenerate** *Use regenerative resources*
CTI v4.0	• *Circular material productivity* • *Total linear inflow* • *Circular inflow in mass*	• *Actual lifetime compared to own product or industry average*	• *% material circularity* • *% recovery potential* • *% recovery types* • *% recovery type by lifetime extension*	• *% circular inflow (renewable)* • *% biodegradable* • *GHG impact (sourcing)* • *Nature impacts*
ISO 59020	• *Decoupling index* • *Resource productivity* • *Value per mass*	• *Average lifetime of product or material relative to industry average*	• *Average % reused or recycled content* • *Inflow* • *Outflow*	• *% renewable content of an inflow*
ESRS E5	• *Minimization of virgin non-renewable material*	• *Expected durability* • *Design principles* • *Reparability of products*	• *Weight and % of:* • *reused or recycled components or content* • *Design principles* • *waste generated and method of recovery or disposal*	• *Overall weight of biological and renewable materials that are sustainably sourced*
Gaps	Resource intensity metrics, which are different from resource efficiency metrics, are needed to measure resource decoupling and avoided resource use. These metrics are starting to appear in standards such as ISO and can be applied at an organizational or regional level, however they are not yet widely used and often need to be tracked over time. An industry-lens or product-lens can drive applicability[46]	There is a key gap in defining and harmonizing lifetime terms (which include durability, reusability, repairability etc.) and measurements, which makes comparability and benchmarking across products and businesses challenging	Frequently documented and well-represented in the CE by the bottom R-ladder steps, via end-of-life measures. Among ‘close’ flows, there is a (large) overreliance on recycling, lacking prioritization of other interventions like reuse or repurposing of components or materials. However, metrics on design for circularity are starting to appear (e.g., CTI’s recovery potential is linked to design)	Lack of clear criteria for defining regenerative, renewable, or sustainably sourced circular materials and for biodegradable or compostable outflows

In conclusion, there is a lack of standardization and harmonized definitions to measure against each of the circularity principles. To guide companies through the circularity transition and increase adoption, interoperability, clarity and standardization are essential.

We collectively need to acknowledge that not all principles are applicable to all businesses. Following the business activities companies need to determine which principles are relevant for them and incorporate corresponding metrics. In doing so, they need to review their place in and influence on the value chain. This is also important as no current standards or frameworks cover waste from upstream activities nor downstream use or consumption. For more insights on this, see section *5. Harmonized reporting and value chain transparency*. As we see in this theme, there is a lack of standardization and harmonized definitions.

Recommendations

- Address current gaps by developing and incorporating comparable indicators and definitions for each CE principle
- Include metrics that focus on decoupling, value maximization and enable the measurement of avoided impacts, e.g., metrics on refuse, rethink, reduce interventions
- Measure the adoption of circular business models and innovation to "create a level playing field and incentivize higher R-practices" alongside appropriate policy[47]
- Provide intensity, lifetime extension and biosphere definitions and indicators that allow for comparability for benchmarking and performance tracking.

3. Accelerating the transition through organizational enablers

While measuring material flows and environmental and societal impact is fundamental, and understanding business performance is critical, organizational enablers are needed to help accelerate the circular transition.

The research identified five key organizational enablers of circular practices and business models. When available, guidance and indicators for these enablers are of qualitative nature in current standards and frameworks:

- **Collaboration**, for example, with suppliers, customers and policymakers is critical for circularity, enabling innovation, new business models and circular solutions. It is also needed to share knowledge and data across value chains and industries.[48,49,50,51] In reporting, collaboration is frequently covered by qualitative disclosures that are similar and aligned across standards.
- **Digitalization** and **data** are necessary for informed decision-making, and development and adoption of circular business models. This requires data prioritization, interoperability, standards, and management.[52] Challenges exist around data availability, accessibility, reliability and comparability.[53] Although it is difficult to quantify these challenges, some qualitative indicators exist in CTI and Circulytics.
- **Building skills** and **knowledge** can allow organizations to better implement CE strategies, improve circularity assessments, and develop innovative solutions.[54] Of the six primary frameworks assessed[iv], only Circulytics covers this.
- **Developing a suitable long-term circular strategy** connects an organization's daily operations with circularity targets. These targets are a critical anchor for tracking progress and ensuring accountability.[55] CTI and ISO include guidance on strategy development and target-setting, while Circulytics contains qualitative indicators.
- **Leadership buy-in** and empowerment is critical for the viability and scale-up of circular business models and practices.[56,57] This is qualitatively covered by Circulytics only.

[iv] Primary six standards and frameworks covered include: ISO 59020, ESRS E5, CTI, Circulytics, GRI, SASB

Recommendations

- Provide (quantitative where possible) indicators and comprehensive guidance, highlighting how enablers can be leveraged with various parts of an organization to drive systemic value creation.
- Establish a common circularity language, including a global taxonomy, to address challenges in ecosystem collaboration, improve data interoperability, and incentivize data sharing to drive circular practices.
- Provide guidance on data availability scenarios and assumptions which can aid decision-making and reporting, as well as guidance on evaluating data reliability and data prioritization to drive reporting credibility.

4. Finance for circular businesses and models

Financing is a key enabler of the CE transition and scaling of circular business models. Financial actors, including governments, investors, insurers, investment, commercial and multilateral development banks and private equity have different needs and roles to play. Both finance providers and businesses seeking finance, run into similar challenges due to the gaps in current standards and frameworks.

The research shows that circular businesses can struggle to attract the same type and level of funding as linear ones,[58] although they can be more resilient and less risky.[59,60,61] There are several reasons for this, including:

- Current risk models are often grounded in the linear economy and may not be fit for circular business. Most do not factor in externalities and linear or long-term risks such as resource availability. This results in a higher *perceived* risk for circular businesses.[62]
    - Financial institutions, like the Netherlands-based Circular Economy Working Group, are developing circular risks scorecards, leveraging the WBCSD's Circular Transition Indicators performance measurement methodology, to address this gap.[63]
- Focus on short-term financial returns can be a barrier for certain industries, as circular solutions may require higher upfront costs and may not yield immediate financial returns.[64] In this case, there is an opportunity to learn from complex, asset-intensive industries which take a longer-term view to investments and returns. Some institutions are addressing this by bringing forward green and circularity-specific instruments. Two examples are Intesa Sanpaolo's CE credit plafond[65] and a pilot developed by the Inter-American Development Bank's private arm (IDB Invest) to finance investments of circular economy projects in the private sector.[66]
- Traditional valuation models are often not designed for circular businesses:
    - Circular goods are not depreciated linearly, and markets are immature in valuing and pricing residual resources accurately.[67]
    - Certain circular business models such as Product-as-a-Service (PaaS), require large amounts of debt to fund assets. This may lead to balance sheet and financial ratio effects that can disincentivize investors, despite the potential value and competitive advantage of such models.[68] Venture capital and private equity can fill the gap where "banks find projects too innovative" or projects are "too capital intensive [for other actors] to finance in full".[69]
    - Benefits of circular practices to the broader value chain are not considered. However, we need to acknowledge that attributing benefits to individual companies can also be challenging.[70,71]

Looking at financial reporting reveals a lack of standardized metrics to describe and compare companies' circularity.[72,73] Furthermore, costs associated with non-financial disclosures limits voluntary disclosures.[74] Additionally, while ESG Ratings, SFDR and the EU Taxonomy are highlighted as key drivers of CE information for investors,[75] the metrics of the latter two do not easily align with current mandatory and voluntary disclosures.

Recommendations

- Develop and enhance holistic risk models suited for circularity by incorporating assessments of linear risks and long-term impacts[76]
- Develop guidance for businesses to disclose relevant decision-useful circularity information for the financial industry
- Include standardized methods, metrics (including unit-value metrics) and definitions to support circular businesses as well as investors in decision-making and comparing business models and investment cases.[77,78]
- Enable comparisons through valuation methods and value chain transparency, to reflect value created and overcome the higher perceived risk:
    - Account for residual resources and harvest value, providing clarity on common measurement methods and definitions as well as unit-value metrics that allow for business model comparisons[79]
    - Embed alternative financial ratios and indicators to address current balance sheet effects and capture the benefits and opportunities of circular businesses
    - Factor in environmental and social externalities

5. Harmonized reporting and value chain transparency

Challenges related to value chain transparency are significantly impeding the circular transition. Amongst others stemming from discrepancies in definitions and indicators, barriers to data access, and a limited scope of reporting and responsibility.

Circularity is facing a scalability challenge.[80] One reason surfaced by the landscape analysis as to why organizations are not adopting circularity at the pace and scale required, is limited accountability and transparency within their value chain.[81] Existing standards and frameworks lack standardized methodologies and definitions to measure direct (e.g., flows entering and exiting the organization) and indirect materials flows across the value chain, and they limit reporting to flows within organizations' boundaries. See a simplified diagram of the reporting boundaries in standards and frameworks in Figure 2.[82]

Benefits of accounting for flows beyond an organization's boundaries include driving accountability for efficient value chain resource use (e.g. GHG Scope 3), incentivizing companies to measure and act beyond their boundaries, reinforcing collaboration, avoid double counting of impacts (like GHG emissions) and promote the shift from waste-centric to resource-centric measurements.[83] However, current gaps and challenges include:

- Reporting of flows beyond an organization's boundaries is limited. For example, GRI 306 disclosures are limited to descriptions of up- and downstream waste-related impacts and waste.[84] CTI, Circulytics and ISO include some downstream indicators (e.g., % actual recovery)
- No standards or frameworks cover waste from upstream activities, nor downstream use or consumption. The gap in downstream impacts is starting to be covered by EPR schemes however challenges remain in products that move across geographies during or after use.[85]

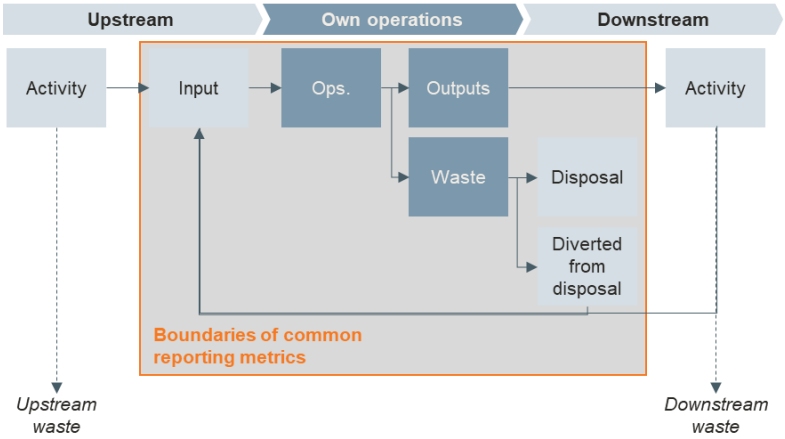

Figure 2: Reporting boundaries in standards and frameworks, simplified diagram. Adapted from GRI 306: Waste 2020 standard.

- Current frameworks like the GHG protocol or SBTi, make it challenging to report on innovations that drive environmental improvements of products during use e.g., longer product lifetime increases the total CO_2 per product footprint. This can disincentivize applying innovations on products in use.[86]
- While LCAs are commonly used to capture flows, they are generally performed on individual products, mainly focus on GHG emissions, and are limited in assessing circularity.
- It can lead to burden-shifting, where negative impacts of direct material flows are pushed out or externalized through outsourcing. This stresses the need for both absolute and relative intensity metrics across the entire value chain, as absolute metrics alone offer limited insight, whereas relative metrics enable meaningful comparisons over time and against industry benchmarks.

Although, organizations can significantly influence downstream flows via the product design,[87] there are no indicators to measure these actions. Similarly, innovations that can enable other value chain actors to increase their circularity (e.g., dematerializing solutions for downstream consumers), yet these efforts also lack measurable indicators.[88] While governments are using strategic levers (e.g., financial instruments and EPRs) to encourage companies to consider their downstream impacts,[89] the scale and coverage of this is inconsistent, limiting circularity business cases.

In addition to a lack of value chain transparency and reporting being limited to the organizational boundaries, the analysis shows a lack of (industry) alignment across definitions and measurement indicators. While most standards and frameworks are industry-agnostic, differences exist among them. For example, when looking at *resource outflows*, ESRS E5 requires organizations to disclose (and focuses on) the expected durability, the repairability and recyclability of products, while CTI uses actual and potential recovery, focusing on overall recirculation.

Further gaps lie in the lack of specific sectoral guidance, although CTI is starting to address this.[90] The consultations in this process converged around the need for an industry-agnostic framework, complemented with industry specific guidance, to create a level playing field across organizations, and address specific material, sectoral or value chain challenges.

Recommendations

- Provide clear definitions of material flows, including the scope and boundaries of flows for which organizations are accountable for.[91]
- Include and further develop indicators on product design.
- Build on existing frameworks to address inconsistencies, providing harmonization, interoperability and comparability.
- Start with an agnostic framework, and provide sector-specific (value chain or material) or regional guidance to reflect specific circular solutions, metrics and measurements.

Conclusion

Summarizing the recommendations from the CP&A landscape analysis:

1. The GCP should set **globally consistent metrics**, but also incorporate relevant environmental and social indicators to enable a clear link and measurement between CE practices and business impacts. For example, recognition of the *informal economy* as a key contributor to the circular economy will help ensure the GCP is conductive to a just transition.
2. The GCP should include a **broad range of indicators** aligned with CE principles that are currently not represented, enabling the measurement of avoided impacts and resource use of circular and sharing models. For example, these should cover both the techno- and bio-sphere, life cycle approaches, value maximization aligning to the top of the R-ladder, and indicators to measure organizations' demand-side strategies and levers (e.g., circular procurement, data and information available to consumers).
3. The GCP should provide **quantitative indicators and comprehensive guidance**, highlighting how enablers can be leveraged within different parts of an organization to drive systemic value creation. For example, establish a common circularity language to provide a base for regulation, standards and frameworks, and organizational global alignment, supporting collaboration and data sharing.
4. The GCP should set **guidance to navigate external enablers** that can accelerate the transition towards a circular economy, such as financing. For example, standardized methods, (unit value) metrics and definitions will enable the comparison of investments as well as the surfacing of value creation by circular businesses (necessary tools include holistic risk models that are better suited for circularity, and valuation methods for residual resources, as well as for companies with circular business models).
5. The GCP should incorporate the below considerations:
    a. Set clear definitions of material flows and define the boundaries of flows for which organizations are accountable for to increase transparency and consistency.
    b. Adopt a value chain approach that enables the systemic shift from waste to resource centricity.
    c. Build on existing frameworks to address inconsistencies, providing harmonization and interoperability and enabling comparability.
    d. Provide guidance to reflect that circular solutions (and their measurement) will likely vary per industry, sector or region.

Main insights: policy and regulation landscape analysis

The research has found that governments are key enablers of the transition to circularity. Policymakers are using a range of strategy levers to implement circularity objectives, but their success is linked to broader ecosystem enablers. The landscape analysis summarizes eight strategic levers and eight ecosystem enablers, critical to a successful move toward a circular economy. These are being applied in different combinations across geographies to varying degrees and levels of success. The steps needed to enhance levers and enablers are not always clearly defined as they relate to overarching system change.

More than 150 policy-related documents were reviewed.[v] Building on previous research,[92] common enabling dimensions emerged through the literature. Eight recurring **strategic levers**[93] were identified. Strategic levers serve as instruments used by government to drive targeted action across a country's circularity activities. They define ambition, incentivize growth and set-out organizational obligations. Each lever has a varying level of impact on a country's circularity progression. The eight levers are detailed in section 6. Strategic policy levers.

Similarly, building on existing research,[94] eight **ecosystem enablers** were identified and can be defined as overarching systemic changes needed to accelerate the circular transition. Ecosystem enablers create an environment that underpins and supports the implementation of policy levers. Each enabler plays a key role in enacting system-wide change and is closely interlinked in achieving countries' long-term circularity objectives. The eight enablers are detailed in section *7. Ecosystem enablers*.

Successful policies include a variety of strategic levers and ecosystem enablers to drive the circular transition. The levers and enablers reinforce each other. Figure 3 shows the relationship (and direction thereof) between each of the levers. For an in-depth analysis refer to the extended landscape analysis, here.

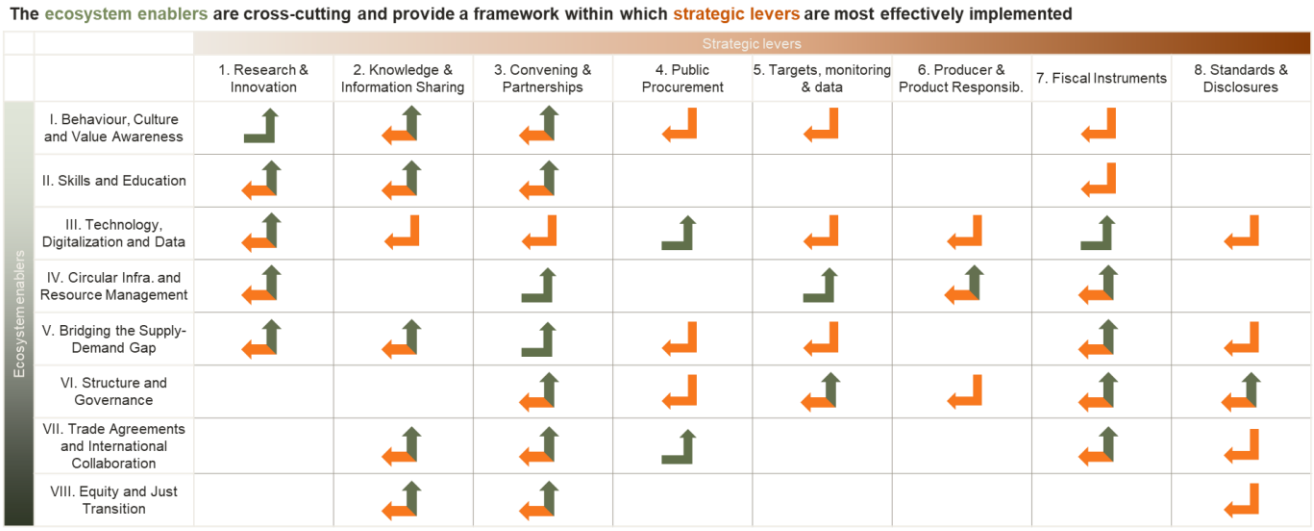

Figure 3: Relationship between strategic levers and ecosystem enablers. Source: Analysis by authors of this report.

[v] Excludes the Intergovernmental Negotiating Committee (INC) instrument on plastic pollution currently under work.

6. Strategic policy levers

To support the transition towards circularity, governments can use a combination of strategic levers as part of their strategies; regardless of where they are on their maturity journey, they are all critical to successfully move towards a circular economy. For each lever, three cases studies were reviewed from polices spanning 35 countries. For an in-depth analysis including the case studies, refer to the extended landscape analysis, here.

1. Research & innovation

Supporting and funding research projects & programs which accelerate advances in innovation and technology. This provides business with the tools to future proof their operations and secure a circular future.

2. Knowledge & information Sharing

Facilitating and encouraging the transfer and sharing of knowledge. Strategies include building voluntary data collection systems to be used by private sector, knowledge-sharing platforms, or national registries to map material flows. This can play a fundamental role in enhancing cross value chain collaboration.

3. Convening & partnerships

Facilitating (sub)national and/or (cross)sectoral collaboration; and industrial symbiosis often using place-based approaches. Working towards resource efficiency across at city, regional, industrial park, value chain or sector-level.

4. Public procurement

Incorporating and prioritizing circular principles and criteria in government procurement processes as well as earlier in the decision-making process for maximum asset value and life. Government can use public procurement to help drive and accelerate the transition, while linking different environmental strategies and reducing the cost to tender to business of circular initiatives.

5. Targets, monitoring & data

Setting ambitions for business, encouraging actors to monitor progress, and introducing reporting requirements for businesses – with a focus on interoperability – to hold them accountable against circular ambitions. This is contingent on the digital transition. The widespread impact targets, monitoring and data is also contingent on business and sector targets being aligned and consistent with national and regional targets to establish a clear line of progress. The Netherlands “started elaborating targets at a product group level to be able to examine the entire value chain and life cycle of a product” and is additionally working “towards a set of more concrete, overarching targets at national level”.[95]

6. Producer & product responsibility

Schemes to hold businesses that manufacture, import and sell these products are responsible for end-of-life environmental impact. Through utilizing eco-modulation, also impacting the start of the value chain. There is further opportunity to increase reuse.

7. Fiscal instruments

Fiscal instruments encompass fiscal policy instruments (e.g., tariffs, taxation, subsidies, funds, rebates) which can be leveraged by governments to influence consumer behavior and further support the circularity business case.

8. Standards and disclosures

Laws, rules, bans, restrictions, technical regulations, regulatory requirements or orders applicable to the manufacturing, marketing, sale, reimbursement and/or pricing of any products or any businesses operating in said market. Standards and disclosures are used to embed eco-design principles in manufacturing and encourage transparent reporting; but could be applied more comprehensively across the value chain.

7. Ecosystem enablers[96]

Complementary to the strategic levers, eight enablers support the circular transition.[97] For each enabler, three case studies were reviewed from policies spanning 20 countries.

I. Behavior, culture and value awareness

Moving away from the dependency on linear models requires a behavioral change from actors in the value chain, across society, including consumers and within companies, procurement, finance and leadership, reconsidering product and asset ownership and management. This includes activities to address overconsumption, and focus on systemic shifts.[98]

II. Skills and education

Enabling workers and end-users to have the right level of knowledge and to support the circular transition is a key requirement to assure that this transition can take place. Finding the right channels and assuring inclusiveness in access to information and training needs to be considered from the design of the educational programs.

III. Technology, digitalization and data

Supporting the creation of the right data and technological landscape can help provide actors of the value chain with suitable information to make data-driven decision making in line with circular practices. New data standards, rules for interoperability, development of new platform are examples of the role that governments can take to drive this forward.

IV. Circular infrastructure and resource management

Investing and developing the infrastructure necessary for circular economy across the value chain. This includes interventions at design, mid-stream of end-of-life phases, and can drive significant impact in a short period of time and a key aspect of the public-private collaboration.

V. Bridging the supply-demand gap

(Pricing) interventions to account for positive externalities that increase the demand for non-virgin materials, contributing to the value proposition of business and increasing economies of scale; subsequently driving down costs of circular models and increase supply. Simultaneously, (pricing) intervention to account for negative externalities can decrease demand for virgin materials. Combined with actions to address overconsumption, these interventions can help to address the supply-demand gap.

VI. Structure and governance

Putting in place necessary governance mechanisms to continuously monitor and evaluate progress with respect to roadmap/strategy objectives and to hold action owners accountable, within and outside government, as agreed in an overarching roadmap/strategy.

Circular strategy requires cross-governmental policy development and governance and should consider sector-specific strategies interaction with decarbonization and economic strategy.

VII. (Multilateral-)trade Agreements and International Collaboration

Putting in place measures to support collaboration cross international government and private sector stakeholders and incorporating circular principles in existing trade infrastructure and measures. Inconsistent circular taxonomies are presenting challenges in designing an economically viable circular trade model.

VIII. Equity and Just Transition

Strengthening the rights and recognizing the value of (informal) workers performing necessary circular activities. Ensuring the transition to a circular economy supports the inclusion across industries and geographies and does not neglect sections. The circular transition presents a series of opportunities for the people and communities involved; and this lens can generate significant buy-in for the transition.

Conclusion

Recommendations based on the policy and regulation landscape analysis include:

- The policy landscape for circular economy is divergent across countries and is constantly changing. There is therefore a need to standardize definitions and approaches to help embed consistency across geographies.
- As is the case with circular standards and frameworks, policy actions in national and regional circular economy roadmaps often focus on waste management.[99,100] There is a need to shift the focus to the entire lifecycle including policy on eco-design and designing for circularity.
- The impact of policy levers is optimized when implemented together – this applies to both domestic policies and regulations, and to international trade and cross-border businesses. Strong cross-governmental engagement is the best way to ensure a joined-up approach which works towards all circularity objectives.
- Ecosystem enablers are cross-cutting and play a key role in supporting a just transition. However, their development relies on strong public-private and cross-sector collaboration to bring about systemic change.
- Governments must consider the circular economy as part of their broader sustainability strategies. Circularity is inherently linked to economic development, industrial strategy and other policy objectives, such as net-zero, and it should be viewed as a mechanism for achieving climate, biodiversity, land, water, pollution and resource scarcity goals as well as business and value chain performance, but will require infrastructure development, incentives to drive circular business models and investments.[101]

Disclaimers

This report is released in the name of WBCSD and OPN. Like other reports, it is the result of collaborative efforts by WBCSD and OPN staff, experts from member companies and stakeholders, the Technical Working Group, and the Advisory Committee Members.

This publication is the result of an iterative process, incorporating feedback along several stakeholder consultation rounds with business leaders, scientific institutions, think tanks, NGOs, civil society and policy markers provided feedback throughout the process of developing this publication, ensuring that the document broadly represents most participants' views. However, the authors (WBCSD and OPN) are responsible for the final content. As a basic principle, the views expressed by project participants are individual views and may not reflect the views of the respective organisations or employers.

Please note that this document is part of a deeper analysis and report which can be found here. The analysis was carried out between March and end of May 2024, and the referenced sources may have been updated since. Given the evolving nature of each of these, the work may be updated in the future if deemed useful.

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