In the twenty-first century, innovation and sustainable development are both means and ends of urban planning and economic growth: innovative and sustainable urban environments provide fertile ground for economic growth that advances the pace of technological innovation and creates more opportunities to develop sustainably. The three case studies presented here – in Barcelona, Boston, and Curitiba – demonstrate how innovation and environmental sustainability can serve as the root of urban development and economic growth.

These innovation paradigms and districts are implemented at different scales, sometimes encompassing areas of several hundred acres. While the geographic concentration of people, capital, and resources to generate economic wealth is certainly not a new concept, these developments are unique for their focus on people and place. These “clusters,” defined by the Metropolitan Policy Program at the Brookings Institution as “geographic concentrations of interconnected firms and supporting and coordinating organizations,” are designed to foster creativity and maximize innovation. They are created under a “live-work” paradigm, with plans and amenities oriented towards the lifestyles of creative persons, young professionals, and entrepreneurs. These places are consciously planned with social sustainability in mind; the goal is to not only attract innovators but to inspire them and encourage them to build their lives and careers there.

The importance of place helps explain the current focus of numerous metropolitan leaders on clusters and innovation districts. The current recession has called into question decades of speculative growth and national broad-stroke economic policies focused on consumption. In their paper, “The New ‘Cluster Moment’: How Regional Innovation Clusters Can Foster the Next Economy,” Bruce Katz and Mark Muro assert that the financial crisis of 2007 – 2008 and continued economic distress demonstrate the need for a
new paradigm of economic development that is “export-oriented, lower carbon, innovation-driven” and grounded in specific “real places” – cities and regions (Muro and Katz, 2010a).

Leaders and politicians are now seeking a new kind of growth “that depends less on bubbles and consumption and more on the production of lasting value in metropolitan economies” (Muro and Katz, 2010b, 4). Organizing the national economy around clusters focuses resources, builds partnerships, and maximizes efficiency and impact (Muro and Katz, 2010b, 32). Citing examples such as life sciences in Indiana, interactive media in Puget Sound, and aviation in Wichita, Katz and Muro demonstrate that every region has specific needs and unique circumstances that will allow it to succeed in this new economy.

Innovation and increased productivity precipitated by externalities such as knowledge spillovers and spontaneous interactions provide a central component of the innovation cluster paradigm. Studies have demonstrated that, on average, businesses located in clusters have stronger growth and survival rates than those not located in clusters (Mammone). But Muro and Katz look deeper into the purpose of clusters, stating that “the cluster paradigm emphasizes the regional underpinnings of the national economy; highlights the unique variations and specializations that define productive local economies; and focuses attention on the myriad actors and the dynamics of their exchanges and interactions that give rise to new innovations and jobs” (Muro and Katz, 2010b, 5).

This new economic paradigm emphasizes the power of place: each neighborhood, city, and region has unique circumstances and individual actors who drive innovation and economic growth in ways different from any other place. Paul Krutko, the president and CEO of Ann Arbor SPARK and former chief development officer of San Jose, asserts that sustainable economic development creates new markets and spurs economic growth through both the supply side—manufacturing of sustainable products and the creation of job opportunities — and the demand side—education about green practices and consumption. “The sweet spot for policymakers are those opportunities where both the economy and climate protection can be advanced simultaneously through transformative projects,” Krutko states. “Policymakers and citizens of all stripes will readily embrace new climate protection policies and programs if they can quantify the economic benefit of doing so.” Planners, as designers of communities that form the building blocks of productive metropolitan regions, are uniquely positioned to capitalize on this moment and create sustainable communities of lasting value.

References


Paul Krutko, e-mail interview with authors, July 8, 2011.

*Image Credits:*

(clockwise from top left): Skyline of Natal, Brazil (Beraldo Leal, CC 2.0); Torre Agbar facade detail; Yokohama, Japan; Boston waterfront boardwalk (courtesy Boston Innovation District); Centro Internacional de Inovacao (John Reinhardt, AICP); Curitiba BRT stop (John Reinhardt, AICP).