

Position Paper on the Circular Economy

1. The urgency and opportunity of the Circular Economy

The global economy is at a turning point. Persistent structural weaknesses - exacerbated by successive crises - have revealed the fragility of an economic system still rooted in a linear, extractive paradigm¹. Rising inflation, energy insecurity, geopolitical tensions, disruptions in global value chains and growing socio-economic inequalities are challenging the foundations of competitiveness and prosperity². What was once a system optimized for efficiency now appears increasingly unfit for resilience, long-term growth and equity³.

The linear economic model has contributed to this situation: a model that thrives on the constant extraction of virgin resources, the mass production of short-lived goods and the disposal of waste. For decades, this model sustained industrial expansion and consumer growth, but its environmental, economic and social externalities are now becoming unsustainable. Today, 90% of biodiversity loss and water stress, two-thirds of GHG emissions and a third of air pollution impacts are directly linked to material extraction and use. The richest billion people consume 72% of global resources: the poorest billion, less than 1%. By 2060, if business as usual continues, we would require the equivalent of two Earths to meet resource demand⁴.

The consequences are not only environmental. The economic costs of pollution, climate instability and resource dependency are rising⁵. Entire sectors - such as construction, mobility and food - are becoming increasingly vulnerable to price shocks, supply disruptions and consumer backlash⁶. The COVID-19 pandemic and geopolitical tensions have further exposed these vulnerabilities, with critical raw materials like lithium, cobalt and rare earths becoming flashpoints of strategic competition⁷. Resource security has become a key determinant of global economic stability.

In such a context, Intesa Sanpaolo has decided to support the circular economy (CE) as a strategic lever to reduce exposure to resource volatility and to support industrial ecosystems in becoming more resilient⁸. The CE offers a compelling alternative: a systemic approach that redesigns how value is created across the economy. As a leading European banking group, Intesa Sanpaolo has long recognized the potential of this model to deliver environmental, social and economic value and has strategically committed to supporting its adoption across sectors.

The CE is not just a set of recycling practices or waste management improvements. It is a paradigm shift from the traditional linear model of “take, make, waste” to a regenerative system that creates long-term value for society, businesses and the environment. In doing so, it enables a decoupling of growth from the consumption of finite resources.

Linear Economy	Circular Economy (CE)
Take → Make → Waste	Design out waste → Keep in use → Regenerate
Resource-intensive	Resource-efficient
Externalizes social/environmental costs	Internalizes value creation
Vulnerable to shocks	Resilient and regenerative
Single-use, short product life cycles	Extended product use, reuse, repair

1 UNEP – International Resource Panel (2024), Global Resources Outlook 2024: Bend the Trend. Pathways to a Liveable Planet as Resource Use Spikes.
 2 World Economic Forum (2025), Global Risks Report 2025; IMF (2025), World Economic Outlook: Global Economy in Flux.
 3 UNEPFI – GACERE (2025), Unlocking Circular Economy Financing – From Vision to Action.
 4 The World Bank (2022), Squaring the Circle: Policies from Europe’s Circular Economy Transition.
 5 Circle Economy, KPG e IFC (2025), The Circularity Gap Report Finance: Tracking capital flows in the Circular economy.
 6 The World Bank (2022), Squaring the Circle: Policies from Europe’s Circular Economy Transition.
 7 Ibidem.
 8 C. Zara, L. Ballardini, M. Gobbi (2023), Circular economy, stock volatility and resilience to the COVID-19 shock, The Quarterly Journal of Finance.

At its core, the CE is based on three principles, according to the Ellen MacArthur Foundation⁹, the most respected and authoritative global thought leader supporting the acceleration of the systemic CE transition:

1. **Eliminating waste and pollution by design**, rethinking how products are conceived and embedding circularity from the outset, for example through modular smartphones that are easy to disassemble and repair, thereby reducing e-waste and extending product lifespan.
2. **Keeping products and materials in use**, through reuse, remanufacturing, repair and recycling. For example, fashion brands implementing take-back schemes to collect worn garments for refurbishment or new production.
3. **Regenerating natural systems**, rather than simply minimising harm, by restoring biodiversity, improving soil health and supporting carbon sequestration, for example applying regenerative agriculture practices that enrich soil fertility and reduce synthetic inputs, enabling food companies to source sustainably while restoring ecosystems.

Intesa Sanpaolo embraces these three principles, integrating them into its activities and actions being aware that this approach actively contributes to addressing the triple planetary crisis - climate change, biodiversity loss and pollution¹⁰ - and also to fostering **strategic innovation, resilience and long-term competitiveness**¹¹. The CE provides a framework for rethinking competitiveness and - as highlighted by the Global Circularity Protocol promoted by the World Business Council for Sustainable Development - it also promotes transparency and accountability across value chains, with circular performance increasingly tracked using science-based, standardized metrics. For **businesses**, it means transforming supply chains and business models to become more resource-efficient and resilient. For **governments**, it provides a policy lever to reduce strategic dependencies, promote industrial innovation and economic security. For **financial institutions**, it opens the door to new asset classes (such as thematic investment funds, bonds or loans), enhanced sustainability performance, strengthened reputation and risk-adjusted returns.

External authoritative sources¹² converge on affirming that **circularity delivers a distinctive contribution** to economic and environmental transformation. In this context the CE functions as a transformative economic model, fostering innovation, strengthening industrial policy, supporting business development and attracting investment. In this sense, circular initiatives do not merely complement existing sustainability commitments: they reinforce and amplify their impact across the broader economic system.

The potential impact is substantial from an economic, social and environmental perspective. According to the Ellen MacArthur Foundation and Material Economics¹³, applying CE strategies in five key sectors - cement, aluminum, steel, plastics and food - could cut CO₂ emissions by 9.3 billion tons by 2050, equivalent to removing all emissions from the global transport sector. Crucially, while renewable energy and energy efficiency can address around 55% of global emissions, the CE is essential to tackle the remaining 45%, which are embedded

9 Founded in 2010, the Ellen MacArthur Foundation works with businesses, governments and academia to accelerate the shift to a regenerative economic model and is widely recognised as one of the most influential no-profit organisations in shaping circular economy strategies worldwide.

10 UNEP (2024), Circular Economy as an Enabler for Responsible Banking: Leveraging the Nexus Between Circularity and Sustainability Impact.

11 Goldman Sachs Equity Research (2024), GS SUSTAIN: Circular Economy, Our Circular Economy Ecosystem Expands in 2024.

12 Politecnico di Milano, School of Management Energy & Strategy (2025), Circular Economy Report 2025; European Commission (2025), The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonization; OECD (2025), The Circular Economy in Cities and Regions of the European Union; World Economic Forum and Bain & Company (2026), The Circular Economy is Now an Economic and Industrial Strategy.

13 Part of McKinsey & Company, Material Economics is a consulting firm based in Stockholm, Sweden, specialized in sustainability and resource strategy themes for both public and private sector clients.

in the way goods are produced, consumed and disposed of¹⁴. CE complements and amplifies the energy transition, especially in hard-to-abate sectors. Recent analysis by the European Environment Agency further reinforces this point, highlighting that around 70% of global greenhouse gas emissions are associated with the extraction, processing and use of materials. A review of empirical studies suggests that circular economy strategies could potentially **reduce greenhouse gas (GHG) emissions** by around one third on average, although estimates vary widely depending on sector and underlying assumptions. Sectoral studies also show significant reduction potential across waste management, construction, transport, industry and agriculture. These findings highlight that circular strategies can play a substantial role in reducing emissions embedded in material production and consumption systems¹⁵.

But the CE goes further. It is also a response to the **social dimension** of sustainability. By extending the life of products, decentralizing value creation and fostering new services such as maintenance, repair and remanufacturing, circular models can generate employment, strengthen local economies and promote inclusion. In developing economies, the CE can reduce dependency on imports and stimulate SMEs ecosystems. In mature economies, it enables more strategic use of resources and fosters new business opportunities, especially in high-value sectors.

This social dividend is already tangible. Recent international evidence suggests that **between 121 and 142 million people worldwide** are currently employed in activities that contribute to the CE such as repair, recycling, second-hand trade and waste management¹⁶. Yet a significant share of this workforce remains informal and vulnerable, especially in emerging and developing economies, where circular value chains can be characterised by low pay and unsafe conditions¹⁷. A systemic transition therefore offers not only environmental gains, but also the opportunity to **strengthen cohesion and social inclusion** by upgrading jobs and skills, improving health and safety, with wider public-health co-benefits from reduced pollution, and supporting the shift from precarious informal work to **decent and secure employment**. Looking ahead, the OECD projects that scaling circular strategies could create 2.5 million new jobs within the EU alone by 2030. At global level, the ILO estimates that the transition to a circular economy could generate 8 million new jobs through expanded reuse, recycling and refurbishment activities¹⁸. Inclusion, however, is not only about jobs. By channeling reuse, repair and refurbishment, circular models can also **lower the cost of access to essential goods**, offering lower-income households an affordable alternative to first-hand consumption. These activities are mostly local, run by social economy actors close to their communities and well placed to make these models work, strengthening local ties in the process. The opportunity ahead is to move from standalone local initiatives to collaborative territorial ecosystems that connect social enterprises, innovation and local development. Here too, financial institutions can act not only as funders but as facilitators of these alliances and networks.

The economic benefits are clear and increasingly measurable. In the built environment alone, CE strategies could unlock €360 billion by 2050 and cut emissions by up to 75%¹⁹. In the EU alone, circular construction could unlock €575 billion in annual revenues and deliver €158 billion in yearly benefits for society by 2035²⁰. One of the most promising areas is building retrofits, which represent a rapidly growing market, expected to expand from \$500 billion today to \$3.9 trillion by 2050. Circular retrofit models help reduce emissions and waste, while

14 Ellen MacArthur Foundation e Material Economics (2019), Completing the picture: How the circular economy tackles climate change.

15 European Environment Agency (2026), Assessing the climate mitigation potential of circular economy.

16 Circle Economy, ILO & World Bank Group (2025), Employment in the circular economy: Leveraging circularity to create decent work.

17 Ibidem.

18 OECD (2025), The Circular Economy in Cities and Regions of the European Union; World Economic Forum and Bain & Company (2026), The Circular Economy is Now an Economic and Industrial Strategy.

19 McKinsey & Company e World Economic Forum (2023), Circularity in the Built Environment: Maximizing CO2 Abatement and Business Opportunities.

20 Ellen MacArthur Foundation (2024), Building Prosperity: unlocking the potential of a nature-positive, circular economy for Europe.

enhancing resilience across supply chains. These benefits make CE not only an environmental imperative, but also a sound economic strategy for the building and construction sector, which represents one of the world's most resource and carbon-intensive industries, accounting for 40% of global emissions²¹.

As highlighted by authors such as the Ellen MacArthur Foundation and McKinsey, **circularity is a key lever for decarbonising value chains and supporting European reindustrialisation**. The transition to recycled and low-carbon materials can significantly reduce emissions, strengthen industrial resilience and stimulate innovation, jobs and more sustainable cities²². In **Italy**, the CE could lead to €119 billion in savings per year by 2030, although current performance stands at €16.4 billion annually showing significant room for acceleration²³.

Circularity can also mitigate the financial risks associated with the linear model. Studies show that companies integrating circular practices exhibit lower default probabilities, stronger post-crisis resilience and better market performance. According to research conducted by Bocconi University with the support of Intesa Sanpaolo Innovation Center, an increase in circularity is associated with a reduction in the probability of default²⁴. In Italy, circular businesses demonstrate a 28% lower average PD compared to their peers²⁵. Moreover, listed companies enabling circular business models delivered a 48% total shareholder return in 2024, since 2021 - outperforming the MSCI ACWI index by 16%.²⁶

Despite these advantages and growing momentum, the **circular transition remains underfunded**. Between 2018 and 2023, CE investments averaged just \$27 billion annually - only 2% of total tracked capital. Investment is concentrated in relatively few circular strategies such as resale and recycling, that are able to operate within a still predominantly linear economy, while transformative upstream solutions like design, modularity and circular production receive less than 5% of total funds²⁷. The European Investment Bank has mobilised €3.83 billion for the CE between 2019 and 2023²⁸ but, according to European official assessments, achieving EU circularity goals will require more than €55 billion annually²⁹. In Italy, circular investments grew by 5% in 2024, but half of the transactions were under €50,000, signalling a clear need for incentives and scale-up mechanisms³⁰. Moreover, this gap is even more striking considering that global circularity is actually declining. According to the Circularity Gap Report 2025, the share of materials re-entering the economy fell from 9.1% in 2018 to just 6.9% in 2024. In other words, despite growing awareness and policy ambition, the world is becoming less circular - highlighting the urgent need to scale up circular business models and investments.

Change is underway. The European Union is positioning circularity as a central pillar of its competitiveness strategy³¹. The Draghi report on The Future of European Competitiveness identified CE as a strategic necessity for Europe's industrial and economic renewal³². The CE Action Plan, the Clean Industrial Deal and the forthcoming CE Act (2026) all reflect a shift towards mainstreaming CE across policy, industry and finance. Circularity is one of the six drivers of industrial competitiveness identified by the European Commission and is embedded in regulations such as the EU Taxonomy and the Corporate Sustainability Reporting Directive.

21 McKinsey & Company e World Economic Forum (2025), *Circularity in the Built Environment: Unlocking Opportunities in Retrofits*.

22 McKinsey & Company (2024), *Global Materials Perspective*.

23 Circular Economy Network (2025), *7° report on circular economy in Italy*.

24 C. Zara, M. Goebel, M. Barbaglia (2026), *Circular Economy, Non-Financial Disclosure and Credit Risk in Europe*, GREEN Working Paper Series, Università Bocconi.

25 Cerved Rating Agency (2024), *The impact of the circular economy on the risk profile of Italian companies*.

26 Goldman Sachs Equity Research (2024), *GS SUSTAIN: Circular Economy, Our Circular Economy Ecosystem Expands in 2024*.

27 Circle Economy, KPG e IFC (2025), *The Circularity Gap Report Finance: Tracking capital flows in the Circular economy*.

28 European Investment Bank (2024), *Circular economy overview*.

29 European Environmental Agency (2024), *Europe's circular economy in facts and figures*.

30 Politecnico di Milano - Dipartimento di Ingegneria Gestionale (2024), *Energy & Strategy. Circular Economy Report*.

31 European Commission (2025), *The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation*.

32 The Draghi report: *A competitiveness strategy for Europe (Part A) (2024)*.

The CE Act represents a critical step forward: for the first time, it would establish harmonised rules for circular solutions across the single market, removing the regulatory fragmentation that currently prevents circular business models from scaling across borders. The Ellen MacArthur Foundation has identified three core policy levers the Act must deliver: a true single market for circular products and secondary materials, a level playing field through reformed procurement and VAT rules, and circularity embedded as an industrial strategy³³. Major companies across sectors, including Intesa Sanpaolo, have jointly called on the Commission to make the CE Act ambitious, explicitly citing investment de-risking and supply chain collaboration as priorities³⁴.

At the same time, **multilateral development banks** (MDBs) are converging around a shared vision for circular economy finance³⁵ and institutions such as the United Nations Environment Programme Finance Initiative (UNEP FI) and the International Finance Corporation (IFC) are advancing harmonised guidelines and common approaches for circular finance, helping to establish greater consistency and comparability across markets. In parallel Nationally Determined Contributions (NDCs) - the national climate action plans submitted by countries under the Paris Agreement - are increasingly incorporating CE as a lever for climate mitigation, biodiversity restoration and pollution reduction³⁶. **For financial institutions, this represents a strategic opportunity:** by aligning early with emerging European and international standards, pioneering actors like Intesa Sanpaolo can lead the development of new circular markets, de-risk innovation and strengthen their positioning within the evolving EU sustainable finance architecture.

From a financial perspective, the implications are twofold. First, CE can offer a new frontier for sustainable investment, particularly in sectors where ESG risks are material and transition opportunities are large. Second, it can enable more accurate risk pricing by revealing the structural vulnerabilities of linear models - such as exposure to volatile input costs, stranded assets and tightening regulations. Incorporating circularity into credit and portfolio assessments is a logical next step³⁷. Nevertheless, the transition is not without challenges. Circular businesses often face a lack of proven models, limited collateral and misaligned incentives. Metrics remain fragmented and skewed toward recycling, while upstream circular strategies - such as product-as-a-service, dematerialization or regenerative design - lack visibility in financial analyses. Moreover, many risk models do not yet reflect the long-term value creation and derisking potential of circularity.

That is why forward-looking institutions must act today. Accelerating circular finance requires collaboration across the ecosystem: from policymakers and regulators to investors, banks and innovators. It also requires embedding circularity into education, procurement, product design and consumption behaviors. For this to happen, a systemic perspective and coordinated action across stakeholders are required.

33 Ellen MacArthur Foundation (2026), The EU Circular Economy Act: a critical opportunity. Key policy levers for Europe's industrial strategy.

34 Ellen MacArthur Foundation (2026), Businesses call for an ambitious EU Circular Economy Act. Joint business letter to the European Commission.

35 African Development Bank, European Bank for Reconstruction and Development, European Investment Bank, World Bank (2024), A shared vision for the Circular Economy.

36 UNEP FI (2023), Building Circularity into Nationally Determined Contributions (NDCs) – A Practical Toolbox.

37 UNEP FI (2024), Circular Economy as an Enabler for Responsible Banking: Leveraging the Nexus between Circularity and Sustainability Impact.

2. The role of Intesa Sanpaolo in enabling the transition towards a circular economy

Transitioning to a CE requires more than innovation and regulation - it demands a systemic rewiring of how we produce, consume and finance. Among all the actors needed to make this shift a reality, **financial institutions play a significant role** as facilitators of access to capital, supporters of business transformation and contributors to long-term value creation. The choices they make in allocating capital can help shape the **economy of the future**.

For the CE to scale, businesses need access to **tailored financing, risk-sharing instruments and strategic support**. Circular business models often imply upfront costs, longer payback times and non-traditional value creation. As such, they may fall outside the scope of conventional credit and investment logic. Financial institutions, therefore, must evolve their tools and mindset to truly enable this transformation. Intesa Sanpaolo has embraced this challenge by developing dedicated approaches to support clients and the broader economy in the transition towards circularity.

Since 2014, under the vision and leadership of Intesa Sanpaolo's top management, the CE has been identified as one of the most effective strategies to transform innovation challenges and opportunities into a **long-term business value creation driver**. Intesa Sanpaolo was among the first major global banking groups to recognize this systemic opportunity. Long before circularity became a mainstream concept, the Group had already positioned it as **a strategic pillar of its innovation and sustainability strategy**³⁸. This commitment is deeply embedded in Intesa Sanpaolo's identity and long-term vision, as demonstrated by its three most recent Business Plans.

Within the Group, the circular economy is led by Intesa Sanpaolo Innovation Center, the Group's innovation hub within the Chief Sustainability Officer area. The company serves as the competence center for the circular economy, promoting circularity as a cross-sector innovation strategy that supports new business models, investment and value creation across industries.

Moreover, Intesa Sanpaolo's long-standing partnership with the **Ellen MacArthur Foundation** - initiated in 2016 and still active today³⁹ - is a cornerstone of its leadership in this field. As the Foundation's **first Strategic Partner from the financial sector**, the Group has not only aligned its internal frameworks with the Foundation's principles but also contributed to international thought leadership on finance and circularity. This includes joint publications, pilot projects and advisory roles in global working groups such as UNEP FI's Circular Economy Community. Through this partnership, Intesa Sanpaolo has proven how financial institutions could support the circular transition - not just by providing capital, but by rethinking risk, value and economic purpose. The collaboration has resulted in tangible outputs: from shared eligibility criteria for financing and impact tools to the consolidation of innovation hubs.

The Group's commitment to the circular economy was formally strengthened in the 2018–2021 Business Plan, which integrated CE into its strategic objectives through a €6 billion credit facility supporting companies' transition to circular models. The initiative introduced a structured approach based on dedicated expertise, operational criteria, training and partnerships, with Intesa Sanpaolo Innovation Center becoming a key competence center for circular innovation. By the end of 2021, total lending for CE projects had exceeded the original target, reaching €7.7 billion.

38 C. Messina (2019), Why more banks must support the circular economy, The Banker-Financial Times.

39 <https://group.intesasnpaolo.com/en/newsroom/press-releases/2026/05/intesa-sanpaolo-renews-ellen-macarthur-foundation--strategic-par>

Building on previous achievements, the 2022–2025 Business Plan further reinforced the Group’s commitment to circularity as a key ESG priority. A new €8 billion plafond was allocated to support CE & Green Economy projects in Italy and abroad. By the end of 2025, disbursements had reached €15.9 billion, significantly exceeding the original target and confirming the Group’s leading role in supporting the circular transition⁴⁰.

This strategic trajectory has been further reinforced in the most recent **2026–2029 Business Plan**, which confirms circular economy as a key component of the Group’s broader strategy for sustainable growth and innovation. The plan sets an ambitious target: 30% of total new medium and long-term lending will be directed towards sustainable activities, encompassing a broad range of environmental categories including green buildings, renewable energy, electrification, clean technology, hard-to-abate sectors, green investments, climate adaptation and circular economy, alongside social lending. Within this framework, circularity is positioned not as a standalone category but as an integral part of a systemic approach to the sustainable transition across the Group’s client base.

Intesa Sanpaolo’s commitment to circularity is strategic, long-term and systemic. As better explained in the following section, it ranges from governance and credit policy to innovation, education and global dissemination. This leadership positions Intesa Sanpaolo as a reference model for the banking sector, demonstrating how financial institutions can proactively drive systemic change while capturing emerging opportunities.

3. Intesa Sanpaolo's strategic pillars and intervention areas for the CE

To actively support the transition towards a CE, Intesa Sanpaolo has developed a multidimensional strategy structured around four core areas of action: **Finance, Innovation, Research** and **Corporate Center**. These areas reflect the Group’s integrated and long-term approach to enabling systemic change, both through its own operations and in collaboration with institutions, clients, partners and civil society⁴¹.

a. Finance

Finance is the **Group’s most powerful lever to support the circular transition at scale**. Alongside significant volumes of CE & Green Economy dedicated lending plafond, Intesa Sanpaolo has developed advanced assessment and scoring models that integrate circularity indicators into ESG evaluation processes. These tools ensure that circular performance is factored into ESG scoring⁴², improving the ESG positioning of the counterparties and potentially enabling clients to access a preferential credit granting process and better pricing conditions.

In relation to fundable projects and initiatives circular eligibility is assessed against an updated scheme – revised in 2026 in collaboration with the Ellen MacArthur Foundation and aligned with the IFC Harmonized Circular Economy Finance Guidelines - with the support of Intesa Sanpaolo Innovation Center. The scheme reflects five circular criteria dedicated to financing activity, prioritising circular design, production and use over value recovery and strengthens the integration of regenerative approaches where relevant:

1. **Circular Design and Production:** design of products, goods, or services that integrate circular economy strategies or principles, including reduction of material inputs, use

⁴⁰ Figures refer to the 'CE & Green Economy' lending category as defined under the 2018–2021 and 2022–2025 Business Plan frameworks respectively. The classification criteria have since evolved in line with the Group’s updated sustainable lending taxonomy.

⁴¹ For the latest data on financed projects, launched innovation programs and impact metrics, please refer to the Group’s official sustainability reports.

⁴² ESG score is a proprietary methodology for assessing the sustainability performance of client companies through a qualitative-quantitative assessment that analyses information on the Environmental, Social and Governance profile.

of reused, recycled and/or regenerative inputs, and increased ease of reuse, repair or recycling; production processes that reduce the use of virgin raw materials and increase production efficiency;

2. **Circular Use:** extension of the useful life of products and goods, for example through repair, refurbishment, renovation, reuse, upgrading and remanufacturing;
3. **Collection, Sorting and Material Recirculation:** collection and sorting to enable the circularity of end-of-life products and materials; management of organic and non-organic materials, recycling and recovery;
4. **Circularity Enablers:** products, services, business models, platforms and tools that enable circularity across the different phases of the material life cycle, promoting a more intensive use of resources already in circulation;
5. **System and Value-Chain Enablers:** projects that increase the circularity of the economy as a whole, at the system level, by creating connections between companies, institutions and other actors to build shared infrastructure, technologies and skills.

Among the many projects financed, selected examples include:

- *Green Hydrogen Steel - H2 Green Steel:* Intesa Sanpaolo co-financed Europe's first hydrogen-based steelmaking plant, combining renewable energy, high scrap reuse and process innovation to drastically reduce emissions in the steel industry.
- *Aquaponic Agriculture - Agrired:* Intesa Sanpaolo helped scale an 8,000 m² aquaponic district for sustainable food and plant production, achieving 85% water savings and 95% land use reduction compared to traditional agriculture.
- *Public Lighting - Escomax Kft:* CIB Bank supported the replacement of outdated lighting infrastructure across 90+ Hungarian municipalities through a product-as-a-service model. The company retains ownership of the systems and provides lighting as a service, cutting electricity use by 50–60% and enabling component recovery.

Other projects include the replacement of fossil-based inputs with recycled or bio-based alternatives, conversion of organic waste into biogas and compost, retrofitting renewable energy infrastructure and reintegration of industrial byproducts into production cycles.

The Group has also pioneered capital-market instruments for circular initiatives, including green and social bonds and CE securitisations. In 2025, Intesa Sanpaolo completed its third Significant Risk Transfer (SRT) synthetic securitisation focused on ESG and CE objectives. The transaction, based on a €1.5 billion loan portfolio disbursed to enterprises with high ESG scores and/or falling within the CE domain, aimed at optimising capital absorption. By transferring credit risk to third party investors, the transaction enabled the Group to free up regulatory capital, increase lending capacity and reinvest in new sustainable and circular projects – including loans granted during the life of the transaction thanks to a replenishment mechanism⁴³. A fourth transaction is planned for Q2 2026.

Intesa Sanpaolo was the first Italian bank to issue a green bond in 2017. Since then, green funding has become a key component of the Group's sustainable finance strategy. As of 31 December 2025 the total amount of Green Bonds outstanding reached €8.7 billion. Notably, in 2019 the Group launched a €750 million Green Bond focused on CE, supporting loans from its

⁴³ The securitisation transaction includes i) a Junior Tranche hedged by a pledge on cash collateral provided by four specialised credit funds; ii) a Mezzanine Tranche hedged by an insurance policy (unfunded) and iii) a Senior Tranche held entirely by Intesa Sanpaolo.

€6 billion CE credit facility. This issuance attracted over €3.5 billion in demand – four times the amount issued – confirming strong investor appetite for circular transition projects. As of 2025, €1.675 billion of the Group's green portfolio is allocated to CE loans (representing 8.1% of the total green portfolio), with 66 transactions contributing to the avoidance of approximately 1.06 million tCO₂eq – around 22% of the total emissions avoided by the Group's €20.754 billion green portfolio⁴⁴. With an impact intensity of 634 tCO₂eq per €million allocated - the second highest across all green categories and nearly three times the portfolio average - this ratio underscores a high environmental impact per unit of capital deployed and reinforces the strategic relevance of the CE in decarbonization finance.

In the Wealth & Asset Management Division, the Group promotes circularity in investment strategies and advisory. Eurizon Capital SGR is a market leader in CE investments. Its flagship fund, Eurizon Fund – Equity Circular Economy, invests in companies advancing circular models based on criteria such as product life extension, waste reduction and use of renewable resources. Eurizon also supports investor awareness through educational materials, events and dissemination of CE knowledge through digital training formats.

Finally, to fully enable the CE, Intesa Sanpaolo believes that **it is crucial to support consumer demand**. This requires innovative financial solutions that promote circular behaviors and make sustainable products and services more accessible. By lowering economic barriers and encouraging active consumer participation, finance can accelerate the adoption of circular products, drive economies of scale and foster innovation. Mobilizing demand in this way ensures that circularity moves beyond niche markets, creating an inclusive and systemic transformation.

Finance thus becomes not only an enabler of the circular transition, but a **catalyst for innovation, competitiveness and long-term value creation**.

b. Innovation

Intesa Sanpaolo places strong emphasis on strengthening the Group's support infrastructure for innovation and recognizes it as a fundamental enabler of the circular transition, helping to reconfigure value chains, scale new business models and overcome technological and financial barriers. Through Intesa Sanpaolo Innovation Center, the Group actively promotes circular innovation by **supporting start-ups, corporates and research projects**. In particular, the company acts as a catalyst of experimentation and partnership, enabling the Group to accelerate the shift from vision to implementation.

A central element of this strategy is the **Circular Economy Lab (CE Lab)**, a non-financial advisory initiative launched in 2018 and designed to accelerate circular innovation in businesses. The CE Lab is the result of a unique partnership between Intesa Sanpaolo and Fondazione Cariplo, one of its key long term stable shareholders, and it is managed through the collaboration between Intesa Sanpaolo Innovation Center and Cariplo Factory, Fondazione Cariplo's platform for innovation and talent development. Since its launch, the CE Lab has supported several companies and institutions⁴⁵, facilitated around 30 innovation projects and contributed to the development of new circular solutions across key industrial sectors. The CE Lab also extends its circular economy expertise to the ESG Labs (Laboratori ESG) of Intesa Sanpaolo, a network of territorial forums promoted by the Banca dei Territori Division to support SMEs in their sustainability transition. Through dedicated sessions within these events, it brings circular innovation content directly to companies across Italy's regions. Through this initiative, Intesa Sanpaolo supports companies not only with capital, but also with knowledge, networks and

⁴⁴ Intesa Sanpaolo (2026), Green and Social Bond Report 2025.

⁴⁵ In 2023, a Strategic Master Agreement was signed between the UAE Ministry of Economy, Intesa Sanpaolo IMI CIB Division and Intesa Sanpaolo Innovation Center to promote the adoption of circular economy principles in the UAE and support the creation of a dedicated national circular economy initiative.

tailored advisory, helping them develop and scale circular solutions in cooperation with start-ups, corporates and research institutions.

Circular innovation is viewed as a cross-sector driver of transformation, reshaping how products and services are designed, delivered and consumed. By promoting regenerative and circular models, it fosters technological development, resource optimization and new sustainable business models such as product-as-a-service, modular design and sharing platforms, creating both environmental and competitive value.

A concrete example of this cross-sectoral innovation effort is the CE Lab's work in the multi-utility sector. Here, the CE Lab launched open innovation programs that accelerated the development of advanced industrial technologies and strengthened companies' innovation capacity. In collaboration with leading utility groups, over 500 national and international startups were scouted and assessed. This led to direct investments, pilot projects and, in one notable case, the installation of an industrial plant for the treatment of sewage sludge and the recovery of valuable raw materials.

In the field of mobility, the CE Lab supported companies in exploring emerging service models such as Mobility as a Service (MaaS) and Demand Responsive Transport (DRT). Through market and technology analysis, it helped identify the most promising solutions aligned with each company's strategic and sustainability goals. These were then developed into pilot initiatives and new service offerings, enabling companies to redefine their positioning within a user-centric and circular mobility ecosystem.

Through Intesa Sanpaolo Innovation Center and its CE Lab, Intesa Sanpaolo contributes to **shaping the national and international innovation ecosystem** needed to make the circular transition a reality, supporting companies and institutions in developing the solutions, tools and business models that circularity requires.

c. Research

Over the years, the Group has developed strategic partnerships with leading academic institutions - such as Oxford University, Bocconi University and the Polytechnic of Milan - to **co-design frameworks and metrics** that assess the financial, environmental and social value generated by circular business models.

The Group has been at the forefront of exploring the role of circularity in derisking financial portfolios. Emerging research conducted with Bocconi University suggests that circular business models may offer a more favorable risk profile compared to traditional linear approaches. This is largely due to the enhanced resilience of circular enterprises - driven by more efficient resource use, diversification of inputs and reduced exposure to volatile supply chains. These findings suggest that integrating circularity into credit analysis is not only an environmental choice but also a sound risk mitigation strategy⁴⁶. With the aim of advancing research on how circularity affects financial performance, Intesa Sanpaolo has supported the development of the Circularity Score, a methodology created by Bocconi University to assess the circularity level of companies. This tool is designed to explore the potential correlation between circularity and derisking or enhanced risk-adjusted returns and is currently used for academic and analytical purposes (not in the credit process), making circular investments more measurable.

⁴⁶ C. Zara, L. Bellardini, F. Oliva (2025), Circular economy, corporate sustainability reporting and equity risk in European markets: first findings, Bancaria.

The January 2026 working paper “Circular Economy, Non-Financial Disclosure and Credit Risk in Europe” published by researchers from Bocconi University analyses a panel of 643 listed companies across 17 resource-intensive industries in the EU-15 and Switzerland over the period 2018–2023⁴⁷. Using a structured two-step methodology that separates substantive circular engagement from disclosure effects, the study relates firms' "core" circularity (measured through the Circularity Score) to four credit risk indicators: one- and five-year probabilities of default, distance-to-default and implied Credit Default Swap spreads.

The results show **a clear and robust de-risking effect** across all measures⁴⁸. This effect is most pronounced among firms in the highest circularity quartile, suggesting that financial materiality emerges when circular practices translate into structural business model transformation rather than isolated initiatives. Importantly, the de-risking effect persists after controlling for MSCI ESG ratings, confirming that circularity conveys information not captured by standard ESG metrics. Moreover transparency on circular practices sends a positive signal to lenders and contributes to lower perceived credit risk, but the evidence confirms that doing circularity matters more than reporting it. Disclosure amplifies the signal; the underlying business model transformation generates it.

Intesa Sanpaolo Innovation Center has also supported research with Bocconi University on the **Circular Shared Value (CeSV)** model, an innovative framework exploring how financial institutions can create both economic and environmental-social value through circularity. Building on the Shared Value concept and circular economy principles, the model identifies four strategic pathways: circular products and services, advisory support, ecosystem advocacy and internal operational transformation. Applied to Intesa Sanpaolo as a case study, the framework showed how circular initiatives can generate measurable stakeholder impact, financial benefits and stronger ESG positioning, promoting a business-driven approach to sustainability⁴⁹.

Another key research initiative is the Circular Economy Report, produced annually by the Politecnico di Milano, through its Energy & Strategy Observatory, with the support of Intesa Sanpaolo Innovation Center. The sixth edition (2025) provides an evidence-based assessment of the state of the CE in Italy, with a quantitative evaluation of the diffusion, maturity and impact of circular practices across firms through a robust empirical approach. The Report confirms that circularity in Italy is moving from experimentation to consolidation, with increasing investment, improving economic returns and wider adoption of performance metrics. Yet the scale gap remains significant: current economic and environmental benefits capture only a fraction of the national potential. Bridging this gap will require a step change in capital mobilisation, stronger risk-sharing mechanisms and a more decisive role for financial institutions in scaling proven circular solutions.

In addition to its academic collaborations, Intesa Sanpaolo Innovation Center actively contributes to applied research and foresight through dedicated reports and trend analyses⁵⁰. These publications help identify **emerging opportunities, challenges and innovation trajectories linked to the CE**. For example, in 2024 the company explored the decarbonisation of the agri-food sector, highlighting circular technologies that can enhance resource efficiency and reduce emissions across the value chain. In the context of marine ecosystems, Intesa Sanpaolo Innovation Center has mapped the development potential of a Circular Blue Economy, emphasizing the

47 C. Zara, M. Goebel, M. Barbaglia (2026), Circular Economy, Non-Financial Disclosure and Credit Risk in Europe, GREEN Working Paper Series, Università Bocconi.

48 The findings confirm - in direction and robustness - the evidence documented in 2021: higher circularity is associated with a structurally lower credit risk profile, independently of the firm's level of non-financial disclosure. A 0.1 increase in the Circularity Score reduces the probability of default over a one-year horizon by 8.63% and over a five-year horizon by 4.93%, both at a 95% confidence level. Bocconi University, Ellen MacArthur Foundation, Intesa Sanpaolo (2021), The circular economy as a de-risking strategy and driver of superior risk-adjusted returns.

49 Zara C., Moscheni Y. and Akpinar, M. (2023), An applied analytical framework for creating circular shared value in the banking industry.

50 <https://www.intesasampaoloinnovationcenter.com/en/trend-analysis/>

importance of regenerative approaches for oceans and coastal areas. These insights contribute to building a shared knowledge base, support strategic planning and reinforce the Group's position as a thought leader in circular innovation.

The Group also contributes to applied research and knowledge exchange across ecosystems, helping bridge gaps between science, finance and policy. In this context it is worth mentioning the collaboration with:

- the Centre for Corporate Reputation in the Saïd Business School of the University of Oxford, which analyzed the reputational benefits for Intesa Sanpaolo related to its commitment to the circular economy⁵¹
- the Italian Circular Economy Alliance, for the publication of a report that highlights the role of the CE in activities to restore natural capital and biodiversity⁵²
- the SRM research center, a think tank for economic studies, participating in the production of the "Towards the Circular Blue Economy" report⁵³

Through these efforts, Intesa Sanpaolo is not only building a robust knowledge base, but also reducing uncertainty around circular investments, supporting the growth of new markets and accelerating the systemic transition toward circularity.

d. Corporate Center⁵⁴

Intesa Sanpaolo plays a leading role in creating the conditions needed for the CE to thrive. The Group actively engages in major national and international dialogues, working to align regulatory, industrial and financial systems with circular principles. This advocacy is built on strategic collaborations with key institutions such as the European Commission, UNEP FI, World Bank and IFC.

As a recognized leader in sustainable and circular finance, Intesa Sanpaolo contributed to the drafting of the **Harmonized Guidelines for CE Finance** published by the IFC in May 2025 and is frequently cited as a best practice in global publications, including UNEP FI's recent reports on integrating circularity into the **Principles for Responsible Banking**. At the national level, the Group is a member of the Italian Circular Economy Alliance (through Intesa Sanpaolo Innovation Center), strengthening networks of companies and institutions committed to advancing circular practices and fostering a coordinated and synergistic development model across the country.

This positioning enables Intesa Sanpaolo to **advocate for consistent and transparent standards**, support the creation of **enabling financial instruments** and promote **public-private partnerships** that accelerate the circular transition. By combining operational expertise with international engagement, the Group contributes to building the institutional foundations required to scale the CE.

51 M. Hughes-Morgan, D. West (2020), How Intesa Sanpaolo bank embraced the circular economy, University of Oxford – Saïd Business School, Centre for Corporate Reputation.

52 Alleanza Italiana per l'Economia Circolare (2023), Industria, biodiversità ed economia circolare. Impatti delle attività economiche sulla biodiversità e possibili soluzioni di mitigazione.

53 SRM, Intesa Sanpaolo Innovation Center (2025), Verso la Circular Blue Economy. Modelli innovativi e investimenti strategici per rispondere alle sfide globali tra crescita economica e rigenerazione ambientale.

54 Corporate Center refers to the Group's cross-functional activities aimed at promoting circular economy principles through institutional engagement, internal transformation initiatives, circular procurement practices, workplace innovation and the integration of circularity across operations and governance processes.

In addition to these structured collaborations, Intesa Sanpaolo is also among the signatories of the **Finance Statement on Plastic Pollution**, promoted by UNEP FI and endorsed by over 180 financial institutions, representing more than \$17 trillion in assets⁵⁵, calling on governments to negotiate an ambitious treaty to end plastic pollution. The Statement supports a legally binding global treaty on plastic pollution based on a circular plastics economy approach, promoting solutions such as reduction, reuse, repair, recycling and improved waste management across the entire plastics lifecycle. By endorsing the initiative, Intesa Sanpaolo reinforces its view of the circular economy as a key tool to address both resource efficiency and large-scale pollution.

Moreover, **the Group applies circular principles also within its own operations**. Circular procurement strategies, workplace innovation and asset reuse form the basis of internal transformation. A notable example is the Circular ICT programme, which rethinks how hardware is managed at end of life. Instead of disposal, devices are refurbished or resold, reducing emissions, cutting storage costs and **generating new revenue streams**. The same approach extends to consumables: used toner cartridges, which supply more than 90% of the Group's printers, are returned for remanufacturing rather than discarded, and paper and office supplies are sourced from recycled content, closing the loop on several high-volume consumable streams. The resource efficiency logic applies equally to unused goods and assets, such as furniture and real estate, which the Group channels to productive social purposes⁵⁶.

The Group also recovers waste heat from its own IT infrastructure. Data centers are essential to banking operations but highly energy-intensive and the clean heat released by server cooling would otherwise be dispersed. This is why in 2025 Intesa Sanpaolo completed a project at its Moncalieri site (near Turin) that captures this heat and converts it into useful thermal energy to warm the site's offices, sized to actual needs and without compromising the data center's operational continuity. The intervention fully decarbonised the site's heating, recovering over 1,900 MWh of thermal energy a year and avoiding around 400 tonnes of CO₂e.

Circular construction principles have also been adopted in the design of the Group's buildings. In Turin, the Group's headquarters integrates multiple bioclimatic and resource-saving solutions. These include natural ventilation systems, "night free-cooling" technologies to reduce the need for air conditioning, a south-facing photovoltaic layer and the use of groundwater for cooling. The building also features a rooftop greenhouse and smart management systems for water and energy consumption. This combination of solutions has earned the building LEED Platinum certification and makes it a best-in-class example of circularity in the built environment.

⁵⁵ In April 2024, ahead of the fourth meeting of the Intergovernmental Negotiating Committee on Plastic Pollution (INC-4), 180 financial institutions signed the Finance Statement on Plastic Pollution calling on governments to negotiate an ambitious treaty to end plastic pollution.

⁵⁶ Through "Donare per non Sprecare" and "Immobili che si muovono per il bene", Intesa Sanpaolo recovers unused goods and real estate and redirects them to social and charitable uses, applying a circular logic of reuse to community ends.

In Milan, the Gioia 22 building embodies many principles of circular design. The tower uses high-efficiency glass curtain walls, integrated photovoltaic panels and construction materials selected with a Cradle-to-Cradle approach, which prioritised safety, reusability and recovery. Furthermore, for both heating and cooling, Gioia 22 uses a water-fed system that doesn't need refrigeration equipment, relying solely on the use of an innovative direct free cooling process. The building is also certified as LEED Core and Shell - Platinum level and it is the first NZEB (Nearly Zero Energy Building) skyscraper in Italy, setting a benchmark for low-impact real estate. These features are relevant from a CE perspective because they:

- promote the efficient use of energy and water;
- extend the useful life of components through modular and flexible design;
- reduce dependency on virgin raw materials by integrating recycled and recyclable materials;
- contribute to the decarbonization of urban environments and generate co-benefits for local communities.

As part of its ongoing transformation, Intesa Sanpaolo is also exploring a strategic approach to identify and scale CE practices across its internal operations. This includes a feasibility study on a framework called ARISE, to apply circularity in key domains such as real estate assets, office furniture, distributed technology, data centers, employee mobility and sustainable real estate development. ARISE defines five strategic objectives: strengthening brand recognition (Awareness), transforming costs into revenues (Revenues), generating positive environmental and social impact (Impact), reducing procurement costs (Saving) and developing distinctive internal expertise (Expertise). This conceptual framework serves as a concrete roadmap to embed circular thinking into the Group's day-to-day operations and long-term business model.

Internally, the Group invests heavily in circular culture. Employees benefit from webinars, video series and podcasts that explore circular concepts and case studies. These initiatives - also shared across international subsidiaries - aim to build awareness and skills aligned with the Group's long-term strategy.

4. Conclusion

As the world faces the converging crises of climate change, biodiversity loss and pollution, embracing circularity is no longer optional – it is an imperative. The CE offers a systemic and regenerative response to these challenges, aligning economic prosperity with environmental and social resilience. For the financial sector, and for banks in particular, this paradigm shift presents both a responsibility and a unique opportunity: to reimagine finance as a lever for sustainable transformation. By embedding CE principles into their strategies, banks can address multiple sustainability objectives in a synergistic way – from reducing resource dependence and mitigating transition risks to enabling inclusive value creation. At the same time, the shift to circularity provides a pathway to anticipate regulatory trends, strengthen long-term returns and safeguard portfolios against material volatility and supply chain disruptions⁵⁷.

Looking ahead, collaboration will be crucial. No single actor can drive this transition alone. Intesa Sanpaolo's contribution is to lower the barriers that slow the circular transition for businesses, investors and policymakers, through dedicated financing instruments, integrated risk frameworks and the active development of shared eligibility standards and harmonised

⁵⁷ C. Messina (2019), Why more banks must support the circular economy, The Banker-Financial Times.

guidelines. Building on €23.6 billion in circular economy dedicated credit facility delivered since 2018, the Group will continue to advance this agenda under its 2026–2029 Business Plan. At the same time, scaling this transition requires an enabling policy environment and the forthcoming European Circular Economy Act represents a decisive opportunity to deliver harmonised investment standards, concrete de-risking instruments and a genuine single market for secondary materials, creating the conditions for circular finance to scale.

In conclusion, the CE is a strategic vision for the future of finance. One that places long-term impact at the heart of value creation and that enables a more just, regenerative and resilient global economy. In this context, **Intesa Sanpaolo has chosen to take a leading role in the circular transition of the economic system.** With a long-standing commitment to circularity, the Group has demonstrated how financial institutions can play a proactive role in accelerating the transition, not only by financing innovation, but also by integrating circularity across operations, research and ecosystem engagement, and by working, across sectors and borders, to build the market infrastructure this transition still requires.

