Steel

Our vision on sustainable materials

Within our circular philosophy, steel is indispensable. The material is strong, dimensionally stable, and has a very long service life. These qualities make it ideally suited to multiple uses: repair, refurbishment and redeployment across several economic life cycles. Its long lifespan enables the environmental impact of the material to be spread over decades. At the same time, we acknowledge the dilemma: steel production results in relatively high CO_2 emissions, while the properties of steel are essential for safe, stable and durable furniture.

How we work with steel

We maximise material retention and minimise the extraction of new raw materials. We do so by:

- Smart, lightweight constructions and hollow components that deliver the same function using less material.
- Designing for long service life, easy disassembly and repairability of components.
- Reuse of frames and steel components within refurbishment programmes; steel parts are rarely replaced due to their robustness.
- Selecting suppliers who invest in low-emission production methods and renewable energy.

The environmental impact of steel in our value chain

Across our total product portfolio, steel is responsible for a significant share of supply chain emissions. For this reason, an important part of our climate strategy focuses on making the steel value chain more sustainable — from raw materials and primary production through processing by our suppliers to reuse at the end of the product life cycle.

What do we mean by “green steel”?

There is currently no single, universally accepted definition of “green steel”. We use the term as an umbrella designation for steel that is produced with demonstrably lower CO_2 emissions, for example through:

- Electric arc furnaces powered by renewable electricity, also for the melting and recycling of scrap.
- Direct Reduced Iron (DRI), whereby iron ore is reduced using natural gas and/or hydrogen instead of coal.
- Process optimisation and energy efficiency improvements in the rolling, forming and coating of sheets and tubes.

We closely monitor these developments and adopt them once quality and security of supply for our applications are assured.

Our goals towards 2030

- Reduction of supply chain CO_2 emissions in line with our climate targets through broader use of low-emission steel where technically feasible.
- Deepening collaboration with European steel suppliers to enable accessible “green steel” options.
- Further increasing recycled content where quality criteria allow.
- Refining design guidelines to minimise material use and maximise repairability.

Why 100% recycled steel is (currently) not feasible
Although we use as much steel scrap as possible (recycled steel originating from end-of-life products), 100% recycled steel is technically not feasible for high-quality applications such as office furniture. This is due to variations in alloying elements (such as chromium, tin and zinc) that affect composition and performance. For applications with lower technical requirements, such as packaging, higher recycled content levels are achievable.

Supplier selection
We select suppliers who report transparently and demonstrably invest in:

- Low-emission production and/or the use of renewable energy in their processes.
- Increased use of high-quality steel scrap where possible.
- Responsible supply chain management in the extraction of alloying elements.
- Quality assurance and certification appropriate to our applications.

Value retention and service life
Steel is particularly well suited to value retention. We extend the use phase of our products through maintenance, repair and revitalisation. This prevents premature recycling and allows us to maximise the long service life of steel frames and components.

Compliance and material health
We apply strict requirements to material safety and chemical processes throughout our value chain. For coatings, surface treatments and chemical additives, we operate in compliance with European regulations such as REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). In addition, we screen materials for hazardous substances in collaboration with our suppliers. This ensures that both our components and finished products meet the highest standards of health and sustainability.