

## ACTION PLAN FOR THE CHEMICALS INDUSTRY

EEB PROPOSALS FOR A MODERN, COMPETITIVE, AND SUSTAINABLE FUTURE FOR THE EU CHEMICAL INDUSTRY



The European Environmental Bureau (EEB) is the largest network of environmental citizens' organisations in Europe. It unites 190 civil society organisations from 41 countries, working for a better future where people and nature thrive together.

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#### **1.INTRODUCTION**

An action plan for the chemicals industry should be focused on ensuring the chemicals industry protects the health of Europe's environment and population which will also support its longterm competitiveness, while addressing the industry's cost of energy, supply chain, and production challenges. The Chemical Industry is a major driver of many existential environmental crises we face today, from climate breakdown to chemical pollution and linear/non-circular economy. As acknowledged by Mario Draghi's report on the future of European competitiveness, the European Union is lagging behind its global counterparts due to insufficient investments, a widening innovation gap and high energy prices. The European Commission's forthcoming "Chemicals Industry Action Plan" is an important opportunity to advance a transformative agenda and ensure the modernisation of the EU chemical industry to advance its competitiveness through sustainability: it can either reinforce a destructive and outdated "business as usual" by subsidising cheap fossil energy, perpetuating extraction, pollution and toxic, linear production; or it can embrace a modern vision of a competitive and future-proof chemical industry that provides safe, more sustainable high value chemicals and goods via clean(er) and circular processes, respects planetary boundaries, and creates high-quality jobs in thriving communities.

An ambitious plan is indispensable, because current (and projected) environmental impacts of the chemical industry are untenable. The industry erodes Earth's safe operating space, pushing both the "<u>novel entities</u>" and climate boundaries past their limits. Its heavy reliance on fossil feedstocks and energy makes it one of the largest industrial contributors to greenhouse-gas emissions, directly undermining the climate planetary boundary. Industry's outputs - ranging from persistent "forever chemicals" (PFAS) and other hazardous substances to plastics - have by far breached the novel entities boundary, contaminating water, soil, air, and communities across Europe<sup>1</sup>.

In its current state, the chemical industry is set to aggravate the urgent crises. <u>Low compliance</u> <u>and enforcement rates</u> rewards polluters' inaction while punishing frontrunners that invest in safer, more sustainable production - despite the widespread support for transition from <u>downstream chemical users companies</u>. Public subsidies have repeatedly been granted with no

<sup>&</sup>lt;sup>1</sup> Some outputs are doubly harmful in terms of climate and pollution. A demonstrative example is Fgases that are both the most potent GHG known to modern science - with some having global warming potential of more than 24,000 times that of carbon dioxide - and accounts for over 60% of world's PFAS pollution.

conditions<sup>2</sup>, based on broken corporate promises for just transitions and despite companies repeatedly <u>funneling</u> record profits into shareholder payouts rather than in promised transition<sup>3</sup>. A key example of what must never be repeated is the case of <u>ArcelorMittal</u>. Despite substantial support pledged by France and the EU under the Clean Industrial Deal, the company announced redundancies and job relocations abroad, prompting public criticism. This, despite the European Commission having agreed to the measures proposed by ArcelorMittal in the Steel and Metals Action Plan. Such outcomes underscore the urgent need for robust environmental and social conditionalities tied to public subsidies. We cannot afford another ArcelorMittal: bailouts without delivering on jobs, climate, or health. Any public support for the chemical sector must come with clear, enforceable conditions to ensure it drives real decarbonisation, detoxification, and a just transition.

While the European chemical industry faces fierce low-cost competition from abroad, particularly for basic chemicals, it should not and cannot try to compete on price-based considerations (cost), particularly for low value chemicals, alone whilst ignoring externalities of pollution damage costs. Its long-term survival depends on competitiveness through leadership in sustainable innovation. This means embracing carbon neutrality, phasing out the most harmful substances and innovating in safe and sustainable chemicals and products, detoxification, circularity and innovation in speciality chemicals and advanced manufacturing processes reflecting 'state of the art' in achieving a high protection of the environment, including human health and climate. With the right policies and incentives, Europe has the potential to become a global leader in these safer and more sustainable chemicals and processes, setting the standard for a future-proof chemical sector. However, the transition must be supported by smart policy and investments. It is crucial to avoid locking the industry into outdated chemicals and production models by pouring resources into infrastructure for low value and toxic basic chemicals currently made from fossil fuels that are unlikely to remain viable in the European context over the long term. While strategic autonomy for chemicals is important for Europe, it can be more effectively achieved in the long term through scalable investments in safer and biorenewable chemicals.

To be effective, the Action Plan must address the industry's fundamental challenges without jeopardizing its long-term viability along with the wellbeing of European nature and its people. Soaring energy prices, the need to maintain good-quality jobs in Europe and the importance of

<sup>&</sup>lt;sup>2</sup> Latest examples being Clean Industrial Deal's <u>commitment</u> of 100 billion euros in state aid subsidies to energy-intensive industries - with no strings attached.

<sup>&</sup>lt;sup>3</sup> In addition, it was recently found that major companies' <u>biggest source of financial stress</u> for petrochemical giants like BASF and TotalEnergies was due to their profits (over 75% of it) being used for shareholder payouts rather than the costs associated with green transition.

a resilient supply-chain whilst achieving the toxic free and zero-pollution ambition of the European Green Deal should guide public intervention. However, given the capital intensity and long-term innovation horizons of the industry, supporting the current status quo without a commitment to mid and longer-term actions risks locking in current technologies, undermining the industry's future, as well as the health of Europe's environment and population.

Europe's chemical industry now stands at a crossroad: Soaring energy prices, the need to maintain good-quality jobs in Europe and keep our supply-chain resilient makes public intervention crucial to maintain a European chemical industry - but intervening on the side of the status quo will only undermine the long-term survival of the industry, as well as of European nature and people around it.

Political will for bold policy actions from EU policy makers is needed now. A fundamental transformation of the industry will take time and require significant, sustained resources, but it offers a far more cost-effective and efficient path to addressing multiple planetary simultaneous crises while building a resilient, future-proof sector. The Action Plan should provide a framework for such actions, for the vision of a future-proof, decarbonised, detoxified and circular chemical industry to become reality. This briefing offers concrete recommendations for what a competitive chemical industry must entail, from questions of energy and jobs to investments and reindustrialisation.

### 2 .KEY ACTIONS

#### 2.1. CHEMICALS INDUSTRY TRANSFORMATION ROADMAP

To establish a resilient and competitive chemical sector of the future, the EU must develop a Roadmap for the transformation of the chemical industry that supports the decarbonisation, detoxification, transition to clean and circular chemicals and materials, meeting the twin goals of protecting health, climate and the environment and boosting EU competitiveness. Not the least, the transformation of the chemical sector and its products is a precondition for the transformation of downstream industries. These industries, dependent on products of the chemical industry, and also subject to significant consumer, market, investor and regulatory pressure to produce safer and lower carbon products, must form an integral part of the Chemical Industry Action plan, given the need for each part of the value chain to share costs of the transition.

The <u>Chemicals Strategy for Sustainability (2020)</u>, <u>Transition Pathway for the Chemical Industry</u> (2023), along with the <u>Joint industry-NGO vision for a prosperous and sustainable industry</u>, should serve as the foundation for this Roadmap. It must outline concrete measures to reduce energy demand, boost electrification and scale up the use of renewable energy. Additionally, it should aim to reduce the environmental footprint of feedstocks, manufacturing processes, and final products, by shifting focus from production volumes to value creation, producing safe and sustainable by design chemistries, enhanced circularity and improved material efficiency</u>.

To establish a resilient and competitive chemical sector of the future, the Roadmap should also foster stronger collaboration across the value chain, linking early-stage SME innovators with larger strategic players and downstream manufacturers and retailers. This connectivity is essential to accelerate the uptake of sustainable technologies, address barriers to adoption and scale, enable faster scaling of breakthrough solutions, and ensure a cohesive transition aligned with climate, safety and circularity goals.

Moreover, the Roadmap should be connected to key innovation and sustainability policies such as:

- Chemical Strategy for Sustainability
- Bioeconomy strategy
- Industrial Decarbonisation Accelerator Act
- Circular Economy Action Plan
- EU Start up and Scale up Strategy

- A rigorous enforcement of the revised <u>Industrial Emissions Directive</u>, with a forward looking mindset
- Improved monitoring framework and tools enabling tracking of progress on pollution prevention e.g. Industrial Emissions Portal Regulation, Chemicals Outlook, Digital Product Passports, improved ECHA database etc.

Finally, the Roadmap should include clear environmental and innovative goals, timelines and indicators of progress.

## 2.2. CLEAN ENERGY THAT FUELS EFFICIENT CHEMICAL PROCESSES

The chemical industry's heavy reliance on energy - the highest of industrial sectors - to fuel crackers, combined with persistently high energy prices, is taking a serious toll on its competitiveness. According to <u>CEFIC</u>, energy costs alone account for 30-40% of the sector's total expenses<sup>4</sup>.

The challenge of higher energy prices can be partly mitigated by investments in energy efficiency (appliance and processes), products (e.g. lighting), insulation, and lower cost renewable energy supply (e.g. renewables and heat pumps), already partly encouraged by the renewable energy directive (RED), energy efficiency directive (EED), EU BREF standards under the revised IED, or supported by funding under the National Recovery and Resilience Plans (NRRPs), the incentives created by carbon pricing under the EU-ETS, savings from circular economy and resource efficiency actions. Beyond higher energy prices, carbon prices are not levied equally internationally, which the Carbon Border Adjustment Mechanism CBAM seeks to address.

In the shift away from dependency on imports of Russian fossil fuels or other countries not sharing the same values, Europe needs to avoid substituting its fossil dependency with other forms of dependence, in particular on US fracking gas and bet on costly new nuclear power plants with a high risk of serious delays. LNG overseas investment, as suggested in the draft Affordable Energy Action Plan (AEAP), are stranded assets as the current export capacity is already growing faster than the world's demand and could only envisage results in the mid-long term. Luckily, the deployment of renewable energy is not only the most economical but also the

<sup>&</sup>lt;sup>4</sup> This is because we currently make chemicals by cracking petroleum which is really energy intensive. Biological processes - like fermentation, are much less energy intensive.

option with the fastest deployment and smallest negative externalities, especially in terms of health and environmental impacts.

The Action Plan needs to ensure that:

- renewable electricity must remain the cheapest option after taxes and levies at EU and member state level
- An acceleration of deployment is further incentivised by mandatory use of tools such as renewable Power Purchase Agreements and /or a minimal annual turnover investment share to be deployed by Energy Intensive Industries (prior to resorting to any public support mechanisms or funds).
- Direct electrification of crackers and energy intensive processes is required through forward looking production standards e.g. EU BREFs and promoted through improved and more flexible grids and smart meters. This will also reduce pollution from burning fossil fuels as well as heat.
- External damage costs of pollution generated by manufacture and use phase are internalised and shall be subtracted prior to any granting of support schemes. For air pollution the more conservative Value of Statistical Life air pollution cost method could be used.
- The EU ETS / CBAM mechanism should properly account for the carbon debt of the whole chemical value chain and ensure reciprocity of pollution prevention standards and pricing of imported / exported chemicals.

Overemphasising energy supply solutions without addressing the intrinsic sustainability of chemical production risks missing the bigger picture. If production volumes and demand for hazardous or resource-intensive chemicals continue to grow unchecked, emissions, pollution, and health impacts will persist, or even worsen, regardless of how "green" the energy source is. Achieving true sustainability for the industry requires not only cleaner energy, but also a fundamental shift toward Safe and Sustainable-by-Design chemistries, reduced material throughput, and more circular, low-impact production models.

#### 2.3. TRANSITIONING TO SAFE AND SUSTAINABLE FEEDSTOCKS

The Action Plan should also aim to reduce the environmental footprint of feedstocks, given the very high share of fossil feedstocks that the chemical industry <u>foresees</u> to maintain at 35% level by 2050, locking Europe into an unsustainable fossil economy addicted business model.

Fossil feedstocks not only contribute to climate disruption, but they also have a high toll on biodiversity and pollution<sup>5</sup>.

With regard to biorenewables, bio-based feedstock can play an important role in the defossilisation of the chemicals industry. However, the renewal phase remains much longer for trees and agricultural products than the use phase of what is grown, in particular when considering soil health and biodiversity. It is not possible with the current supply of biomass to meet all defossilisation needs, and the supply of land for biomass cannot be extended in a Paris Agreement-compatible scenario. Use of biomass for the chemicals industry should therefore be carefully considered according to the highest possible overall societal value.

Similarly to the energy issue, promoting the use of biomass and bio-based feedstocks in chemical production must go hand in hand with a critical assessment of what is being produced. Simply replacing fossil inputs with bio-based ones does not automatically lead to sustainability, especially if the end products, such as plastics, remain inherently harmful to health, the environment, and the climate. For example, producing benzene or PVC from biomass does not mitigate the material's toxic lifecycle impacts or its contribution to pollution and waste. A truly sustainable bioeconomy must prioritise non-toxic, circular, and low-impact chemical applications, rather than reinforcing existing problematic production models with alternative feedstocks.

Bioeconomy provides opportunity to improve inputs also to the chemical industry, but every input should be assessed according to the same high standards, using clear minimum metrics: no hazardous substances, and biodegradability alone should not be grounds for favourable

<sup>&</sup>lt;sup>5</sup> Joel Tickner, Ken Geiser & Stephanie Baima (2021) Transitioning the Chemical Industry: The Case for Addressing the Climate, Toxics, and Plastics Crises, Environment: Science and Policy for Sustainable Development, 63:6, 4-15, DOI: 10.1080/00139157.2021.1979857

GRID-Arendal, 2024. Climate Impacts of Plastics. Arendal: GRID-Arendal. https://www.grida.no/publications/1023

treatment. If a product is promoted on the basis of biodegradability, producers should provide evidence that it degrades in all environments and into non-harmful components only.

The Action plan shall operationalise the transition to safe and sustainable feedstocks by:

- Developing science-based sustainability criteria for all alternative carbon sources, including bio-based, CO<sub>2</sub>-derived, and recycled feedstocks, ensuring their use results in meaningful reductions in climate, environmental, and health impacts. These criteria must be grounded in the cascading use principle, prioritising the highest overall societal value of feedstocks, particularly where biomass is limited.
- Ensuring that the EU bioeconomy strategy is fully aligned with circular economy principles, ensuring that increased use of bio-based feedstocks does not replicate the unsustainable dynamics of the fossil economy.
- Prioritising R&D into second-generation feedstocks, such as agricultural and forestry residues, and CO<sub>2</sub> captured from industrial processes, and promoting renewable carbon sources that are safe and sustainable. These should exclude hazardous substances and support circular, non-toxic material flows.
- Advancing chemical recycling technologies only where they demonstrate verifiable environmental benefits and exclude high-impact processes like pyrolysis and gasification. They must serve as a complement to, not a replacement for, upstream solutions like reduction, reuse, and mechanical recycling.
- Developing a strategic roadmap for scaling truly sustainable feedstocks, drawing on frameworks such as the Renewable Carbon Initiative.

#### 2.4. PROMOTING SAFE AND CIRCULAR CHEMICALS AND MATERIALS

Safe and sustainable by design should be the guiding principle for product design. The Ecodesign for Sustainable Products Regulation (ESPR) is an opportunity to set the bar high for durability, repairability, and recyclability as well as setting minimal requirements on the environmental footprint for the whole life cycle. In this context it is imperative that we work towards the highest standards, which means zero acceptance of hazardous chemicals in product design.

Coherence across chemical, product, and waste legislation is key but with a clear guiding compass pointing towards safe and sustainable circulation of products and materials. The principles of the Chemicals Strategy for Sustainability should be integrated with circular economy legislation. This includes phasing-out the most harmful substances, enhancing access to information on substances of concern and improving the traceability of chemicals during all relevant stages from manufacture, to use and end of life stages: Full traceability is needed to ensure our future capability to track chemicals of concern yet to be identified and avoid uncontrollable contaminations with legacy substances of concern, as highlighted by <u>companies</u> acting along the supply chain.

To rapidly increase European material stocks suitable for reuse and recycling, while ensuring a high level of protection of human health and the environment, the most hazardous chemicals should be swiftly banned in consumer products and all other non-essential uses.

The action plan shall specifically:

- Safeguard and enhance clean material cycles, notably through
  - Fast-tracking of restrictions in REACH and other relevant chemicals legislation regarding the most harmful substances in products.
  - Making safe and sustainable products the norm, as established in ESPR Article 1, through an ambitious implementation of this Regulation when it comes to setting ecodesign requirements<sup>6</sup>.
- Ensure information on chemical ingredients and their hazardous properties along the supply chain.
- Ensure a rigorous enforcement of the precautionary, prevention, and polluter pays principles. Moving away from the "no data, no problem" situation to a thorough implementation of the EU Treaty principles underlying environmental policies.

At the same time, robust control systems must be established for recyclates, both domestic and imported, to avoid health and environmental risks.

#### 2.5. SUPPORTING QUALITY INDUSTRIAL JOBS/ TRAINING/ TRANSITION

The green industrial transition in the chemical sector must support high-quality jobs in Europe with strong health and environmental standards. All economic players willing to enter the EU Single Market must comply with these standards, making the EU a haven for industry

<sup>&</sup>lt;sup>6</sup> For products such as textiles and furniture, ensure information requirements that enable the identification of existing and future Substances of Concern and performance requirements restricting hazardous chemicals to address any significant risk. And when it comes to ecodesign requirements for chemicals as such, ensure full environmental footprint data for chemicals and all ingredients.

undertakings that align with planetary boundaries. To manage the transition and ensure job-tojob transitions and re/up-skilling programs, the EU must adopt a Just Transition policy framework and Directive. It is key that jobs are in line with <u>ILO standards and the European Pillar</u> of <u>Social Rights</u> (EPSR). Those who need to (re)train need to be able to access it easily. Paid opportunities, such as remunerated traineeships as recommended by the Council, are crucial and could benefit excluded groups such as women and young people. Special attention also needs to be given to older workers, as training is often mainly targeted at younger people. Whilst making training accessible to all ages is necessary, it can also be helpful to acknowledge that older people might benefit from early retirement schemes in cases where difficulties in finding a job are too high. In any case, consultation with social partners should be mandatory, not simply encouraged, when identifying which types of jobs should be changed, extinguished, or created.

The Action Plan for the chemicals industry must also ensure training the next generation of scientists and engineers to integrate health and safety at the outset of chemical and material design<sup>7</sup>.

#### 2.6. DERISKING THROUGH INVESTMENT AND LEAD MARKETS

Achieving a sustainable and competitive European chemical sector requires targeted investment and strategic market-shaping policies that reduce risk, accelerate 'innovation' towards sustainability, and create the conditions for safe and sustainable-by-design chemicals and materials to thrive.

To scale such solutions, public and private funding must support innovation serving public interest goals throughout the entire value chain, from early-stage R&D to commercialisation and market uptake. A connected and outcome oriented 'innovation' pathway is essential: one that links research and development with societal, regulatory, and market needs. For example, the urgent demand for PFAS-free alternatives illustrates how aligning 'innovation' efforts with policy goals can accelerate both market readiness and regulatory success.

<u>Europe can not build a green industrial future with yesterday's chemicals</u>. Investment mechanisms must de-risk the development and deployment of new molecules and production processes by including strict environmental conditionalities when supporting pilot projects, demonstration facilities, and scale-up initiatives. This could bring costs down and enable

<sup>&</sup>lt;sup>7</sup> Soeteman-Hernández, L.G.Accelerating the industrial transition with safe-and-sustainable-by-design (SSbD). <u>RSC Sustainability</u>, 2025, 3, 2185-2191. DOI: <u>10.1039/D4SU00809J</u>

competitive pricing compared to incumbent, high-impact substances, just as has been achieved with renewable energy technologies. Further transformative techniques and business models need to provide an added value of public interest beyond what is achieved through the uptake of state of the art (best available techniques / current best practice).

Lead market creation will also be critical. This involves strict environmental and social conditionalities for procurement, targeted incentives, offtake assurances for manufacturers to scale safer and more sustainable chemicals and regulatory recognition to reward non-toxic chemicals and processes supported through mechanisms based on the Extended Producer Responsibility and Polluter Pays principle. Public authorities should set an example by creating demand signals and accelerating adoption and recognizing leaders.

Strong regulation that provides transparency, predictability and a level playing field is considered by <u>authorities</u> and <u>companies</u> to be the main driver for substitution of hazardous substances and innovation towards safer chemicals and products and should be prioritized:

- The reform of REACH should ensure reliable and updated information on hazards and uses of chemicals along the supply chain, clear phase-out timelines for the most hazardous substances as well as improved compliance and enforcement. However, supporting measures can help overcome deterrents to substitution and innovation, such as incumbency, lack of education/knowledge at company level or lack of technical and financial support.
- Reinforcing the requirement of the revised IED (Art 14a, paragraph 3 point d) laid upon the operators of the largest industrial activities to elaborate a substitution plan and risk assessment of impact on health and the environment related to hazardous chemicals they produce / use on site and measures to reduce their use or emissions, ensure this assessment part of the Environmental Management System to be public as per Article 14, paragraph 4.
- Reinforcing the requirement of the IED (Art 27d) mandating the operators of largest industrial activities, which includes the chemical industry, to elaborate an installation level transformation plans where they shall detail on how their installations will become clean, circular and climate neutral in the 2030-2050 phase. The expected Commission delegated act shall ensure that the content of the transformation plan is comparable in terms of key performance indicators of measures proposed by the operators and timescales of action.

In addition, the Action Plan for the chemicals industry should include an array of complimentary policy measures to support substitution and innovation towards safer and climate neutral chemicals on the ground:

- Generate a market for alternatives.
  - Similar measures as those proposed in the Clean Industrial Deal (CID) to boost climate neutral products, should be implemented to also boost the demand for safer substances and products. The public procurement framework that will be reviewed in 2026 to introduce sustainability and resilience criteria in public procurement for strategic sectors, should promote safer alternatives by deterring/avoiding all the most hazardous chemicals.
- Support the transition to safer substances, materials and products.
  - All the finance supporting measures already foreseen in the CID for decarbonisation should also include the detoxification aim to speed-up the transition to <u>SSbD and clean</u> products and manufacturing processes, including the new Clean Industrial Deal state aid framework, the strengthened Innovation Fund, the industrial decarbonisation bank, and the amended InvestEU Regulation.
  - Leverage economic instruments, implementing the polluter pays principle by introducing a fee to the use of Substances of Very High Concern and substances subjected to derogations from restrictions or an authorisation under REACH and by ensuring polluters fully cover environmental remediation costs.
- Enhance education and provide technical support for SMEs.
  - Launch a dedicated call under Horizon Europe to stimulate research and innovation on alternatives to critical uses of the most hazardous chemicals. These should not only consider possible alternatives with the same level of performance but also any alternative with a function and a level of performance that society can accept as sufficiently delivering the expected service.
  - Ensure training on alternatives assessment and substitution processes for Occupational Safety and Health (OSH) and environmental professionals and consultancies to capacitate them to support substitution processes at SME. Collaboration with the EU-OSHA can support reaching out to OSHA professionals at companies, trade unions and consultancies.
  - Ensure technical support to SMEs by establishing a network of sectoral and academic institutions in all EU member states that can provide advisory and

technical support to SME on identification, assessment and implementation of safer alternatives.

- Establish an EU Substitution Centre and Network that will work as an information, training, financial and technical support hub to support practical substitution activities by companies, in particular SME. The centre would also coordinate such activities with national substitution centres providing technical support on alternatives. Financial mechanisms for substitution support could be considered, for example fees for derogated or authorised use of substances of very high concern (SVHC) and chemicals derogated from restrictions, could be used to support the EU Substitution Centre.
- Develop and improve existing tools and databases for tracking progress on pollution prevention action, such as the ESPR digital product passport, IEPR mandatory reporting of the inputs and the outputs + BAT compliance, ECHA registration and SCIP databases, etc.

#### 2.7. PROMOTING AND PROTECTING EUROPEAN CAPACITIES

Building a competitive and sustainable European chemical industry requires a deliberate shift away from dependence on basic, high-volume chemical production towards a vibrant, innovation-driven economy rooted in specialisation, added value, and safe and sustainable by design practice.

We need a chemicals industry that serves our societal essential needs, such as ensuring safe and clean food production and water services, biodiversity protection, energy production, health and safety, soil remediation and (de)pollution activities, etc.

To achieve this, Europe must actively promote and protect its chemical production capacities through strategic investment, policy support, and cross-sectoral collaboration.

Central to this vision is the development of strong value chain partnerships, linking upstream chemical producers with manufacturers, downstream users, retailers, and end-markets. These partnerships are critical for aligning demand with innovation and ensuring that safe and sustainable alternatives reach commercial scale. SMEs, in particular, play a vital role as innovation drivers and should be supported through targeted funding, infrastructure, and collaborative frameworks that allow them to integrate into industrial ecosystems. Creating collaborative networks that connect companies to collectively solve chemical challenges, while ensuring competition will be necessary to drive solutions faster and on a scale.

Rather than focusing innovation and investment activities on bulk commodity chemicals where cost competition and market creation demands are strongest, **Europe should prioritise the growth of high value, specialised chemical sectors that fulfill society's essential needs**. This includes developing value-added final products within Europe, while simultaneously building international partnerships to secure sustainable feedstock supply chains, such as bio-based or waste-derived inputs, from trusted and aligned global partners.

Public and private finance partnerships that ensure "patient investment" will be key to enabling this transformation as it has been in the renewable energy sector. Investments must support the full journey from R&D to market adoption, including pilot projects, lead markets, and public procurement mechanisms that reward safer and more sustainable, greener chemistry. Recognising and incentivising the use of SSbD substances across value chains will accelerate the shift toward safer, cleaner, and more resilient manufacturing systems.

To ensure long-term resilience and technological leadership, Europe should foster a distributed manufacturing network approach, composed of SME innovators and specialised producers as well as chemical distributors, capable of aggregating and supplying a new generation of high performing SSbD chemicals across sectors. This requires not only financial support, but policies that actively accelerate the uptake of safe and sustainable alternatives and embed innovation into regulatory, industrial, and market structures.

By promoting a high-value, sustainable, and innovative-led chemicals economy, the EU can secure strategic autonomy, reduce environmental and health impacts, and protect its industrial capacities in an increasingly competitive global landscape.

#### 2.8. A LEVEL/FAIR PLAYING FIELD

Non-compliance with REACH regulation is widespread - an estimated <u>35%</u> of firms fail supplychain communication requirements and <u>40%</u> don't adhere to authorisation obligations - yet inspections remain insufficient while fines remain rare and uneven across Member States. In the case of IED, the compensation right for not complying with permit limits does not discourage offenders, as in the worst case the minimal fine levels are very low. In addition, if there is not a permit limit e.g. for PFAS, there is no breach, and therefore no compensation even though the harm is real and done, as the widespread PFAS pollution crises in Europe, including 23,000 polluted sites, has shown.

Opaque enforcement activities restrict access to critical information on enforcement levels for the public and stakeholders, undermining the capacity for public scrutiny while shielding polluting companies from reputational damage that their unlawful activities should create. The lack of or inappropriate implementation and enforcement also costs the EU economy approximately  $\underbrace{\text{\ensuremath{\in}55\ billion}}$  annually in health and environmental costs.

Although REACH applies across the EU, enforcement and compliance stays uneven. Some National Enforcement Authorities (NEAs) impose sanctions that are too weak to be deterring and apply them inconsistently, while those who seek to enforce REACH rigorously would often hesitate to penalise domestic companies in the context of such uneven playfield due to concerns about their competitiveness within the EU market.

The Action Plan should require for the REACH reform to elaborate harmonised enforcement standards across countries, with consistent criteria to control operators' activities (production, use, and import of chemicals and products) and a truly dissuasive sanction system.

Ensuring a level playing field also requires addressing the growing problem of imports via digital platforms, which increasingly serve as entry points for products containing hazardous chemicals that would not meet EU safety or environmental standards. These unregulated imports not only pose direct risks to human health and the environment, effectively "importing pollution" into the EU, but also undermine the competitiveness of European companies that are investing in cleaner, safer, and more sustainable production. Without stricter enforcement and digital market accountability, responsible manufacturers in the EU will continue to face unfair competition from lower-cost, non-compliant goods. The Action Plan must close these loopholes and ensure that all products on the EU market, regardless of origin or sales channel, comply with the same high standards.

An EU-wide audit system within the REACH framework is also necessary for the European Commission and ECHA to monitor, support, and intervene when necessary to enhance enforcement. In addition, legislative reform must ensure that there is always an EU-based economic operator legally responsible for complying with REACH requirements, whether for substances, mixtures, or articles. A publicly accessible national and EU compliance register - detailing inspections, decisions, and sanctions - would enhance transparency, while a "name and shame" database of non-compliant companies and products would strengthen public safety and reputational incentives. Finally, REACH must facilitate third-party submissions of credible non-compliance concerns and guarantee effective legal remedies-including compensation and injunctive relief-for those harmed by hazardous chemicals.

Effective innovation in safer, climate-neutral chemicals are also dependent on strong, transparent regulation that guarantees predictability for investments and a truly level playing

field. Reforming REACH must therefore deliver up-to-date hazard and use data, firm phase-out timelines for the most harmful substances, and robust, harmonised enforcement.

Supporting measures are also crucial in overcoming the deterrents to substitution and innovation. The Chemicals Industry Plan should pair regulatory overhaul with a suite of support initiatives to accelerate the transition to safer, sustainable chemistries in practice. The Action Plan should therefore pair regulatory changes with a battery of supporting measures that address barriers like incumbency, lack of knowledge at company level and/or lack of technical and financial support



# **#ToxicFreeFuture**