ELEVATE 2009: CLIMATE CHANGE AND THE NEW FRONTIERS OF URBAN DEVELOPMENT

FOREWORD

NESTOR M. DAVIDSON* AND WILLIAM SHUTKIN**

There is a rapidly growing consensus that responding to climate change has become the signal challenge—and equivalent opportunity—of our time, requiring approaches that align economic, social and environmental goals as never before. This alignment defines the purpose and practice of sustainability, demanding strategies that unite not only theory and practice, but also commerce and community. On February 26–27, 2009, the University of Colorado Law School and the University of Colorado Leeds School of Business hosted an interdisciplinary symposium entitled *Elevate 2009: Climate Change and the New Frontiers of Urban Development*. The symposium brought together a diverse group of theorists and practitioners from the fields of law, policy, planning, finance, design, and development, among others, to advance our already rich discourse of sustainable land use and real estate development in the age of global warming. The Articles and Essays collected in this issue reflect some of the most significant and actionable parts of that conversation.

To begin, in her Article, *Modern Lights*, Sara Bronin proposes a creative and innovative legal framework for a regime of solar rights. Beginning with the reality that the natural characteristics of sunlight should guide any solar rights regime, Bronin draws from natural resources law, particularly water law, to posit a flexible approach that would empower individuals to choose among different paths to solar rights. In this functional regime, solar rights would clarify the identity of the right holder of the initial entitlement and the nature of the entitlement itself. Bronin further argues that solar rights should be assigned to the party who could put such rights to

* Associate Professor, University of Colorado Law School.

** Visiting Scholar, Renewable and Sustainable Energy Institute, University of Colorado Boulder.

the highest use and that solar rights should be protected by a liability rule, as opposed to a property rule. Allowing compensation for burdened landowners, she argues, would help avoid takings challenges and other obstacles in the way of solar-rights regimes. Solar power has, Bronin concludes, "too long remained in the shadows," and her proposal represents a promising path toward the light.

Next, Patricia Salkin provides a fascinating, ground-level analysis of local-government innovation in response to climate change in her Article, *New York Climate Change Report Card: Improvement Needed for More Effective Leadership and Overall Coordination with Local Government*. Using the state of New York as an example, Salkin argues that the most effective strategies to slow climate change can be accomplished at the local level through building codes, zoning ordinances and other land-use regulation. She explains these tools must be implemented in ways that are innovative but also consistent, which would send a message to local residents that programs combating climate change will endure. Reacting to the inherent complexity of the array of state and local initiatives in New York, Salkin recommends the creation of a "climate change information clearinghouse" as well as "a statewide catalogue of climate change laws, development of benchmarking tools, and the establishment of a state-local climate change task force." For Salkin, the key to effective local-government action lies not only in developing and implementing appropriate strategies for emissions reduction, but an abiding commitment to public education about the immediacy of the challenge and need for a timely response.

Matthew Kiefer's *Toward a Net Zero Carbon Planet: A Policy Proposal* argues for adopting a science-based balanced global carbon budget allocated to smaller units of government, industry, and neighborhoods with the freedom to choose how to meet the budget within a set time frame. Kiefer notes the need for a policy utilizing absorption, efficiency, and substitution techniques adaptable for long-term implementation. He emphasizes that this global carbon budget must be clear, comprehensive and flexible in order to gain, and keep, public support. Devolution, Kiefer argues, is critical to harnessing the innovation and flexibility necessary for multi-scale implementation. Kiefer is realistic about the barriers his proposal faces—including the limited role that cities play in carbon regulation; the problem of unfunded mandates for local governments; and

some long-held orthodoxies of the environmental movement—but ably addresses these concerns to promote a carbon budget policy initiative aligned with the scale of the challenge.

In *Policy, Urban Form, and Tools for Measuring and Managing Greenhouse Gas Emissions: The North American Problem*, Nicole Miller, Duncan Cavens, Patrick Condon, and Ronald Kellett examine the need for effective policy tools to manage greenhouse gas ("GHG") emissions through the lens of urban form. Noting that locally influenced policy decisions are linked to urban form—"how streets, blocks, land uses, buildings, and infrastructure are arranged across regions, cities and neighborhoods"—Miller and her co-authors argue that policymakers across varying scales of governance must be informed and equipped with tools for decision making that go beyond existing information-management approaches to aid interpretation and foster collaboration. This means, Miller and her coauthors explain, that we need to account for multiple processes that generate GHG-performance data and policies and that we must examine all factors that influence ground-level performance, accounting for sensitivity to aggregate effects of how building form, shared walls, orientation and other features of the built environment influence GHG performance at the site itself, and also at the district and regional scales. This multiscalar approach fills a significant gap in our current array of planning tools.

Peter Pollock's *A Comment on Making Sustainable Land-Use Planning Work* makes the case that we already have at hand the planning tools and regulations necessary to achieve substantially better environmental performance outcomes, including lowering GHG emissions. What we lack, Pollock contends, is successful implementation, given a variety of barriers in governmental structure, economic policies, and entrenched and outmoded planning and development practices. Pollock argues that land-use planning is too local, resulting in negative, spatial externalities that could be avoided if planning decisions were made at a more regional level. The fundamental conflict between accommodating growth and satisfying concerns that intense redevelopment brings to existing community members can be solved by a broader, more regionalized vision of future land-use changes consistent with the direction the community wants to grow. Pollock uses the city of Boulder, Colorado as an example, where sales tax revenue distortions have arisen from a high tax base serving a small population.

In contrast, Pollock argues, local tax systems need to be developed to account for new growth paying only its share of the proper *existing* public services costs, not "new public services that exceed community standards." Finally, Pollock argues that zoning reform needs to link to physical-area planning, taking into account community members' interests and to allow areas previously under discretionary review to adapt to new conventional zoning reforms. In sum, Pollock's provocative yet practical recommendations can guide regions to overcome the current gridlock on so many land-use questions related to sustainability.

Ending on a creative note, Brian Muller tackles the work of Jim Kunstler in his Essay, *Rethinking the Cycle of Adaptation: Climate Change, Community Decision Making and the Urban Sustainability Retrofit through the Lens of James Howard Kunstler*. Muller compares Kunstler's works, especially his latest book, the novel *World Made by Hand*, to current efforts to address climate change in cities across the country. Muller argues that Kunstler's works describe an economic and political lifestyle that is reminiscent of community-centered Luddite life, with little electricity, no gas, and simple, low-tech irrigation. Current local, state, and federal responses to climate change, including adaptation strategies, which Muller terms the "Sustainability Retrofit," parallel Kunstler's almost-apocalyptic vision, but without abandoning optimism. Muller usefully outlines a set of practical questions that the Sustainability Retrofit movement ought to examine, but gives us reason to think the movement is gaining momentum, even if slowly.

No collection of articles and essays can by itself address, let alone answer, the myriad questions climate change presents us, whether as theorists or practitioners. Nevertheless, as evidenced in this Symposium issue, the ideas and insights that are being generated at the intersection of economics and ecology, and regulatory regimes and market forces, are formidable. They are the building blocks of a sustainable approach to land-use and development in our warming, globalizing, and growing world, and of the practice and policy innovations that must transcend traditional sectors, institutions, and geographic boundaries. We hope these writings will spark further thinking and, more important, bold and skillful action.