

CASE STUDY TITLE

Iron and Steel Sustainability Management Systems



SUMMARY

The production of steel is a highly intensive process with environment consequences. Aware of this, during the past decades the steel industry has innovated towards a more sustainable production model. As part of this evolution, the Spanish steel producers joined efforts to develop a standard, UNE 36901 "Iron and steel sustainability management systems. Requirements", allowing them to introduce environmental, economic and social sustainability aspects in their activity.

BACKGROUND

The production of steel is known as a highly intensive process with respect the use of raw materials, water and energy, being also an industry with high CO2 emissions and waste production. Nevertheless, thanks to innovation the European steel industry has evolved very much during the past decades modifying its production processes and energy sources in order to be much more efficient and climatically neutral. Greenhouse emissions have been also drastically reduced and recycling of steel and the water used during production have converted the steel production one of the major recycling industries.

At the same time, during the past years steel companies have raised more and more awareness on product quality and corporate social responsibility aspects, which has led to the implementation of new company policies and procedures.

STRATEGY

At the Spanish national level, steel companies share a vision of a sustainable steel production in the long term, as part of the circular economy, contributing to the socio-economic growth.

AT A GLANCE

COUNTRY

- Spain

LEVEL

- National

SDG ADDRESSED

- SDG 12 - Responsible Consumption & Production

From this view, Spanish steel companies decided to incorporate to their activities the concept of sustainability with its environmental, economic and social aspects. For this purpose, they found the national standardisation system as a key ally to develop a standard capable to collect their interests and, in this way, to facilitate them the integration of an iron and steel sustainability management system with other management systems previously implemented.

This standard is UNE 36901:2018, that uses the high-level structure for management systems standards. UNE 36901 is particularly aligned with ISO 14001:2015 and follows the recommendations of ISO 26000:2010.

STRATEGY

This standard specifies the requirements for a sustainability management system for iron and steel organizations, allowing them to develop and implement a policy and objectives that not only consider de legal requirements, but also other possible requirements, as well as the information related to the economic, social and environmental areas. The standard also provides guidance for their implementation. UNE 36901:2018 contains a minimum set of sustainability aspects and their scope, to be considered by the organizations, which also shall define the required sustainability indicator system for evaluation purposes.

RESULTS & IMPACT

UNE 36901 was published the first time in 2016 and updated in 2018. Since then, 15 Spanish steel companies have implemented an Iron and steel sustainability management system according to UNE 36901, which has a direct relationship with SDG 12, “Ensure sustainable consumption and production patterns”.

In particular, this standard contributes to the achievement of target 12.2 “By 2030, achieve the sustainable management and efficient use of natural resources”, target 12.4 “By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment”, target 12.5 “By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse”, and target 12.6 “Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle”.

This Spanish standard also contributes to SDG 8, “Promote inclusive and sustainable economic growth, employment and decent

work for all”, in particular to target 8.4 “Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead”. Other SDG to which UNE 36901 contributes is SDG 9, “Build resilient infrastructure, promote sustainable industrialization and foster innovation”, specifically to targets 9.1 “Develop quality, reliable, sustainable and resilient infrastructure” and 9.2 “Promote inclusive and sustainable industrialization”.

Finally, SDG 17 “Revitalize the global partnership for sustainable development” can also be helped by UNE 36901, due to its contribution to the steel companies’ policy and institutional coherence, with target 17.14 “Enhance policy coherence for sustainable development”. The process of standardization to develop this standard is directly related to target 17.17 “Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships”. UNE 36901 is also used by companies, together ISO 9001, ISO 14001, ISO 45001, ISO 50001 and EMAS Regulation to obtain a National Mark, “Iron and steel sustainability”. It is an independent mark, open to any steel company, that recognizes the engagement of a steel company with corporate social responsibility beyond the legal requirements.



CHALLENGES & LESSONS LEARNED

The first main challenge was to reach an agreed standard, UNE 36901, taking into account the implications that a management system has for a steel company. Nevertheless, stakeholders involved in its development under the neutral environment represented by a standardization technical committee, aware of the relevance of the subject and committed to reach an agreement, were able to finally approve the standard.

The second challenge was the effective implementation of UNE 36901 in steel companies. The impulse and support given by some key stakeholders was a key factor for success. Nowadays, 15 steel companies, from local to multinational, are certified under this standard. This is considered as a success and demonstrates that standardisation and standards help stakeholders to align their activities with the SDGs and that the Spanish steel industry has a sound commitment with sustainability.

POTENTIAL FOR REPLICATION

This experience has an enormous potential to be replicated in other countries, through their own National Standardization Bodies, or even developing standards at European level in CEN or International level in ISO.

Iron and steel industry is quite globalized and the requirements set in the Spanish standard are likely to be applicable in many other countries and locations.

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