

Circular Economy

The chemical industry is on its way towards a circular economy that preserves resources throughout the entire life cycle of chemical products. This is achieved through efficient use of materials and energy in production, the conservation of resources during application, and sensible recovery after product use. Essentially, the aim is to run the basic building block carbon "in a cycle" and thus reduce CO₂ emissions. This means that the circular economy is concrete climate protection. Politicians, too, have recognised this: Among other things, the European Commission presented in March 2020 a new circular economy action plan.

Also along downstream processing, chemical products contribute to the circular economy and, consequently, to the solution of many challenges: Resources are preserved by using thinner and lighter materials, and innovative chemical products increase the durability of many other products. Through their use in technologies for the generation of renewable energies,

they contribute indirectly to climate protection. And after their use, many products can be returned to the beginning of the value chain in modern recycling processes.

The goal: protection of natural resources

The chemical industry in Germany is looking for ways to become greenhouse gas-neutral by 2050 at the latest. For this purpose, the expansion of recycling and the use of alternative raw materials are driven forward. Supplementing the classic mechanical recycling of plastics, further processes are being developed (e.g. chemical recycling or direct use of CO₂). Resorting to recycled plastics, renewable resources and alternative raw materials such as CO₂, the chemical industry contributes to securing the supply of raw materials. Through sustainable product design, which takes into account not only recyclability but also the intended use, these raw materials can be used several times. Such holistic design is a major contribution to the protection of natural resources.

THE VCI IS CALLING FOR THE FOLLOWING

◆ **Impulses for innovation and development**

The transformation towards a circular economy can only succeed if new technologies and investments in research and development are promoted and competitive advantages for companies are thus created. Innovative technologies such as chemical recycling must be recognised as part of the solution.

◆ **Holistic approach to the product life cycle**

The sustainability of products and materials should be examined across their whole life cycle and must not be assessed solely on the basis of their recyclability after use. Overall performance and material savings should be taken into account too.

◆ **Strengthen the EU internal market for secondary raw materials**

An internal market for secondary raw materials (recyclates) should be driven by market-based rather than regulatory incentives. This includes an immediate implementation of the landfill ban for plastic waste at EU level, because waste is also a valuable resource for supplying the market with secondary raw materials. Therefore, EU-wide minimum standards for secondary raw materials are needed to meet the high requirements to innovative products. National quotas for the use of recyclates are unsuitable.