

What is the connection between metallurgy and environmental issues? Could a new discipline emerge from this confrontation?

Jean-Pierre Birat

ESTEP, European Steel Technology Platform, Bruxelles, Belgique

Abstract. In neoclassical economics, the environment is an externality and environmental issues are treated as an add-on feature. In metallurgy, the environment is handled in a similar way, for similar reasons: environmental issues are both external to the core themes of metallurgy and to the economics of process metallurgy. Environmental issues range from corrosion, to generation of by-products, to air and water emissions, to environmental footprints (carbon footprint, water footprint, etc.), a measure of the burdens/liabilities that metals production and use impose on the “planet”, to social footprint, a measure of the assets brought about by the economic activities they generate, and to recycling, re-use and nega-use issues.