1. Record Nr. UNINA9910483898503321
Autore Friedman Avi <1952->

Titolo Fundamentals of sustainable urban design / / Avi Friedman

Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021]

©2021

ISBN 3-030-60865-4

Edizione [1st ed. 2021.]

Descrizione fisica 1 online resource (X, 328 p. 240 illus.)

Disciplina 307.1216

Soggetti Sustainable urban development

Sustainable architecture

City planning

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Integrating Nature -- Moving Around -- Mixing Amenities And

Residences -- Green Open Spaces -- High-Density Neighbourhoods -- Weaving Old And New -- Edible Landscapes -- Urban Design For Well-Being -- Urban Design For Renewal -- Wealth Generation By Design.

Sommario/riassunto This book begins with an introduction describing current societal

transformations that merit new urban designs, including depletion of non-renewable natural resources, elevated levels of greenhouse gas emissions, large numbers of aging "Baby Boomers," and climate change. Dr. Friedman then examines these challenges through ten topical chapters of interest to architects, civil and construction engineers, and urban planners. Each of these topics represents an aspect of urban design and describes an innovative solution and offers a detailed description of underlying principles. The text presents the state of the art and how it compares to a conventional design. In the second part of each chapter, several international projects are featured as case studies illustrating design implementations. Considers concepts that minimize urban development's carbon footprint, such as district heating, passive solar gain, net-zero neighborhoods and shared transport; Emphasizes strategies for preserving a site's natural assets, including open green spaces, existing building stock, and edible landscapes; Examines contemporary urban design concepts and

illustrates these with examples from around the world.