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Nota di contenuto	Introduction to Geothermal Systems -- Geothermal Potential across Europe -- Technologies for Deep Geothermal Energy -- Risks and Barriers -- Summary and Conclusions.
Sommario/riassunto	<p>Since nearly 50 % of Europe's energy demand is in the heating and cooling sector, it is expected that geothermal energy will play an important role in the transition to a decarbonized energy system. However, deep geothermal energy is currently harvested mainly from areas with very favorable geothermal conditions. As these areas are geographically limited, the use of geothermal energy in less favorable regions is essential for unleashing the full potential of geothermal energy, since they make up the majority of the total geothermal potential in Central Europe. Motivated by the growing interest in deep geothermal energy among, e.g., energy companies and communities, this text reviews the state of the art in deep geothermal energy with focus on direct heating in geothermally less favorable regions. It provides an overview of technologies used to generate heat from the deep underground and discusses main technical and non-technical</p>

risks associated with deep geothermal projects. The text addresses readers with an interest in geothermal energy but does not require a background in geoscience or engineering sciences. It is suitable as textbook for Geothermal Energy courses for undergraduate students from different disciplines.
