

# Preface

How to measure our progress toward achieving sustainable development is one of the key issues of the sustainability agenda. In recent years, we have seen intensive efforts by a wide range of actors, such as international agencies, governments, nongovernmental organizations, communities, and businesses, to develop measurement systems and indicators that characterize progress toward sustainable development, or at least some of the dimensions of sustainability.

Measurement and indicators play an important part in introducing the concept of sustainable development into practice. They help decision-makers define sustainable development objectives and targets, and help assess progress toward meeting those targets.

It is fair to say that, despite some remarkable achievements in the development of sustainability indicators, there is still no broad consensus regarding the best way to measure progress toward sustainability. Thus, efforts to produce new and "better" indicators are continuing. We see constant evolution of and improvement in the existing frameworks as well as emergence of new initiatives. They all attempt to answer that simple question (also posed by this book), how do we measure sustainability? Given the complexity of the concept of sustainable development and the inherent difficulty in measuring the "well-being" of both present and future generations, it should not be surprising that the search for the right answer is still ongoing.

Therefore, this book is timely as it provides broad insight regarding how to measure environmental impacts and other aspects of sustainability. It considers a range of methods and approaches, including, but not limited to, systems analysis and optimization, life-cycle assessment, carbon and water footprints, sustainable process design, and decision analysis regarding multiple criteria. I expect that this book will be of interest to a wide-ranging audience and that it will stimulate lively discussions about how to measure our progress toward sustainable development.

**Adisa Azapagic**

*The University of Manchester, Manchester, UK*