



Soaring Towards Sustainability

2023 CEFIC SUSTAINABILITY PROGRESS UPDATE



Soaring towards sustainability

The path to sustainability is a journey, one that requires the chemical industry to continuously upgrade to improved processes, materials, and products.

CEFIC SUSTAINABILITY PROGRESS UPDATE 2023

As we move into 2024, we at Cefic are set to continue our momentum towards sustainability. Our goal remains to ensure that the chemical industry, as the “industry of industries”, plays a pivotal role in facilitating sustainable development in an environmental, economic, and societal context.

In 2022 and 2023, we focused on the creation of tools and instruments that support the green and digital transition, as outlined in the Green Deal Communication by the European Commission.

All of this builds up on our past activities:

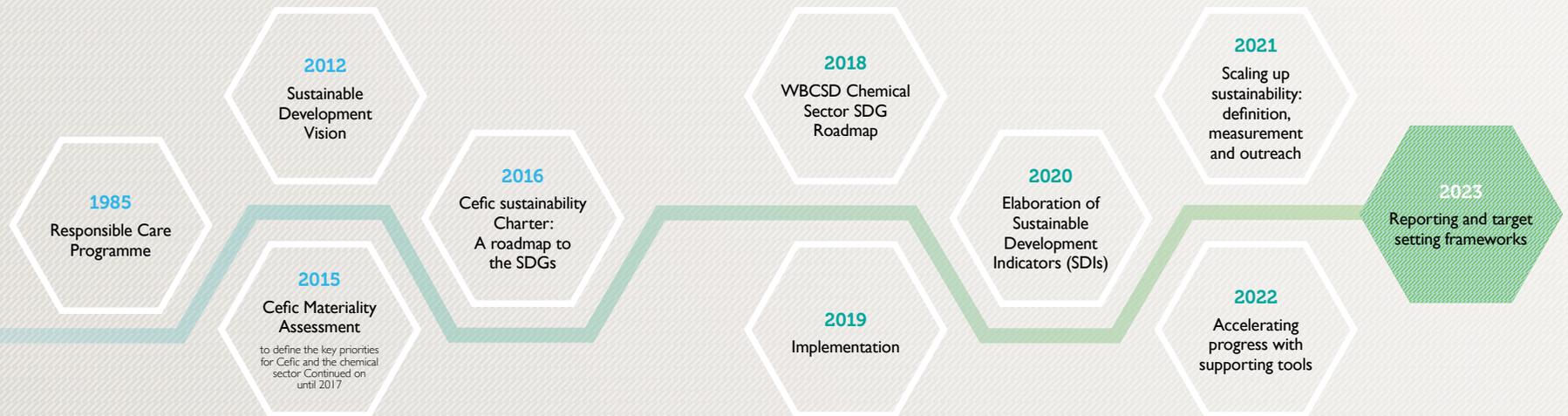
In 2016 and 2018, we directed our efforts – including [Cefic’s Sustainability Charter](#) and Chemical Sector SDG roadmap – towards the United Nations Sustainable Development Goals and the Paris Agreement.

From 2021 onwards, we have been intensifying our focus on quantifying the sustainability performance of the chemical sector. We have also been exploring new concepts such as Safe and Sustainable-by-Design, which are crucial for our progress in sustainable development and the transition toward a Green Economy.

This report highlights our contributions in 2023 to a transitioning society.

Cefic contributions

- ☞ Updated our SDI (Sustainable Development Indicators) reporting by introducing several new indicators, expanding on our 2022 framework, and adding a new sustainability pillar: Construct Prosperity and Competitiveness.
- ☞ Published our long-term holistic vision for sustainable carbon cycles.
- ☞ Continued our work on Safe and Sustainable-by-Design.
- ☞ Amplified our focus on a suite of key sustainability assessment tools.
- ☞ Continued our dialogue with SBTi (Science-Based Target Setting Towards Climate Neutrality).
- ☞ Continued the dialogue and outreach capacity with relevant stakeholders.
- ☞ Launched our “Sustainability Lab,” a series of events for sparking new ideas, exchanging insights, and finding solutions to sustainability challenges.



Measuring the Transition

In our ongoing commitment to steer the chemical industry toward a climate-neutral Europe, we've crafted a set of **Sustainable Development Indicators (SDIs)**.

These indicators are not merely metrics; they reflect our ambition to align with the 17 UN Sustainable Development Goals (SDGs). They also resonate with key UN and EU policy benchmarks, including the Chemical Strategy for Sustainability and the Circular Economy Action Plan.

Our SDIs are structured around five pivotal sustainability pillars: reflecting our dedication to a safe, efficient, and circular economy:



A newly introduced pillar in 2023.

In 2023, our team together with member experts updated our SDI reporting, introducing several new indicators, expanding on our 2022 framework.

Beyond serving as a tool for sectoral reporting, these indicators act as an early-warning system. They enable us to proactively assess both current and emerging risks within the chemical sector, and we've already begun to make strides in this direction.

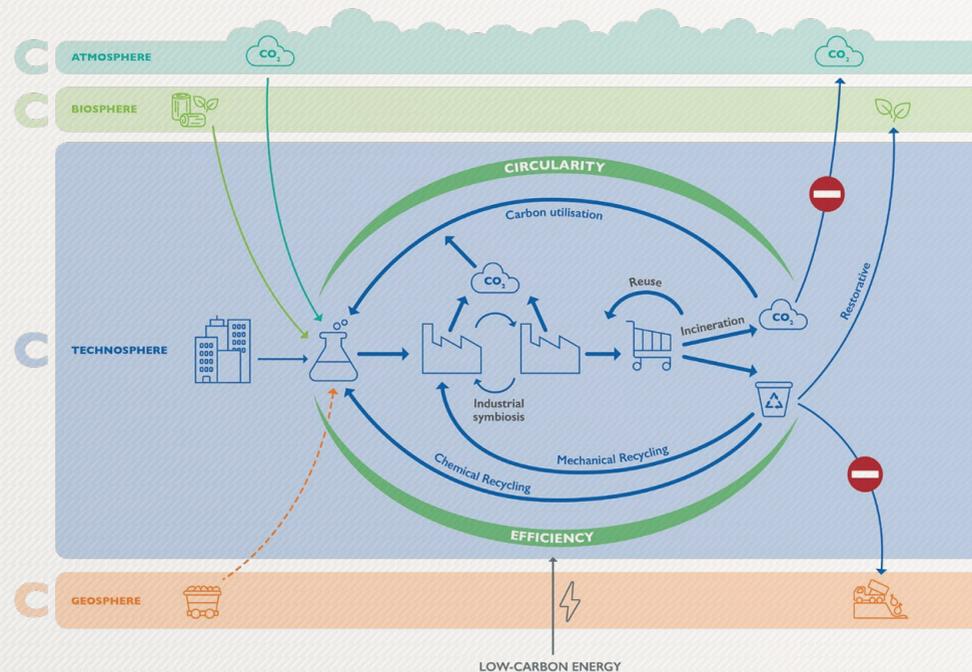
Lastly, in anticipation of the Delegated Regulation on the European Sustainability Reporting Standard, published in July 2023, and its subsequent reporting obligations for the 2024 financial year, our SDI network has undertaken and planned in-depth analyses to navigate the complexities of this new reporting landscape.

See "Sustainability Lab: Advancing Sustainability Practices And Knowledge"

Holistic Vision on Sustainable Carbon Cycles

Placed at the economic point where carbon enters our everyday items, the chemical industry's expertise in carbon processing is pivotal in providing fossil feedstock alternatives and in meeting the climate-neutrality imperative.

SUSTAINABLE CARBON CYCLES DRIVEN BY LOW CARBON ENERGY



Cefic's paper outlines a vision for the industry's role in adopting fossil feedstock alternatives, with the aim of creating a climate-neutral society. This vision serves as a foundational guide for discussions on decarbonisation strategies at multiple levels – be it the EU, individual Member States, or companies.

See "Sustainable Carbon Cycles Driven by Low Carbon Energy"

Safe and Sustainable-by-Design: Key Developments

Looking back at 2021 and 2022, the chemical industry defined **Safe and Sustainable-by-Design (SSbD)**: a step-by-step process that guides the development and market introduction of safe chemicals, materials, products, processes, and services.

These not only ensure safety but also provide environmental, societal, and/or economic benefits through their use.

In 2023, testing was the key word. Cefic and its members tested the Framework proposed by the **European Commission** and are preparing another guidance directed at innovators. Stay tuned!

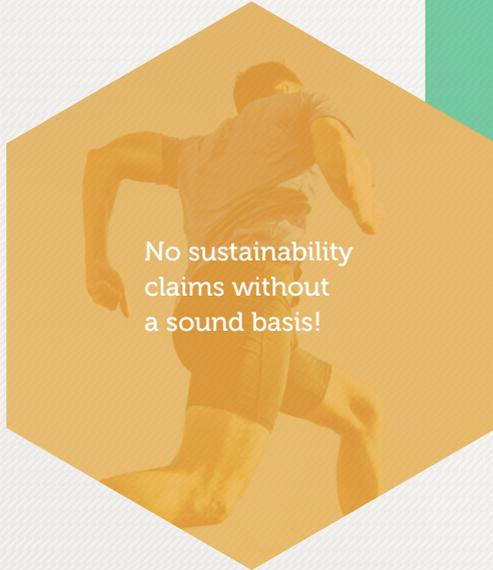


Science-Based Target Setting Towards Climate Neutrality

In December 2020, the Science-Based Targets Initiative (SBTi) began developing sector-specific guidance for the chemical industry. Cefic has been actively engaging in this process, serving on SBTi's Expert Advisory Group (EAG) to provide industry feedback. The sectoral guidance for the chemical industry is expected in the first quarter of 2024.

The SBTi is a partnership between (Carbon Disclosure Project), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). Science-based targets show companies and financial institutions how much and how quickly they need to reduce their greenhouse gas (GHG) emissions to prevent the worst effects of climate change.

Sustainability Assessment Tools



No sustainability claims without a sound basis!

At Cefic, we firmly believe that sustainability claims should be backed by rigorous, evidence-based assessments. That's why we're amplifying our focus on a suite of key sustainability assessment tools, including Life Cycle Assessment (LCA), Product Environmental Footprint (PEF), Product Carbon Footprint (PCF), and comprehensive carbon accounting and reporting methodologies.

Our platform serves as a dynamic hub where members can exchange and learn from each other. We're privileged to learn from our esteemed

partners. One such collaboration is with "Together for Sustainability," an organisation that has been a trailblazer in upstream Scope 3* Greenhouse Gas Emission reporting.

Through these partnerships, we're not only learning but also contributing to a more sustainable and transparent chemical industry.

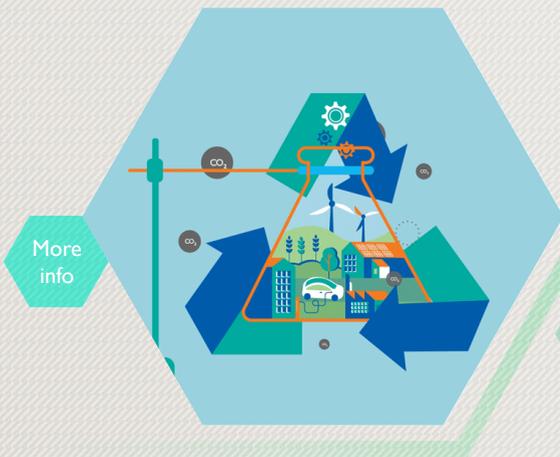
* Scope 3 covers emissions that the company doesn't directly produce or control, but are related to its business activities throughout its value chain. For instance, when we purchase and dispose of products from suppliers.

Outreach & Dialogue

In 2023, our [ChemistryCan](#) newsletter took a deep dive into the transition towards a circular economy. This shift demands a resource-efficient approach, emphasizing recycling and reuse of materials. Without recycling, our climate-neutral ambitions could be at risk. While our industry is making significant strides in accelerating material recycling, there's always room for exploration and improvement.

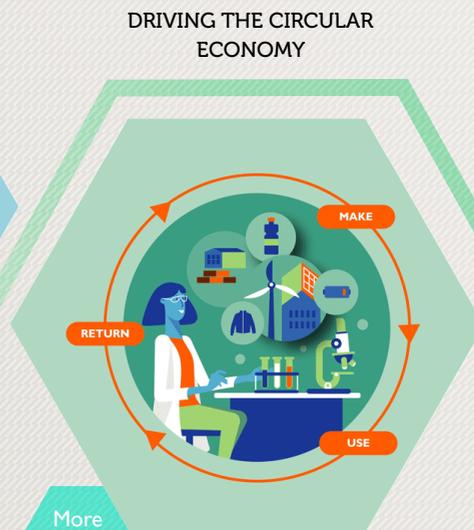
That's why we engaged with expert [Catherine Weetman](#), who underscored the need for systemic change, innovative business models, and a shift in societal values to curb production and consumption. Her insights inspire us to delve deeper into the chemical sector's role in shifting from a linear to a circular approach.

Our [ChemistryCan](#) platform continues to spotlight case studies from chemical companies. This year, we're particularly focusing on the circularity of value chains and the role of digitalisation.



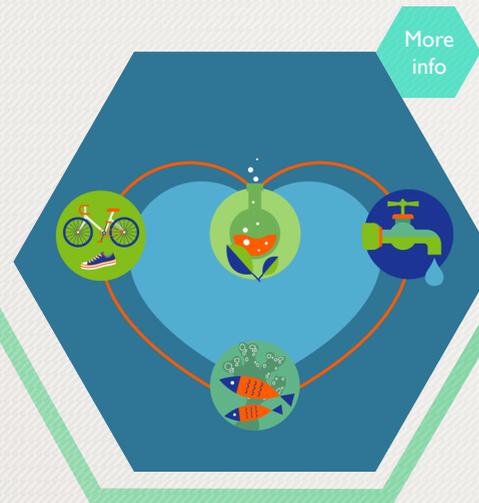
GOING CLIMATE NEUTRAL

More info



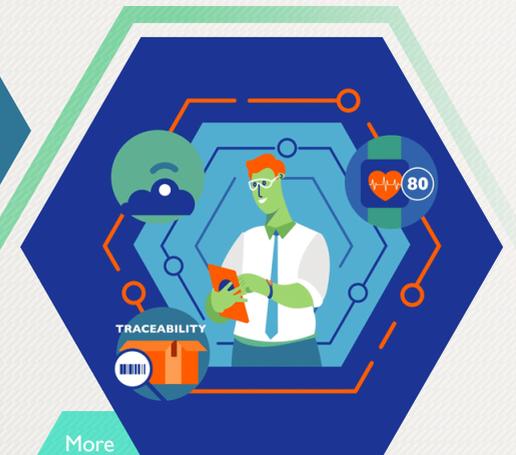
DRIVING THE CIRCULAR ECONOMY

More info



ENHANCING THE QUALITY OF LIFE

More info



SCALING-UP DIGITAL & TECH

More info

SUSTAINABILITY LAB

Advancing Sustainability Practices and Knowledge

In 2023, we launched our "Sustainability Lab," a series of events curated by Cefic's Sustainability Team. These events, which range from workshops, webinars, trainings, talks, to conferences, are open to Cefic's members as well as outside audiences, depending on the focus of the event.

Our "Sustainability Lab" underscores the significance of safe and sustainable-friendly practices. It's our hub for sparking new ideas, exchanging insights, and finding solutions to sustainability challenges.

As a key player in sustainable development, the chemical industry is instrumental in shaping a low-carbon economy, boosting resource efficiency, and championing circular economy principles.

Through the "Sustainability Lab," we aim to unite a variety of stakeholders to collaborate, innovate, and engage in discussions about trends, research insights, suggestions, and best practices.



So far:

- **Green and Sustainable Chemistry Bootcamps:** These bootcamps are a unique opportunity to learn and discuss green chemistry concepts.

Our **first bootcamp**, organised in collaboration with the Association of the Austrian Chemical Industry (FCIO), honed in on Green Chemistry. It served as a platform for industry-wide discussions and equipped participants with the skills needed to address concerns about chemicals impacting human health and the environment.

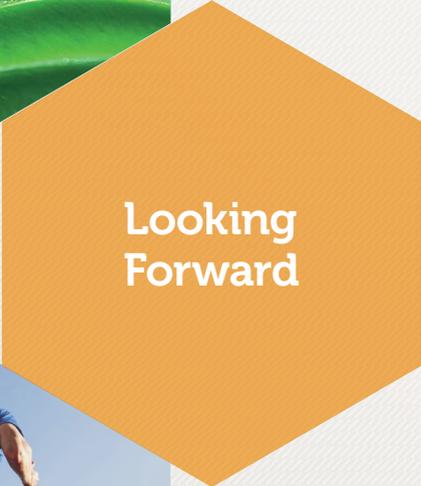
- **Towards Qualitative Plastic Loops by (Chemical) Recycling:** Professor Steven De Meester presented a **study** emphasising the necessity of chemical recycling technologies to achieve circular economy goals.
- **Learning Network on the European Sustainability Reporting Standards:** Cefic launched a **series of webinars** to provide a roadmap for companies to navigate the EU's Corporate Sustainability Reporting Directive (CSRD), with a focus on environmental, social, and governance (ESG) impacts.

- **Water Scarcity - The Chemical Sector's Role and the Tools to Tackle It:** In collaboration with France Chimie, Cefic hosted a workshop spotlighting the **urgent water-related challenges** that the chemical industry faces today and will confront in the future.

- **Biodiversity Workshop:** Hosted by Cefic, this **workshop** underlined the urgent need for integrating biodiversity considerations into the chemical industry's business strategies. The event highlighted the multi-faceted risks of biodiversity loss, including its impact on economic activity and societal well-being.

- **Planetary Metrics for the Absolute Environmental Sustainability Assessment of Chemicals Workshop:** Dr Victor Tulus and his research group of the Sustainable Process Systems Engineering Lab (SUPERLAB) at ETH Zürich presented their **study** on assessment of the impacts of more than 400 chemical substances through the Absolute Environmental Sustainability Assessment (AESA), to see whether the substances can be defined as (un)sustainable according to absolute sustainability criteria based on the concept of planetary boundaries.

Two of our events, Biodiversity Workshop and Water Scarcity were held prior to 2023, but due to their relevance, we decided to retroactively brand them under Sustainability Lab.



Looking Forward



In 2024, Cefic's Sustainability Team, together with Cefic members, will:

- Increase its focus on using emerging guidelines and standards, including the:
 - Safe and Sustainable-by-Design methodology
 - Portfolio Sustainability Assessments (PSA)
 - Circular Transition Indicators (CTI)
 - Sector-specific guidance for science-based targets.
- Further identify data gaps for the Life Cycle Assessment of chemicals
- Define a path forward for issues such as Biodiversity and natural resources e.g. water
- Develop a Cefic Vision on Sustainable Products.

Our channels for dialogue will remain open, fostering ongoing exchange and collaboration.

PSA and CTI are initiatives by the World Business Council for Sustainable Development (WBCSD) with whom Cefic is collaborating.

CONTACT

General enquiries

Ann Dierckx - Sustainability Director

Tel: +32 474 76 00 02

Email: adi@cefic.be