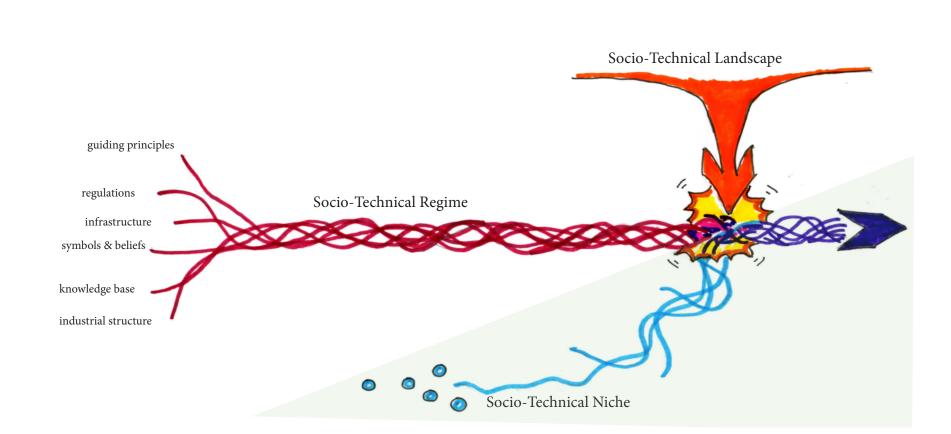
Climate Mitigation as Socio-Technical Transition: The Evolution of Eco-Cohousing in Tompkins County, New York Robert Boyer, Ph.D., Assistant Professor of Geography & Earth Sciences, University of North Carolina at Charlotte. [rboyer1@uncc.edu]

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. Niches serve as "incubation spaces" for young, suboptimal 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 "sociotechnical landscape". It is under such pressure that "niche" practices can emerge into the mainstream, either replacing or or supplementing regime practices (Geels 2002).



This poster follows the evolution of a niche eco-cohousing 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 practice throughout the last century.

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

Inspired in part by Kathryn McCamant and Charles Durret's book Cohousing: A Contemporary Approach to Housing Ourselves (1989), group leaders used the momentum of the march to begin work on a more permanent project. Bokaer and Walker hosted an envisioning retreat in Ithaca, New York 1991 to begin sketching ideas for what would evolve into today's ecovillage.

[PHASE 1: EcoVillage as an Idealistic Vision]

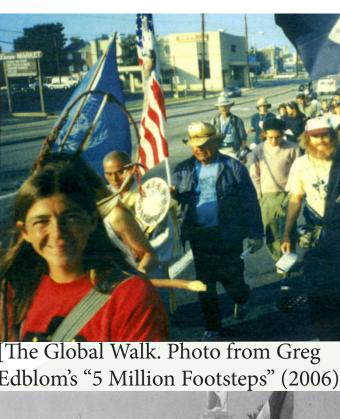


[The Global Walk for A Livable World, February 1-October 24, 1990]





[Global Walk organizers, Joan Bokaer (left) and Liz Walker (right)]



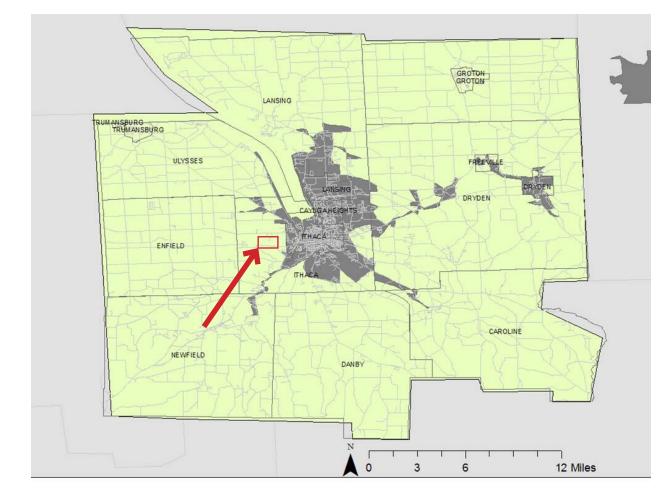


Walker's "Ecovillage at Ithaca: Pioneering Sustainable Culture" (2005)]

EcoVillage at Ithaca, Town of Ithaca, New York



The group chose to settle on a site about 2.5 miles outside 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 this 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. The cohousing model does not "fit" into the mass production model of mainstream housing, and it would take nearly five years between the official founding of EcoVillage at Ithaca and the construction of its first

Financial Barriers: The group was able to raise \$400,000 in loans to purchase land very quickly, but slow progress on construction forced the group to sell a portion of their land and take an additional loan.

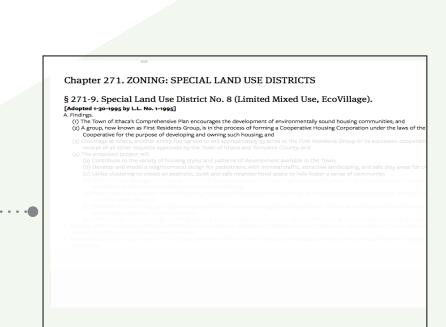
Practical Barriers: The group had little experience building homes, and had trouble moving forward on construction. They ultimately hired a local architect and builder to help them move from vision to reality.

Legal Barriers: The group's mixed-use vision did not fit any existing ownership or regulatory structure. EVI's parcel, as it exists today, is actually five parcels controlled each by its own 501(c)3 non-profit board. There are too many local, state, and federal entities to satisfy for the entire project to exist under one legal framework.

Regulatory Barriers: The group had to negotiate with the Town of Ithaca to create a customized zoning category, or a "Special Land Use District" often known as a "Planned Unit Development." Most residential development is designed to fit an existing zoning category, but the ecovillage vision did not fit into any existing category. Instead the group spent 11 months creating a new category with Town officials.

Ideological Barriers: Early group members disagreed about whether their project serve as a new model for "middle class" housing or a model that suited every income level. After a painful six-month deliberation, the group settled on the later "middle class" option, but lost multiple early key members.

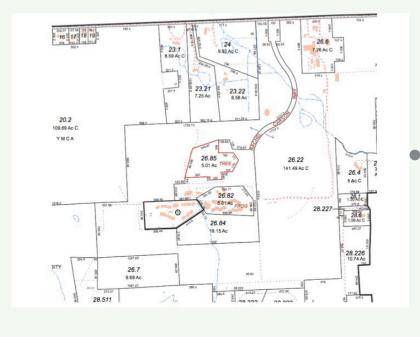
[PHASE 2: EcoVillage as an Experimental Settlement]



[Special Land Use District (SLUD) drafted with Town of Ithaca]



[FRoG (First Residents Group) built 1996]



[EVI consists of five parcels, each owned by distinct non-profit entities.

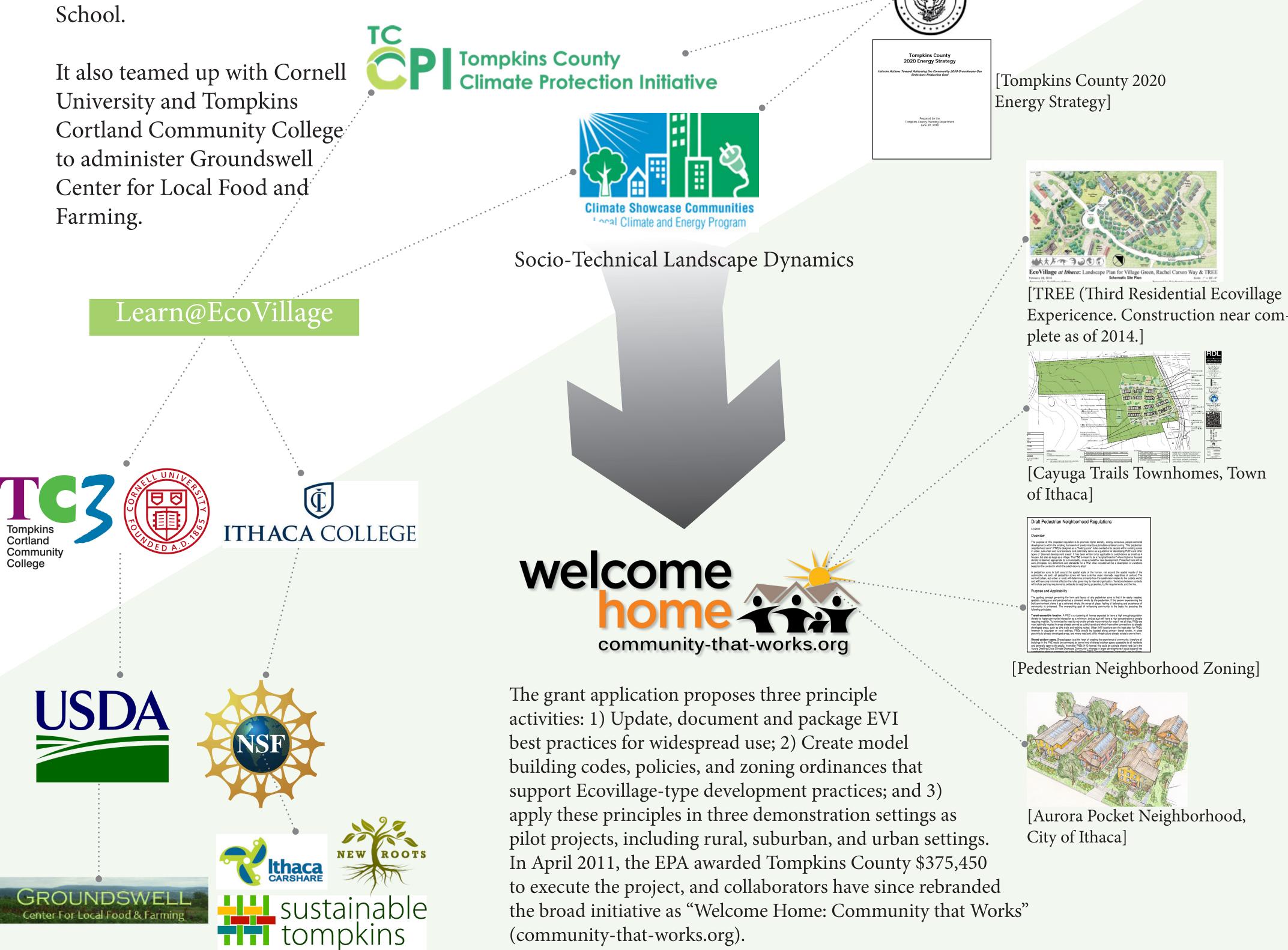


[SONG (Second Neighborhood Group) built 2001]

Scaling-Up: In EVI's second decade, its nonprofit organization Learn@ EcoVillage began to partner with educational and nonprofit institutions in the region, earning grants to found such initiatives as Ithaca Car Share, Sustainable Tompkins, and New Roots Charter High School.

It also teamed up with Cornell University and Tompkins to administer Groundswell. Center for Local Food and

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, TREE, crossed the desk of county planners. The planned 80-90 percent energy savings of homes in TREE 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 TREE project as a project the community could "showcase".



[PHASE 3: EcoVillage as a Leading Community-Based Organization]

The broadening of EVI's network coincided with national and international dynamics that framed climate change as ·I.C·L·E·I a salient public policy issue. Prior to the 1990s, climate change was effectively non-Governments _ for Sustainability existent as a public concern. In the 1990s, agreements like the Rio "Earth Summit" (1992), the Kyoto Protocol (1997), and the Clinton Administration's Climate Action Plan (1993), helped move climate change on the political agenda. ICLEI's Cities for Climate Protection program (CCP) also re-framed climate action as a local undertaking, and cities around the USA began crafting their own plans for climate change.

[PHASE 4: EcoVillage as a Partner in Urban Development]

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 'niche' contexts that play by different rules, and that these practices 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.

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