Challenge
If steel is infinitely recyclable and more than 85% of it is recycled, what is the problem? It is that, globally, the demand for steel is running around three times higher than the supplies of recycled metal available. Ironically, steel’s in-use longevity means that there is simply not enough recycled metal to satisfy growing global demand.

This throws into stark focus both the need – and the opportunity – for circular economy strategies to do more with less: to use less steel, use it for longer, use it again and make it more cleanly.

Solution
For French company CMD Gears, deploying all of those strategies is a no-brainer. It provides premium, customised power transmission solutions – gears and couplings – for civil infrastructure and heavy industry sectors, including the steel industry. And it specialises in extra-large gears that its customers definitely don’t want to have to replace very often.

Many pieces are custom-designed and made to help the customer extend the life and usefulness of existing plant, and CMD Service assures their maintenance and repair. That creates the incentive to continuously improve the ecodesign of its products, explains Deputy General Manager Frédéric Bellot.

Digitalisation is also increasingly improving maintenance efficiency, through the use and sharing of data obtained from sensors monitoring temperature, vibration, oil use and more. This enables predictive maintenance and reduces downtime.

“Of course, the more the gearbox we make is adapted and robust, the lower the maintenance needed and hence the greater the productivity – this is a big driver for us.”

Frédéric Bellot, Deputy General Manager, CMD Gears
Orgalim represents Europe’s technology industries, comprised of 770,000 innovative companies spanning the mechanical engineering, electrical engineering and electronics, ICT and metal technology branches. Together they represent the EU’s largest manufacturing sector, generating annual turnover of over €2.076 billion, manufacturing one-third of all European exports and providing 11.33 million direct jobs. Orgalim is registered under the European Union Transparency Register – ID number: 20210641335-88.

Meanwhile, within CMD Gears’ own plant, all metal scrap is recycled, and energy use has been cut by the equivalent of one year’s worth over six years. Parts and products taken back from customers at end of life are remanufactured where possible or disassembled and recycled. There is no steel waste.

Policy implications
CMD Gears’ biggest ask is for a level playing field. “We are competing with organisations all over the world, and some are fair competitors but some have very low environmental constraints and the competition is not fair,” says Mr Bellot. “So I would say Europe should enforce fair competition because if we have to compete unfairly, we cannot win.”

Related Orgalim position papers
- Circular Economy Action Plan
- Sustainable Products Initiative
- Draft French decree on consumer information for waste-generating products
- Draft French decree on the minimum proportion of reused packaging

CMD Gears was founded in 1901 by André Citroën and today is one of the leading manufacturers worldwide of low-speed, high-torque gearboxes, widely used in heavy industries, such as steel making, mining, cement, infrastructure, and also sugar production. It made and maintains the hoist for one of the lifts in the Eiffel Tower. The company employs around 400 people at two sites in France, and reported turnover of nearly €53 million in 2020, about three-quarters of which is exports to more than 70 countries. In 2005, CMD became part of the French engineering group, Groupe CIF.