

CIRCULAR ECONOMY FACT SHEET | 2023

# CIRCULAR ECONOMY

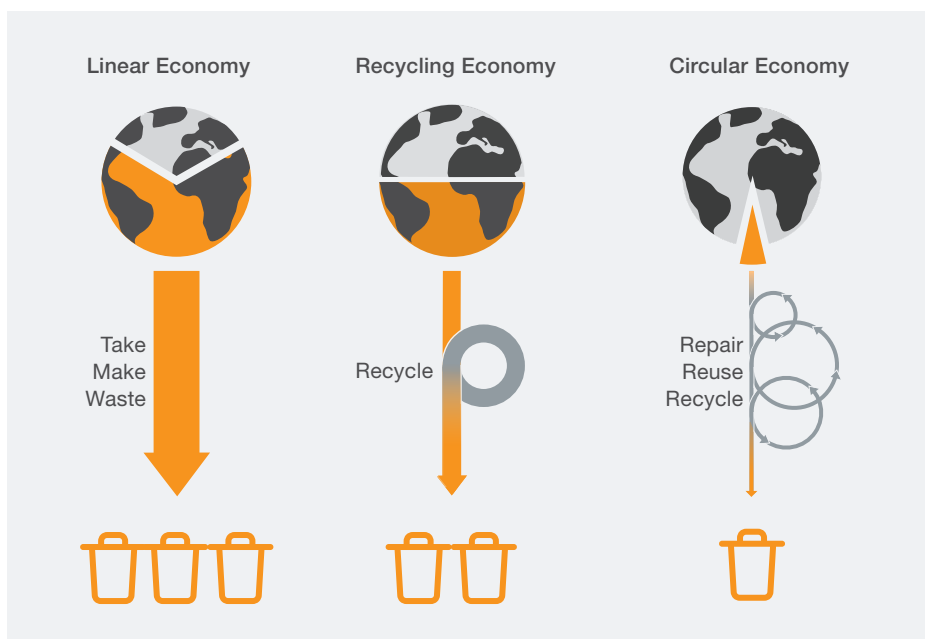
Nature is organized in cycles. Nutrients, organic matter, all material streams, everything is being reused. In that way, life has existed for millions of years. Within a very short time, mankind has disturbed this equilibrium by exploiting fossil sources and creating long-lasting waste, resulting in severe consequences for our planet. Therefore, the only way for us to prevail on this planet is to restore this equilibrium. WACKER recognizes its role in the collaborative struggle in coming back to circularity.

### Role of Circular Economy

The Circular Economy (CE) has become key for long-term business success. Next to the need to de-fossilize, the question of how we deal with the production and consumption of materials is crucial to addressing environmental sustainability problems by not neglecting social and economic aspects. How we extract and treat materials accounts for around 95% of biodiversity loss, and around 45% of global greenhouse gas emissions.

### Circular Economy – WACKER's Vision

Our vision is to enable a circular economy: From value chains to value cycles. Together with our customers and value chain partners, we aim at developing solutions that implement the three circular economy principles as proposed by the Ellen MacArthur Foundation: design out waste, keep products and materials in use for as long as possible, and regenerate natural ecosystems. Recycling is one of the key tools in this context.



### Chemistry Is Key

WACKER is convinced that the transition to a circular economy is key to addressing the ecological crisis. And we believe in the power of chemistry and material science to drive this transition. We commit to taking a full life cycle perspective on our products and processes.

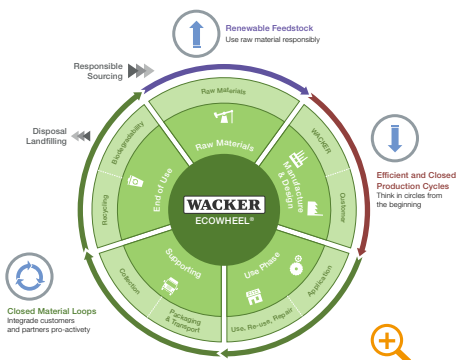
### Different Circular Economy Strategies

As a producer of raw materials, we need to define the scope of our products related to their end application. Therefore, we divided our product portfolio into three categories that follow different strategies (see below.)

Circular Economy Strategies			
Product type	Durable products	Disposable / convertible products	Rinse-off / leave-on
<b>Examples of applications</b>	Construction or automotive industry	Healthcare, food and hygiene	Cosmetics
<b>Focus areas and strategy</b>	<ul style="list-style-type: none"> <li>Continue to design our products to support an even longer durability of the end application and not hinder recyclability after the use phase.</li> <li>Use of renewable feedstock.</li> </ul>	<ul style="list-style-type: none"> <li>Examine suitability of R&amp;D projects, e.g. (bio)degradability, recycling feasibility, use of renewable feedstock.</li> </ul>	<ul style="list-style-type: none"> <li>Focus on continuous market screening.</li> <li>Develop (bio)degradable, safe and nontoxic products.</li> <li>Use of renewable feedstock.</li> </ul>

**Our Strategy from Raw Materials to End of Life**

The WACKER ECOWHEEL (see below) describes our life cycle thinking very well. To anchor our strategy, we have defined three focus areas and have linked them to our SustainaBalance® strategy with the following pillars: Value up, Footprint down and Collaboration beyond.

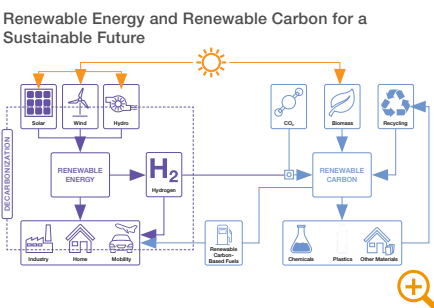


**Renewable Feedstock Instead of Fossil Raw Materials**

Renewable feedstock entails all sources that avoid or substitute the use of any additional fossil feedstock from the geosphere. Fossil raw materials are to be completely substituted by renewable feedstock, which is feedstock from alternative sources: biomass, CO<sub>2</sub> and recycling. We will focus on renewable carbon as a main raw material and replacement of fossil coal by renewable reductants. We aim to significantly raise the amount of recycled raw materials as well as regeneratively sourced biomass. The same holds true for other kinds of circular feedstock, for example silicon. We aim to adopt recycling instead of using minerals from mining.

**Info**

Renewable carbon entails all carbon sources that avoid or substitute the use of any additional fossil carbon from the geosphere. Renewable carbon can come from the biosphere, atmosphere or technosphere – but not from the geosphere. Renewable carbon circulates between the biosphere, atmosphere and technosphere, creating a circular carbon economy.



**Efficient and Closed Production Cycles as Our Key Asset**

Waste has already been reduced within WACKER operations to a high extent as most of the side streams have been recovered (see Integrated Production). Therefore, recovery quotes are quite high already and recycling rates are monitored annually for each individual production site. In accordance with the EU's Waste Framework Directive, we want to further intensify our focus on reducing waste by following the commonly used waste hierarchy. **i** Our target is to further reduce specific production waste by 15% by 2030 (relative to 2020).

**Closed Material Loops Achieved by Our Product Portfolio**

Alongside the continued support of long-lasting products and of using fewer resources over the whole life cycle, the

other two options we include for end-of-life recovery are recycling and (bio) degrading / composting. As our products are often a very small part of the final product, we envision as a second step to not hinder recyclability of the end product. In this regard, we aim to increase the sales of products that have a positive impact on circular aspects (durability, recyclability, (bio)degradability) on a measurable scale for durable and disposal / convertible applications. Furthermore, we aim to have 100% of raw materials for rinse-off / leave-on and disposable / convertible applications that are nontoxic and safe for humans and the environment.

**Closed Material Loops for Packaging**

Packaging of products is not only a topic for WACKER, but a major challenge for the whole industry. Therefore, we want to start with ourselves and want to reduce the environmental impact from our product packaging by 25%. This means: fewer carbon emissions, less waste, more recycled material and multiple use of packaging. This is possible through measures such as using sustainably produced packaging, increasing the content of recycled raw materials, switching to light-weight packaging and using larger containers where this makes sense. This entails a common understanding throughout the whole supply chain, including packaging suppliers, producers, logistics and our customers.

**Collaboration Beyond as a Pillar for Realizing our Vision**

We are aware that nobody can solve all these issues alone. Therefore, we strive for partnerships along the whole value chain. Interested? Then just share your ideas with us!

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany

www.wacker.com/contact, www.wacker.com

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