bate. This volume is thus useful both as a reference for scholars interested in the debate and as a teaching tool for courses that pay significant attention to the question of reform of the institutions of global environmental governance.

Bulkeley, Harriet, and Michele Betsill. 2003. Cities and Climate Change: Urban Sustainability and Global Environmental Governance. London and New York: Routledge.

Reviewed by Kai N. Lee Williams College

Agenda 21, set forth at the Earth Summit in 1992, provided a first draft of instructions for finding a sustainable world, in which meeting the needs of the present might not entail compromising the ability of future generations to meet their own needs. As has become apparent in the years since, Agenda 21 was a crude and incomplete chart. What we have is an atlas no better than the earliest maps of the age of discovery, when Europeans filled in large stretches of the Americas and Asia with drawings of monsters and labeled them "terra incognita."

Harriet Bulkeley and Michele Betsill, young social scientists in the UK and US, respectively, have explored a significant region of the new world of sustainable development: the way that cities are undertaking climate protection initiatives. The results are both disappointing and hopeful—as one might expect from stories of pioneers in strange lands.

Urban populations now equal those in rural areas, and urban centers account for far more energy use and economic output than does the countryside. Cities in the developed economies drive greenhouse gas emissions worldwide through the consumption and investment choices of their residents, and it is logical to look to these places in the effort to contain and to mitigate climate change.

Cities and Climate Change is a policy evaluation of the Climate Change Program (CCP) of the International Council for Local Environmental Initiatives (ICLEI), a transnational nongovernmental organization created in 1990 to provide linkages among local governments committed to global sustainability. The CCP is examined not in itself but through its effects in six local governments: Newcastle, Cambridgeshire, and Leicester in the United Kingdom, Newcastle in New South Wales, Australia (all based on empirical studies by Bulkeley), and Denver and Milwaukee in the United States (done by Betsill). These cities include declining industrial centers (both Newcastles, Milwaukee, Leicester) and growing service-based economies (Cambridgeshire, Denver). The former are seeking to join the ranks of the latter. For all, the financial advantages and political cachet of mitigating global warming provide incentives to local government leaders.

Surprisingly, the quantitative performance of the governmental programs is not evaluated, so the reader cannot compare the tonnes of greenhouse gases

that were not emitted, nor the percentage reductions from baseline projections. Instead, Bulkeley and Betsill focus on organizational change. Australian Newcastle and Denver are judged to be successes: "climate change considerations have been integrated into the institutional structure of local government . . . [including] policy and financial decisions" (p. 172); targets have been set and there is monitoring to measure progress toward them; and both cities have spread their lessons learned through the CCP network. The good news is that dozens of cities have innovated, without prodding from higher levels of government and sometimes in quiet opposition to them.

But the record is mostly mixed or negative. Local governments do not control much energy use beyond public buildings and some public transport. Governments' influence through land-use planning, building codes, and regulation turns out to be inadequate, especially when faced with pressure to facilitate economic expansion. Even mayoral leadership does not, by itself, suffice to create long-lasting commitment. And CCP itself "has not had any significant impact on . . . the . . . attention given to local initiatives within international policy arenas" (p. 183).

The authors trace these shortcomings to a misunderstanding of the job to be done. CCP and its participating cities imagine that better information and decision-making hold the key to managing greenhouse emissions. Spreading information about best practices, facilitating monitoring and modeling of energy use, and building networks of colleagues in city governments around the world are given priority in CCP. While such a technocratic approach is *de rigueur*, Bulkeley and Betsill say, even more important are governmental authority, financial resources, and the recognition that climate policy is being fashioned in a chaotic, opportunistic multi-level process, in which governance has displaced government. "The CCP network has not recognized the shift from government to governance, of which it is a part" (p. 191).

This point is contradictory. The fluid concept of "governance" draws attention toward politics and away from the administrative workings of top-down bureaucracy and bounded rationality that Bulkeley and Betsill call "government." But they are surely right to measure success by institutionalization—that is, by the inscribing of climate protection in the indelible routines of bureaucracy.

This riddle—of needing simultaneously a more inclusive politics and more administrative power to transcend narrow interests—lies at the heart of postindustrial governing, from social welfare to sustainable development. Bulkeley and Betsill have recorded something real, and they seem puzzled by it, as are many observers.

In 1671 two Jesuit priests compiled a map of Lake Superior, the largest body of fresh water in North America. They paddled a canoe around the lakeshore, took a compass bearing as they set out for each landmark, then counted the paddle strokes needed to reach it. This proved to be the most accurate map of Lake Superior for more than a century. Like many analysts of cli-

mate policy, Bulkeley and Betsill would say we have far less than a century to find a good map of the sustainable world. In this careful and honest study, they count strokes in a long journey.

Ebbin, Syma A., Alf Håkon Hoel, and Are K. Sydnes, eds. 2005. A Sea Change: Exclusive Economic Zones and Governance Institutions for Living Marine Resources. The Netherlands: Springer.

Reviewed by Frank Alcock New College of Florida

It has now been more than two decades since the 1982 Law of the Sea Convention, a landmark event that codified coastal states' authority to govern living marine resources within 200-mile exclusive economic zones (EEZs). A Sea Change reflects upon the world's experience with this dramatic institutional change.

The volume first seeks to characterize the nature of institutional development in the wake of the creation of EEZs. It then addresses issues relating to analytical themes developed by Oran Young in conjunction with a broader research program with which this volume is associated. These relate interplay among international, national and local institutions that were triggered by the creation of EEZs, and the fit between marine resource management regimes developed within and around EEZs and the biophysical systems in which such resources are embedded. The treatment of these themes in this volume remains largely descriptive; the volume simply depicts various forms and instances of interplay and makes observations of good or bad fit between institutional regimes and the ecosystems they seek to address.

The volume is divided into four sections. The first section includes an introduction and a legal assessment of the EEZ regime in its entirety. The second section focuses on a set of domestic cases that include Norway, the Russian Federation, Australia, the Pacific Northwest region of the United States, and the Trobiand Islands of Papua New Guinea. A third section focuses on regional cooperation strategies and includes a general assessment of regional fisheries organizations and case assessments of the South China Sea and the Pacific Islands. A final section on new directions contains a discussion of relevant workplans of the FAO and the World Summit on Sustainable Development, an assessment of

1. A Sea Change is a product of the Institutional Dimensions of Global Environmental Change (IDGEC) project's flagship activity entitled Performance of Exclusive Economic Zones, or PEEZ. IDGEC, in turn, is a one of four core projects conducted under the auspices of the International Human Dimensions Programme on Global Environmental Change. For more information on IDGEC see http://fiseta.bren.ucsb.edu/~idgec/. For more information on IHDP see http://www.ihdp.uni-bonn.de/. A thorough discussion of the themes of fit and interplay can also be found in Oran Young's The Institutional Dimensions of Environmental Change: Fit, Interplay, Scale (Young 2002).