Steel production can be a significant source of pollution and consumes natural resources that are not renewable. Feralpi plans to eliminate its negative impact on the environment. To achieve this goal, Feralpi has set itself a strategy with very challenging targets. These include achieving complete circularity in business operations, and a framework such as CTI is required to measure company performance and identify areas for improvement.

Maurizio Fusato,
Feralpi Group’s Ecological Transition Manager

Why are circular metrics interesting to your company?
Having standard KPIs allows to consistently compare performance along the entire value chain. We believe CTI to be a valuable framework to measure and monitor processes, assess circularity performance, capture related risks and opportunities, define areas for improvement and establish priorities towards achieving objectives.

We focused our CTI pilot on the Feralpi Siderurgica premises in Lonato del Garda, our headquarters. This facility produces rebar, smooth and ribbed wire rod, recoiled or drawn wire and welded wire mesh for the construction industry. CTI supported us in assessing the level of circularity in our processes using analytical and metric methods, which partially differ from those already used for other activities, such as certification.

Key challenges
We have initiated various circular processes along the entire value chain with the objective to reduce our environmental footprint and contribute to sustainable development in line with the targets set out in the UN 2030 Agenda. From our perspective, CTI can provide support when measuring individual processes by identifying potential weaknesses and defining improvements and objectives in line with our planning.

Solutions
Feralpi Siderurgica has always assessed its impact through environmental certifications such as ISO 14001, the EMAS environmental declaration or ISO 50001. In using the Circular Transition Indicators, we focused on several aspects of our process, such as flows, which are circular, linear, incoming or outgoing, or water, starting from a perspective not analyzed beforehand, through material flows.

Results
The analysis performed using CTI returned very positive ratings on overall circularity performance at Feralpi Siderurgica. With regards to inflows, this is linked to the use of scrap to produce steel (93% of the steel produced by the Feralpi Group comes from recycled material). Concerning outflows, the management of waste and production scrap mainly involves recovery processes and/or classification as by-products. Only the remaining residue is sent to landfill. Moreover, these products are 100% recyclable, and they can be reintroduced into the production cycle as scrap iron.
This assessment enabled us to define new KPIs for measuring company performance, which are added to the other environmental performance indicators already adopted. The extension of the analysis with CTI to the Group’s other production facilities, first and foremost those undergoing hot processing, is currently being assessed to determine circularity performance at individual sites and subsequently carrying out a comparative analysis.