

## Sustainable Carbon Cycles (SCC)

### Subject Overview

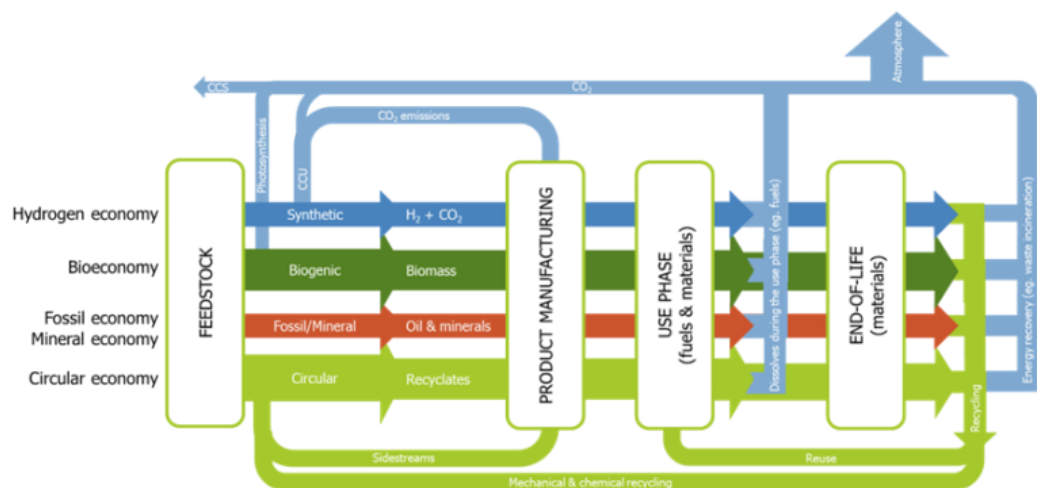
SCC, or Sustainable Carbon Cycles, is the Commission's approach to consolidating various policy areas related to sustainable carbon cycles under one heading. The term itself originates from the Commission's vision, which materialized in a communication paper bearing this name in 2021.

In practice, the Commission's vision focuses significantly on land use and carbon farming but also includes the goal for industries to use 20% non-fossil raw materials, as well as the EU-level target to capture 5 million tons per year of carbon dioxide from the atmosphere. Following the communication, the Commission presented a proposal for carbon removal certificates, which seems to be primarily aimed at capturing biogenic carbon dioxide and directly capturing carbon dioxide from the atmosphere.

Sustainable carbon cycles are a cross-cutting theme spanning several policy areas, and related legislation can be roughly categorized into three categories: climate legislation, legislation related to biogenic carbon, and legislation related to waste-based raw materials.

### Key legislation includes:

Climate: Emission Trading Directive, CCS Directive, burden-sharing regulation, net zero industry act, carbon removal certificates (including bio), Energy Taxation Directive, taxonomy,  
 Bio: Renewable Energy Directive, LULUCF,  
 Waste: Waste Framework Directive, Packaging Waste Regulation, Ecodesign for Sustainable Products Regulation (ESPR), End of Life Vehicles Regulation, Construction Products Regulation



## **Objective of the Chemical Industry**

The chemical industry aims for greater clarity and harmonization in the current extensive legislative framework. Moreover, the authorities responsible for different legislative blocks should have a sufficient understanding of the overall picture.

One significant issue with current legislation is that it does not sufficiently promote alternative sustainable sources of carbon to virgin fossil raw materials. This is particularly evident in climate-related legislation, which does not favor carbon dioxide capture and reuse. Typically, legislation requires carbon to be permanently sequestered in the product. If this does not occur, the legislation usually penalizes carbon capture and utilization (CCU) as double counting of emissions. Additionally, some legislation does not recognize negative emissions. Similar challenges exist in the field of material recycling. Legislation should favor keeping carbon in circulation through mechanical and chemical recycling methods instead of landfilling or incinerating waste, but this is not currently happening.

Accurate accounting and consideration of emissions are essential for achieving sustainable carbon cycles. Accounting presents significant challenges in many cases, partly due to the different policy areas. For example, carbon dioxide emissions are divided into the emission trading sector, the burden-sharing sector, and the land use sector. Sustainable carbon cycles cannot be confined to a single sector, as they may extend to several sectors depending on the situation.

The chemical industry believes that the Commission's proposed objectives should be properly promoted. However, these objectives should remain sufficiently high-level in the future. At its simplest, the objective could be a percentage of the use of alternative sustainable carbon sources over virgin fossil ones. Such carbon sources could include all captured carbon dioxide, recycled/reused carbon, and sustainable biogenic carbon sources.

Regardless, substantial investments will be needed, so support programs and state/state-owned company investments (e.g., in infrastructure) will be necessary. However, the promotion of sustainable carbon cycles should be technology-neutral.

### **Key Messages from the Chemical Industry:**

1. The extensive legislative framework should be harmonized and consistent.
2. Fair and just accounting rules are needed; the product's lifecycle length should not affect the calculation; negative emissions should be considered.
3. Legislation should favor all sustainable alternative carbon sources over virgin fossil sources, which should also be reflected in the objectives.
4. Investments should be supported rather than penalized; technology neutrality is crucial.

## **Current Situation and Timeline**

The Commission published a communication on sustainable carbon cycles at the end of 2021. Subsequently, the Commission has released a regulation related to carbon removal certificates, which has been under consideration by the Parliament and the Council in 2023. Sustainable carbon cycles are likely to be part of the Commission's work program to be selected in 2024.

**What We Influence**

1. Finnish authorities and politicians
2. The EU Commission and Parliament
3. Cefic, NorBal, and other stakeholders with similar interests
4. The Commission's work program following the 2024 elections

We also monitor the positions of other countries.

**Additional information:**

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