



**PALGRAVE ADVANCES IN BIOECONOMY:
ECONOMICS AND POLICIES**

SERIES EDITOR: JUSTUS WESSELER

Advanced Biofuels and Circular Economy

Technoeconomic,
Socioeconomic, and
Environmental
Implications

Edited by
Rahil Akhtar Usmani
Mudasir A. Dar
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ISSN 2524-5848

ISSN 2524-5856 (electronic)

Palgrave Advances in Bioeconomy: Economics and Policies

ISBN 978-3-031-86933-4

ISBN 978-3-031-86934-1 (eBook)

<https://doi.org/10.1007/978-3-031-86934-1>

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CONTENTS

- 1 A Perspective on the Circular Economy of Advanced Biofuels** 1
Rahil Akhtar Usmani, Akram Ahmad Khan, Asim Hasan, and Mudasir A. Dar
- 2 Circular Economy Transitions for Advanced Biofuel Supply Chains** 21
Tesfaye Kassaw Bedru, Yohannes Assefa Degaga, Jayakaran Pachiyappan, Selvakumar Periyasamy, and Mani Jayakumar
- 3 Assessing Risks in the Circular Economy of the Advanced Biofuel Industry** 49
Suhail Ahmad Khan and Mohd. Abdul Muqet Maaz
- 4 Circular Economy Advantages Through Derivatives and Value-Added Products in Advanced Biofuel Production** 77
Renan Carriço Payer, Osvaldo Luiz Gonçalves Quelhas, Níssia Carvalho Rosa Bergiante, and João Henrique Paulino Pires Eustachio

5	Exploration of Recent Advancements in Advanced Biofuel Production Technologies	103
	Mahdi Monazzah, Elaheh Kowsari, and Mohammad Sadegh Salmani Kiasari	
6	A Comparative Evaluation of Technoeconomic Feasibility of Advanced Biofuel Production Processes	135
	Akram Avami	
7	Socioeconomic Implications of Advanced Biofuels Production	161
	Mudasir A. Dar, Rongrong Xie, Shehbaz Ali, Rahil Akhtar Usmani, Akram Ahmad Khan, Niknik Nurhayati, Radityo Pangestu, Md Muzammel Hossain, and Jianzhong Sun	
8	Examining Social Dimensions in the Circular Economy of Advanced Biofuel Production	187
	Diego Alexis Ramos Huarachi, Cleiton Hluszko, Micaela Inés Castillo Ulloa, Fabio Neves Puglieri, and Antonio Carlos de Francisco	
9	Sustainable Development and Circular Economy Perspectives on Advanced Biofuels	213
	Muhammad Uzair Javed, Hamid Mukhtar, and Umer Rashid	
10	Advanced Biofuel and Climate Change Mitigation	243
	Mohammad Hasanain, Mehraj Ud Din Sofi, Tarun Tomar, Gaurav Verma, Sandeep Kumar, Vijay Singh Meena, Raghavendra Singh, and Vinod Kumar Singh	
11	Recent Developments in Mapping Environmental Sustainability of Advanced Biofuel	267
	Mudasir A. Dar, Rongrong Xie, Atif Khurshid Wani, I Made Sudiana, Farhan Ahmad, Babbiker Mohammed Taher Gorish, Daochen Zhu, Maryam Gheibipour, Reena Singh, Rahil Akhtar Usmani, Akram Ahmad Khan, and Jianzhong Sun	

12	Overview of Policies for Increasing Advanced Biofuel Utilization in Major Producing Countries	299
	Daniel Balsalobre-Lorente and Syed Ale Raza Shah	
13	Policy and Regulatory Frameworks for Sustainable Production of Advanced Biofuels	333
	Ali Hashemizadeh and Mudasir A. Dar	
14	Prospects and Challenges in Implementing Circular Economy Practices for Advanced Biofuels	361
	Yann Emmanuel Miassi and Kossivi Fabrice Dossa	
15	Potential Routes of Bioenergy Production and Their Circular Bioeconomy	387
	Tesfaye Kassaw Bedru, Wondifraw Abate Abera, Jayakaran Pachiyappan, Selvakumar Periyasamy, and Mani Jayakumar	
16	Methodological Proposal for the Evaluation of the Sustainability of Solid Biofuels	411
	Luis Bernardo López Sosa, Mario Morales-Máximo, Arturo Aguilera Mandujano, Bernardina Alejo Justo, Ricardo González Cárabes, and Netzahualcóyotl Flores Lázaro	
	Index	433



Assessing Risks in the Circular Economy of the Advanced Biofuel Industry

Subail Ahmad Khan and Mohd. Abdul Muqet Maaz

3.1 INTRODUCTION

The biofuels industry is demonstrating to be a significant component toward the drive for renewable energy sources, and can potentially reduce fossil fuel usage and its environmental effects. With the current worldwide changes in climate and substantial increase in demand for energy needs, switching to renewable energy sources is essential. Biofuels are produced from organic raw materials including plants, agricultural residues, as well as algae, which makes them a feasible option to replace conventional fossil fuels. Additionally, it helps in decreasing the greenhouse gas emissions, enhancing energy security and contributing to sustainable development. Thus, biofuels are often viewed as an integrated part of the strategies

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R. Akhtar Usmani et al. (eds.), *Advanced Biofuels and Circular Economy*, Palgrave Advances in Bioeconomy: Economics and Policies, https://doi.org/10.1007/978-3-031-86934-1_3