

[CONCISE GUIDES
to the UNITED NATIONS
SUSTAINABLE DEVELOPMENT GOALS]

SDG9

**Industry,
Innovation and
Infrastructure**

LUIS VELAZQUEZ

SDG9 – INDUSTRY,
INNOVATION AND
INFRASTRUCTURE

CONCISE GUIDES TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

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SDG9 – INDUSTRY, INNOVATION AND INFRASTRUCTURE

BY

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INVESTOR IN PEOPLE

This book is dedicated to my professors, colleagues, former students, family, and friends, all my fellow adventurers on my tireless quest for sustainability. Moreover, I also dedicate it to those students worldwide who will become the agents of change needed to achieve inclusive and sustainable industrialisation and a better world.

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DISCLAIMER

The views expressed in this book do not reflect the opinions or views of any organisation, agency, or program of the United Nations or any other international agency.

PREFACE

Although *SDG9: Industry, Innovation and Infrastructure* targets students and professors in the field of Engineering Management, it is also intended for those students, professors, researchers, and practitioners in related fields. It has been almost 30 years since I graduated as an industrial engineer from the University of Sonora in Mexico and practically the same time since Sustainable Development captivated me.

My quest for sustainability in the industry has been fascinating and challenging, as I have had successes and disappointments. During these three decades, I have had the opportunity to study sustainability at prestigious universities worldwide. Everything I have experienced has been valuable, but if I had to select the most valuable thing, without a doubt, it is the experiences shared with my colleagues and with students. I have collaborated with sustainability experts in North America, South America, Europe, Asia, Africa, and Arabia; everyone taught me so much about sustainability.

The invitation to write this book came from a researcher in Germany whom I consider an icon of Sustainability Science; however, my most significant spiritual motivation has always been the students. For them, I accepted the invitation, hoping that they will find inspiration to be agents of change and soon help achieve inclusive and sustainable industrialisation. The students have been an injection of enthusiasm and optimism at a most challenging moment of my career; therefore, a reason

not to give up. While I do not consider myself a sustainability expert, writing about inclusive and sustainable industrialisation initially did not seem as challenging as it turned out.

The most challenging phase was gathering information about SDG9 because there appears to be a lack of reliable SDG9 information available and what exists is hard to find. The searching for information lasted months and sometimes was frustrating and futile. This fact is likely because progress towards SDG9 has not been as positive as it might be. It is not that the current SDG9 published literature is wrong, but the evidence is not conclusive. In general, though, information sources often offer qualitative information, and quantitative data are scarce. Moreover, there is no trustworthy or go-to source of information that indicates with certainty the progress towards the 2030 Agenda; therefore, generating insights about assessing progress towards the achievement of SDG9 was somewhat difficult; it was like piecing together a puzzle. This situation is not exclusive to SDG9; thus, several of the arguments expressed in the book might apply to multiple SDGs.

In the end, I have managed to present a comprehensive framework within which complex SDG9 issues can be understood to be adapted and applied effectively and efficiently in particular situations. Therefore, I hope that this book helps build qualified human resources to accelerate progress towards SDG9 by increasing awareness and knowledge towards a low-carbon and inclusive industrialisation.

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Finally, yet importantly, I would like to thank my lovely family and friends for their patient and understanding during the months I spent writing the book.