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Autore	Erdbeer Robert Matthias
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Altri autori (Persone)	HagenmeyerVeit StierstorferKlaus
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Nota di contenuto	Introduction: Modelling the Energy Transition: Cultures - Visions - Narratives, R. M, Erdbeer, V. Hagenmeyer and K. Stierstorfer -- Part I: Transparent Modelling: Revisiting Model Theory -- Theories, Modelling and Empirical Support, B. van Fraassen -- Modelling in Experimentation, H-J. Rheinberger -- Model-Based Science as Epistemic Warfare: Scientific Models in a Static and a Dynamic Perspective, L. Magnani -- Modelling Objectively, N, Cartwright, F. Ray -- Basic Operations of Model Building in Literary Studies, D. Tenev -- Part II: Modelling the Energy Transition 1: Technology and Practice -- On the Art of Electric Power System Modelling and Simulation for

Integrated Transmission-Distribution Analysis, U. Kuehnappel, V. Hagemeyer -- Daily Streamflow Forecasting using an Enhanced LSTM Neural Network Model, V. Eniola et al -- Open Models are Not Enough: Advancing Energy System Modelling Towards Practical Usefulness, F. Lombardi et al -- Part III: Modelling the Energy Transition 2: Societal and Cultural Perspectives -- Backcasting: Prototyping Future Ontologies by Backward Chaining Possible Futures, G. Gramelsberger -- Indicator Politics: Modelling Societal Problems under Real-World Conditions, S. Boeschen -- Understanding Petromodernity: Oil as a Medium between Geology, Technology, and Different Types of History, B. Steininger -- Part IV: The Energy Imaginary: Model Media in Literature and Art -- Literary Models of/for Resilience in Juliana Spahr's "The Transformation" and Kim Stanley Robinson's "The Ministry for the Future", J. Dorson -- Modelling the Future with Miniature Worlds, O. Eide -- Models in Art: A Visual Approach to Energy Transition, T. Becker.

## Sommario/riassunto

This open access book reconfigures Energy Transition as a global discourse from a multidisciplinary perspective. Energy Transition is not only one of the most daring technological endeavours of the present, it is also its new master narrative. Focusing on modelling both as a cultural technique and as a strategy of innovation, the chapters provided in this volume throw into relief the visions, but also the blind spots of modelling the challenges of climate change. Thus, in a rare encounter, major voices from the Sciences and the Humanities, from Energy Systems Design, Mechanical Engineering, Theory of Science, Science and Technology Studies, Literary Studies and the Arts, have gathered here to overcome the cultural divide between the technological and the societal dimensions of this global task. In doing so, they offer a new form of model criticism, pointing to the impacts of what may be termed the 'Energy Imaginary' on the technosocial mindsets of our time. Robert Matthias Erdbeer is a professor for German literature and literary theory at the University of Münster, Germany. His research covers literary form and modelling, experimental video games, but also the extensive contact zone of literature, philosophy of nature, and scientific thought. He has been the spokesperson of the Münster Center for Philosophy of Science. Veit Hagemeyer holds the Chair of Energy Informatics and is the director of the Institute for Automation and Applied Informatics at Karlsruhe Institute of Technology (KIT), Germany. He is the spokesperson of the German federal national research programme 'Energy System Design' of the Helmholtz Association and a Director of the Energy Lab at KIT. Klaus Stierstorfer is Chair of British Studies at the University of Münster, Germany. He has published widely on literary history, literary and cultural theory, law and literature, and has an interest in literary modelling. He has been spokesperson of the Collaborative Research Centre 'Law and Literature' and is director of the EU CoFund Project 'Migration, Diaspora, Citizenship'.