



2021 CEFIC SUSTAINABILITY PROGRESS UPDATE

SUSTAINABILITY AT THE CORE OF A FUTURE EUROPE

Change is encouraged to make Europe greener, more digital, and more resilient. Change is needed to make the products and processes of our industry climate neutral and more circular. And sustainability is at the centre of this change.

To name a few examples: Post-COVID-19 recovery plans to boost economic development have a strong sustainability focus. Europe's Sustainable Finance Disclosure Regulation has reinforced the increased attention of large investors towards the sustainability performance of their portfolios. The sixth assessment report of the Intergovernmental Panel on Climate Change (IPCC) and the extreme weather events within Europe this summer show that the 'Fit for 55 package' is a crucial step at a crucial moment to realise the race to climate neutrality by 2050.

CEFIC CONTINUES ON ITS JOURNEY TO SUSTAINABILITY

Cefic embarked on its journey towards sustainability with the launch of the Sustainable Development vision for the sector in 2012, showing how the European chemical industry could contribute to improving the livelihoods of over nine billion people by 2050, within the planetary boundaries and building on the Responsible Care principles. These principles have already been applied for almost three decades now to trigger the chemical industry to go beyond legislation in addressing sustainability issues.

In 2015, the year that the UN Sustainable Development Goals (SDG) and the Paris Agreement on Climate Change were launched, the vision was translated into a roadmap identifying the key priorities for the chemical sector based on materiality of the topics. This roadmap is the basis of the Cefic Sustainability Charter and addresses the four focus areas: Create – a low-carbon economy; Conserve – resource efficiency; Connect – circular economy; and Care – for people and the planet. In the Sustainability charter, Cefic and its members committed to focus action and foster innovation especially in these areas.

In 2018, the chemical industry teamed up with the World Business Council for Sustainable Development (WBCSD) to develop the Chemical Sector SDG Roadmap that outlined the transformational potential of the chemical sector and described how the chemical industry could meet and support the SDGs. Progress will be monitored by the development of Sustainable Development Indicators for the sector. Developments of these indicators started in 2019.

In 2021, Cefic focused on:

- Taking circularity to the next level; Circular Carbon
- Developing indicators driving and monitoring our progress towards the SDGs in general, and the EU Green Deal in particular
- Developing Cefic views on Safe and Sustainable-by-Design and taking these views forward to contribute to the EU Green Deal objectives
- Increasing the dialogue and outreach capacity



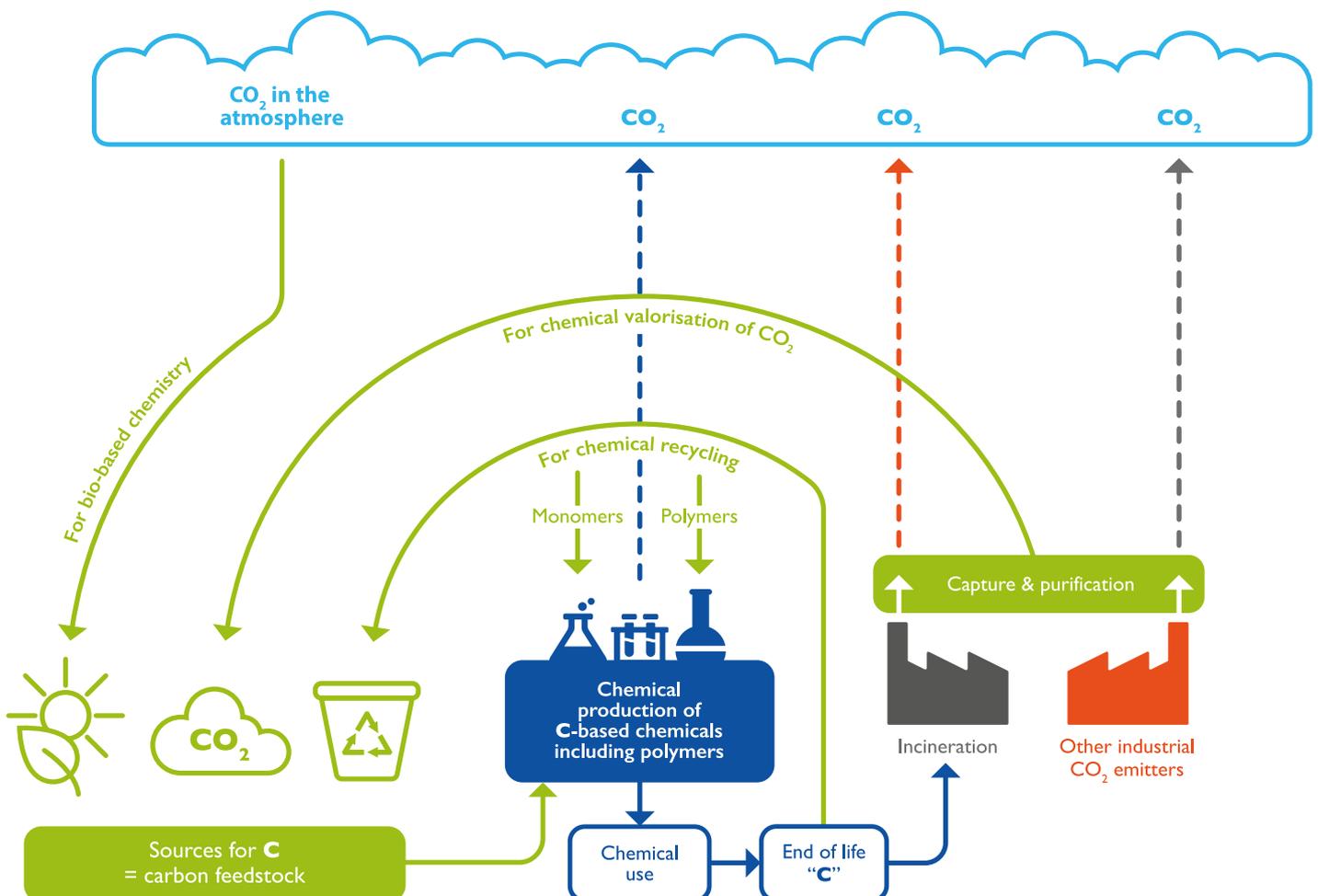
CIRCULAR ECONOMY 2.0: CIRCULAR CARBON

The chemical industry transforms available resources into products we all need and desire. Carbon is the main element for many chemicals, as well as for a large variety of products varying from food to materials. It can also serve as energy source. During the last two centuries, the main source for carbon was (non-renewable) fossil resources. Today, the chemical industry is diversifying its feedstock and considers alternative carbon sources and production pathways to keep carbon circulating: circular carbon, part of the [circular economy 2.0](#).

Cefic and its members will further deepen the concept, zoom in on methodologies to assess the contributions of circular carbon to the Paris goals, and inspire by means of [case examples](#).

The figure below highlights three alternative sources for fossil feedstocks:

1. Obtaining carbon from industry: by capturing CO_2 and recycling it into carbon
2. Obtaining carbon from plastic waste: with chemical recycling technologies that complement mechanical recycling
3. Obtaining carbon through nature: also referred to as producing biomass



SUSTAINABLE DEVELOPMENT INDICATORS – UNRAVELLING COMPLEXITY AND SHARING BEST PRACTICES

Cefic's portfolio of Sustainable Development Indicators (SDIs) will reflect how the chemicals sector is contributing to the transition towards a safe, resource efficient and circular economy within a climate-neutral Europe – the central objectives of the Green Deal, and critical to meet the Sustainable Development Goals set in the UN Global Agenda 2030.

The SDIs are organised around the four sustainability focus areas of **Cefic's Sustainability Charter**: Create, Conserve, Connect and Care. By connecting the measurement tools to the charter, we aim to drive progress in those four areas and encourage the industry to take necessary action to improve performance.

Other indicators are under development and, where possible, based on existing frameworks or methodologies. The 'Circular Transition Indicators Framework' and the 'Portfolio Sustainability Assessment methodology' are two frameworks developed by the World Business Council for Sustainable Development (WBCSD) and driving industry action in 'Design for Sustainability' and 'Increase the Circularity of Processes'. A pilot-project will be launched in 2022 to collect data for these indicators as well as for several other indicators for which no European aggregated data are available.



SAFE AND SUSTAINABLE-BY-DESIGN – BOOSTING INNOVATION AND GROWTH WITHIN THE EUROPEAN CHEMICAL INDUSTRY

The vision EU policymakers have in the Chemicals Strategy for Sustainability (CSS) is that “Chemicals are produced/used in a way that maximises their benefits to society while avoiding harm to planet & people and production and use of safe and sustainable chemicals in Europe becomes a benchmark worldwide”. This reflects [the journey to sustainability](#) that the chemical industry has embarked on, as well as our [vision for 2050](#).

The chemical industry defines Safe and Sustainable-by-Design as a process to innovate and put on the market chemicals, materials, products and technologies that are safe and deliver environmental, societal, and/or economical value through their applications. Those chemicals, materials,

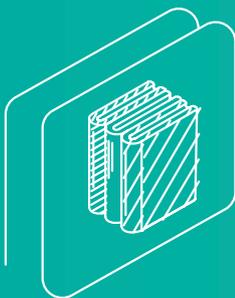
products and technologies enable accelerating the transition towards a circular economy and climate-neutral society and preventing harm to human health and the environment throughout the life cycle.’

Taking the Safe and Sustainable-by-Design concept successfully forward will require a set of harmonised criteria within an assessment framework, commonly agreed on by all stakeholders (throughout the value chain, policy makers, etc.). Cefic [proposed](#) 4 steps towards design criteria that can be used to assess the impact of a new or alternative process or product throughout an innovation process.

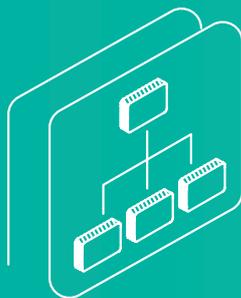
TOWARDS DESIGN CRITERIA

Cefic proposes 4-steps to define criteria that can be used to assess the impact of a new or alternative process or product throughout an innovation process.

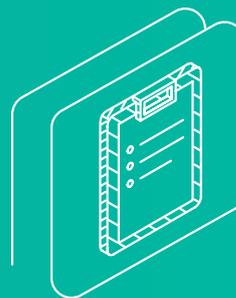
1
MAP EXISTING
CRITERIA



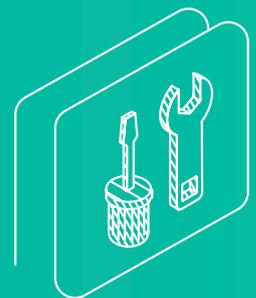
2
ASSESSMENT
FRAMEWORK



3
KEY CRITERIA
FOR EVALUATION

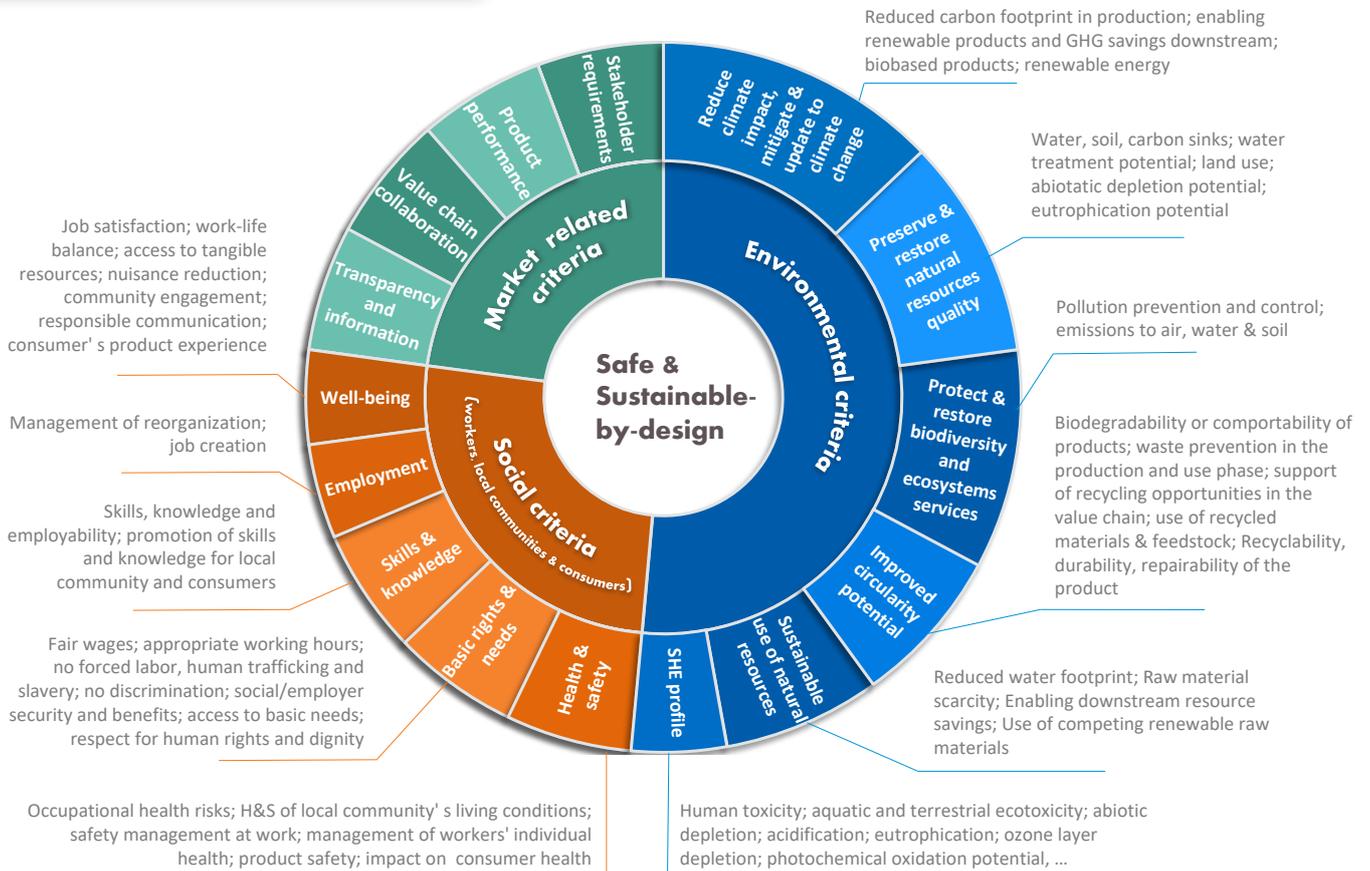


4
TOOLS & DATA
INVENTORY





The chemical industry has already been making strides to identify Safe and Sustainable-by-Design criteria for chemicals. In 2018, the WBCSD launched a [roadmap for the Chemical Industry Methodology for Portfolio Sustainability Assessments](#). This roadmap identifies different approaches used by pioneering chemical companies to assess their sustainable performance, to proactively steer their overall product portfolios towards improved sustainability outcomes. Based on these practices, Cefic has mapped a long list of design criteria, which will need to be further organised in key safe and sustainable dimensions, in minimum and optional design criteria, in fit-for-all and application specific criteria. These criteria need to be supported by assessment tools and data.



OUTREACH & DIALOGUE

The chemical industry is convinced that defining the concept, as well as making chemical products and technologies Safe and Sustainable-by-Design, is not a standalone exercise. As such, Cefic calls on all stakeholders to join us in our journey to define the Safe and Sustainable-by-Design process and criteria. We want to work with the European Commission and all other stakeholders to come up with a harmonised framework.

Furthermore, Cefic launched a multi-stakeholder platform for all supporters of sustainable chemistry. The aim of the platform is to raise awareness on the topic and help promote stronger market opportunities for sustainable chemistry in the EU. The ultimate end-goal being to accelerate investments in chemical innovations which are Safe and Sustainable-by-Design. To date, 893 people have subscribed. Those who joined have the option of staying up to date on all the latest sustainability trends via our events and ChemistryCan newsletter; industry updates via our ChemistryMatters newsletter; and policy updates via our Digital Dialogue events. Interaction between the members of the Future Chemistry Network is possible at these events, as well as via the closed LinkedIn group. Are you committed to further the interests of sustainable chemistry in Europe?

[Join our movement!](#)



WHAT IS NEXT?

In 2022 Cefic will continue to monitor and drive progress towards Cefic's ambitions and the ambitions of the EU Green Deal and further develop the Sustainable Development Indicators.

These activities will go beyond the indicator development and data collection and generation, but also focus on guidelines and standards under development, including those supporting the implementation of the EU-taxonomy regulations and the Corporate Sustainability Reporting Directive.

Likewise, taking the Safe and Sustainable-by-Design approach forward, needs a common language, a common framework, tools and data. Cefic will increase its efforts in contributing to the development and roll-out of these tools with a focus on the key sustainability dimensions, the environmental and carbon footprinting, transparency on data, ...

And last but not least, Cefic invites all stakeholders to continue sharing inputs via, among others, the Future Chemistry Network.

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Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 16% of world chemicals production.

Cefic members form one of the most active networks of the business community, complemented by partnerships with industry associations representing various sectors in the value chain. A full list of our members is available on the Cefic website: www.cefic.org/About-us/Our-members

Cefic is an active member of the International Council of Chemical Associations (ICCA), which represents chemical manufacturers and producers all over the world and seeks to strengthen existing cooperation with global organisations such as UNEP and the OECD to improve chemicals management worldwide.



Chemistry
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The European Chemical Industry Council, Cefic aisbl
www.cefic.org
EU Transparency Register n°64879142323-90

