**Introduction to Volume I: Green Growth, Environmental Protection and Sustainable Agriculture in the Geo-economy of the Future**

**Sustainable Development of the Geo-economy and Environmental Management Best Practices**

 This book opens a new perspective on geo-economy, which for the first time means not economic geography and globalization (differences in the sociocultural and economic situation of countries—from the standpoint of the humanities), but land economics (from the standpoint of earth and planetary sciences). This makes it possible to systematize, in-depth study, and critically rethink current and future economic practices from the standpoint of consequences for the environment and sustainable development. The uniqueness of this book lies also in the fact that, in contrast to the established environmental economy in science, which focuses on the problems of climate change and the reduction of production and consumption waste, the spotlight of this book is a geo-economy with a focus on responsible environmental management, sustainable agriculture, and alternative energy. Thus, this book fills a gap in the existing scientific knowledge at the intersection of economic geography and environmental economy, opening a new and wide field for scientific research on land economics. The relevance of this book is explained by the fact that in the area of the new perspective of the geo-economy that has opened thanks to it, there is a wide range of acute, poorly studied, and unsolved issues. These issues include uncertainty about how to make the transition to a green economy and how to manage environmental management. The theoretical concept of the green economy is well developed and widely represented in the available scientific literature. However, it is not clear how to implement this concept in practice. The core of this concept is presented in the Sustainable Development Goals: SDG 12 (responsible consumption and production) and partly SDG 3 (in terms of the contribution of the green economy to health care). This concept covers a wide range of areas of economic activity, because of which it has blurred lines, is not understood, and is not supported by many potentially interested economic entities in its implementation. For example, it is unclear whether the disposition of green investments is sufficient to qualify an enterprise as a subject of v vi Introduction to Volume I: Green Growth, Environmental Protection and … a green economy. The concept of a green economy does not give a clear and unambiguous answer to this question—the answer must be flexible and requires further in-depth scientific study from the standpoint of the geo-economy. For example, if an enterprise creates a large carbon footprint and causes serious damage to the environment, and its green investments are aimed at eliminating only superficial negative consequences of this damage, it is obvious that it cannot and should not belong to a green economy. It also raises the question of what is meant by green investment. If the selection criteria are set too high, green investments will become unavailable for small and medium-sized enterprises (i.e., for mass implementation), and if the criteria are set too low, large businesses will formally approach green investments without actually contributing to the sustainable development of geo-economy. Consequently, the criteria should be flexible and take into account the specifics of different business practices and different business entities. Among the problems under consideration is the ambiguity in the interpretation of the concept of “environmental quality,” as well as the lack of a scientific and methodological approach to assessing and ensuring the environmental efficiency of economic practices. This concept is based on SDGs 13 (combating climate change), and 14 and 15 (biodiversity conservation). These concepts are based on SDG 12 (responsible consumption and production) and partially SDG 3 (in terms of the contribution of the “green” economy to health care). In particular, questions about whether and how to separate or combine environmental quality from the overall quality of goods and services need to be considered. Likewise, it is worth considering whether environmental efficiency is viewed in isolation (and how to measure it in isolation) or in unity with the overall performance of an enterprise, country, and region. Although there are separate criteria for measuring and categorizing the given characteristics, coherent methodological support has not been developed yet. For practical application, the criteria and categories need clarification and should be supplemented with specified and detailed recommendations. Separately, it is worth noting such an issue as the incompleteness of the concept of sustainable agriculture and the development of rural areas. This concept is based on SDG 2. In some cases, agricultural sustainability refers to the stability of the operation (normal, smooth functioning) of agricultural enterprises; in other cases, it refers to their contribution to the fight against hunger and ensuring food security. Much less studied, but no less significant is the third area of sustainable development of agriculture and rural areas, namely the responsible land use. Although the responsible environmental management in the context of studying a new perspective of geo-economy applies to all sectors of the economy, it is most significant for agriculture, since, firstly, its conduct presupposes the closest naturality, and, secondly, agriculture has the greatest potential not only to reduce environmental damage but also to improve its condition based on restorative land use. The described problems are comprehensively considered and studied in detail in the first volume of the book, and their promising solutions are also proposed. The purpose of the first volume of the book is to develop the scientific concept of the Introduction to Volume I: Green Growth, Environmental Protection and … vii geo-economy of the future and to develop applied recommendations for its practical implementation while systematically considering the experience and prospects of sustainable green growth, environmental protection, and sustainable agriculture. The problems noted have determined the logic and structure of this volume of the book— they are sequentially explored in the first three parts (first, second, and third). The first part is devoted to the green economy and environmental management with a detailed consideration of international experience (e.g., countries such as Russia and China) and industry practices. They also consider the health benefits of sustainable development of geo-economy and take into account the experience of sustainable development of geo-economy in the context of the COVID-19 pandemic and crisis. The second part examines the environmental quality and environmental efficiency of business practices. The third part explores sustainable agriculture and rural development. The original perspective of the study of geo-economy provides a multidisciplinary approach to this book, due to which we hope it might be of interest and useful for representatives of various fields of science, including economic geography, environmental economics, agricultural sciences, business economics, regional economics (in terms of