



ethica

CEO Factsheet: Linking Circularity to Business KPIs

Impactful messages to
share with your team

Linking Circularity to Business KPIs

Circular economy is a proven business performance driver. Our analysis across 21 core business KPIs shows that 17 demonstrate a direct or indirect positive impact from circular practices. Circular strategies improve profitability through cost savings and margin growth, enhance capital efficiency and resilience, strengthen customer retention, and accelerate innovation and employee engagement.

We compiled evidence from global studies confirming that circular transformation delivers measurable financial results across sectors. When circularity is integrated into the company's operating model and linked to established KPIs, its business value becomes visible and quantifiable.

This factsheet helps CEOs and teams map circular activities to the right KPIs and communicate in familiar financial terms.

We are here to help:



Paula Fontell
Founder & CEO, BBA
+358 40 768 0160
paula.fontell@ethica.fi



Paula Vastela, author
Head of Consulting, EMBA
+358 400 878 762
paula.vastela@ethica.fi



Ville Grönlund, co-author
Head of International Markets,
M.Sc.(Tech)
+358 50 506 2110
ville.gronlund@ethica.fi

Business KPIs for CEOs



These 21 metrics show how your business is performing in crucial areas like growth, profitability, operational efficiency and customer satisfaction
Not sure about the terminology? [Check our cheat sheet](#)

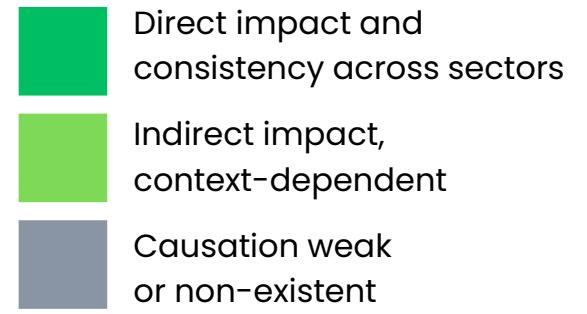
Revenue Growth Rate	Net Profit Margin	Gross Margin	Operating Margin	Inventory turnover	Accounts receivable turnover	Working Capital Ratio
Return on Assets (ROA)	Debt to Equity Ratio	Overhead rate	Employee productivity	Customer Retention Rate	Churn rate	Lifetime Value (LTV)
Customer acquisition cost (CAC)	LTV: CAC Ratio	Cash Conversion Cycle (CCC)	Earnings before interest and taxes (EBIT)	Net Promoter Score (NPS)	Employee Engagement Score	Innovation Index

Linking Circularity to Business KPIs



Impactful messages to share with your team

Click on the links to learn more!



[Revenue Growth Rate](#)

[Net Profit Margin](#)

[Gross Margin](#)

[Operating Margin](#)

[Inventory turnover](#)

[Accounts receivable turnover](#)

[Working Capital Ratio](#)

[Return on Assets \(ROA\)](#)

[Debt to Equity Ratio](#)

[Overhead rate](#)

[Employee productivity](#)

[Customer Retention Rate](#)

[Churn rate](#)

[Lifetime Value \(LTV\)](#)

[Customer acquisition cost \(CAC\)](#)

[LTV:CAC Ratio](#)

[Cash Conversion Cycle \(CCC\)](#)

[Earnings before interest and taxes \(EBIT\)](#)

[Net Promoter Score \(NPS\)](#)

[Employee Engagement Score](#)

[Innovation Index](#)

Revenue Growth Rate
Measures the increase in sales vs. previous periods

Claim: Circular offerings open new markets and drive topline growth.

Proof: Circular offerings like recycling and repair programs often boost topline growth by 15–20% over previous periods, as observed in multiple case studies across industries from electronics to manufacturing

Source: Scaling Circularity into Profitable Business; Boston Consulting Group, By Nanna Gelebo, May 02, 2025

<https://www.bcg.com/publications/2025/scaling-circularity-into-profitable-business>

◀ Back

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Net Profit Margin
Indicates % of revenue left as profit after expenses

Claim: Strong evidence of margin gains from material savings and premium pricing.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof 1: The Ellen MacArthur Foundation highlights that circular business models, especially product-as-a-service and reuse, can command higher customer loyalty and willingness to pay, due to perceived sustainability and durability

Source 1: Ellen MacArthur Foundation, Published on 14 February 2023

<https://www.ellenmacarthurfoundation.org/how-does-the-circular-economy-create-value>

Back

Proof 2: Circular economy strategies (such as recycling, repair, and product-as-a-service models) reduce dependence on virgin raw materials, leading to significant long-term savings in material and procurement costs – these savings directly improve net profitability.

Source 2: The Circular Business Model: Transforming Sustainability and Profitability, Published on June 5, 2025, By Herbert Komsoon, RTS

<https://www.rts.com/blog/circular-business-model/>

Gross Margin
Per cent of revenue that remains after cost of goods sold

Claim: Premium pricing for circular products lifts margins.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof: Circular economy strategies can positively impact gross margins, primarily through: (1) Premium pricing: Circular products often command higher prices due to their sustainability credentials, quality, or brand value. (2) Operational efficiencies: Reducing resource inputs and waste can lower production costs, which improves margins. (3) Resilience against volatility: Circular models can buffer against commodity price swings, stabilizing input costs.

Source: Is circularity always good business? Going circular can involve high near-term investment but also long-term value creation. The business case is often positive. 16 Sep 2024, William Nicolle, UBS

<https://www.ubs.com/global/en/sustainability-impact/our-insights/2024/is-circularity-always-good-business.html>

Operating Margin
Per cent of revenue left after all operating expenses

Claim: Resilience and cost savings from CE models improve operating efficiency.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof: Bain's 2025 CEO survey reports that almost two-thirds of companies with circular business models expect improved operational resilience and cost savings, even when accounting for higher upfront investments needed for redesign, asset tracking, and supply chain adaptation.

Source: Circular Business Models Unlock New Profit and Growth
Companies are using circular strategies to reap economic benefits.
By Joshua Hinkel, Hernan Saenz, Xavier Houot, and Abhijit Prabhu,
Bain & Company

<https://www.bain.com/insights/circular-business-models-unlock-new-profit-and-growth-ceo-sustainability-guide-2025/>

← Back

Inventory turnover
Times
inventory sold
and replaced
over a period

Claim: Leaner, less wasteful supply chains improve turnover.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof: Reduced excess and obsolescence: Sustainable supply management under circular principles minimizes overproduction and waste, leading to leaner stock levels and faster turnover rates.

Source: Too much of a lean thing? The impact of inventory leanness on circular economy performance Available to Purchase, Mingjie Fang, Diancen Xie, Kum Fai Yuen, Xueqin Wang, Lanhui Cai, Journal of Manufacturing Technology Management, August 11 2025

<https://doi.org/10.1108/JMTM-01-2025-0069>

◀ Back

**Accounts
receivable
turnover**
Efficiency in
collecting
receivables

Claim: Virtually no direct link to circularity.

There's little to no direct evidence that CE practices impact AR turnover or receivables collection efficiency in a measurable or consistent way

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

◀ Back

Working Capital Ratio
Comparison of current assets to current liabilities

Claim: CE reshapes inventory/payables, improving resilience.

Proof: The World Economic Forum's 2025 report notes that circular transformation improves resilience and cost efficiency, which often translates into leaner working capital structures.

Source: Circular Transformation of Industries: Unlocking Economic Value, Jan 2025, World Economic Forum (WEF) In collaboration with Bain & Company and the University of Cambridge

https://reports.weforum.org/docs/WEF_Circular_Transformation_of_Industries_2025.pdf

← Back

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

**Return on
Assets (ROA)**
Return on
shareholder
equity

Claim: Circular Economy has long-term de-risking effect, but this is sector-dependent.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof 1: According to a 2021 University of Milan study firms with stronger circularity performance demonstrated reduced financial risk and superior risk-adjusted returns.

Source 1: The Impact of Circular Economy on Public Equity in Europe. Understanding De-Risking Effect and Risk-Adjusted Performance, Zara, Iannuzzi, Ramkumar, University of Milan, Jan 2021

https://www.researchgate.net/publication/357025819_The_Impact_of_Circular_Economy_on_Public_Equity_in_Europe_Understanding_De-Risking_Effect_and_Risk-Adjusted_Performance

Proof 2: Sectoral variation is high: Benefits are more pronounced in manufacturing, energy, and construction than in services or finance. Time horizon matters: Circular investments may depress short-term returns but improve long-term ROA/ROE.

Source 2: Is circularity always good business? Going circular can involve high near-term investment but also long-term value creation. The business case is often positive. 16 Sep 2024, William Nicolle, UBS

<https://www.ubs.com/global/en/sustainability-impact/our-insights/2024/is-circularity-always-good-business.html>

Debt to Equity Ratio
Comparison of total debt of shareholders' equity

Claim: Circular models reshape capital needs, but debt impact varies by sector.

Circular models can influence capital needs (e.g., lower asset intensity, leasing vs. ownership), but the link to debt/equity structure is indirect. Sectoral consistency varies widely. In capital-intensive sectors (e.g., manufacturing, energy), circularity may reduce debt reliance through asset-light models. In others, the effect is minimal.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

 Back

Overhead rate
Proportion of
indirect costs
to direct costs

Claim: Circular economy can cut overhead, but sector and strategy decide.

Highly context-dependent; can rise or fall. Circular economy can impact the overhead rate, though the direction and magnitude depend heavily on the business model, implementation phase, and sector.

Source: Circular Transformation of Industries: Unlocking Economic Value, Jan 2025, World Economic Forum (WEF) In collaboration with Bain & Company and the University of Cambridge

https://reports.weforum.org/docs/WEF_Circular_Transformation_of_Industries_2025.pdf

← Back

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Employee productivity
Output per employee or workforce efficiency

Claim: Reskilling and digital CE tools improve workforce efficiency.

Proof: WEF report 'Unlocking Economic Value' emphasizes that circular transformation requires new capabilities beyond material substitution, including design for disassembly, reverse logistics, and digital lifecycle tracking. It notes that many businesses are moving from a cost-optimization mindset to one that includes resilience and innovation, which demands cross-functional skills and stakeholder engagement.

Source: Circular Transformation of Industries: Unlocking Economic Value, Jan 2025, World Economic Forum (WEF) In collaboration with Bain & Company and the University of Cambridge

https://reports.weforum.org/docs/WEF_Circular_Transformation_of_Industries_2025.pdf

← Back

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

**Customer
Retention Rate**
Per cent of
customer
continuing to
purchase over time

Claim: Sustainability-aligned brands enjoy higher loyalty.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof: Circularity should positively influence customer retention, and there's growing evidence that it often does. But the impact depends on how circularity is implemented and communicated. Studies show that sustainability-conscious consumers are more loyal to brands that reflect their values, especially Gen Z and Millennials.

Source: Retail's Circular Economy Requires Circular Loyalty
By Ted Levine, for Forbes Business Council Apr 22, 2022

<https://www.forbes.com/councils/forbesbusinesscouncil/2022/04/21/retails-circular-economy-requires-circular-loyalty/>

 Back

Churn rate
Rate at which
customers
leave or stop
purchasing

Claim: CE service models reduce churn, but evidence is less direct.

Proof: Service-based models reduce churn structurally. However a 2025 systematic review of 75 CE studies found that consumer engagement and perceived product quality are key to retention and churn, but churn itself is rarely measured directly.

Source: Circular Economy: A Systematic Review of High-impact Studies
Review Paper, Letícia Salazar Serra & Solange Alfinito, 08 August 2025
Springer Nature

<https://link.springer.com/article/10.1007/s43615-025-00679-0>

◀ Back

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Lifetime Value (LTV)
Total revenue from a customer over all time

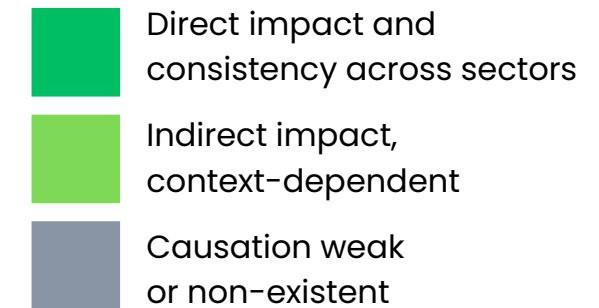
Claim: Circularity adoption to Customer lifetime value (LTV) delivers tangible gains.

Customer Lifetime Value (LTV) is one of the most promising KPIs where circular economy adoption can have a clear, positive, and measurable impact, especially when circularity is embedded in the business model.

Proof 1: A 2021 thesis from LUT University showed that product-service systems aligned with CE principles increase consumer interest and brand affinity, which are precursors to higher LTV.

Source 1: LUT School of Business and Management, Tytti Valvisto, CUSTOMER VALUE OF CIRCULAR PRODUCT-SERVICE SYSTEMS, 2021

https://lutpub.lut.fi/bitstream/handle/10024/163311/ProGradu_Valvisto_Tytti.pdf?sequence=1



Proof 2: A 2025 systematic review highlighted that consumer-driven demand and engagement are central to CE success - and that financial incentives and perceived quality are key to sustaining long-term relationships.

Source 2: Source: Circular Economy: A Systematic Review of High-impact Studies, Review Paper, Letícia Salazar Serra & Solange Alfinito, 08 August 2025 Springer Nature

<https://link.springer.com/article/10.1007/s43615-025-00679-0>

Back

Customer Acquisition Cost (CAC)
Cost of acquire a new customer

Claim: Circular Economy can raise or lower CAC, it's all in the execution.

Circular economy can influence Customer Acquisition Cost (CAC) in both positive and negative ways. The impact depends on how circularity is implemented, communicated, and perceived by the target audience.

Proof: The World Economic Forum's 2025 report notes that circularity can help firms "reach new markets and customers" while improving cost efficiency - but emphasizes the need for mindset shifts and clear communication.

Source: Circular Transformation of Industries: Unlocking Economic Value, Jan 2025, World Economic Forum (WEF) In collaboration with Bain & Company and the University of Cambridge

https://reports.weforum.org/docs/WEF_Circular_Transformation_of_Industries_2025.pdf

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

LTV:CAC Ratio
Return on
investment in
customer
acquisition

Claim: Circular Models Strengthen LTV:CAC.

Proof: Study by Fallahi et al. specifically noted that circular business models can produce a significantly higher LTV:CAC ratio. The article highlights that in circular setups, customer LTV often increases through repeated use, service contracts, and customer loyalty, while CAC either remains stable or decreases relative to linear models due to stronger brand positioning and better customer relationships.

Source: Financing solutions for circular business models: Exploring the role of business ecosystems and artificial intelligence, Sara Fallahi, Ann-Charlotte Mellquist, Olof Mogren, Edvin Listo Zec, Peter Algurén, Lukas Hallquist, November 2022, RISE Research Institutes of Sweden

<https://onlinelibrary.wiley.com/doi/full/10.1002/bse.3297>

← Back

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

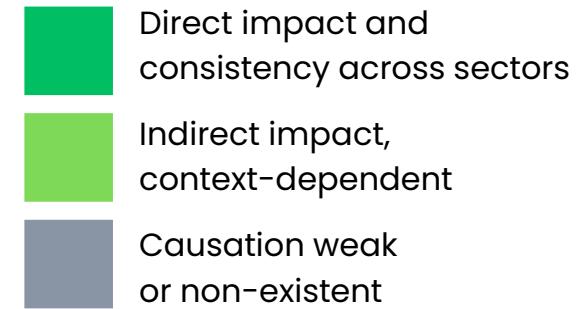
**Cash
Conversion
Cycle (ccc)**
Time to convert
business inputs
into cash flows

Claim: Circular economy can influence the Cash Conversion Cycle (ccc), and the impact is often more prominent in the long term than in the short term.

Source: JPMorgan notes that CCC can be optimized by reducing inventory holding time, accelerating receivables, and extending payables, all areas where CE can play a role.

<https://www.jpmorgan.com/insights/treasury/integrated-receivables/understanding-and-optimizing-your-cash-conversion-cycle>

◀ Back



Direct impact and consistency across sectors
Indirect impact, context-dependent
Causation weak or non-existent

Earnings before interest and taxes (EBIT)
Profitability excluding tax and interest expenses

Claim: Circularity can unlock economic value through cost reduction, resilience, and revenue growth, especially when embedded in core operations.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof 1: While recent WEF report doesn't isolate EBIT numerically, it highlights profitability gains from circular models like remanufacturing, modular design, and digital lifecycle tracking, which directly affect EBIT by lowering operating costs and increasing value creation

Source 1: Circular Transformation of Industries: Unlocking Economic Value, Jan 2025, World Economic Forum (WEF) In collaboration with Bain & Company and the University of Cambridge

https://reports.weforum.org/docs/WEF_Circular_Transformation_of_Industries_2025.pdf

Proof 2: The 2024 published in Economic Annals-XXI provides robust empirical evidence with sample of 200 European manufacturing firms (2018–2022) using panel data regression using a custom Circular Economy Index (CEI).

Source 2: Circular economy practices and their effect on corporate financial performance, Shavkatov, N., Abdurakhimova, D., Sherkuziyeva, N., Omonov, S., & Rakhmedova, M., 2024

Net Promoter Score (NPS)
Willingness of customers to recommend your business

Claim: CE-aligned experiences drive advocacy and referrals.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

Proof: Bain & Company found that NPS leaders in circular sectors outgrow competitors by 2x, but only when CE is embedded in customer experience. In their article Customer Experience Transformation for a New Era, Bain emphasizes that embedding purpose and sustainability into customer experience is key to unlocking loyalty-driven growth

Source: Customer Experience Transformation for a New Era
Propel growth with a three-part playbook that enhances every facet of customer experience. By Eduardo Roma, Maureen Burns, Andy Pierce, Phil Sager, and Richard Hatherall, Bain & Company, Inc.

<https://www.bain.com/how-we-help/customer-experience-transformation-for-a-new-era/>



Claim: Purpose, reskilling, and sustainability pride boost morale.

- Direct impact and consistency across sectors
- Indirect impact, context-dependent
- Causation weak or non-existent

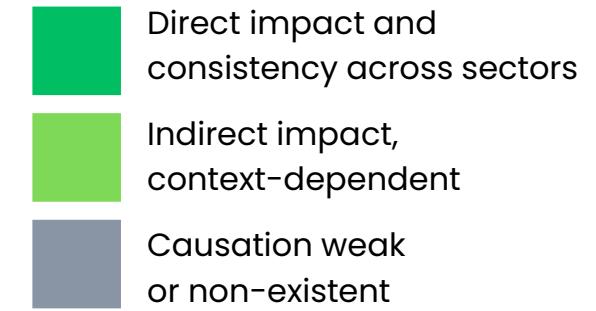
Proof: From a circular economy and KPI perspective, the study from Finland introduces a novel survey method to measure how employees perceive sustainability transitions at work across sectors. It finds that employee engagement scores are higher in organizations actively pursuing sustainability, particularly those with structured climate programs and inclusive practices

Source: Measuring employees' perceptions of sustainability transitions at work: a novel survey with findings from Finland, 15 November 2023, Fanni Moilanen & Arho Toikka

<https://link.springer.com/article/10.1007/s43621-023-00163-5>



Claim: Circular Economy fosters transformative innovation by aligning with systemic sustainability goals.



Proof: The European Commission's Eco-Innovation Index shows a 27.5% growth in innovation across the EU (2014–2024), driven by increased investment, patent activity, and resource efficiency. However, innovation remains uneven: only 5 of 27 Member States exceed the 3% R&D intensity target, and 50% of private R&D is still concentrated in mid-tech sectors. To escape this "technological trap," the EU's New Innovation Agenda prioritizes deep-tech and systemic innovation, aligning R&I with circularity and competitiveness goals.

Source: European Environment Agency, Thematic briefing, Europe's environment 2025, 4.8 Transformative innovation, Published 29 Sept 2025

<https://www.eea.europa.eu/en/europe-environment-2025/thematic-briefings/circular-economy-and-other-enablers-of-transformative-change/transformative-innovation>

Cheat sheet: Business KPIs

[Back](#)

These 21 metrics show how your business is performing in crucial areas like growth, profitability, operational efficiency and customer satisfaction

Revenue Growth Rate
Measures the increase in sales vs. previous periods

Net Profit Margin
Indicates % of revenue left as profit after expenses

Gross Margin
Per cent of revenue that remains after cost of goods sold

Operating Margin
Per cent of revenue left after all operating expenses

Inventory turnover
Times inventory sold and replaced over a period

Accounts receivable turnover
Efficiency in collecting receivables

Working Capital Ratio
Comparison of current assets to current liabilities

Return on Assets (ROA)
Return on shareholder equity

Debt to Equity Ratio
Comparison of total debt of shareholders' equity

Overhead rate
Proportion of indirect costs to direct costs

Employee productivity
Output per employee or workforce efficiency

Customer Retention Rate
Per cent of customer continuing to purchase over time

Churn rate
Rate at which customers leave or stop purchasing

Lifetime Value (LTV)
Total revenue from a customer over all time

Customer Acquisition Cost (CAC)
Cost of acquire a new customer

LTV:CAC
Ratio
Return on investment in customer acquisition

Cash Conversion Cycle (CCC)
Time to convert business inputs into cash flows

Earnings before interest and taxes (EBIT)
Profitability excluding tax and interest expenses

Net Promoter Score (NPS)
Willingness of customers to recommend your business

Employee Engagement Score
Gauge of employee morale and engagement

Innovation Index
Measure of innovation and creativity fostered

About Ethica

WE INSPIRE AND GUIDE ENTIRE INDUSTRIES TO SUCCEED IN A CIRCULAR FUTURE

Together with our clients, we build roadmaps and design products and services that not only comply with the EU Ecodesign regulation, but also drive successful future-fit business during the biggest market transition of our time.



GET IN TOUCH WITH
US TO GET PREPARED FOR THE FUTURE!
WWW.ETHICA.FI

Since 2013, we have worked together with hundreds of companies on circular business and product design. Our values joy, trust and courage guide our work every day: our projects are not only meaningful and impactful, but also fun; we earn our clients' trust every day by delivering and exceeding their expectations; we have the courage to challenge and explore new successful paths with our clients and other circular front-runners.