

# Preface

This edited collection is a direct result of the activities of the ERASMUS+ funded project ‘European Steel Skills Agenda’ (ESSA), which aimed to develop a blueprint for a common European skills agenda of the steel sector. By investigating technological transformation, environmental challenges and developing understandings of the current skills profile of Europe’s steel workforce, the ESSA project focused on developing a new sector skills strategy. The project brought together people working across the sector, including companies, training providers, representatives of industry associations and trade unions, as well as researchers and other stakeholders.

What has come out of ESSA goes beyond a simple exchange within the sector but comprises an overarching European education and economic endeavour that aims at a digital, green and prosperous Europe. In the course of the ESSA project the consortium and its ecosystem have gathered new knowledge, from which this book aims to present a rich cross-cutting overview of workforce development in the European steel industry. It represents various perspectives, topics, developments and solutions from ESSA and a range of other steel-focused projects to discuss the technical and social challenges of the twin transition towards digital and green production.

Overall, this volume employs the steel industry as a lens through which to provide an international perspective of sector transformation and transition and it is likely to be of interest to academic scholars in the areas of engineering, technology studies, human resources, labour process theory, employment relations, and skills formation. Based on original and cutting-edge research, the book is informed directly by sector-specific projects and offers a distinct sector analysis of Industry 4.0, digital technologies, decarbonisation, robotics, skills and workforce development and human resources that is also likely to attract interest from a range of industry stakeholders, from both within and outside the steel sector, including employers, trade unions and associated federations and business organisations.

The editorial team includes highly published engineering and social science researchers and scholars of the steel industry from across Europe—Antonius Johannes Schröder, Clara Behrend and Martin Weinel from Germany, Luca Antonazzo and Valentina Colla from Italy, Aitor Goti from Spain and Dean Stroud from

the UK—who have pulled together a range of contributors with the aim of providing an informed and European perspective on recent and future developments across the sector. This is particularly as the latter applies to the industry’s workforce and the skill implications of the twin challenges of digitalisation and decarbonisation, towards building a sustainable steel industry in Europe.

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