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| Autore | Bullerdiek Nils |
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| Altri autori (Persone) | NeulingUlf<br>KaltschmittMartin |
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| Soggetti | Chemical engineering<br>Environmental engineering<br>Green chemistry<br>Cogeneration of electric power and heat<br>Fossil fuels<br>Environmental Process Engineering<br>Green Chemistry<br>Fossil Fuel |
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| Nota di contenuto | Introduction -- Background: Climate Protection in the Mobility Sector -- Feedstock -- Process Technology/Conversion Steps -- Distribution/ Logistics -- Application -- Energy Economics Aspects -- Conclusion. |
| Sommario/riassunto | Powerfuels are the subject of intense and often contentious current discussions within industry, research, politics, as well as the overall society. These discussions primarily revolve around the practical and technical feasibility of power-to-X processes and applications, their economic viability, the respective environmental benefits, the contribution to climate protection as well as the social acceptability. Thus, the primary aim of this book is to provide a comprehensive overview of various aspects, diverse considerations, and different perspectives regarding the future role and utilization of power-to-X |

pathways on a global scale. This encompasses the challenge of sourcing necessary educts / feedstock options, their conversion into different products and product groups, exploring the possibilities of using these electricity-based fuels / hydrocarbons in various markets, and establishing suitable framework conditions for viable and sustainable markets in the years to come. These objectives are achieved through a collection of papers contributed by experts actively engaged in various fields related to power-to-X.