

The Financial Rationale for a Robust Circular Economy Act

This document consists of two parts: (1) the main text provides the financial rationale for a robust Circular Economy Act, and (2) Annex, a research article providing the underlying economic analysis and evidence base.

A fundamentally changed economic environment

Price volatility for key raw materials, driven by global shortages, export restrictions, sanctions, energy shocks and geopolitical instability, is directly affecting margins and competitiveness in European markets. At the same time, Europe remains highly dependent on imported raw materials, while exporting valuable waste due to

limited domestic recycling capacity. As demand for these materials rises across sectors, such as wind and solar energy, defence, digital infrastructure and mobility, Europe's exposure to supply risk will intensify. These developments have structural implications for the financial sector, as they influence the resilience of businesses.

A robust **Circular Economy Act** (CE Act) can create market conditions needed to mobilise private capital. To succeed, the Dutch Banking Association recommends the CE Act to focus on three core areas¹:

1 Getting the economics right for circular business models

Ensuring price signals, regulatory conditions and financing frameworks that make circular businesses competitive and investment ready. For banks, this translates into more viable business cases, clearer long-term demand signals and a stronger pipeline of financeable circular projects. Next it would also address the current situation in which companies across Europe face fragmented rules, making cross-border operations complex and costly. By creating clearer and more consistent rules across the EU, businesses would spend less on compliance and have more clarity about how to scale, ultimately enabling investors to more confidently support circular solutions.

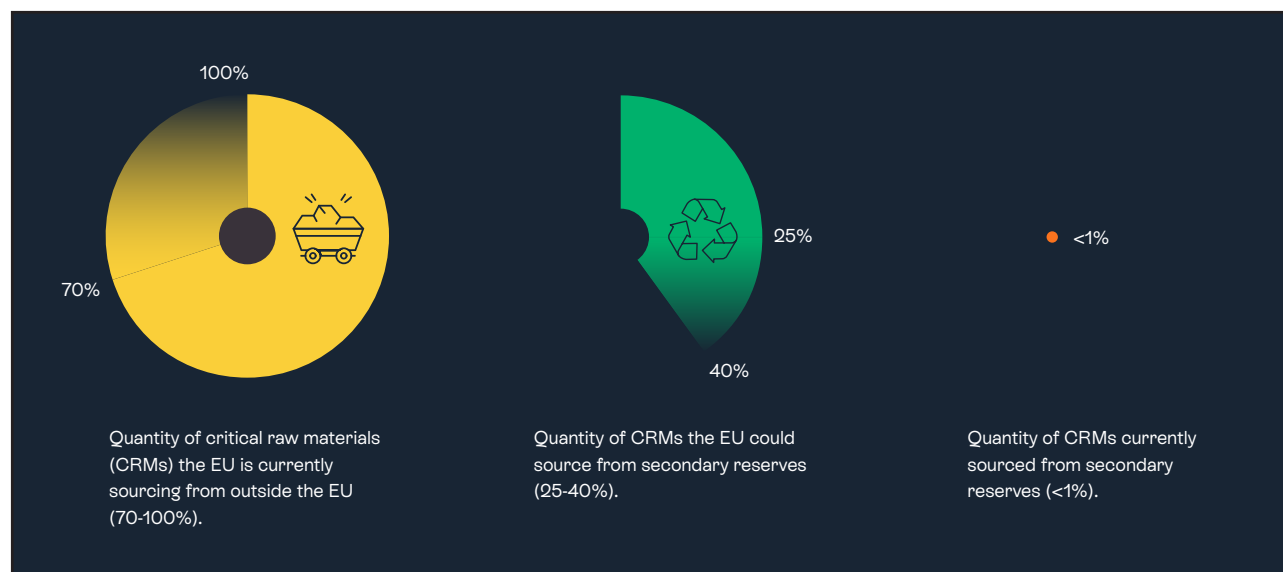


Figure 1: **Current approaches to material sourcing create dependence instead of autonomy** / Source: Yellow circle: European Commission (EC) (2023); Green circle: EC JRC (2025); EP Briefing (2024); EC (2020); Orange circle: World Economic Forum (2024)

2 Embed circularity into the EU's financial architecture

With a level playing field that is not yet a reality, intermediate public-private financing solutions are required. Expanding EU-backed guarantees and embedding resource use and circularity into EU financial architecture can accelerate early stage growth. Many circular businesses rely on new technologies or supply chains, and banks typically enter only once cash flow generation is sufficiently proven. When repayment capacity is uncertain, lending becomes difficult. Additional risk-bearing capital, through for example guarantees and blended finance, reduces the need for debt, makes repayment more achievable and thereby lowers the risk for banks. Public risk-sharing can play a crucial role in enabling early growth, ensuring that promising firms reach the stage at which commercial banks can support them.

3 Enhance resource and product data

Private capital will only flow at scale into material-efficient products and business models if their economic value and risk profile can be assessed consistently. Investors and lenders therefore require robust, comparable data on material sourcing, product design, value retention and end-of-life management to accurately price supply risk, input cost volatility and regulatory exposure. Such data can come from the CSRD standard on Resource Use and Circular Economy (ESRS E5) and other complementary tools, such as harmonised EU-wide product and material

passports. This will become essential for assessing companies' exposure to supply disruptions, price volatility and future compliance costs, and long-term investment stability.

Isolated measures will not be sufficient

A coherent EU framework is needed to prevent further erosion of critical circular infrastructure and reduce financing risks linked to policy uncertainty. The Dutch plastics recycling sector shows what is at stake: cheap virgin imports have pushed recycle prices below cost levels, leading to bankruptcies and the loss of capacity, even as the EU sets ambitious recycled-content targets for 2030. Without a level playing field today, the infrastructure required to meet future goals may fall short of what is needed.

The circular economy can unlock new opportunities for future-proof investments

However, linear models often remain easier to finance, while more resilient circular models struggle to scale. A robust CE Act would enable capital to flow towards futureproof business models and support a more competitive and resilient European economy, for companies and its financiers. The Dutch Banking Association and its members remain committed to support the transition to a circular economy, and we welcome ongoing dialogue on this topic.

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¹ All recommendations are addressed to policymakers and relate to the enabling regulatory framework. Individual financial institutions remain fully responsible for their own independent commercial, credit and pricing decisions, in compliance with EU competition law.

Annex Research article: Unlocking finance and entrepreneurship for a European Circular Economy

Market structures and incentives in the circular economy transition

Geopolitical tensions and growing resource scarcity are drawing attention to European businesses' dependence on primary raw materials and to the potential solutions offered by business models that retain economic value over time, such as through reduction, reuse, redesign, repair and recycling. Lower and more efficient use of resources has been associated with greater economic resilience, competitiveness and long-term economic development, as well as reduction in (undesirable) dependencies.

Why are banks calling for a strong EU circular economy?

The economic environment in which European companies and financiers operate is fundamentally changing. Prices of key raw materials (from aluminium and copper to phosphorus) have experienced sharp spikes due to global shortages and energy price shocks, directly affecting margins and competitiveness.¹ As a result, analysts and economists increasingly argue that economic systems should prioritize resilience over pure efficiency.²

The European Union (EU) depends on imported raw materials for the production of food and health products and for the manufacturing of building materials and technologies across the renewable energy, digital, mobility, aerospace and defence sectors. Within this context, it is becoming difficult for Europe to rely on the traditional linear model of sourcing, where extraction and processing occur outside the EU.³ Geopolitical instability, trade dependencies and rising uncertainty expose European companies to increasing supply risks, price volatility and reduced strategic autonomy.⁴ Finite resources and rapid expansion of digital and clean energy technologies will intensify global competition for critical materials, including lithium, graphite, and cobalt, with demand projected to rise 20- to 40-fold over the next 20 years.⁵

Europe's Resource Dependence: A Strategic Vulnerability

The EU relies heavily on third countries, particularly China, for critical raw materials. China supplies 97% of the EU's magnesium, refines 100% of the rare earths used in permanent magnets, and controls around 80% of global battery recycling capacity.⁶ At the same time,

the EU lacks sufficient domestic recycling infrastructure, leading to the export of large volumes of valuable waste, often back to China itself. Alarmingly, these exports alone could account for up to 14% of the EU's projected lithium demand by 2030. In other words,

Europe is discarding materials it will soon need to import again (at higher prices and under less favourable geopolitical conditions). Dependencies are not limited to China: the EU also relies heavily on Turkey for borate and on the Democratic Republic of Congo for cobalt.⁷



70% of the world's **cobalt**, used in batteries, is extracted in the Democratic Republic of Congo



97% of EU's **magnesium** supply is sourced from China



100% of the **rare earths** used for permanent magnets are refined in China



98% of EU's supply of **borate** is provided by Turkey

Figure 1: Illustrating European material dependencies / Source: [European Critical Raw Materials – European Commission](#)

Current business models deteriorate economic value by discarding, downcycling or exporting materials that could be retained within the European economy, potentially weakening competitiveness and increasing long-term cost.⁸

Electronic waste illustrates the missed opportunity: Europe generates around 10.7 million tonnes each year, containing around 1 million tonnes of critical raw materials in phones, computers, appliances and cables. Around 700,000 tonnes of e-waste are landfilled or incinerated annually, while at least 400,000 tonnes are exported for reuse in other countries.⁹

The geopolitical push to extract resources in territories beyond the EU, such as Greenland and parts of Africa, would be costly.¹⁰ Studies have already demonstrated the cost-benefit of circularity compared to virgin mining. Looking at copper and aluminium as an example, we see that extracting these materials from discarded products, known as urban mining, can be cheaper than virgin mining (figure 2). Average costs for urban mining are about \$3,000 per ton for copper and \$1,660 per ton for aluminium – well below the typical virgin mining expenses.¹¹ This cost benefit does not apply to all materials. Some, like copper, are easier and cheaper to recover because more of them are found in waste streams.¹² Export restrictions, sanctions and other trade interventions further increase volatility.¹³



Figure 2: **Cost comparison of virgin and urban mining for copper and aluminium** / Data sourced from Zeng et. al (2022).

Beyond firm-level risk, resource dependency also creates macroeconomic vulnerability. As highlighted by De Nederlandsche Bank, value chain disruptions can reduce trade volumes, weaken productivity and contribute to structural inflationary pressure.¹⁴ For banks and other players within the financial sector, linear trends in resource use translate directly into financial risk: higher input cost volatility, supply disruptions, weaker business cases, and an increasing risk of stranded assets.¹⁵ The circular economy could be a strategic insurance mechanism to combat these risks, strengthening local value chains and creating more robust business models. Despite their long-term advantages, circular business models face challenges in achieving price competitiveness in current markets. The absence of negative

externalities taxes means that linear products do not reflect their true environmental and geopolitical costs.¹⁶ Consequently, circular models face higher upfront costs and greater market uncertainty, making it difficult for them to compete on price.

This can result in a misallocation of capital: linear models remain cheaper and therefore easier to finance, while more resilient circular models struggle to scale. Banks see this as a market failure that can be addressed through coherent market reform at EU level. These types of problems contribute to the crisis in the Dutch plastic recycling sector, where over ten plastic recycling businesses have gone bankrupt resulting in a severe loss of Dutch plastic recycling capacity. This is partly due to the absence of a level playing field, driven by cheap virgin plastic imports undercutting recyclate prices. From 2030, all plastic packaging in the EU must contain a minimum recycled content and the Clean Industrial Deal targets 24% circular materials by that year, yet the infrastructure required to meet these targets must be developed today.

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