

Solar Flushing

Queens College Urban Studies 373 and 760
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Research Questions

How do we advance implementation of photovoltaic (solar) panels in Flushing?

What are NY's solar programs and for whom?

Which agencies promote solar?

What challenges to solar are unique in immigrant neighborhoods?



Research Focus

Flushing, Queens NY

- Community Board 7 city-owned properties
- Mitchell-Linden Neighborhood bounded by 25th Avenue (N), Union Street (E), 32nd Avenue (S), and Linden Place (W)



Research Methods

Stakeholder interviews

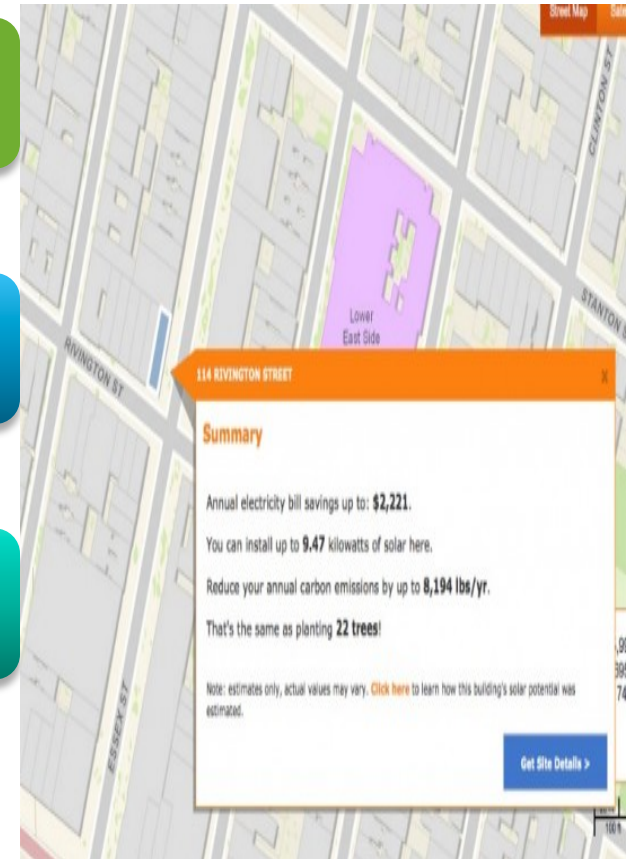
- Mission, role, obstacles

Data analysis

- OASIS, NYC Solar Map

Policy analysis

- NY Solar Jobs Act, NYC Zone Green Text Amendment, Solar America Cities, PlaNYC 2030, Manhattan Borough President's Rooftop Revolution report



Interviewed Stakeholders

Local

- Douglas Le Lam and Tran Htut Phoo, Asian Americans for Equality
- John Choe, ONE FLUSHING and Mitchell Linden Civic Association
- Simon Gerson, Gerson Properties
- Nick Roberts, Flushing Willets Point Corona LDC
- Marilyn Bitterman, District Manager, CB 7

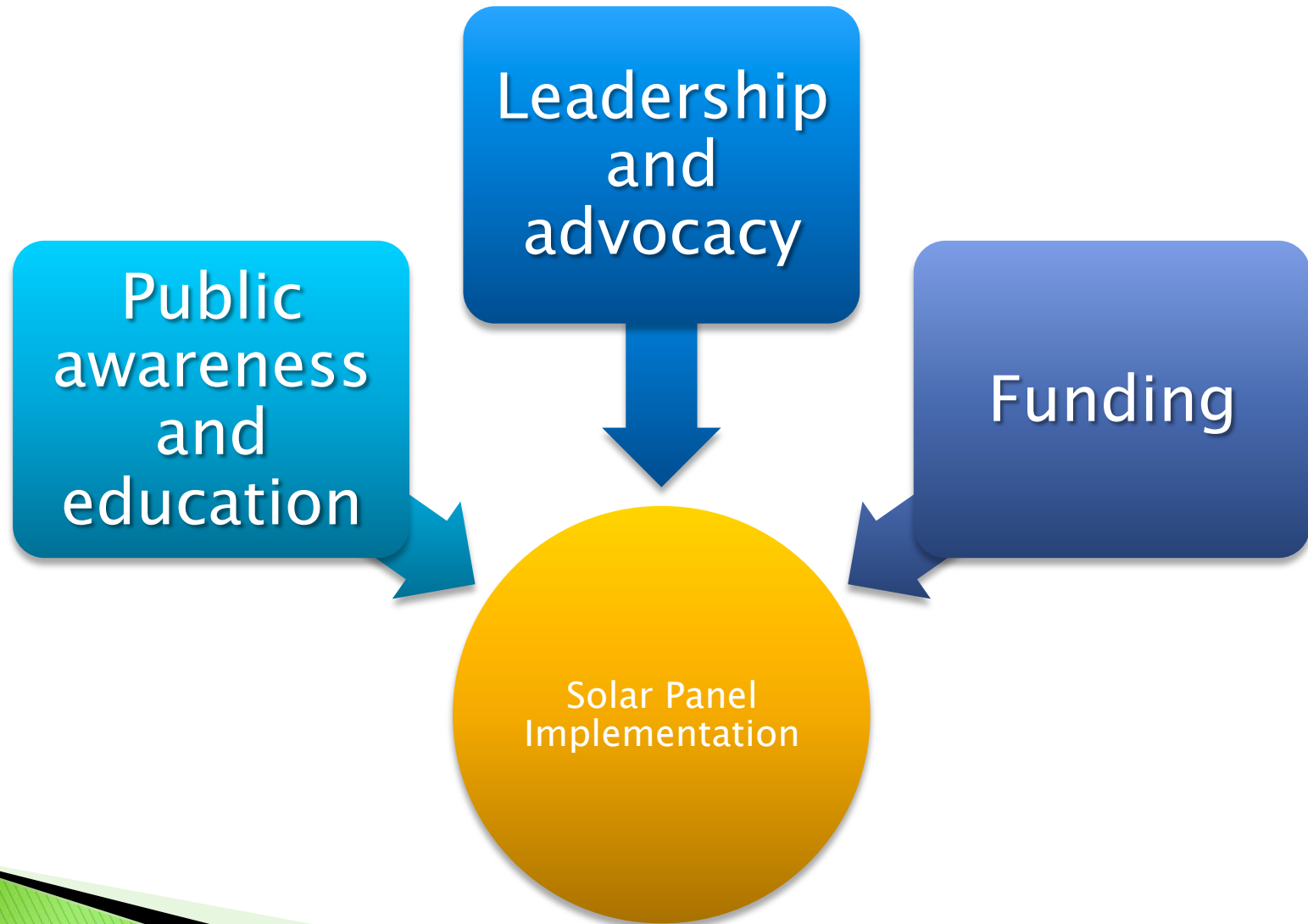
Municipal

- Alison Kling, CUNY Sustainability Project
- City Council Member Peter Koo
- Jay-E Emmingham, NYSERDA Senior Energy Smart Communities
- Alexis Greene, Community Environmental Center
- Stephen Corson, Manhattan Borough President's Office

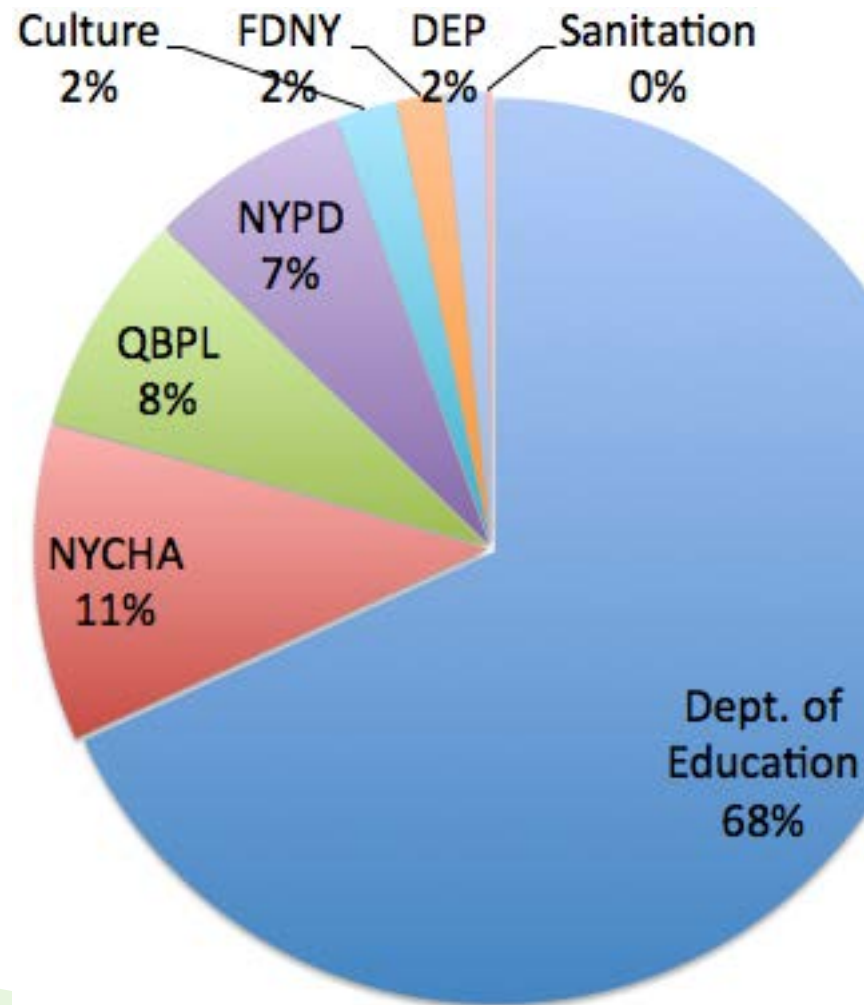
State

- Assemblywoman Grace Meng
- Frank Mace, New York State Energy Research and Development Authority

Key Stakeholder Concerns

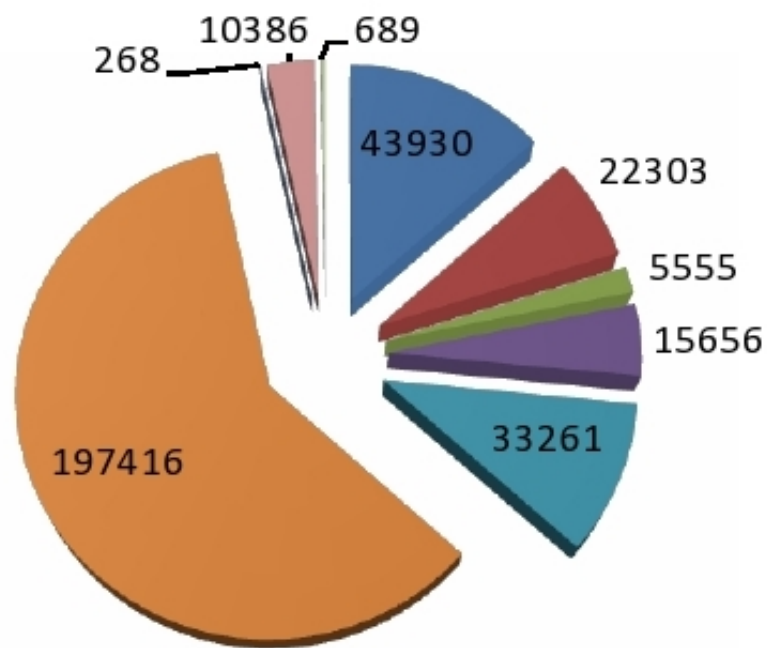


CB 7 Municipal Property Ownership

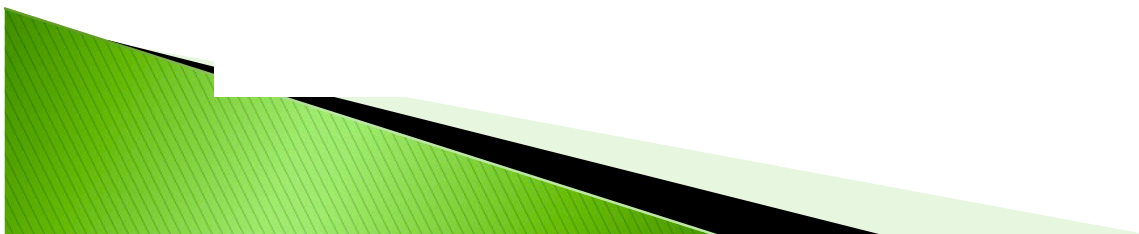


Usable Area for Solar in Mitchell Linden Neighborhood

Total Usable Area for Solar



- Commercial/Office Building
- Public facility/institution
- Residential Single family
- Residential 1& 2 family
- Residential Multit-family walk up
- Residential Multit-family elevator
- Co-op
- Mixed residential/commercial
- N/A- 2 capatible



NYC Solar Map:

Findings for Mitchell–Linden Neighborhood

Current Use	Total Usable Area for Solar	Total Annual Electric Bill Savings	Total Kilowatts You Can Install	Total Reduced Carbon Emissions per yr	Total Reduced Carbon Emiss. Tree Equiv.	Average Payback Period
Commercial/Office Building	43,930	\$84,349	362.06	311,174	831	6.8
Public facility/institution	22,303	\$44,359	180.46	163,647	435	7
Residential Single family	5,555	\$14,608	61.07	53,882	144	5.7
Residential 1 & 2 family	15,656	\$35,741	152.54	124,681	23,033	6.7
Residential Multi-family walk up	33,261	\$78,193	319.22	289,073	782	6
Residential Multi-family elevator	197,416	\$408,984	1663.39	1,508,800	434	5.5
Co-op	268	\$464	2.15	1,712	4,025	8
Mixed residential/commercial	10,386	\$20,790	86.01	76,702	205	5.7
N/A- 2 capatible	689	\$1,296	5.51	4,782	11	6.5



Recommendation: Improve Outreach, Education, and Collaboration for Solar

Cultivate political will and resources



Improve coordination among local stakeholders and relevant city and state agencies



Inform the public on renewable energy technologies and financial incentives

Increase CBO outreach and visibility on sustainability initiatives

Expand Greening Western Queens

Leverage the ethnic media



Recommendation: Solar financing can be improved

As time passes, subsidies fall

Subsidies need to be deep,
comprehensive, long-term

Extend NYC property tax
abatement for solar

Power Purchase Agreements
warrant further research



Recommendation: Pass the NYS Solar Industry and Jobs Act 2012

Bipartisan bill

Sets statewide goal of 3,000 MW by 2021

Creates Solar Renewable Energy Credit Market

- An (SREC) market mandates utility companies such as NYPA to procure a small share of electricity from solar sources

Potential to create 22,000 jobs

\$20 billion in economic output statewide



Additional Recommendations

Engage city agencies regarding funding opportunities

Encourage elected officials to fund demonstration PV implementation project at Flushing Library and Flushing High School

CBOs should train local bilingual solar educators/advocates

Expand renewable energy education programs in public schools and libraries

Flushing as a Solar Empowerment Zone

Promote university/community collaboration to continue research e.g., integrate solar energy in new developments on Flushing waterfront



Acknowledgments

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Environmental Protection

Dr. James Cervino, CB 7 Environment
Committee Chair

Bill Murray of City Councilman James
Gennarro's office

