

1. Record Nr.	UNINA9910682557903321
Titolo	Geothermal Heat Pump Systems / / edited by David Borge-Diez, Enrique Rosales-Asensio
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-24524-5
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (326 pages)
Collana	Green Energy and Technology, , 1865-3537
Disciplina	697.07
Soggetti	Renewable energy sources Thermodynamics Heat engineering Heat - Transmission Mass transfer Energy storage Buildings - Environmental engineering Renewable Energy Engineering Thermodynamics, Heat and Mass Transfer Mechanical and Thermal Energy Storage Building Physics, HVAC
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Geothermal heating systems and heat pumps -- Energy sources to supply a geothermal heat pump -- Economics of heat pumps -- Polygeneration systems.
Sommario/riassunto	This book presents an overview of geothermal heating systems using ground source heat pumps in different countries. It evaluates the emissions and energy costs generated by the operation of low enthalpy geothermal systems, with heat pumps fed by different energy sources, and assesses, from an international point of view, those policies whose aim is a sustainable, low-carbon economy. The use of low-impact energy sources is gradually growing with the aim of reducing greenhouse gases emission and air pollution. The alternatives offered

by geothermal systems are one of the key solutions for a future renewable development, enabling the electrification of heating systems and the use of biofuels. The book will be of interest to energy professionals and researchers.
