Climate Mitigation as Socio-Technical Transition: The Evolution of Eco-Cohousing in Tompkins County, New York

Robert Boyer, Ph.D., Assistant Professor of Geography & Earth Sciences, University of North Carolina at Charlotte [rboyer1@unc.edu]

The socio-technical transitions (transitions) framework contends that the dramatic social and technological changes implicit in the agenda for sustainability must begin in isolated "niche" networks outside the rules and priorities of the mainstream. Niche serve as "incubation spaces" for young, sub-optimal practices (Rip and Kemp 1998). These practices would not typically "survive" in the mainstream, or in what transitions scholarship labels "socio-technical regimes". Regimes consist of multiple overlapping social and technological structures. They do not change easily. Regimes change, however, under pressure from exogenous, societal-scale pressures from the broad "socio-technical" landscape. It is under such pressure that "niche" practices can emerge into the mainstream, either replacing or supplementing regime practices (Geels 2002).

The group chose to settle on a site about 2.5 miles outside of the City of Ithaca—close enough to the city so that members could commute to "mainstream" jobs, but far enough that the group could enact their vision of five clustered neighborhoods surrounded by a mix of gardens and common facilities. Practical as the decision was, it would also force the group to reconcile their vision with the rules of the urban development mainstream.

The early group struggled financially, practically, legally, and ideologically to construct a permanent neighborhood, and it would take nearly five years between the official founding of Eco Village at Ithaca and the construction of its first building.

Financial Barriers: The group was able to raise $80,000 in loans to purchase land very quickly, but slow progress on necessary financial and legal (proposals for tax-exempting the group) slowed project initiation.

Practical Barriers: The group had little experience building homes, and had trouble moving forward on construction. They ultimately hired a local architect and builder to help them move forward.

Legal Barriers: The group had to navigate to create a permanent neighborhood. The cohousing model does not fit into the most prevalent model of homeownership, and the group spent 11 months creating a new category with Town of Ithaca—a Special Land Use District (SLUD) not an existing ownership or regulatory structure. EVI's goal was to create a "socially responsible" and "sustainable" neighborhood, but the rules and regulations were based on current existing categories.

Ideological Barriers: The group set out to create a co-housing project as a new model for urban development, and it did not fit any existing ownership or regulatory structure. EVI's goal was to create a "socially responsible" and "sustainable" neighborhood, but the rules and regulations were based on current existing categories.

Reversing the most troubling climate and ecosystem trends will require drastic changes in urban development practice in cities and regions, without or without support from state or federal lawmakers. This study illustrates that novel sustainability strategies can emerge from such networks and can be translated from one context to another. This translation process, however, requires that both grassroots actors and mainstream regime actors adjust to each other's priorities and problem frames.

The grant application proposes three principle activities: 1) Update, document and package EVI best practices for widespread use; 2) Create model building codes, policies, and zoning ordinances that support Eco-Village-type development practices; and 3) Apply these principles in three demonstration settings as pilot projects, including rural, suburban, and urban settings. In April 2011, the EPA awarded Tompkins County $357,454 to execute the project, and collaborators have since rebranded the broad initiative as "Welcome Home: Community that Works" (community-that-works.org).

In 2010 and 2011 several events coincided to stimulate the transition of EVI's cohousing model into mainstream application. The county released its "2020 Energy Strategy" in June 2010, around the same time that site plans for EVI's third neighborhood, TREED, crossed the desk of county planners. The planned 80-90 percent energy savings of homes in TREED impressed county planners. These plans aligned with a grant opportunity from the Environmental Protection Agency's Climate Showcase Communities (CSC). The CSC program awards grants of up to $500,000 to communities engaged in innovative climate mitigation projects. At a meeting of the Tompkins County Climate Protection Initiative (TCCPI) county planners and other local activists connected the CSC program with EVI's TREED project as a project the community could "showcase."

In 2010 and 2011 several events coincided to stimulate the transition of EVI's cohousing model into mainstream application. The county released its "2020 Energy Strategy" in June 2010, around the same time that site plans for EVI's third neighborhood, TREED, crossed the desk of county planners. The planned 80-90 percent energy savings of homes in TREED impressed county planners. These plans aligned with a grant opportunity from the Environmental Protection Agency's Climate Showcase Communities (CSC). The CSC program awards grants of up to $500,000 to communities engaged in innovative climate mitigation projects. At a meeting of the Tompkins County Climate Protection Initiative (TCCPI) county planners and other local activists connected the CSC program with EVI's TREED project as a project the community could "showcase."

The poster follows the evolution of a niche eco-co-housing model, from its origins as a grassroots project to its recent application in the housing market of Ithaca, New York. Findings support and understanding of urban planning as a process of social learning rather than a causal-linear process, a common assumption in planning scholarship and theory.

The early group struggled financially, practically, legally, and ideologically to construct a permanent neighborhood, and it would take nearly five years between the official founding of Eco Village at Ithaca and the construction of its first building.

Financial Barriers: The group was able to raise $80,000 in loans to purchase land very quickly, but slow progress on necessary financial and legal (proposals for tax-exempting the group) slowed project initiation.

Practical Barriers: The group had little experience building homes, and had trouble moving forward on construction. They ultimately hired a local architect and builder to help them move forward.

Legal Barriers: The group had to navigate to create a permanent neighborhood. The cohousing model does not fit into the most prevalent model of homeownership, and the group spent 11 months creating a new category with Town of Ithaca—a Special Land Use District (SLUD) not an existing ownership or regulatory structure. EVI's goal was to create a "socially responsible" and "sustainable" neighborhood, but the rules and regulations were based on current existing categories.

Ideological Barriers: The group set out to create a co-housing project as a new model for urban development, and it did not fit any existing ownership or regulatory structure. EVI's goal was to create a "socially responsible" and "sustainable" neighborhood, but the rules and regulations were based on current existing categories.

Reversing the most troubling climate and ecosystem trends will require drastic changes in urban development practice in cities and regions, without or without support from state or federal lawmakers. This study illustrates that novel sustainability strategies can emerge from such networks and can be translated from one context to another. This translation process, however, requires that both grassroots actors and mainstream regime actors adjust to each other's priorities and problem frames.

The group chose to settle on a site about 2.5 miles outside of the City of Ithaca—close enough to the city so that members could commute to "mainstream" jobs, but far enough that the group could enact their vision of five clustered neighborhoods surrounded by a mix of gardens and common facilities. Practical as the decision was, it would also force the group to reconcile their vision with the rules of the urban development mainstream.

The early group struggled financially, practically, legally, and ideologically to construct a permanent neighborhood, and it would take nearly five years between the official founding of Eco Village at Ithaca and the construction of its first building.

Financial Barriers: The group was able to raise $80,000 in loans to purchase land very quickly, but slow progress on necessary financial and legal (proposals for tax-exempting the group) slowed project initiation.

Practical Barriers: The group had little experience building homes, and had trouble moving forward on construction. They ultimately hired a local architect and builder to help them move forward.

Legal Barriers: The group had to navigate to create a permanent neighborhood. The cohousing model does not fit into the most prevalent model of homeownership, and the group spent 11 months creating a new category with Town of Ithaca—a Special Land Use District (SLUD) not an existing ownership or regulatory structure. EVI's goal was to create a "socially responsible" and "sustainable" neighborhood, but the rules and regulations were based on current existing categories.

Ideological Barriers: The group set out to create a co-housing project as a new model for urban development, and it did not fit any existing ownership or regulatory structure. EVI's goal was to create a "socially responsible" and "sustainable" neighborhood, but the rules and regulations were based on current existing categories.

Reversing the most troubling climate and ecosystem trends will require drastic changes in urban development practice in cities and regions, without or without support from state or federal lawmakers. This study illustrates that novel sustainability strategies can emerge from such networks and can be translated from one context to another. This translation process, however, requires that both grassroots actors and mainstream regime actors adjust to each other's priorities and problem frames.

EcoVillage at Ithaca emerged from a nine-month, 3000-mile, 150-person march, from Santa Monica, California to New York City in 1990, by social activists Joan Bakardjian and Liz Walker, the "Global Walk for a Livable World" hoped to raise awareness about the environmental threats of consumerist lifestyles.