

Contents

1	Introduction.....	1
	Daniela Thrän	
2	Demand for the Flexible Provision of Bioenergy Carriers: An Overview of the Different Energy Sectors in Germany.....	11
	Martin Dotzauer, Karin Naumann, Eric Billig, and Daniela Thrän	
3	Biomass Resources and Sustainability Issues for a Flexible Bioenergy Provision.....	33
	Stefan Majer and Daniela Thrän	
4	Flexible Power Generation from Solid Biofuels	49
	Andreas Ortwein and Volker Lenz	
5	Flexible Power Generation from Biogas	67
	Jan Liebetrau, Jaqueline Daniel-Gromke, and Fabian Jacobi	
6	Flexible Heat Provision from Biomass	83
	Volker Lenz and Daniela Thrän	
7	Liquid and Gaseous Biofuels for the Transport Sector	107
	Franziska Müller-Langer and Marco Klemm	
8	Intermediate Biofuels to Support a Flexible Application of Biomass	121
	Eric Billig, Janet Witt, Marco Klemm, Claudia Kirsten, Jan Khalsa, and Daniela Thrän	

9	The Potential of Flexible Power Generation from Biomass: A Case Study for a German Region	141
	Philip Tafarte, Subhashree Das, Marcus Eichhorn, Martin Dotzauer, and Daniela Thrän	
10	Conclusion and Outlook	161
	Daniela Thrän	
	Index.....	179

Smart Bioenergy

Technologies and concepts for a more flexible
bioenergy provision in future energy systems

Thrän, D. (Ed.)

2015, VIII, 181 p. 46 illus., Hardcover

ISBN: 978-3-319-16192-1