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Autore	Qadrdan Meysam
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Disciplina	665.74
Soggetti	Renewable energy resources Fossil fuels Energy efficiency Thermodynamics Heat engineering Heat transfer Mass transfer Renewable and Green Energy Fossil Fuels (incl. Carbon Capture) Energy Efficiency Engineering Thermodynamics, Heat and Mass Transfer
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	1.The transition to a low carbon energy system -- 2.Fundamentals of gas networks -- 3.Impact of wind power generation on the operation of the gas network -- 4.Impact of decarbonisation of the heat sector on gas network -- 5.Alternative use of gas networks.
Sommario/riassunto	This book investigates the role of gas networks in future low-carbon energy systems, and discusses various decarbonisation pathways, providing insights for gas network operators, developers, and policy makers. As more countries around the world move towards low-carbon energy systems and increase their exploitation of renewable energy sources, the use of natural gas and the associated infrastructure is

expected to undergo a substantial transformation. As such there is a great uncertainty regarding the future role of gas networks and how they will be operated in coming years. The topics addressed include:
Fundamentals of gas network operation
The impact of variable renewable electricity generation on the operation and expansion of gas networks
The impact of decarbonising heat supplies on gas networks
Opportunities and challenges of utilising gas networks to transport alternative low-carbon gases such as bio-methane and hydrogen.
