

# Consortium on Law and Values in Health, Environment & the Life Sciences

## 2010-11 Student Proposal Cover Page

### Applicant Information

Applicant Name:	I-Chun Catherine Chang	Email: chang444@umn.edu
Project Title:	Chinese Green Capitalism and Urban Sustainability: The Cases of Shanghai's Dongtan Eco-City and Tianjin Eco-City	
Department:	Geography	College: CLA
Home address:	2300 E. Franklin Ave., Apt 411	City & State: Minneapolis, MN Zip: 55406
Faculty advisor name:	Helga Leitner Eric Sheppard	Email: eqj6139@umn.edu; sheppard@atlas.socsci.umn.edu <input type="checkbox"/> Not applicable
Dept. Head's name:	Abdi Samatar	Dept. Head's email: samat001@umn.edu
Dean's name:	James Parente	Dean's email: paren001@umn.edu

How did you hear about this funding opportunity? Department email list

### Funding

Total amount of funding requested:	<b>\$9,420</b>	Is funding available within your center or dept for this project? No
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Executive summary (maximum 200 words)

Proliferating environmental sustainability policy frameworks based on green capitalism suggest that sustainability and economic competitiveness are essentially interdependent and mutually enhancing. Under these policy discourses, cities are designated as the strategic geographical locales for fulfilling the green capitalist goal of reconciling the contradiction between environment and development that has long troubled capitalist development. While most urban sustainable agendas are crafted based on the experience of post-industrial countries, the promise of green capitalism faces the biggest challenge at places where industrial production still dominates the economy. However, research of whether, and how, urban sustainability policies become variegated across places and social contexts beyond post-industrial economies is insufficient. This proposed research will examine the discourses and practices of urban sustainability and green capitalism in contemporary China. Through the case studies of the Dongtan eco-city in Shanghai and Tianjin Eco-City, this research will interrogate: a) the green developmental logics, rationalities and conceptions of sustainability underlying these eco-city projects; b) how these logics, rationalities and conceptions have been shaped by local and international institutions and individual actors at multiple geographic scales (local to global); and c) how they have articulated with prevailing global sustainability discourses to become globally mobile eco-city exemplars.

### Approvals

*Check all appropriate approvals required for your proposal. Approvals must be obtained prior to receipt of funding. If you have applied for approval but have not yet received it, indicate that below.*

IRB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Application pending
IACUC	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Application pending
Other	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Application pending

### Checklist

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- The proposal is 1000 words or less excluding budget, biographies, references and citations.

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  - The proposal includes a work plan with a specific timeline using months or quarters to identify work to be done and completion dates.

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  - The proposal includes a 1-2 paragraph biography of the applicant and all co-investigators.

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  - The budget form is complete including the funds sought for this project, other pending applications for this project, and the amount/source of matching or other funds.

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  - The applicant's faculty advisor is copied on the application email. Professional students w/o advisors check NA.

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  - All necessary approvals are pending or received.
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## **Proposal for the Consortium on Law and Values in Health, Environment and the Life Sciences Research Grants (Graduate Student and Professional Student)**

### **Applicant**

I-Chun Catherine Chang, PhD Candidate, Geography (chang444@umn.edu)

### **Faculty Advisors**

Dr. Helga Leitner, Professor, Geography (eqj6139@umn.edu)

Dr. Eric Sheppard, Regents Professor, Geography (sheppard@atlas.socsci.umn.edu)

### **Project Title**

Chinese Green Capitalism and Urban Sustainability: The Cases of Shanghai's Dongtan Eco-City and Tianjin Eco-City

### **Description of Proposed Research**

My research examines how urban sustainability policies have become variegated across places and social contexts beyond post-industrial economies. The prevailing idea of green capitalism claims that economic competitiveness and environmental sustainability can be mutually enhancing, and create durable economic growth (Gibbs, 2009). Urban sustainability policies based on green capitalism highlight the role of cities as strategic geographical locales for the emergence, translation, circulation and realization of sustainability at all scales (Davis, 2010; Suzuki et al, 2010). While such policies are primarily crafted based on the experience of Western post-industrial cities, they are now widely embraced in places where industrial production dominates the economy. Yet research into whether, and how, such policies may become variegated when traveling across places and geographical scales is still lacking, with little research on the relationship between urban sustainability policies and green capitalism outside the North America and Europe.

More specifically, my research examines urban sustainability discourses and practices and green capitalism in contemporary China. By using the Dongtan and Tianjin eco-city projects as case studies, I plan to address the following questions:

- a) What are the green developmental logics, rationalities and conceptions of sustainability underlying eco-city projects in Chinese cities?
- b) How have these Chinese eco-city projects been shaped by local and international institutions and individual actors at multiple geographic scales from the local to the global?
- c) How are these projects articulated with prevailing global sustainability discourses, are these models replicated elsewhere, and are they being scaled up to become a constituent part of international sustainability discourses?

The focus of this research on Chinese cities aims to expand our knowledge of the variegated relationships between environment and development beyond post-industrial capitalist societies more generally.

### **Chinese Eco-City Projects: Dongtan Eco-City and Tianjin Eco-City**

Dongtan Eco-city is a joint Sino-British project outside Shanghai. It started in 2005 and aimed to create an ecologically, socially and economically self-sufficient city. After 2006, Dongtan became heralded as a model urban sustainability project by the Shanghai City government and Chinese and British central governments, not only for Chinese cities but also across the globe. The Dongtan project had been halted, presumably for political reasons, but its master plan continues to be cited as “best practice” green urbanism among international urban sustainability alliances. Drawing on the Dongtan experience, the Chinese government collaborated with Singapore to initiate another large-scale Chinese eco-city project on the outskirts of Tianjin City in 2008. Under construction since 2010, this project aims to become another replicable sustainability model, for cities in China and abroad facing similar challenges of rapid economic growth and large population concentration. The status of both the projects as models circulating through broader-scale urban sustainability discourses and practices makes them ideal cases to study the variegated urban-scale implementation of green capitalism beyond post-industrial capitalist societies, and the emergence and circulation of eco-city discourses and practices across places and spatial scales.

### **Research Methods**

I will undertake a multiple-methods research design, including document analysis, archival research, discourse analysis, formal open-ended and in-depth interviews, informal interviews and participant observation:

- a) The first question requires a comparative examination of sustainability policy narratives and discourses, at different geographical scales, related to Dongtan and Tianjin, including the local communities’ and Chinese official views on sustainability, and those from international sustainability advocacy communities. I will start with archival analysis of second-hand documentations<sup>1</sup>. Interviews and discussions with knowledgeable participants in both eco-city projects will also be conducted, including key informants working in sustainability-related public and private sectors, professionals in local planning institutes, and urban planning related scholars in local universities and research institutes.
- b) The second question calls for tracking the projects’ planning and implementation, identifying key actors and other stakeholders, and analyzing their actions, reasoning, and interrelations. I will identify and trace actors and their networks, beginning with the second hand document analysis and key informant interviews mentioned for the question. The major actors identified so far include the participating national (and local) governments<sup>2</sup>, sustainability planning technocrats, professionals and sustainability experts<sup>3</sup>, relevant development and architectural

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<sup>1</sup> including reports and documents of sustainability policies, both for China in general and specifically related to Dongtan and Tianjin projects; governmental publications; sustainability and eco-city brochures and educational booklets; press coverage since 2005; online resources (such as sustainability internet groups and Chinese eco-city advocacy blogs); and pertinent academic publications

<sup>2</sup> in Dongtan, China and Britain; in Tianjin, China and Singapore

<sup>3</sup> in Dongtan, mainly affiliated with Tonji University, East China Normal University and Shanghai University; in Tianjin, mainly affiliated with the Urban Redevelopment Authority of Singapore, the Chinese Academy of Urban Planning and Design, the Tianjin Institute of Urban Planning and Design

industries<sup>4</sup>, international development organizations and policy and research networks<sup>5</sup>, and local residents at both project sites.

- c) The third question seeks to illustrate whether and how the involvement of institutional and individual actors has facilitated a rescaling between local sustainability practices and global sustainability discourses. I will establish correspondence with governmental officials, relevant international organizations, sustainability policy consultancies, developers, architects, and professional experts relevant to the Dongtan and Tianjin projects, conducting in-depth interviews where and whenever possible. Answers to this question will also require interviewing participants in and observers of the Dongtan and Tianjin projects, and current residents in the two project areas.

### **Interdisciplinary Nature and Significance of Research**

This research will advance our critical understanding of the contemporary diffusion and dissemination of green agendas, and will also build on and contribute to three interdisciplinary bodies of literature on urban sustainability, environmental neoliberalization and urban political ecology. A detailed study of Dongtan Eco-city and Tianjin Eco-city is valuable for two reasons. First, it will help us understand how and why particular initiatives and practices are chosen and constructed as replicable models for international and urban policy-making regimes within techno-expert communities and in varying local contexts. Second, these projects provide a vantage point to untangle the complex relationship between the market and state in green urban development initiatives in Chinese cities. The different involvement of the Singaporean and different tiers of the Chinese state in each case will allow me to examine whether and how state-led capitalism tackles the relation between development and environment differently from neoliberal regimes in the Global North, and how state-led green development may reshape the beliefs and knowledge subscribed to by international environmental policy and techno-expert communities.

### **Timeline**

June, 2011	Preparation for the fieldwork (analyzing second-hand documentations, identifying key actors, and making connections for conducting interviews)
July, 2011	Fieldwork in Shanghai (collecting on-site documentations, conducting interviews and participant observation)
August, 2011	Fieldwork in Tianjin (collecting on-site documentations, conducting interviews and participant observation)

word count: 999

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<sup>4</sup> in Dongtan, ARUP, Shanghai Industrial Investment Company, Sustainable Development Capital; in Tianjin, Keppel Corporation

<sup>5</sup> including the World Bank Eco<sup>2</sup> Cities Initiatives, the UN Habitat, the United Nations Industrial Development Organization, the Clinton Foundation Climate Initiative, the International Eco-Cities Initiative.

### **Works Cited**

- Davis, M. 2010. Who Will Build the Ark? *New Left Review*, 61. <http://newleftreview.org/A2818> (Accessed Nov 21, 2010).
- Gibbs, D. 2009. Sustainability entrepreneurs, ecopreneurs and development of a sustainable economy, *Greener Management International*, 55: 63-78.
- Suzuki, H., A. Dastur, S. Moffatt, N. Yabuki, and H. Maruyama. 2010. *Eco2 Cities: Ecological Cities as Economic Cities*. World Bank Publications.

### **Applicant’s Biographical Information**

I-Chun Catherine Chang is a doctoral candidate in Geography at the University of Minnesota. She also holds a B.A in Geography from National Kaohsiung Normal University (Taiwan) and a M.S. in Geography from National Taiwan University (Taiwan). Ms. Chang’s previous research focused on the political economy of urban infrastructure projects in East Asian cities, with particular interests in the role of authoritarian states in urban politics and policies. Since beginning her graduate study in Minnesota, Ms. Chang has been intrigued by the convergence and divergence of neoliberal urban projects across places, and the newly found “symbiosis” between urban ecology and urban economy in recent urban policies. Her current research focuses on how urban sustainability has become a strategy to achieve urban entrepreneurship, and how new urbanism regards environmental-friendly technologies as the key for next-generation urban competitiveness. Ms. Chang’s research proposal for the Consortium on Law and Values in Health, Environment and the Life Sciences Research Grants will be a significant part of her doctoral dissertation research on exploring the interplays and connections between urban sustainability and different socio-economic contexts across geographical places and scales, with empirical contributions centered on understanding the social construction processes and societal implications of eco-city projects in contemporary China.

Consortium on Law and Values in Health, Environment the Life Sciences  
**Budget for Student Proposals**

**Project Title:** Chinese Green Capitalism and Urban Sustainability: The Cases of Shanghai's Dongtan Eco-City and Tianjin Eco-City

Instructions provided below.			Requested funding	Matching/other funding	
	Personnel costs	Description & justification Salary = ___hrs x ___ hrly wage	Amount	Amount	Source
1	Your salary (stipend)	12 weeks @30 hrs per week X17.93 hrly wage (based on the RA salary in Geography Department )=6,454.8	5,000	500	Urban Geography Specialty Group Graduate Research Award (pending)
2	Other personnel			750	Economic Geography Specialty Group Graduate Research Grants (pending)
3	Other personnel			500	Association of Amercian Geographers Dissertation Research Grants (pending)
4	Other personnel				
5	<b>Personnel Subtotal</b>		<b>\$5,000.00</b>	<b>\$1,750.00</b>	
6	Speaker Honoraria	Number of speakers and amount of honoraria			
7	Supplies & Services	US \$ 470 in total (including xeroxing US\$ 200 (2000 pages @ US\$ 0.1 per page); telephone services US\$ 120 (3 months @US\$ 30 per month); Chinese newspaper and academic article full-text database access US\$ 150 (300 news reports/articles @ US\$ 0.5 per report/article))	470		
8	Equipment				
9	Travel (Fieldwork in Shanghai and Tianjin)	Minneapolis-Shanghai US\$1,700; 30 days in Shanghai @ US\$ 120/day=3,600; 30 days in Tianjin @ US\$ 110/day=3,300 (from Orbitz website, based on the average prices of one room in one-star hotels plus basic meal expense, and the rates here are lower than the allowable per diem found at <a href="http://travel/umn.edu">http:// travel/umn.edu</a> ); roundtrip airfare between Shanghai and Tianjin US\$350)	3,950	5,000	SSRC Dessertation Proposal Development Fellowship (Pending)
10	<b>Subtotal research supplies, equipment, travel, other</b>		<b>\$4,420.00</b>	<b>\$5,000.00</b>	
11	<b>TOTAL BUDGET</b>		<b>\$9,420.00</b>	<b>\$6,750.00</b>	

Consortium on Law and Values in Health, Environment the Life Sciences  
**Budget for Student Proposals**

1. Stipend justification. You must justify the amount of stipend you are requesting by identifying the number of hours you plan to work on the project and the hourly wage used for research assistants in your department. Include fringe benefits.
- 2-4. Identify all other personnel to be paid from this grant including interpreters, travel guides, etc. and justify their salary by identifying the number of hours they will work and the hourly wage. What is the hourly wage based on?
6. For colloquia, identify the number of speakers and the amount of honoraria you will provide.
7. Supplies and services. List out all supplies and their estimated costs. Explain in line 7 or in the body of your proposal what the supplies will be used for.
8. Equipment costs are allowable only if the justification clearly shows that the equipment is necessary for the project. Include explanation of what will happen to equipment at completion of project.
9. Travel costs must include a description of the purpose of the travel, start and stop dates of travel, transportation costs, housing costs, and allowable per diem (use University rates found at [http:// travel/umn.edu](http://travel/umn.edu)).