1. Record Nr. UNINA9910583023303321 Autore Asdrubali Francesco Titolo Handbook of energy efficiency in buildings [[electronic resource]]: a life cycle approach / / edited by Francesco Asdrubali, Umberto Desideri Pubbl/distr/stampa Oxford: .: Butterworth-Heinemann, . [2019] ©2019 **ISBN** 0-12-812818-6 0-12-812817-8 Descrizione fisica 1 online resource (xxi, 836 pages): illustrations (some colour) 696 Disciplina Soggetti **Energy consumption** Buildings - Energy conservation Sustainable Development Construction Industry Handbooks and manuals. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Introduction -- Policies, Recommendations and Standards

(International Technical Standards, Main Laws and Regulations; EU Directives; Energy Labeling) -- From Efficient to Sustainable and Zero Energy Consumption Buildings -- Life-Cycle Assessment of Buildings -- Steady-State and Dynamic Codes, Critical Review, Advantages and Disadvantages, Accuracy, and Reliability -- Building Envelope -- High Efficiency Plants and Building Integrated Renewable Energy Systems --Building Automation for Energy Efficiency -- Energy Efficiency in Building Renovation -- Conclusions.

Sommario/riassunto Handbook of Energy Efficiency in Buildings: A Life Cycle Approach offers a comprehensive and in-depth coverage of the subject with a further focus on the Life Cycle. The editors, renowned academics, invited a diverse group of researchers to develop original chapters for the book and managed to well integrate all contributions in a consistent volume. Sections cover the role of the building sector on energy consumption and greenhouse gas emissions, international technical standards, laws and regulations, building energy efficiency

and zero energy consumption buildings, the life cycle assessment of buildings, from construction to decommissioning, and other timely topics. The multidisciplinary approach to the subject makes it valuable for researchers and industry based Civil, Construction, and Architectural Engineers. Researchers in related fields as built environment, energy and sustainability at an urban scale will also benefit from the books integrated perspective.