

# Energy Communities

Customer-Centered, Market-Driven, Welfare-Enhancing?



Edited by  
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## Energy Communities

*Customer-centered, market-driven, welfare-enhancing?*



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### DESCRIPTION

Energy Communities explores core potential systemic benefits and costs in engaging consumers into communities, particularly relating to energy transition. The book evaluates the conditions under which energy communities might be regarded as customer-centered, market-driven and welfare-enhancing. The book also reviews the issue of prevalence and sustainability of energy communities and whether these features are likely to change as opportunities for distributed energy grow. Sections cover the identification of welfare considerations for citizens and for society on a local and national level, and from social, economic, and ecological perspectives, while also considering different community designs and evolving business models.

### WHAT AND WHY OF ENERGY COMMUNITIES

In the power sector, distributed as well as renewable energy sources are gaining market share. Simultaneously, the role of the end customer is changing from passive "load" to be served to one of an active participant in the market. By producing, storing, and managing energy on their premises, citizens can start to assume responsibility for balancing the energy system. Energy communities may be an important means to support this process. This book explores whether and how energy communities can be part of the solution, serving to integrate customers as active participants in future electricity markets.

### KEY FEATURES

- Explores whether and how different kinds of energy communities contribute to the transition towards distributed energy systems;
- Describes how policy, market and regulatory frameworks need to be adjusted;
- Describes the appeal of energy communities to energy customers and identifies their economic, ecological, emotional, and social benefits;
- Examines enabling technologies and community design in the power or heating market or involving sector coupling; and
- Explores how energy communities can turn into promising business models for different actors along the value chain.

"How do public policies and regulation consider the case of energy communities, their various forms, and the different services that they deliver? Are communities a new type of player in the energy sector, or another supplier, or a collective consumer, or a kind of integrated utility? Are consumers themselves the genuine nature of communities, or only the ones served by those? How should network monopolies, and their regulated metering and settlement processes treat and bill the communities and their members? The chapters of this book address many of these questions and more."

**Jean-Michel Glachant**

Director of Florence School of Regulation, Florence, Italy

"This book contains a compendium of fascinating responses to the question of whether 'energy communities' are citizen-centered, market-driven and welfare-enhancing Flexible demand has to assume a more prominent role in balancing supply and demand."

**Bruce Mountain**

Director, Energy Policy Center, Univ. of Victoria, Melbourne, Australia

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