



Why the circular economy matters

Many steel industry observers have been quick to speculate whether steel has a future in Europe, given the many challenges we face today. Unlike some, I don't just believe that the steel industry has a future in Europe, I believe that having a strong European steel industry is vital to the future of manufacturing here in Europe.

Each edition of Update features an article from an ArcelorMittal opinion leader. In this issue we hear from Geert Van Poelvoorde, CEO of ArcelorMittal Europe – Flat Products and president of the European Steel Association (EUROFER).

Without a highly efficient and innovative steel sector, European industry would be at a significant disadvantage compared with other regions. If steel production moves outside Europe we would lose control of the supply chain, meaning that quality cannot be guaranteed.

This does not need to happen, if the right measures are put in place to protect steelmaking. I believe that the European steel industry's future should be built on two foundations: innovation, and recognising steel's central role in the circular economy which includes the production, consumption, re-use and recycling of materials.

The European steel industry is a major innovator. Across ArcelorMittal we employ 1,300 researchers who work on innovation every single day. For example, we work with our automotive partners for years before a car goes into production. In fact, thanks to world-class R&D we co-design and engineer cars together with automotive companies. In 2015, we invested more than US\$200m in research and development, around 80% of which was dedicated to Europe.

But innovation isn't just about making new grades of steel – our production processes are also continually being improved to make them more efficient, leading to a dramatic increase in the productivity of Europe's steel industry in the last five years. At the same time we have continued to reduce our impact on the environment and find new and beneficial uses for our by-products.

And this is where the second foundation for the future of European steel – recognising steel's role in the circular economy – comes into play.

Europe's steel industry has a major part to play in the circular economy. Thanks to its unique properties and 100% recyclability, steel is fundamental to the closed loop approach of the circular economy, which includes the production, consumption, re-use and recycling of materials. The concept of the circular economy also includes an industry's wider value to society. In the case of steel, every euro of demand for steel products creates additional demand worth €3.10 to society, of which €2.10 goes to other suppliers. This powerful leverage arises from long value chains across a range of economic activities including transport, construction, automotive, aeronautics, and electronics.

The EU's legislative proposal – the so called 'Circular Economy package' – supports the introduction of new definitions which clarify the value of various recovery operations along the waste hierarchy. Using those definitions, we can see that making steel produces around 0.86 tonnes of CO₂ per tonne on a life-cycle basis. That's 57% below the two tonnes of CO₂ generated if a tonne of steel was never recycled. With recycling rates in Europe above 85% in most sectors, factoring this type of information into decision making will help drive demand for steel long into the future, as customers increasingly make decisions that consider the carbon footprint of what they are buying.

The statistics strongly support steel as a sustainable material for the future. As well as producing strong, sustainable steel for our customers we, as ArcelorMittal Europe, must continue to spread the message that steel innovation, and the central role of steel in the circular economy, are key to the long-term future of our industry.

Geert Van Poelvoorde