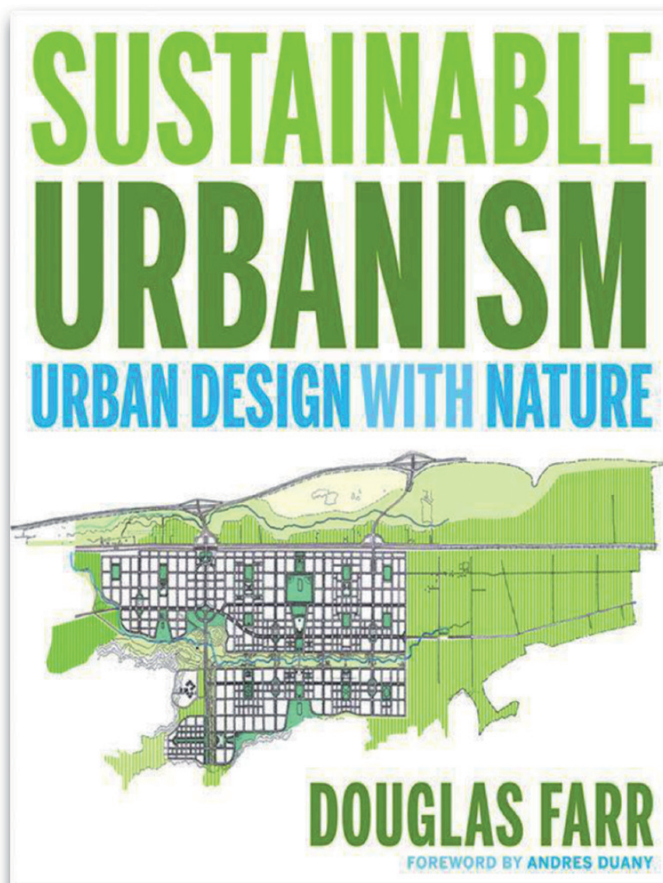


Sustainable Urbanism: Urban design with nature.

Douglas Farr, John Wiley and Sons Ltd, 2008

ISBN: 978-0-471-77751-9



Mankind is becoming increasingly urbanized: there will be five and a half billion people by 2025; worldwide, one in two people now lives in areas highly populated. Just this fact to argue that environmental sustainability is an urban issue, the challenge is the search for a new urbanity. This is why the battle for sustainable development, for a healthier one, just and stable, from the point of view of the environment, is to fight, to a large extent in the cities.

The western economic model, which was asserted with the industrial revolution, produces a great alteration of ecosystems and a large-scale environmental change. The revision of the classical economic finalization of the dynamics of transformation requires the search for new settlement patterns. In this cultural background, the book provides a comprehensive introduction to sustainable urbanism. Written by Douglas Farr, the chair of the Leadership

in Energy and Environmental Design for Neighborhood Development (LEED-ND) initiative, and by worthy American experts on sustainable urban design, who are involved with both the Congress for the New Urbanism and the US Green Building Council, *Sustainable Urbanism: Urban Design with Nature* is an urgent call to action and a comprehensive introduction to sustainable urbanism.

The book, published by John Wiley & Sons Inc. in the 2008, is organized into four parts, eleven chapters plus a preface.

The first part: The case for sustainable urbanism, is divided in two chapters: The built environment: where we are today and Sustainable urbanism: where we need to go. This part functions essentially as an outline for courses in planning, architecture, engineering, environmental studies, and interdisciplinary sustainable development that could be used to train development professionals, public officials, and municipal staff on the emerging practice of sustainable urbanism. It narrates and quantifies the magnitude of the problem, provides a history of pioneering reforms, makes the compelling case for sustainable urbanism, and outlines an agenda of strategic reforms leading to the dominance of sustainable urbanism.

The second part: Implementing sustainable urbanism, is organized in two chapters: Leadership and communications and the Process and tools for implementing sustainable urbanism. It is designed to serve as an operating system to coordinate the work of discrete individuals to achieve magnified benefits. The process section describes the detailed steps needed to implement sustainable urbanism through individual planning and development projects. It also provides templates for selecting qualified design professionals, project types, and development teams.

The third part: Emerging thresholds of sustainable urbanism is articulated in five chapters. It features nearly thirty emerging thresholds of sustainable urbanism. The thresholds can be used as benchmarks for designers to use as performance targets on projects, particularly useful in conjunction with the LEED for Neighborhood Development standard, or to provide the foundation for developing even more robust standards. The standards span five comprehensive areas of concern: density, sustainable corridors, neighborhoods, biophilia, and high-performance buildings and infrastructure. Together

these constitute some of the most challenging opportunities for design integration in sustainable urbanism.

- *Density*. Sustainable urbanism is not achievable at low densities below 7-8 dwelling units per acre (DU/A). The sites should be dense enough to set the place walkable and provide the place with public traffic system. For these reasons, sustainable urbanism requires minimum development densities roughly four times higher than an average U.S. development density of two DU/A.
- *Sustainable corridors* are building blocks of sustainable regions. The main parameters of such a corridor are its density and land use mix. To achieve a well-based density and to free people from automobile dependence, a minimum of 7 DU/A is required. For even better service and modes, a density of 15 DU/A for trolley transfer and 22 DU/A for light rail system are necessary. The corridor land use mix should achieve a 1:1 job-housing balance. Transit corridors are the backbone of sustainable urbanism, linking neighborhoods together with districts and other regional destinations;
- *Biophilia* (Human access to nature) concerns in detail biotopes, stormwater systems, locally grown food and local waste management;
- *High-Performance Buildings and Infrastructure*. In this chapter, the impact of urban planning on building energy usage is shown. Building orientation and massing (which is the work of an urban planner) have significant influence on the energy used by the unit, even before any energy efficiency measures are incorporated into the design. From a planner's perspective the results are obvious: reducing surface-to-volume ratio as much as possible and reducing south-facing glass that receives direct sunlight. The term *high-performance infrastructure* refers to core best practices improving the performance of the entire roadway system.

This design includes street and sidewalk, underground utilities, stormwater infrastructure, landscapes, and streetscape elements.

The fourth part: Case Studies in Sustainable Urbanism is organized in two chapters: Lessons Learned from Sustainable Urbanism and State of the Art in Unbuilt Sustainable Urbanism. It documents a diverse and mature worldwide movement of visionary neighborhood-scale projects, both those already built and those yet to be built, that take a sustainable urbanistic approach.

Summarizing, the essays written by Farr and others delve into such issues as: increasing sustainability through density, integrating transportation and land use, building up sustainable neighborhoods, including housing, car-free areas, locally-owned stores, walkable neighborhoods, and universal accessibility. It may be an answer to many questions referring to how places should grow, how people should get from one place to another and how people could live in a more sustainable way. The text provides a clear direction for urban designers, urban planners, and architects to design cities and developments that are sustainable and reduce environmental harms. The book includes a wide background on sustainability, case studies of exemplars of sustainable urban design and standards for sustainable urbanism. In particular the last one seems to be an important contribution to urban planning techniques to plan and design new types of human settlements.

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