

Preface

Recently, international tourism has demonstrated steady and substantial growth. This has contributed to the significant diversification of its product offer and made it one of the fastest developing economic sectors globally. Further acceleration of international tourism is projected which implies it will be playing an increasingly more important role in global economy in the future.

The phenomenon of continued tourism growth can be explained by a broad set of factors, all of which have enabled an increasingly larger number of people worldwide to consider travel with leisure purposes as an indispensable element of their lifestyles. While there are a large number of positive effects associated with global tourism development, there is also a dark side to the story. This is because travel with leisure purposes imposes significant pressures on the environment. The negative outcome of the industry has been recognised and the research stream aiming to reveal the nature and to quantify the magnitude of environmental impacts from tourism products and services is growing. The negative environmental effects should be minimised to facilitate progress of the industry towards the goal of sustainability.

Reduction of environmental impacts from tourism represents a challenging task. It is the joint responsibility of many stakeholders, starting with holidaymakers themselves and finishing with national governments and tourism enterprises. To achieve effective reduction, environmental pressures associated with specific tourism products and services should first be identified and their magnitude established. This can only be achieved via the application of reliable impact assessment methods.

Tourism has traditionally been considered as part of 'soft' sciences. This may have found reflection in the limited number of assessment tools and appraisal frameworks which have been deployed within the industry in question to accurately measure its impacts on the environment. Complex computations are often required to assess the magnitude of environmental effects; the outcome of these computations is normally expressed in a quantitative way while many 'soft' sciences have been traditionally concerned with more qualitative approaches to impact

assessment. There is a critical need to enhance the methodological underpinning of tourism impact appraisal in order to enhance its accuracy, refine the depth of analysis and improve the reliability of findings. Academic literature has acknowledged that relatively little has been done in this respect to-date.

The concept of life cycle thinking has been trending for quite a while. It has been successfully applied to evaluate the environmental impacts from a broad range of products and services. It has assisted managers and policy-makers in identifying areas with the life cycle of specific products and services which require urgent mitigation. Surprisingly, the concept of life cycle thinking has found little application in the field of tourism to-date. This may be partially because the life cycle thinking paradigm originates from the 'hard' sciences while tourism as a whole has primarily been examined from the 'soft' sciences perspective as described above. The potential of the life cycle thinking concept to contribute to the development of strategies which could bring the tourism industry closer towards the goal of environmental sustainability may have therefore not been entirely appreciated by tourism academics. Life cycle thinking has a number of striking advantages over conventional methods for environmental impact appraisal when applied to tourism products and services and it is vital that tourism managers, policy-makers and academics can all apprehend and capitalise upon these.

This book represents the first known attempt to systematically discuss the benefits of integrating the life cycle thinking considerations into tourism impact appraisal research. It introduces and evaluates the potential of life cycle assessment (LCA), an established method for impact appraisal of products and services which has gained international recognition and won high reputation in a broad range of non-tourism related disciplines but has rarely been applied in tourism, for assessment of the negative environmental effects attributed to the tourism industry. The book provides an overview of the key terms and explains the primary concepts attributed to the LCA impact appraisal framework and critically reviews the pros and cons of its implementation in tourism with the purpose of more effective environmental management and decision-making. The book draws upon a number of examples extracted from real-world business and contemporary research practice to demonstrate the importance of the broader adoption of life cycle thinking and the method of LCA in tourism.

While this book deals with the concept of life cycle thinking and the method of LCA, it does not aim to substitute or become another handbook on LCA. The field of LCA research is well established and there are a large number of significantly more detailed and specialised manuscripts available with which this book does not aim to compete. Likewise, while this book looks at the tourism industry, its broad product and service portfolio and a variety of environmental impacts attributed to tourism business operations, its goal was not to review this topic in the fullest detail as this has repeatedly been done in a wide range of dedicated textbooks which have been produced specifically with this purpose. Instead, this book strives to demonstrate how life cycle thinking and the method of LCA could be applied in tourism, an industry of global importance whose negative environmental impacts have been intensifying, with the purpose of generating more accurate and comprehensive

appraisals of the magnitude and disclosing the true diversity of these impacts. The book therefore contributes to the growing stream of academic literature concerned with the assessment and mitigation of tourism's increased environmental pressures. However, the book also makes an important input into LCA research agenda. This is because it aims to link the 'worlds' of tourism and LCA not only by demonstrating the benefits of applying the life cycle thinking constructs in tourism impact assessment research, but also by outlining a new avenue (=tourism) for LCA application outside the 'hard' science disciplines that have so far been overlooked in terms of holistic environmental impact analysis. Drawing upon examples retrieved from non-tourism related literature and reflecting upon real-world tourism business case studies, it outlines a number of new, prospective application directions for the method of LCA whose appraisal potential has not yet been properly recognised and whose benefits have not therefore been fully capitalised upon in tourism.

This book is a product of many years' research work. The author embraced the challenge of exploring the role of life cycle thinking and the method of LCA in tourism impact appraisal back in 2008 and the groundwork which has been collected since had laid the basis of the manuscript. This long research journey has had its ups and downs and, on the personal and professional fronts, the author is very grateful to many people for the support provided. Professor Janet Dickinson and Mr. Derek Robbins from Bournemouth University have played the key role in the making of the author as an academic who has developed passion for research which is related to LCA applicability in tourism. The author is particularly thankful to his family (Yuliya, Emily, Katsyaryna and Leanid) for love, patience and encouragement provided throughout all research journeys he has embarked upon so far. The author is also deeply indebted to his dear friends from Worms and Frankfurt (Germany) who have contributed considerably to the personal and professional development of the author, especially at the early stages of his academic career.

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Tourism

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