Record Nr. UNINA9910437765903321 Sustainable Built Environments / / edited by Vivian Loftness, Dagmar **Titolo** Pubbl/distr/stampa New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 **ISBN** 1-4614-5828-5 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (427 illus., 334 illus. in color. eReference.) 720.47 Disciplina Soggetti Architecture Building Regional planning Urban planning **Energy efficiency** Landscape architecture Landscape ecology Sustainable development **Building Construction and Design** Landscape/Regional and Urban Planning **Energy Efficiency** Landscape Architecture Landscape Ecology Sustainable Development Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "Selected entries from the Encyclopedia of sustainability science and technology"--Cover. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Part I: Sustainable Built Environment -- Bioclimatic Design -- Biofuels and Sustainable Buildings -- Daylight, Indoor Illumination, and Human Behavior -- Daylighting Controls, Performance and Global Impacts --Facades and Enclosures, Building for Sustainability -- Geothermal Conditioning: Critical Sources for Sustainability -- Indoor Environmental Quality and Health Improvement, Evidence-Based Design

for -- Natural Ventilation in Built Environment -- Passive House (Passivhaus) -- Passive Solar Heating in Built Environment -- Rating

Systems for Sustainability -- Regenerative Development and Design --Resource Repletion, Role of Buildings -- Sustainability Performance Simulation Tools for Building Design -- Sustainable and Healthy Built Environment -- Sustainable Built Environment, Introduction --Sustainable Design and Construction, Integrated Delivery Processes and Building Information Modeling -- Sustainable Heating Ventilation and Air Conditioning -- Part II: Sustainable Landscape Design and Green Roof Science and Technology -- Biodiversity in Cities, Reconnecting Humans with Nature -- Green Infrastructure and Climate Change --Green Roof Infrastructures in Urban Areas -- Green Roof Planning in Urban Areas -- Green Roofs, Ecological Functions -- Landscape Planning for Minimizing Land Consumption -- Landscape Planning for Sustainable Water Usage -- Landscape Planning/Design of Shrinking Landscapes -- Sustainable Landscape Design, Urban Forestry, and Green Roof Science and Technology, Introduction -- Sustainable Landscapes -- Urban Forest Function, Design and Management --Urban Redevelopment and Quality of Open Spaces.

Sommario/riassunto

Sustainable design is a collective process whereby the built environment achieves unprecedented levels of ecological balance through new and retrofit construction, with the goal of long-term viability and humanization of architecture. Focusing on the environmental context, sustainable design merges the natural, minimum resource conditioning solutions of the past (daylight, solar heat, and natural ventilation) with the innovative technologies of the present. The desired result is an integrated "intelligent" system that supports individual control with expert negotiation for resource consciousness. International experts in the field address the fundamental questions of sustainable design and landscape management: How should the sustainability of landscapes and buildings be evaluated? Which targets have to be set and which thresholds should not be exceeded? What forms of planning and governance structures exist and to what extent do they further the goals of sustainability? Gathering 30 peer-reviewed entries from the Encyclopedia of Sustainability Science and Technology, Sustainable Built Environments provides comprehensive, multidisciplinary coverage of these issues and other aspects of sustainable building and landscape design.