EU Sectoral Briefings:
#1

Transitioning the EU Chemical Sector

Policy levers to support viability and increase sustainable finance

December 2025

Disclaimer

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Acronyms and abbreviations

APIs	Active pharmaceutical ingredients
BRS	Basel, Rotterdam and Stockholm Conventions
CBAM	Carbon Border Adjustment Mechanism
CCUS	Carbon capture, utilization, and storage
CCfDs	Carbon contracts for difference
CEA	Circular Economy Act
CEAP	Circular Economy Action Plan
cGMP	Current Good Manufacturing Practice
CID	Clean Industrial Deal
CISAF	Clean Industrial Deal State Aid Framework
CSRD	Corporate Sustainability Reporting Directive
EBF	European Banking Federation
ECHA	European Chemical Agency
EIB	European Investment Bank
ETS2	Emissions Trading System 2
GBF	Kunming-Montreal Global Biodiversity Framework
GFC	Global Framework on Chemicals
ICT	Information and communications technology
IDB	Industrial Decarbonization Bank
IEA	International Energy Agency
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
MFF	Multiannual Financial Framework
PFAS	Per- and polyfluoroalkyl substances (“forever chemicals”)
PPA	Power purchase agreement
PPWR	Packaging and Packaging Waste Regulation
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Law)
SUPD	Single-Use Plastics Directive
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative

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Executive summary

The European Union's chemical sector is the second-largest globally (Cefic, 2024a), making up the bloc's fourth-largest manufacturing industry, underpinning critical value chains across sectors, and employing over a million people (European Commission, 2025g). However, the EU chemical sector faces declining global market share, high energy costs, and rising sustainability pressures that limit its bankability. The sector's heavy reliance on toxic substances and fossil-based feedstocks make it a major source of pollution and contribute 5% of EU total net greenhouse gas emissions (EEA, 2025c). Its transformation is essential to help address the triple planetary crisis of climate change, pollution, and biodiversity loss. Leveraging the EU's highly skilled workforce and strong innovation capacity is necessary to accelerate the shift towards safe, circular, and low-carbon chemical production and to deliver climate, economic, and social gains, which in turn can enhance sustainability and strengthen competitiveness.

This brief presents a landscape analysis of the sector and current and forthcoming policies that are relevant to its transformation. Its primary focus is to help financial institutions and other stakeholders understand how Europe's chemical sector is developing within the sustainable transformation, including key policies affecting it. It also identifies practical policy levers that can help banks strengthen their role in financing the chemical transition.

Three areas of focus

- **Part 1: The EU chemical sector: overview and role in the sustainability transition:** A market overview of the sector and its economic value, sustainability footprint, mitigation potential, and related EU objectives for its transformation.
- **Part 2: Policies affecting the EU chemical sector:** International and regional policies including the Global Framework on Chemicals, the 2025 EU Chemicals Industry Package, and related policies such as the EU Clean Industrial Deal and Industrial Decarbonization Bank.
- **Part 3: Policy levers to support viability and increase sustainable finance:** 1) De-risking; enhancing bankability and investment viability; 2) Enabling environment for the chemical sector; and 3) Ensuring a coherent and horizontal policy approach.

Main takeaways

The main takeaways by focus area are highlighted in **Tables ES1** and **ES2**.

Table ES1: Main takeaways by focus area

The EU chemical sector: Overview and role in the sustainability transition

- **EU chemical industry overview:** The chemical sector is central to Europe's industrial competitiveness as the EU is the second-largest chemical producer globally, with a share of 12.6% global sales in 2023 (Cefic, 2024a). It is also the fourth-largest manufacturing industry in the EU (European Commission, 2025g).
- **Sustainability footprint:** At the EU level, the chemical sector remains a notable source of hazardous emissions despite ongoing efforts to reduce the output of pollutants, including water and groundwater contamination, soil degradation, microplastic accumulation, and GHG emissions (EEA, 2025b; Cefic, n.d.). The chemical sector in the EU will need to reduce GHG emissions by approximately 164 million tons from 2019 levels to reach the EU's 2050 net-zero goals (Accenture, 2022).
- **Sustainable transformation for workforce and sector resilience:** The sector employs ~1.2 million people across roughly 29,000 companies through direct jobs and supporting 19 million jobs across supply chains in Europe (European Commission, 2025g). Ensuring a sustainable transformation of the sector is therefore vital to preserve and enhance its social and economic contributions while aligning with environmental and social objectives.
- **Interconnected benefits of sector transformation:** Supplying materials across other critical sectors from agriculture and food to healthcare, energy, consumer goods, mining, and others, the EU chemical sector helps shape these sectors' environmental and human rights impacts. Reduction of pollution and GHG emissions can lead to economic benefits related to safety and health, stronger biodiversity and ecosystem services, and greater resilience to climate change impacts (WHO, 2025; WHO, 2017; EEA, 2022).

Policies affecting the EU chemical sector

- **The Global Framework on Chemicals:** Adopted under UNEP in September 2023, the Global Framework on Chemicals sets out five strategic objectives and 28 targets for the sound management of chemicals and waste and provides a shared vision for a safe, healthy, and sustainable future (UNEP, 2024b). It also reflects a shift in perspective towards a sector-based approach, while at the same time addressing the critical interdependencies between sectors on a systemic level.
- **The Chemicals Industry Package:** At the EU level, the European Commission presented the Chemicals Industry Package as part of its 2025 Work Program (European Commission, 2025g). Key initiatives will include a revision of the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation; establishment of a new European Chemicals Agency (ECHA) Basic Regulation; establishment of a Critical Chemicals Alliance; implementation of policies to promote clean energy affordability and circular economy solutions; proposed science-based restrictions on PFAS; and integration with the EU Omnibus Simplification Package, among other relevant EU policies.
- **Other policies affecting the EU chemical sector:** The EU's broader climate and industrial policy framework is set to reshape the chemicals sector by covering emissions targets, driving decarbonization, and advancing circularity. Key examples are the European Climate Law (2021), the Clean Industrial Deal (2025)—integrating measures such as the Industrial Decarbonization Accelerator Act (2025) and the Industrial Decarbonization Bank (2026)—the Circular Economy Act (2026), the Packaging and Packaging Waste Regulation (2025) and the The European Pillar of Social Rights Action Plan (2025 review) (European Commission).

Policy levers to support viability and increase sustainable finance

- **Chemical sector leads EU manufacturing investments:** The chemical sector leads in EU27 manufacturing investments, with nearly 18% of the total investment—and 25% of chemical sector investment in petrochemicals (European Commission, 2025h; Cefic, 2024a).
- **Financing gaps and market challenges:** Varying estimates show annual financing gaps on the order of tens of billions of euros (European Commission, 2025h; Accenture, 2022), in part attributable to structural barriers including higher cost base, weak demand, and competitive pressure. Inclusion of the sector in relevant indices, sustainable funds, and green bond issuances remains relatively low, as further explored in part 3.
- **Potential policy levers:** The sector's sustainability pressures, regulatory shifts, and investment constraints underscore the need for coordinated solutions. **Table ES2** illustrates seven levers across three topics that have been identified through this brief as having potential to increase bankability of the EU chemical sector. These policy levers have the potential to unlock new market opportunities, strengthen risk management, and accelerate capital deployment into low-carbon and circular solutions.

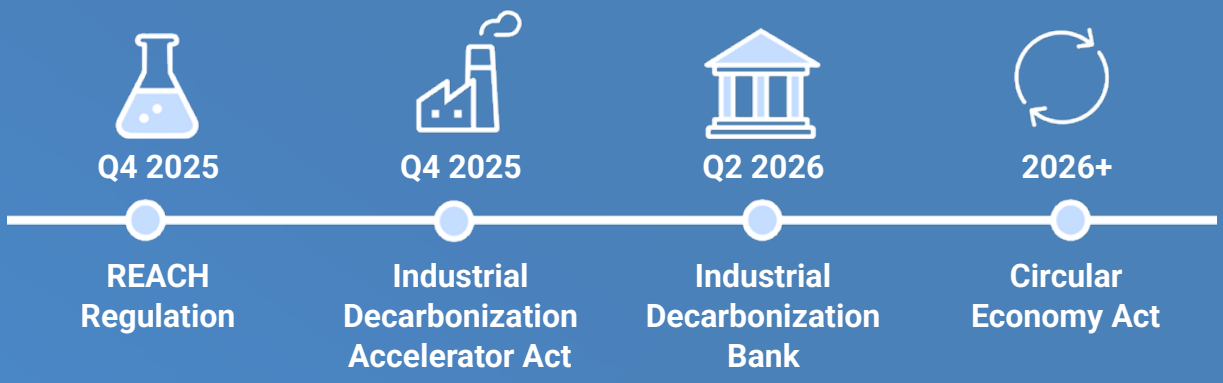
Table ES2: Potential policy levers to support viability and increase sustainable finance

Topic	Policy levers
De-risking mechanisms to improve the bankability and investment viability of the EU chemical sector	1. Innovating funding mechanisms, initiatives, and tools to enhance bankability. 2. Scaling circular and resource-efficient models to enhance investment viability.
Enhancing the enabling environment for the chemical sector to transition	3. Enhancing data transparency and standardization for informed investment decisions. 4. Reducing administrative burden across the value chain, especially for SMEs.
Ensuring a coherent and horizontal policy approach to the chemical sector transition and financing	5. Integrating policy frameworks for a sustainable and competitive transition. 6. Ensuring long-term policy stability to drive sustainable transformation. 7. Encouraging banks to engage with policymakers and clients to support a transition that upholds environmental safeguards.

Examples and next steps

The brief includes four examples from interdependent sectors of materials recycling, energy, transport, and agriculture, illustrating how targeted financing instruments, guarantees, and blended finance structures can de-risk investments, mobilize private capital, and accelerate clean technologies.

The following timeline highlights some relevant upcoming EU policies that will influence the competitiveness, decarbonization and circularity of the chemical sector.



In the coming months, stakeholders should prepare for new consultations and funding calls tied to upcoming initiatives. The Chemicals Industry Package is expected to link closely with the Clean Industrial Deal and Industrial Decarbonization Bank, opening up opportunities for blended finance, guarantees, and de-risking tools to accelerate investment in low-carbon and circular chemistry. Monitoring these initiatives will be essential to anticipate regulatory impacts, align transition strategies, and engage early with the Commission's implementation process.

About this policy brief series

This policy brief is the first in a series on EU sectoral policy, developed by UNEP Finance Initiative (UNEP FI) and the European Banking Federation (EBF) to strengthen the connection between financial institutions, policymakers, and the real economy.

This series complements additional UNEP FI related work—such as the United Nations Principles for Responsible Banking (PRB) Guidance Series on Sectoral and Client Engagement, PRB Target Setting on Financial Health and Inclusion, Sectors Mapping, Impact Radar, and the Regulatory Implementation Support Programme (RISP)—by providing a policy-focused counterpart that helps banks understand the evolving EU policy landscape and identify policy levers to finance real economy transitions. Together, these resources aim to bridge the investment gap in relevant sectors and support the integration of sustainability objectives into banking strategies and portfolios.

Part 1: The EU chemical sector's role in the sustainability transition

1.1 Market overview

The chemical sector is central to Europe's industrial competitiveness as the EU is the second-largest chemical producer globally with a share of 12.6% global sales in 2023 (Cefic, 2024a).

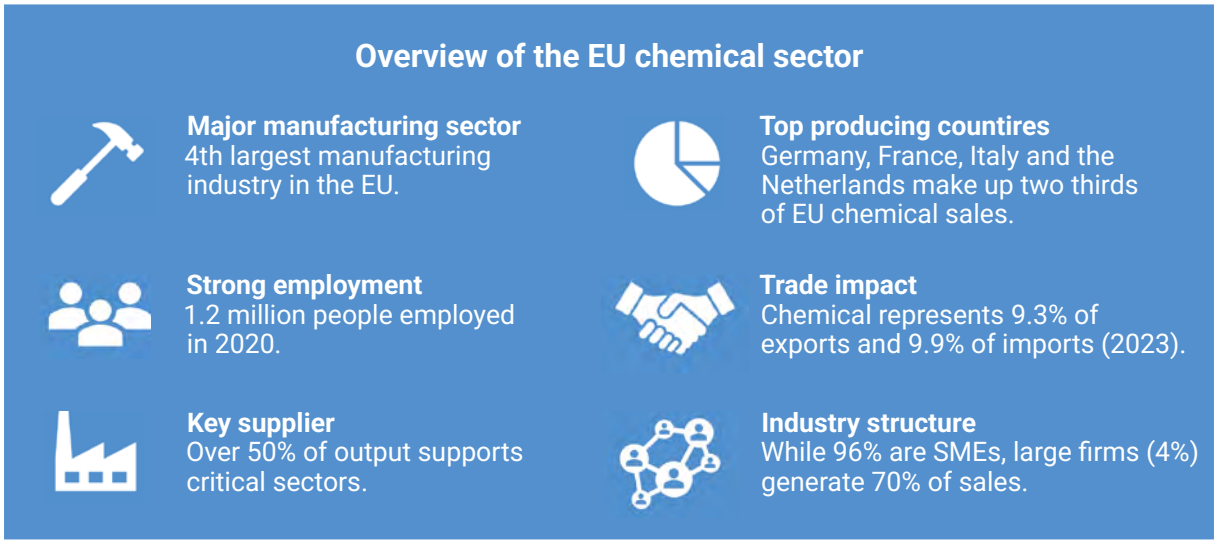


Figure 1: Overview of the EU chemical sector

Despite being the EU's fourth-largest manufacturing industry, the EU chemical sector has seen its global market share decline over the past decade (European Commission, 2025g; Cefic, 2024a; Lorbeer and Ezekoye, 2024), with structural barriers impacting the sector's ambitions around its transformation and sustainability efforts:

- **Sinking profit margins** due to higher feedstock costs, destocking post-Covid-19 and weaker demand are pushing production towards lower cost regions outside of Europe with less stringent environmental standards (Cefic, 2025a).
- **Recent tariffs, potential trade wars, and supply chain risks** create uncertainty.
- **Energy costs are rising,** while energy return on investment is declining, due to a variety of factors including international conflicts.
- **Lack of adequate regulatory pressure,** for example due to challenges in attribution of harm of low dose chemical cocktails, may result in lock in of hazardous processes (Blumenthal *et.al.,* 2022; Kortenkamp, 2014).
- **Innovative approaches to circular value chains** are struggling to compete with low-cost imports, undermining business viability and leading to market exits such as the closure of recycling facilities (EuRIC, 2025; S&P Global, 2025).

Innovation and investment are consequently becoming more critical to sustain the sector's resilience and accelerate its sustainable transition.

With a highly skilled workforce and strong innovation capacity, the EU leads in early-stage green technologies, including sustainable chemical processes. The challenge is to translate this innovation into scalable, competitive production. If successful, the sector can help demonstrate that clean, high-value manufacturing is viable, reinforcing the EU's leadership in a sustainable industrial transformation (Cleantech for Europe, 2025).

1.2 Sustainability footprint

The chemical sector is associated with multiple sustainability topics across the Sustainable Development Goals (SDGs), affecting all three interlinked issues of the triple planetary crisis—climate change, pollution and biodiversity loss (UNEP, 2024a)—as well as social sustainability. Some of the main topics are explored in further detail below.

The chemical sector is the major global source of pollution across air, water, and soil in the form of hazardous introduced chemicals and residual chemical emissions. It also accounts for 5% of total net GHG emissions. **Figure 2** illustrates the different stages of the chemical value chain where hazardous chemicals originate, highlighting the need for deep transformation that addresses pollution holistically. The sector's high energy intensity is driven largely by its reliance on fossil-based feedstocks, with about 50% of total energy input used as feedstock. Combined with the significant energy needed for processing, production, and supply chain logistics, this reliance makes decarbonization particularly challenging (IEA, 2023).

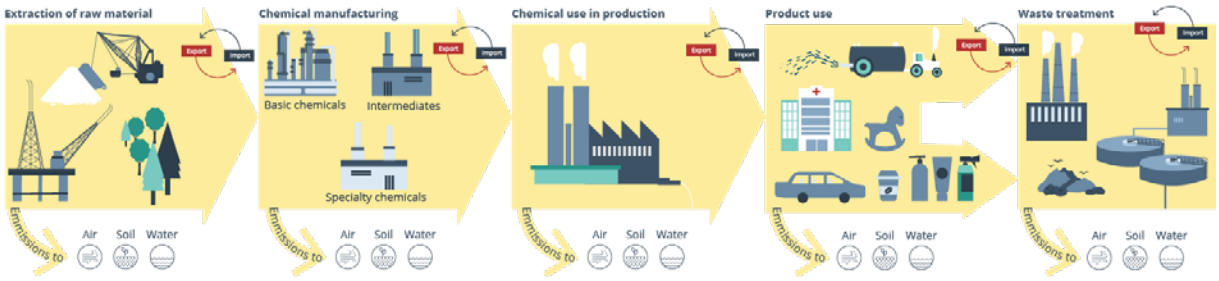


Figure 2: The chemical value chain (EEA, 2023)

Environmental impacts of the chemical sector affect human health through direct exposure of communities and workers on production sites; through contaminated air, water, and soil affecting downstream consumers; and through diminishing ecosystem services that are central to human health. Failure to ensure occupational safety and health exposes workers to hazardous conditions while weakening productivity and economic competitiveness (WHO, 2017). Consumers' exposure to harmful chemicals is linked to cancer, reproductive harm, and endocrine disruption (EEA, 2022). Ecosystems provide crucial services like air purification or disease control; their degradation reduces these benefits (WHO, 2025). Combatting the sector's contribution to pollution additionally has the potential to safe direct and indirect economic costs, for example caused by reduced crop yields, loss of tourism revenue, or reduced labor productivity (UNEP FI, 2024c). Detailed information on the UNEP FI Impact Radar showing areas and topics across the pillars of sustainable development as well as an extraction of the UNEP

FI Sectors Mappings showing the positive and negative sector-impact associations contained within the chemicals sector can be found in **Annex 1**.

At the EU level, the chemical sector remains a notable source of hazardous emissions despite ongoing efforts to reduce the output of pollutants (Cefic, n.d.; EEA, 2025b):

- **Water contamination:** Only 29% of EU surface waters achieved good chemical status (2016–2021), mainly due to persistent pollutants like mercury and brominated flame retardants.
- **Groundwater contamination:** 77% of groundwater areas met good chemical standards (2016–2021), leaving 23% in poor condition due to ongoing contamination.
- **Soil degradation:** Use of synthetic chemicals continues to degrade soil health, with residues of banned pesticides and persistent organic pollutants still detected.
- **Microplastic accumulation:** Between 31,000 and 42,000 tonnes of microplastics accumulate annually in EU farmland soils, largely through sewage sludge application.
- **GHG emissions:** Despite recent decoupling trends, the chemical sector accounts for 5% of the EU's GHG emissions.

Ensuring a sustainable transformation of the sector is vital to preserve and enhance its social and economic contributions while aligning with environmental and social objectives.

1.3 Mitigation potential and EU objectives

Transforming chemical production in response to the sector's environmental and health challenges offers interconnected benefits. For example, the removal of toxic chemicals from plastics has been estimated to also result in economic benefits of around USD 2.0 trillion by avoiding associated deaths (Cropper *et.al.,* 2024). Cleaner and circular production further protects biodiversity and ecosystem services, strengthening resilience to climate change and contributing to long-term food and water security. Renewable energy can lower costs and enhance energy security by facilitating independence from geopolitical conflicts, which can help boost the competitiveness of the EU chemical sector.

The sector is enhancing product, process, and ecosystem innovation to alleviate some of the associated challenges, with a particular emphasis on feedstock sourcing and advances in circularity (Yankovitz *et al*., 2024). Examples of innovation include developing products based on renewable feedstocks, making production processes cleaner through more advanced technologies, and helping minimize harm to ecosystems by implementing improved recycling practices. The chemical sector in the EU will need to reduce GHG emissions by approximately 164 million tons from 2019 levels to reach the EU's 2050 net-zero goals (Accenture, 2022). Some initial progress in decoupling emissions from increased output has been demonstrated, keeping emissions at a relatively stable level since 2015 (Cefic, 2024a; EEA, 2025c). Carbon capture, utilization, and storage (CCUS) offers one opportunity to mitigate hard-to-abate CO_2 emissions in the future. However, the technology faces some limitations and uncertainties in its commercial readiness, scalability, infrastructure, and long-term viability (Cefic, 2024b).

Systemic interventions—such as circularity strategies, material substitution, demand reduction, and increased product-use efficiency—are most essential to drive the chemical sector's sustainable transformation.

The EU has set specific objectives for different parts of the chemical sector to guide its transition. Situated within the EU Green Deal, the EU Chemicals Strategy for Sustainability sets out a dual objective to 1) better protect citizens and the environment from the impacts of the chemical sector and 2) boost innovation for safe and sustainable chemicals to enhance the EU's competitiveness (European Commission, 2020). In parallel, the sector is undertaking a "twin transition", both green and digital. The Commission's Transition Pathway highlights the sector's role in a circular economy, from designing safe and sustainable chemicals to advancing recyclable material cycles and recycling infrastructure (European Commission, 2023b). Digitalization, through tools like product passports and shared data platforms, is understood as key to transparency, traceability, and efficiency. In addition, the EU's new Climate Law-aligned sectoral decarbonization pathways offer quantitative guidance for aligning industry strategies with the EU's 2050 climate-neutrality objective, including three pathways directly addressing chemical subsectors and several pathways addressing interdependent subsectors (European Commission, 2025f).

1.4 Interdependence with other industries

The EU chemical sector supplies essential materials and products across other critical sectors, shaping these industries' environmental impacts. Strong interdependencies also have an effect on the protection of human rights within the chemical sector and its value chains. While there are duties to respect environmental protection and human rights throughout a company's value chain, interdependencies with other sectors complicate the ability to identify, prevent, and address risks, making it essential to understand these mutual reliances (see **Table 1** for a consolidated overview of key sectoral interdependencies).

Table 1: Key interdependencies between the chemical sector and other critical sectors

Sector	Chemical sector contributions	Key interdependencies
Agriculture & food	Fertilizers, pesticides, crop protection products, food preservatives, packaging, plastics	In conventional agricultural practices, agrochemicals are heavily used, aiming for increased yields, food security, and pest control; precision agri-inputs, bio stimulants, circular and regenerative practices and regenerative practices enable more sustainable farming.
Healthcare & pharmaceuticals	Medicines, vaccines, diagnostics, medical devices, hospital supplies, plastic packaging	Sector is dependent on active pharmaceutical ingredients (APIs), solvents, and excipients from chemicals; joint R&D in advanced drug delivery; strict Current Good Manufacturing Practice (cGMP) and regulatory standards.
Energy	Refining oil/gas, production of hydrogen, batteries, wind turbine resins, solar photovoltaics (PV), hydropower	Clean energy technologies rely on chemical processes and materials; collaboration drives carbon capture and next-generation solutions.
Construction & infrastructure	Cement additives, insulation, plastics, coatings, adhesives, composites	Chemicals enable energy efficiency and durability in buildings; innovations like carbon-negative cement and bio-based insulation support green standards.
Transport & automotive	Fuels, lubricants, composites, plastics, adhesives, EV batteries	Advanced materials underpin EV safety, performance, and recyclability; recycling systems reduce reliance on critical raw materials.
Textiles & consumer goods	Synthetic fibres, dyes, plastics, detergents, cosmetics, cleaning products	Sector relies on polymers and fibres; shift underway toward biomaterials, recyclables, and more sustainable consumer products.
Electronics & ICT	Semiconductors (heavy input of water and silicon), circuit boards, displays, plastics, specialty chemicals for chip production	Specialty chemicals are essential for semiconductors and electronics; innovation targets recyclable and sustainable materials.
Mining	Reagents for ore processing (e.g. flotation agents, lixiviants), explosives, dust suppressants, water treatment chemicals	Chemicals are essential in mineral extraction and processing; mining supplies critical raw materials (e.g. lithium, cobalt, rare earths) to the chemical sector; mutual reliance on innovation for circularity and sustainability.

Part 2: Policies affecting the EU chemical sector

The chemical sector is influenced by international frameworks and a wide range of EU policies. These policies entail chemicals-specific regulations, as well as broader, cross-sectoral initiatives that indirectly impact the sector by setting sustainability and competitiveness goals. In addition, it is affected by social and just transition initiatives.

Internationally, the Global Framework on Chemicals, adopted under UNEP in September 2023, sets out five strategic objectives and 28 targets for the sound management of chemicals and waste and provides a shared vision for a safe, healthy, and sustainable future (UNEP, 2024b). It also reflects a shift in perspective towards a sector-based approach, while at the same time addressing the critical interdependencies between sectors on a systemic level. Shifting to a sector-based approach can enable more strategic collaboration with key stakeholders and implementation of comprehensive solutions.

At the EU level, the European Commission presented the Chemicals Industry Package as part of its 2025 Work Program, to strengthen the competitiveness, sustainability, and modernization of the sector (European Commission, 2025g). Key initiatives will include:

- **A revision of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation,** to simplify rules for the chemicals industry without compromising on safety or environmental protection.
- **A new European Chemicals Agency (ECHA) Basic Regulation** that will establish an autonomous legal framework to enhance the Agency's operational efficiency and regulatory clarity. It will streamline scientific opinion delivery, unify budgets, and transfer governance provisions currently embedded in the REACH Regulation into the new standalone framework.
- **The establishment of a Critical Chemicals Alliance** of member states and stakeholders to address the risks of capacity closures and ensure fair competition. It will coordinate investment priorities, provide policy support to strategic production sites, and reinforce trade defence and import monitoring.
- **The swift implementation of the Affordable Energy Action Plan** to lower energy and feedstock costs. The plan includes launching tripartite contracts that connect governments, clean energy producers, and industrial consumers to stabilize energy prices, boost investment in offshore wind and storage, and help deliver up to 88 GW of offshore renewables and 200 GW of storage capacity by 2030 (European Commission, 2025d).
- **The promotion of circular economy solutions** by creating Innovation and Substitution Hubs and providing fiscal incentives to stimulate demand for clean chemicals, mobilizing Horizon Europe funding to accelerate the development of safer substitutes,

and leveraging the Circular Economy Act to unlock secondary material markets and boosting recycling and bio-based inputs (European Commission, 2025e).

- **A proposition of a science-based restriction on PFAS emissions,** allowing their use only in critical applications. Promotion of remediation based on the polluter pays principle, and prioritization of the development of safer alternatives.
- **An integration with the Omnibus Simplification Package,** expected to save EUR 363 million annually by streamlining labelling, cosmetics rules, and fertilizer registration.

Table 2 summarizes other key EU policies, and their main objectives. A table containing a broader, yet non-exhaustive, range of relevant policies can be found in **Annex 2**.

Table 2: Other key EU policies and objectives

Policy/initiative	Description	Key dates
Clean Industrial Deal (CID)	Aligns industrial strategy with decarbonization, resource efficiency, and competitiveness through green innovation and procurement	Launched Q1 2025
Industrial Decarbonization Accelerator Act*	Accelerates permitting for decarbonization and infrastructure, introduces clean product criteria, and low-carbon labelling	Expected Q4 2025
Circular economy action plan (CEAP) & the Circular Economy Act (CEA)*	The second circular economy action plan (CEAP) aims to reduce waste and enhance sustainability, while the Circular Economy Act, under the CID, will establish a Single Market for secondary raw materials to boost supply and demand for high-quality recycled inputs	CEAP: Adopted Q1 2020; CEA expected 2026
Packaging and Packaging Waste Regulation (PPWR)*	Sets new EU-wide rules to reduce packaging waste, promote reuse and recycling, and limit harmful substances	Launched Q1 2025
Industrial Decarbonization Bank	Mobilizes EUR 100 billion to fund green industrial transition through grants, guarantees, and contracts for difference	Expected Q2 2026
Clean Industrial Deal State Aid Framework* as part of CID	Simplifies state aid rules to support clean tech, reduce industrial energy costs, and de-risk private investments	Launched Q2 2025
PPA Pilot (EIB)	EUR 500 million program to de-risk clean energy for energy-intensive firms via counter-guarantees	Proposed 2025
Occupational Safety and Health Framework (EU Adoption)*	Strengthens workplace safety and supports modernization in chemical facilities	Outlined for the years 2021–2027
Just Transition Fund	Financial support to help carbon-intensive regions diversify, reskill workers, and modernize facilities	Duration 2021–2027
Agenda Vision for Agriculture and Food	Tightens pesticide rules and aligns trade standards, influencing chemical demand	Presented 2025

* These policies currently have or will have partial or full legally binding components

Part 3: Policy levers to support viability and increase sustainable finance

From an investment perspective, chemicals (including pharmaceuticals, rubber, and plastics) take the lead in EU27 manufacturing, constituting 17.7% of the total investment, with automotive and food following. The petrochemicals sector accounts for more than 25% of the EU27 chemical sector's overall investment (Cefic, 2024a; European Commission, 2025h). Similar to most players in the real economy, the chemical sector obtains capital through internal financing, loans, and public and private equity and debt markets.

Estimating investment requirements for the chemicals sector is very challenging and may vary significantly. The European Commission estimates that, out of the total estimated annual investment need of EUR 35 billion for industry between 2030 and 2050 to meet climate targets, the chemicals sector accounts for 37%, representing an estimated annual need of EUR 12.95 billion (European Commission, 2025h). However, another estimate shows that funding net-zero initiatives in the chemical sector alone—one of the hardest-to-abate sectors—would require EUR 35 billion yearly based on a 2022 report, with a financing gap estimated at EUR 12.6 billion (Accenture, 2022).

Some of the structural barriers explored in Chapter 1.1 translate into factors causing unfavorable financing and investment conditions in the sector, including sustainable funds, that also show limited exposure to chemical companies: 1) higher feedstock and energy cost, including two to five times those of the U.S and China; 2) end consumer demand for the sector has flattened, for example in consumer goods among others; and 3) excess supply from lower cost markets. Given a higher cost base, weak demand, and competitive pressure, bond and loan market pricing are reflecting these negative pressures, including lower earnings results leading to decreasing stock prices and ratings downgrades for companies in the sector (Pitchbook, 2025).

As a proxy for investor sentiment in the sector, inclusion of this sector in relevant indices remains low, in Europe and beyond. For example, under the MSCI ACWI index, the chemical sector is classified under Materials among other sectors like construction and metals and mining (MSCI, 2024). Materials make up 3.44% of the index's sector weighting, so the chemicals subsector inevitably weighs less (MSCI, 2025). For the STOXX Europe 600 Index, chemicals as a super-sector make up 3.61% of its sector weighting. Sector categories may vary across data providers in indices and may not be completely comparable (STOXX, n.d.).

Based on the top 10 sustainable funds over five years according to Morningstar, only a few include chemical companies (Morningstar, 2024). Some of the factors contributing to this include recent performance decline. According to a McKinsey study, since 2024 the chemical sector has not outperformed the market compared to the MSCI World Index (Lorbeer & Ezekoye, 2024).

The chemical sector has had a relatively small percentage of green bond issuances. Of the USD 583.9 billion (EUR ~497.3 billion) green bond issuance in 2024 (ICE, 2024), only USD 5.5 billion (EUR ~4.8 billion) was from the chemical sector (Bloomberg terminal, August 25, 2025). From 2024 to July 2025, there were 22 green bond issuances totalling USD 6.76 billion (EUR ~5.8 billion) in the sector (Bloomberg terminal, August 25, 2025). Use of proceeds examples include recycling and upcycling of waste, reduction of GHG from production processes, energy-efficient systems, and innovative R&D projects, among others. However, green bond issuance within the EU has declined in recent years due to ESG backlash, inflation, higher interest rates, and market uncertainty.

The transition of Europe's chemical sector presents both significant challenges and opportunities for financing.[1] Key potential policy levers can be summarized in **Table 3**.

Table 3: Potential policy levers to support viability and increase sustainable finance

Topic	Policy levers
 **De-risking mechanisms to improve the bankability and investment viability of the EU chemical sector**	1. Innovating funding mechanisms, initiatives, and tools to enhance bankability. 2. Scaling circular and resource-efficient models to enhance investment viability.
 **Enhancing the enabling environment for the chemical sector to transition**	3. Enhancing data transparency and standardization for informed investment decisions. 4. Reducing administrative burden across the value chain, especially for SMEs.
 **Ensuring a coherent and horizontal policy approach to the chemical sector transition and financing**	5. Integrating policy frameworks for a sustainable and competitive transition. 6. Ensuring long-term policy stability to drive sustainable transformation. 7. Encouraging banks to engage with policymakers and clients to support a transition that upholds environmental safeguards.

1 Some of these challenges and opportunities were raised during 2025 Clean Industrial Deal discussions co-hosted by UNEP FI and the EBF. Policymakers, banks, and industry representatives highlighted the need for stronger alignment between policy ambition and financing realities.

De-risking; enhancing bankability and investment viability

3.1 Innovating funding mechanisms, initiatives, and tools to enhance bankability

Many projects will struggle to progress beyond demonstration phase without more risk-sharing instruments. This gap is especially acute in the chemical sector, where projects at higher technology readiness levels moving from pilot to commercial scale face steep capital needs and high risks but lack blended finance tools to de-risk investment (Cefic, 2025b).

Tools such as guarantees, blended finance, and carbon contracts for difference can reduce the risk premium of early-stage or low-carbon projects, helping banks finance new technologies with clearer long-term returns.

- **The Industrial Decarbonization Bank (IDB)** aims to mobilize more than EUR 100 billion to de-risk large-scale decarbonization projects through grants, guarantees, subordinated debt, and carbon contracts for difference (CCfDs), which provide revenue certainty by fixing carbon prices and supporting cleaner production methods (European Commission, 2025b; European Commission, n.d (a)).
- **The Clean Industrial Deal State Aid Framework (CISAF)** will also allow direct grants, tax advantages (such as accelerated depreciation), guarantees and other forms of aid, subject to compatibility conditions including competitive bidding processes and funding-gap assessments (European Commission, 2025c).
- **The Multiannual Financial Framework (MFF)** for 2028–2034, amounting to nearly EUR 2 trillion, will expand long-term EU investment capacity with a focus on competitiveness, research, and the clean transition. This budgetary framework could unlock additional funding streams and create synergies with sector-specific initiatives, reinforcing blended finance opportunities for capital-intensive industries such as chemicals (European Commission, 2024).
- **The European Commission** has developed a broad set of funding mechanisms to help reach the objectives that are part of the chemicals strategy, including the Recovery and Resilience Facility, InvestEU Program, Cohesion Policy Funds, LIFE Program, Horizon Europe, Just Transition Fund, and Digital Europe Program, which are further described in **Annex 2** (European Commission, n.d.(b)).

To make these instruments more accessible and effective for financial institutions, policymakers should ensure that the Industrial Decarbonization Bank, CISAF, and the next MFF are designed with clear eligibility criteria and strong risk-sharing mechanisms that could benefit most material industrial sectors such as Chemicals. In parallel, banks can start engaging with EU institutions, multilaterals, and industry to co-design and pilot blended-finance structures, to ensure their practicability and scalability.

3.2 Scaling circular and resource-efficient models to enhance investment viability

Transitioning from linear production to circular, resource-efficient models—focused on reuse, recycling, and material substitution—creates more stable and recurring value streams that improves project profitability, enhancing the attractiveness of chemical-related investments for banks.

- **EU policy initiatives could strengthen the economic viability of circular business models.** This includes explicitly and systematically integrating circular principles (durability, repairability, and recyclability) into the eligibility criteria for EU public financing instruments. This includes explicitly and systematically integrating circular principles of durability, repairability, and recyclability into the eligibility criteria for EU public financing instruments. Initiatives such as the EU's Hydrogen Bank or Industrial Decarbonization Bank could be replicated for circularity. Such a "Bank of Circularity" could offer off-take guarantees for recycled inputs in industry sectors or for new technologies, which, combined with other forms of de-risking and deployment of public-private financing schemes, could also enhance the bankability of circular business models, projects, or activities (EBF 2025a).
- **In parallel, banks and investors should consider integrating circular principles into their strategies and business practices,** to scale up finance for circular solutions and drive systemic change. This includes dedicated financing products for circular solutions and promoting the integration of resource-efficiency considerations into their risk-return financial models. In this regard, UNEP FI's Circular Economy as an Enabler for Responsible Banking (2024) series of resources helps banks around the world operationalize the interlinkages between the circular economy and climate, nature, pollution, and healthy and inclusive economies.
- **Financing the circular and resource-efficient transition is not a new concept;** there are several projects in place that can serve as examples for future financial schemes (EIB, 2020).

Enabling environment for the chemical sector

3.3 Enhancing data transparency and standardization for informed investment decisions

Limited availability of reliable, standardized data on emissions, resource use, and technology performance significantly constrains investment decisions in the chemical sector. Standardized environmental and transition data, harmonized under EU standards like the CSRD and Taxonomy, can lower due-diligence costs and reduce uncertainty for banks and investors, enabling more efficient capital allocation.

- **To effectively track progress toward a clean industry, financial institutions require coherent, trustworthy, and forward-looking information on how companies source materials and integrate circular design principles.** Standardization and credibility of data reported under the European Sustainability Reporting Standards (ESRS) remains essential. Complementary instruments, such as the Digital Product Passport (DPP), can strengthen transparency and build investor confidence by providing reliable data. As President Ursula von der Leyen underlined in her 2025 State of the Union: "Only what gets measured, gets done" (European Commission, 2025a).

The UN Principles for Responsible Banking (PRB) Client Engagement workstreams, Sectors Mapping, Impact Radar, and Human Rights toolkits are good examples of tools and resources to navigate these complexities by structuring industries' positive and negative impacts across environmental, social, and economic dimensions and thereby enhance impact assessment, inform portfolio strategy, and strengthen the alignment of financing with sustainability objectives. Complementing these tools, PRB's Transition Plan Guidance helps banks assess the credibility of clients' transition plans and further highlights sector-level transition levers that banks can draw on to finance the real-economy transition (UNEP FI, 2025).

3.4 Reducing administrative burden across the value chain, especially for SMEs

The EU chemical sector's vast network of small and medium-sized enterprizes (SMEs) faces high compliance costs, complex administrative requirements, and limited access to finance. Simplified regulatory frameworks, stronger guarantee mechanisms, and SME-focused financial products—such as aggregated project financing platforms—are essential to help smaller firms integrate into cleaner, more competitive value chains.

- **One key enabler is the Digital Product Passport (DPP),** to be implemented in phases through 2029. As a central tool for sharing critical sustainability information, the DPP will enable targeted disclosure of product data, support circular resource management, and enhance traceability of substances of concern that hinder recycling—ensuring compatibility across recycling technologies (Cefic, 2025c). Further streamlining permitting and procurement processes, while improving access to public incentives, can shorten project timelines and lower financing costs—particularly for SMEs developing sustainable chemical solutions.

- **Developing a digital one-stop-shop platform and fast-track procedures** for projects meeting predefined sustainability benchmarks could simplify access to standardized blended finance instruments at the EU level. This would make it easier for SMEs—who represent more than 96% of the sector (European Commission, 2023b)—to identify relevant subsidies and accelerate project deployment.

To support SMEs, platforms like the PRB Clients and Customers SME Engagement workstreams focus on providing toolkits, compendia of good practices and lessons learned and case studies for SMEs, and the PRB target setting on Financial Health and Inclusion, and on Gender Equality and Women's Empowerment, specifically provides concrete related actions applicable to SMEs (UNEP FI, 2024b; UNEP FI, 2024a). Banks can make use of these tools and streamline onboarding and credit processes for SMEs, using more accessible documentation, digital platforms and easing their client processes.

Ensuring a coherent and horizontal policy approach

3.5 Integrating policy frameworks for a sustainable and competitive transition

Coordinating environmental, industrial, circular and energy policies is critical to ensure consistent and effective incentives. Policy coherence can strengthen competitiveness while accelerating the green transition.

- **Energy policies** are crucial for the European chemical industry, as natural gas prices are three times higher than in the US and reliance on imported feedstocks have already led to plant closures and deterred new investment (OPIS, 2025). Linking CID measures with the Action Plan on Affordable Energy, the European Grids Package, and the Renewable Energy Directive can help restore competitiveness. This is especially relevant for the chemical sector as high energy costs have already forced cracker closures across Europe.

- Other complementary initiatives include:
  - **The Circular Economy Action Plan 2.0 and upcoming Circular Economy Act** aim to reduce material dependency and boost secondary raw materials markets.
  - **The Packaging and Packaging Waste Regulation and the Single-Use Plastics Directive** further restrict virgin materials, single-use plastics, and PFAS in packaging.

- **The European Climate Law-aligned sectoral decarbonization pathways** offer a coherent, science-based framework that helps align industrial and climate policies across sectors, including chemicals, thereby supporting more consistent financing and transition planning European Commisssion, 2025f).

The UNEP FI Regulatory Implementation Support Programme is a related programme designed to help stakeholders understand, implement, and comply with sustainable finance policies, regulations and reporting requirements. Understanding these policy developments can help banks align their strategies and policies, increasing de-risking products and incentivizing the sector through targeted investments. Similarly, the C-ESG Risk Roundtable provides useful resources to facilitate banks with integration of ESG factors into their risk management in compliance with the EU regulation.

3.6 Ensuring long-term policy stability to drive sustainable transformation

Maintaining alignment with the EU Green Deal, Climate Law and broader environmental and social targets will ensure the sector's transformation addresses the economic challenges related to climate, nature, human rights, and health and inclusivity, while giving investors long-term policy certainty. For chemicals, long-term predictability is essential, as stable and transparent policies enable investors to plan large-scale transformation projects with confidence. This implies:

- **Consistent policy signals**—anchored in the European Climate Law's 2030, 2040 and 2050 targets and broader environmental targets, reinforced by the CID and Industrial Decarbonization Bank—can restore confidence and mobilize private capital at scale.
- **Coherence across regulatory, fiscal, and industrial policies.** For banks, such predictability is essential to integrate transition risks into their business plans and lending strategies and develop long-term financing instruments.

A stable and credible policy environment not only lowers the cost of capital but also can help position the financial sector as a key enabler of Europe's sustainable industrial transformation.

3.7 Encouraging banks to engage with policymakers and clients to support a transition that upholds environmental safeguards

Close collaboration among banks, policymakers, and industry clients is vital to ensure that the chemical sector's transition remains both competitive and environmentally sound. Financial institutions can bridge policy ambition and market reality—helping shape enabling frameworks, mobilize capital for sustainable solutions, and align transition pathways with the EU's climate, pollution, and circular economy objectives. They can contribute by:

- **Supporting clients with targeted products and advisory services**—such as sustainability-linked loans and finance solutions—that encourage substitution of hazardous substances and investment in circular business models.
- **Engaging in structured policy dialogue** to share financing insights that inform the design of de-risking tools and transition incentives under the Clean Industrial Deal, the Chemicals Package and other related initiatives.

Part 4: Examples from interdependent sectors

Building on these levers, the following selected examples demonstrate how targeted financing instruments, guarantees, and blended finance structures can de-risk investments, mobilize private capital, and accelerate clean technologies. Additional examples can be found in the EBF's report on increasing the bankability of transition projects under the Clean Industrial Deal (EBF, 2025b).

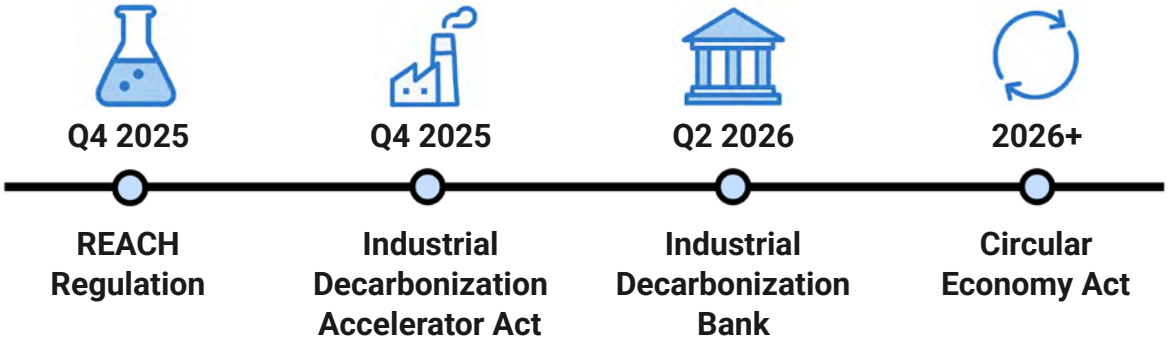
Sector	Example	Summary
Material recycling	Novamont Renewable Chemistry	The EIB is providing EUR 30 million to support the rollout of innovative technologies for producing bioplastics and bio-chemicals, intended for use in both industrial (e.g. plasticisers, biodegradable lubricants) and consumer (e.g. cosmetics, packaging, carrier bags) applications.
Energy *(part of the EBF report)*	H2 Green Steel: Decarbonizing Steel	H2 Green Steel is a Swedish industrial project developing large-scale fossil-free steel production by replacing coal with renewable hydrogen. The initiative addresses one of Europe's hardest-to-abate sectors, aiming for up to 95% lower CO_2 emissions compared to blast furnaces. Its EUR 4 billion+ financing package combined public support with private debt (EU Innovation Fund, Riksgälden, Euler Hermes, InvestEU, EIB, NIB), showing how guarantees and grants can de-risk major decarbonization projects. The chemical sector supplies electrolysis materials, and process chemicals that are essential for green hydrogen production.
Transport *(part of the EBF report)*	Modernization of Palermo–Catania Railway Line	A EUR 3.4 billion financing package enabled the upgrade of Italy's Palermo–Catania railway, with contributions from the EIB, Intesa Sanpaolo Imi Corporate & Investment Banking Division, and the CDP. The structure combined loans, counter-guarantees, and intermediated financing, providing a model for scaling strategic green infrastructure. The chemical sector supports such projects through adhesives, coatings, and composites that improve resilience and durability.
Agriculture	Bioeconomy on Marine Sites Association, Germany	A EUR 20 million public investment by Germany's BMBF funds BaMS, a blue bioeconomy initiative supporting both academic research and industrial innovation to integrate material and energy flows across sectors, such as nutrient cycling and bio-based fertilizers (BMBF and BMEL, 2022).

Part 5: Next steps

The European Commission's Chemicals Industry Package will mark major policy milestones to boost the sector's competitiveness, sustainability, and resilience. It will include an Action Plan for the Chemicals Industry and a Simplification Package to modernize EU chemical rules, reduce administrative burdens, and streamline REACH and ECHA procedures. Key measures will establish a Critical Chemicals Alliance to address the risks of capacity closures in the sector and applying trade defence measures to ensure fair competition; lower energy and feedstock costs through the Affordable Energy Action Plan; and provide stronger incentives for innovation, circularity, and clean technology adoption. A science-based restriction on PFAS and clearer fiscal and regulatory frameworks are also expected to support safer, more sustainable production.

Leading up to the first Global Framework on Chemicals International Conference (November 2026), a finance workstream will work to mobilize the finance sector under the Global Framework on Chemicals Implementation Programs supported by IOMC.

The following timeline highlights other major upcoming EU policies that will influence the competitiveness, decarbonization and circularity of the chemical sector.



In the coming months, stakeholders should prepare for new consultations and funding calls tied to upcoming initiatives. The Chemicals Industry Package is expected to link closely with the Clean Industrial Deal and Industrial Decarbonization Bank, opening up opportunities for blended finance, guarantees, and de-risking tools to accelerate investment in low-carbon and circular chemistry. Monitoring these initiatives will be essential to anticipate regulatory impacts, align transition strategies, and engage early with the Commission's implementation process.

Annex 1: UNEP FI Impact Radar and Sectors Mapping

The below figure shows the UNEP FI Impact Radar which is a compilation of Impact Areas and Topics across the three pillars of sustainable development (Social, Socio-economic, Natural Environment).

An extraction of the UNEP FI Sectors Mappings shows the positive and negative sector-impact associations contained within the chemicals sector (bold indicates it is a key sector-impact association) using the impact areas/topics of the Impact Radar.

Chemical sector impact types	Impact areas
Positive sector-impact associations on:	Employment
	Wages
Negative sector-impact associations on:	**Health and safety**
	Wages
	Social protection
	Climate stability
	Waterbodies
	Air
	Soil
	Species
	Habitat
	Resource intensity
	Waste

Annex 2: EU and global policies and initiatives affecting the chemical sector (non-exhaustive list)

Classification	Policy	Description	Key dates
Chemicals-Specific policies	Chemicals Industry Package*	Comprehensive package to strengthen competitiveness, simplify chemical regulation, revise REACH, and modernize ECHA	Revision of REACH expected Q4 2025
	Global Framework on Chemicals	The Global Framework on Chemicals (GFC), provides a comprehensive plan to guide countries and stakeholders in jointly addressing the lifecycle of chemicals	Adopted in 2023, First International Conference to be held in November 2026
	BRS (Basel, Rotterdam and Stockholm) Conventions	Three international legal instruments addressing transboundary movements of hazardous wastes and their disposal (Basel), the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (Rotterdam) and persistent organic pollutants (Stockholm)	Integration of all three conventions in a single secretariat in 2013
	Minimata Convention on Mercury	Designed to protect human health and the environment from mercury pollution.	Adopted in 2013, entered into force 2017
Other policies affecting the chemical sector	European Climate Law*	Sets binding climate neutrality by 2050 and 55% GHG reduction by 2030	Launched 2021
	Clean Industrial Deal (CID)	Aligns industrial strategy with decarbonization, resource efficiency, and competitiveness through green innovation and procurement	Launched Q1 2025

Classification	Policy	Description	Key dates
Other policies affecting the chemical sector	Industrial Decarbonization Accelerator Act*	Accelerates permitting for decarbonization and infrastructure, introduces clean product criteria, and low-carbon labelling	Expected Q4 2025
	Packaging and Packaging Waste Regulation (PPWR)*	Sets new EU-wide rules to reduce packaging waste, promote reuse and recycling, and limit harmful substances	Launched Q1 2025
	Single-Use Plastics Directive (SUPD)*	Targets the most common single-use plastics by banking specific items and setting recycling targets	Launched 2019; Updated 2023
	Global Plastic Treaty currently being negotiated	The current negotiation of a Global Plastic Treaty with the aim to end plastic pollution includes discussions on chemicals of concern in plastic products	Negotiation launched 2022; Under negotiation 2025
	Agenda Vision for Agriculture and Food	Roadmap to create a resilient, future-proof agri-food system with fair income, climate alignment, and rural development	Launched Q1 2025
	Revision of CBAM (Carbon Border Adjustment Mechanism)	Revision aims to simplify and strengthen CBAM to prevent carbon leakage effectively while minimizing burdens particularly on SMEs	Will apply as of January 2026
	Circular Economy Action Plan (CEAP)	European Commission's strategic framework that aims to promote sustainability and resource efficiency by boosting innovation, recycling, and circular use of materials	Adopted in 2015
	Circular Economy Act (CEA)*	Proposed EU regulation setting mandatory requirements to improve transparency, recyclability, and secondary raw material use across sectors	Expected 2027
	Omnibus Simplification Package	Set of targeted changes to multiple EU chemical-related regulations, aimed at streamlining compliance, reducing administrative burdens, and modernizing procedures in the chemical sector. The main areas affected are chemical classification/labelling/packaging (CLP), cosmetics, and fertilizers	Expected to be fully implemented by the end of 2025

Classification	Policy	Description	Key dates
Social and Just Transition-related initiatives	Promoting Social Fairness in the Modern Economy	Promotes social cohesion through housing, job quality, and social rights to address growing inequalities	Launched 2017; Updated Q1 2025
	Just Transition Mechanism including the Just Transition Fund	Tool aiming to enhance equity of the transition; Provides financial support to regions and workers most affected by the EU's shift to climate neutrality	Launched 2021; Reviewed 2025
	Social Climate Fund *	Will provide funds until 2032 to help EU Member States mitigate social impacts of Emissions Trading System 2 (ETS2)	Expected 2026
	Occupational Safety and Health Framework (EU Adoption)*	Strengthens workplace safety and supports modernization in chemical facilities	Outlined for the years 2021–2027
	European Pillar of Social Rights Action Plan	Initiative that translates 20 key social rights principles into concrete actions aimed at creating fairer labor markets and social protection systems across Europe	2025 review
	Quality Jobs Roadmap	Initiative aimed at promoting high-quality, sustainable employment across all sectors. It is developed in consultation with social partners and seeks to support collective bargaining, fair wages, good working conditions, training, and just job transitions	Expected for the end of 2025
	EU Anti-Poverty Strategy	EU-wide plan aimed at eradicating poverty by 2050. It focuses on addressing the root causes of poverty, emphasizing a rights-based, inclusive approach that tackles structural and systemic inequalities.	Expected to be formally presented in 2026
	Union of Skills plan	Strategy to strengthen Europe's competitiveness by supporting workforce adaptability to the digital and green transitions	Launched in March 2025
	Joint Pact for European Social Dialogue	Formal agreement between the European Commission and European cross-industry social partners, aiming to strengthen social dialogue by enhancing the role of social partners in shaping labor market, employment, and social policies. Promoting fair and sustainable economic development, quality jobs, and social dialogue to manage change linked to digital and green transitions.	Signed in March 2025

Classification	Policy	Description	Key dates
Financing and investment-related initiatives	Industrial Decarbonization Bank	Mobilizes 100 billion EUR to fund green industrial transition through grants, guarantees, and contracts for difference	Expected Q2 2026
	Clean Industrial Deal State Aid Framework*	Simplifies state aid rules to support clean tech, reduce industrial energy costs, and de-risk private investments	Launched Q2 2025
	PPA Pilot (EIB)	500 million EUR program to de-risk clean energy for energy-intensive firms via counter-guarantees	Proposed 2025

* These policies currently have or will have partial or full legally binding components.

Annex 3: EU funding mechanisms to help reach the objectives that are part of the EU's Chemicals Strategy for Sustainability

Programme	Description
Recovery and Resilience Facility	Supports Member State reforms and investments post-COVID; several already include funding for a safe and sustainable chemical sector, plus generic programmes on electrification, green skills, decontamination and resource-efficiency
InvestEU Programme	Boosts investment in sustainable infrastructure, SMEs, research/innovation/digitization, and social investment/skills; chemical projects funded include identifying toxic chemicals in wastewater and producing biochemicals from algae
Cohesion Policy Funds	ERDF: invests in research & innovation, Digital Agenda, SMEs, low-carbon economy; ESF+: funds education, skills adaptation, labor mobility, social inclusion; CF: supports transport and environmental projects in lower-income Member States
LIFE Programme	Finances projects in nature/biodiversity, circular economy, climate change, and clean energy; chemical-related projects include consumer information, safe and sustainable chemicals, and substitution of harmful substances
Horizon Europe	EU R&I programme (2021–2027); funds development of innovative solutions for persistent and mobile chemicals and combined exposures to industrial chemicals and pharmaceuticals
Just Transition Fund	Supports regions and people in climate transition; finances projects linked to phasing out coal/lignite, and innovation in sustainable technologies, digitalization, and up/reskilling of vulnerable groups
Digital Europe Programme	Provides funding in five areas: high-performance computing, AI, cybersecurity, advanced digital skills, and digital technology use across economy and society

Annex 4: Stakeholders of the EU chemical sector (non-exhaustive list)

Main associations in the European chemicals sector include:

Association	Description
cefic	Leading trade association for Europe's chemical companies (around 13% of global production), providing regulatory expertise, policy advocacy, and support for a sustainable and competitive industry
efcg EUROPEAN FINE CHEMICALS GROUP	A Cefic group representing fine chemical manufacturers, focusing on APIs, excipients, agrochemicals, and intermediates, while promoting safety and sustainability standards
EuChemS European Chemical Society	Umbrella organization for 130,000 chemists in 50 member societies, fostering scientific exchange, hosting conferences, and providing evidence-based policy input
ECHA EUROPEAN CHEMICALS AGENCY	EU body implementing chemicals legislation (REACH, CLP, BPR, PIC), evaluating substances, proposing risk management, and promoting chemical safety
PARC	EU initiative advancing next-generation risk assessment aligned with the Chemicals Strategy and Green Deal, developing data, methods, and tools for regulators
DUCG Downstream Users of Chemicals Co-ordination group	Platform of 11 associations from sectors using chemical mixtures (cosmetics, paints, detergents, construction), supporting REACH/CLP implementation and ensuring user needs are reflected in EU policy

Other stakeholders of the European chemicals sector include:

Association	Description
EEB European Environmental Bureau	Europe's largest network of environmental NGOs, advocating stronger EU chemicals laws (notably REACH), faster substitution of hazardous substances, and prevention of toxic chemicals in products, the environment, and the circular economy
CHEMTrust Protecting humans and wildlife from harmful chemicals	Charity protecting people and wildlife from harmful chemicals like PFAS and hormone disruptors by advancing science, advocating stronger regulation, and informing the public about health and biodiversity risks
HEAL HEALTH AND ENVIRONMENT ALLIANCE	Non-profit network of 70+ groups promoting health-based evidence to policymakers, aiming to reduce and eliminate hazardous chemical exposure through strong protective laws

References

Accenture (2022). *The chemical industry's road to net zero: Costs and opportunities of the EU Green Deal*. Accenture. accenture.com/content/dam/accenture/final/a-com-migration/r3-3/pdf/pdf-174/accenture-chemicals-costs-opportunities-eu-green-deal.pdf

Blumenthal, J., Diamond, M., Hoffmann, M., Wang, Y. (2022). *Time to Break the 'Lock-In' Impediments to Chemicals Management*. *Environmental Science and Technology*. pubs.acs.org/doi/10.1021/acs.est.1c06615.

BMBF and BMEL (2022). *Bioökonomie in Deutschland—Chancen für eine biobasierte und nachhaltige Zukunft.* German Federal Ministry of Education and Research and Federal Ministry of Food and Agriculture. biooekonomie.de/sites/default/files/2022-05/Biooekonomie_in_Deutschland_2022.pdf.

Cefic (n.d.). *Sustainability Performance*. Cefic. cefic.org/sustainability-performance/environment/.

Cefic (2024a). *2024 Facts and Figures*. Cefic. cefic.org/facts-and-figures-of-the-european-chemical-industry/.

Cefic (2024b). *Chemical Industry access to Carbon Capture and Storage (CCS)*. Cefic. cefic.org/resources/chemical-industry-access-to-carbon-capture-and-storage-ccs-research-paper/.

Cefic (2025a). *Chemical trends report*. Cefic. cefic.org/app/uploads/2025/05/Cefic-Chemical-Trends-Report-Q1-2025.pdf.

Cefic (2025b). *Improving the EU R&I funding landscape: Addressing current challenges.* Cefic. cefic.org/app/uploads/2025/03/Cefic-position-improving-EU-RI-Funding-Landscape.pdf.

Cefic (2025c). *Policy Requirements for a Circular, Competitive and more Autonomous EU Chemical Industry—The role of the chemical sector in a circular economy*. Cefic. cefic.org// app/uploads/2025/07/Policy-Requirements-for-a-Circular-Competitive-and-More-Autonomous-EU-Chemical-Industry.pdf.

Cleantech for Europe (2025). *Cleantech Reality Check—Revitalising manufacturing in Europe* Cleantech for Europe. cleantechforeurope.com/publications/cleantech-reality-check/crc-series-3.

Cropper, M., Dunlop, S., Hinshawa H., Landrigane, P., Park, Y. , Symeonides, C. (2024). "The benefits of removing toxic chemicals from plastics". *Proceedings of the National Academy of Sciences of the United States of America*. pdfs.semanticscholar.org/92a5/10a2337d90b02c4181d0d2d722cc38e5f8a5.pdf

EBF (2025a). *EBF submits recommendations to create robust business cases and unlock private financing for the EU Circular Economy.* ebf.eu/ebf-media-centre/updates/ebf-submits-recommendations-to-create-robust-business-cases-and-unlock-private-financing-for-the-eu-circular-economy/.

EBF (2025b). *Increasing Bankability of Transition & the Clean Industrial Deal. European Banking Federation*. ebf.eu/wp-content/uploads/2025/09/Increasing-bankability-of-transition-the-Clean-Industrial-Deal.pdf.

ECB (2025). *Opinion of the European Central Bank of 8 May 2025 on proposals for amendments to corporate sustainability reporting and due diligence requirements* (CON/2025/10). European Central Bank. ecb.europa.eu/pub/pdf/legal/ecb.leg_con_2025_10.en.pdf?330cb335ad9426cd4a64dbe4021597f1

EEA (2022). *Chemicals and Health* European Environment Agency. eea.europa.eu/en/analysis/publications/zero-pollution/health/chemicals-and-health.

EEA (2023). *Managing the systemic use of chemicals in Europe* European Environment Agency. eea.europa.eu/en/analysis/publications/managing-the-systemic-use-of-chemicals.

EEA (2025a). *EEA greenhouse gases—data viewer*. European Environmental Agency. eea.europa.eu/en/analysis/maps-and-charts/greenhouse-gases-viewer-data-viewers.

EEA (2025b). *Zero pollution monitoring and outlook 2025*. European Environment Agency. eea.europa.eu/en/analysis/publications/zero-pollution-monitoring-and-outlook-report.

EEA (2025c). *Total greenhouse gas emissions in the chemical industry.* European Environment Agency. eea.europa.eu/en/european-zero-pollution-dashboards/indicators/total-greenhouse-gas-emissions-in-the-chemical-industry.

EIB (2020). *The EIB Circular Economy Guide Supporting the circular transition.* European Investment Bank. eib.org/files/publications/thematic/circular_economy_guide_en.pdf.

EIB (2025). *EIB Group increases 2025 financing ceiling to record EUR 100 billion to step up investments in security and defence, energy grids and Europe's tech leadership*. European Investment Bank. eib.org/en/press/all/2025-247-eib-group-increases-2025-financing-ceiling-to-record-eur100-billion-to-step-up-investments-in-security-and-defence-energy-grids-and-europe-s-tech-leadership.

EuRIC (2025). *Joint open letter: Europe's plastics recycling & post-consumer textiles industries need urgent support*. Recycling Europe. euric.org/resource-hub/letters/joint-open-letter-europes-plastics-recycling-post-consumer-textiles-industries-need-urgent-support.

European Commission (n.d. (a)). *Competitive bidding*. European Commission. climate.ec.europa.eu/eu-action/eu-funding-climate-action/innovation-fund/competitive-bidding_en.

European Commission (n.d. (b)). *Funding for the chemicals strategy*. European Commission. environment.ec.europa.eu/topics/chemicals/funding-chemicals-strategy_en.

European Commission (2020). *Chemicals strategy*. European Commission. environment.ec.europa.eu/strategy/chemicals-strategy_en.

European Commission (2023a). *Packaging & Packaging Waste Regulation*. European Commission. environment.ec.europa.eu/topics/waste-and-recycling/packaging-waste/packaging-packaging-waste-regulation_en.

European Commission (2023b). *Transition pathway for the chemical industry*. European Commission. ec.europa.eu/docsroom/documents/54595.

European Commission (2024). *EU budget 2028—2034*. European Commission. commission.europa.eu/strategy-and-policy/eu-budget/long-term-eu-budget/eu-budget-2028-2034_en.

European Commission (2025a). *2025 State of the Union Address by President von der Leyen (Speech)*. European Commission. ec.europa.eu/commission/presscorner/detail/ov/SPEECH_25_2053.

European Commission (2025b). *Clean Industrial Deal.* European Commission. commission.europa.eu/topics/eu-competitiveness/clean-industrial-deal_en.

European Commission (2025c). *Clean Industrial Deal State Aid Framework (CISAF).* European Commission. competition-policy.ec.europa.eu/about/contribution-clean-just-and-competitive-transition/clean-industrial-deal-state-aid-framework-cisaf_en.

European Commission (2025d). *Commissioner Jørgensen announces first 2 sectorial tripartite contracts* European Commission. energy.ec.europa.eu/news/commissioner-jorgensen-announces-first-2-sectorial-tripartite-contracts-2025-09-05_en.

European Commission (2025e). *Commission strengthens Europe's chemical industry European Commission*. ec.europa.eu/commission/presscorner/detail/en/ip_25_1755

European Commission (2025f). *Making finance flows consistent with climate goals—European Climate Law-aligned EU sectoral decarbonisation pathways*. European Commission. climate.ec.europa.eu/eu-action/eu-funding-climate-action/making-finance-flows-consistent-climate-goals_en#european-climate-law-aligned-eu-sectoral-decarbonisation-pathways.

European Commission (2025g). *Plan for stronger EU chemical industry.* European Commission. commission.europa.eu/news-and-media/news/plan-stronger-eu-chemical-industry-2025-07-08_en.

European Commission (2025h). *Platform on Sustainable Finance report: Monitoring capital flows to sustainable investments.* European Commission. finance.ec.europa.eu/publications/platform-sustainable-finance-report-monitoring-capital-flows-sustainable-investments_en.

ICE (2024). *Sustainable Bond Analysis 2024*. ICE. ice.com/insights/sustainable-bond-report-2024.

IEA (2023). *Chemicals*. International Energy Agency. iea.org/energy-system/industry/chemicals.

IISD (2019). *Global Chemicals Outlook II Chapter Highlight: Overview of the Global Chemical Industry.* International Institute for Sustainable Development. sdg.iisd.org/news/global-chemicals-outlook-ii-chapter-highlight-overview-of-the-global-chemical-industry/.

Kortenkamp, A. (2014). *Low dose mixture effects of endocrine disrupters and their implications for regulatory thresholds in chemical risk assessment*. Curr Opin Pharmacol. pubmed.ncbi.nlm.nih.gov/25244397/.

Lorbeer, C. and Ezekoye, O. (2024). *The state of the chemicals industry: Time for bold action and innovation*. McKinsey & Company. mckinsey.com/industries/chemicals/our-insights/the-state-of-the-chemicals-industry-time-for-bold-action-and-innovation.

MSCI (2024). *Global Industry Classification Standard (GICS®) Methodology—Guiding Principles and Methodology for GICS.* MSCI. msci.com/indexes/documents/methodology/1_MSCI_Global_Industry_Classification_Standard_GICS_Methodology_20240801.pdf.

MSCI (2025). *MSCI ACWI Index (USD).* MSCI. msci.com/documents/10199/8d97d244-4685-4200-a24c-3e2942e3adeb.

Morningstar (2024). *Best Performing Sustainable Funds in 2024*. Morningstar, Inc. global.morningstar.com/en-gb/funds/best-performing-sustainable-funds-in-2024.

OPIS (2025). *No Sign of Recovery for Europe Chemical Industry Amid High Energy Prices, Tax*. OPIS, A Dow Jones Company. opis.com/resources/energy-market-news-from-opis/no-sign-of-recovery-for-europe-chemical-industry-amid-high-energy-prices-tax/.

Pitchbook (2025). *European chemicals sector's prolonged slump unsettles investors*. Jean-Marc Poilpré, Pitchbook. pitchbook.com/news/articles/european-chemicals-sectors-prolonged-slump-unsettles-investors.

Stoxx (n.d.). *STOXX® EUROPE 600 INDEX, based on the last periodic review implementation.* STOXX. stoxx.com/document/Bookmarks/CurrentComponents/SXXGV.pdf.

S&P Global (2025). *European plastics recycling industry facing collapse: PRE*. S&P Global, Commodity Insights. spglobal.com/commodity-insights/en/news-research/latest-news/chemicals/090125-european-plastics-recycling-industry-facing-collapse-pre.

UNEP (2024a). *Chemicals and Waste Issues of Concern: A Summary Analysis of Stakeholders' Views*. UNEP—UN Environment Programme. unep.org/resources/report/chemicals-and-waste-issues-concern-summary-analysis-stakeholders-views.

UNEP (2024b). *Global Framework on Chemicals—For a Planet Free of Harm from Chemicals and Waste*. UNEP—UN Environment Programme. unep.org/resources/global-framework-chemicals-planet-free-harm-chemicals-and-waste.

UNEP FI (2024a). *Advancing Gender Equality and Women's Empowerment: Target Setting Guidance for Banks.* UNEP FI. unepfi.org/industries/banking/gender-equality-guidance/.

UNEP FI (2024b). *Driving Impact on Financial Health and Inclusion of Individuals and Businesses: From Setting Targets to Implementation.* UNEP FI. unepfi.org/industries/banking/financial-health-inclusion-guidance/.

UNEP FI (2024c). *Navigating Pollution: A Blueprint for the Banking Sector.* UNEP FI. unepfi.org/wordpress/wp-content/uploads/2024/12/White-Paper-on-Pollution-UNEP-FI-Nov-2024-D8.pdf.

UNEP FI (2025). *A Guide to Transition Plans for Banks—The path from targets to implementation.* UNEP FI. unepfi.org/wordpress/wp-content/uploads/2025/11/47-A-guide-to-transition-plans-for-banks.pdf.

WHO (2017). *Protecting workers' health*. World Health Organization. who.int/news-room/fact-sheets/detail/protecting-workers.

WHO (2025). *Biodiversity*. World Health Organization. who.int/news-room/fact-sheets/detail/biodiversity

Yankovitz, D., Hardin, K., Kumpf, R. and Christian, A. (2024). *2025 Chemical Industry Outlook.* Deloitte Insights. deloitte.com/us/en/insights/industry/chemicals-and-specialty-materials/chemical-industry-outlook.html.

UN environment programme

finance initiative

UNEP Finance Initiative (UNEP FI) brings together a large network of banks, insurers and investors that catalyses action across the financial system to deliver more sustainable global economies.

For more than 30 years the Initiative has been connecting the UN with financial institutions from around the world to shape the sustainable finance agenda establishing the world's foremost sustainability frameworks that help the finance industry address global environmental, social and governance challenges.

Convened by a Geneva, Switzerland-based secretariat, more than 500 banks and insurers are individually implementing UNEP FI's Principles for Responsible Banking and Principles for Sustainable Insurance. Financial institutions work with UNEP FI on a voluntary basis to apply the sustainability frameworks within their industries using practical guidance and tools to position their businesses for the transition to a sustainable and inclusive economy.

Founded in 1992, UNEP FI was the first initiative to engage the finance sector on sustainability. Today, the Initiative cultivates leadership and advances sustainable market practice while supporting the implementation of global programmes at a regional level across Africa & the Middle East, Asia Pacific, Europe, Latin America & the Caribbean and North America.

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