



ACHIEVING ENERGY DEMOCRACY:

*A VISION FOR COMMUNITY-BASED
ENERGY POLICY IN NEW YORK STATE*

A Memo in Response to the 2014 NYS Energy Plan
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Introduction

In the wake of Superstorm Sandy, New Yorkers at all levels--government officials, advocates, utility executive and consumers--have given new consideration to energy policies that promote resiliency through the decentralization and localization of energy production; the diversification of energy sources, with special emphasis on boosting renewable production methods that offer stability and require fewer inputs; and the reduction of consumption burdens through broad deployment of energy efficiency measures in both residential and commercial markets.

This memo offers a range of ideas for achieving decentralization of production, greater adoption of renewables and broadened access to energy efficiency services by placing community-based organizations at the center of a spoke offering clarity and capacity to communities ready to face emerging energy challenges. PUSH favors this community-based framework because, by leveraging existing networks and centers of influence, it provides the clearest path to achieving resiliency and scaling renewables and energy efficiency. A community-based approach to energy policy can also work in tandem with other components of community revitalization to create stronger, more equitable and more self-sufficient communities and to create pathways to work for the long-term unemployed, following the Green Jobs/Green NY (GJGNY) model.

PUSH believes that community control of energy efficiency and clean energy resources should be a central feature of New York State's energy policy and should form the backbone of a strategy to improve the resiliency of regions across the state. Principles of community control should encompass (a.) grassroots planning, (b.) program development and implementation, (c.) targeted investments and affordable financing; (d.) performance and impact monitoring and evaluation, and (e.) program innovation and experimentation. Specifically, a New York State Energy Plan that values principles of community control would include:

A. Grassroots Planning

- Multi-stakeholder, grassroots strategic planning of energy efficiency and clean energy programs at the neighborhood and regional levels.¹

B. Program Development and Implementation

- Coordinated and targeted community-based deployment of energy efficiency and clean energy programs, modeled after NYSERDA's Green Jobs/Green NY program, that include customer aggregation and demand side management strategies for all market segments;
- Public and/or community ownership, operation, and maintenance of community-scale distributed generation renewable energy capacity that includes solar PV, solar thermal, wind, geothermal, and biomass; and utilizes other emerging and enabling technologies (e.g., virtual net-metering; feed-in tariffs);²
- Place-based initiatives, like eco-districts and green development zones, that strategically leverage public and private investments, and ratepayer funds, to meet energy efficiency and clean energy goals and impact standards at the neighborhood level;

1. See e.g., the Community Energy Strategies Program (CESP) in Massachusetts (<http://www.masscec.com/programs/community-energy-strategies>). As part of the program municipalities and regional planning authorities receive state funding to support local clean energy planning and implementation initiatives. New York State could scale up NYSERDA's existing Cleaner Greener Communities program to drive grassroots clean energy planning.

2. See e.g., Co-op Power (<http://www.cooppower.coop/home>) which uses a Local Organizing Council structure that matches local stakeholders with the technical resources needed to develop community-owned clean energy generation capacity.

- Competitive programs, mirroring those adopted by the Regional Economic Development Councils and other New York State agencies, that incentivize innovation and raise the visibility of renewable energy and energy efficiency goals at the regional and community levels.

C. Targeted Investments and Affordable Financing

- Targeted grants, incentive grants, and improved access to affordable capital through financing mechanisms like On-Bill Recovery (OBR) and Property Assessed Clean Energy (PACE), for low to moderate income households and businesses struggling with high energy burdens and legacy environmental hazards (lead, asbestos), and for communities most vulnerable to the effects of climate change;
- Regional grant programs and revolving loan pools for energy efficiency and clean energy sector businesses, with a focus on Minority and Women-owned Business Enterprises, to mitigate costs and risks associated with business start-up and operations.³

D. Performance and Impact Monitoring and Evaluation

- Cost effectiveness testing that valorizes the multiple community benefits of energy efficiency and clean energy - increased social capital and civic capacity, improved public health and wellness, growth of small and emerging businesses, quality job creation, enhanced climate resilience, and greater energy security;
- Regulatory authority and program administration that operates to maximize both energy and non-energy benefits of energy efficiency and clean energy through creative compliance, reward, and incentive structures for consumers and industry partners;
- Regional and/or community-level stakeholder and citizen advisory capacity to monitor and report on the implementation of energy efficiency and clean energy programming in relation to community, economic, and environmental impact standards developed through multi-stakeholder, grassroots planning processes;
- Clear objectives and metrics that can be adopted and gauged by a range of stakeholders, with a particular emphasis on measuring progress toward carbon neutrality across the state and within regions.

E. Program Innovation and Experimentation

- Energy efficiency and clean energy sector training, employment, small business development, and supply chain hubs or One-Stop Centers at the local level to rationalize workforce and economic development investments within regions across the State;
- Innovative community-based coordination of training-to-employment pipelines with market transformation activities to ensure disadvantaged communities and populations with barriers to employment have reliable access to meaningful opportunities in the energy efficiency and clean energy sectors.



3. See "The Hidden Flaw in Residential Energy Efficiency Financing" at <http://www.ency.org/1/previous/2.html>



Recommendations for the 2014 New York State Energy Plan

1. Improving energy affordability

Expand access to whole-structure energy efficiency services in all market segments. Whole-structure approaches based in building science provide the greatest energy savings and eliminate unstrategic patchwork efforts.

- Scale up residential aggregation programs delivered through community-based organizations. The implementation of Green Jobs/Green NY has provided a template for employing aggregation models and community-driven systems of project management and quality control;
- Align substantial conservation revenues flowing from the Public Service Commission (PSC), Homes and Community Renewal (HCR) and NYSERDA to establish single points of entry, managed by Constituency Based Organizations (CBOs), for whole-house weatherization across the income scale. There are a multiplicity of unintegrated, scattered energy efficiency funding programs. Many of the resources needed to create a top-flight, whole-house, energy efficiency program exist, but they are currently underutilized or misallocated;
- Align currently disparate marketing efforts managed by NYSERDA and PSC-regulated utilities to support cross-income single-point-of-entry strategy. Statewide and regional NYSERDA and PSC-affiliated program marketing efforts are also scattered and unintegrated. If brought under one roof and coordinated with community-based drivers, they could unlock substantial demand.

Create competitive grant pool, perhaps organized by Assembly district, to reward communities that have achieved highest number of residential retrofits. A competitive framework could help to generate best practices and elevate the visibility of community-driven strategies.

2. Unleashing the power of private sector energy financing

Commit available funds to “buying down” portion of residential projects to expand eligibility for OBR. OBR is a powerful tool for broadening access, but has been limited by restrictive regulations that disqualify homeowners across the income stream.

Offer microloans to residential households and small businesses who are interested in financing energy efficiency improvement measure as part of smaller work scopes.

Incentivize municipalities to adopt PACE through Energy Improvement Corporation membership. A structure is already in place for municipalities to adopt this important finance tool.

Attract Program Related Investments and pension funds to the OBR loan pool. OBR provides a worthy space for social investors.

3. Providing a more resilient and flexible power grid

Develop pilot grant and finance programs for incentivizing development of wind farms and solar fields owned by community-based nonprofits, cooperatives, community associations and municipalities. Models in Iowa and Massachusetts demonstrate scalability of community-owned wind farms and solar fields.



Create residential bulk solar purchasing program on the model of DC Sun.⁴ This and other existing aggregated consumer programs have demonstrated success in scaling-up solar.

Adopt remote net-metering in order to increase access to community solar buy-in through a share structure⁵ or, following Solar Mosaic⁶, a crowdsourced investment opportunity.

4. Giving customers more control over their energy use

Establish feed-in tariff pilots through the New York Power Authority (NYPA) and the Long Island Power Authority (LIPA), or through another authority structure. Public authorities could stabilize and rationalize solar market conditions by establishing stable price expectations.

Incentivize bulk purchasing of electricity and gas through consumer aggregation, managed by CBOs or co-operatives, on the model of Groundswell⁷.

5. Aligning energy innovation with market demand

Adopt emerging technologies, such as the Metered Energy Efficiency Transaction Structure (MEETS)⁸, that enable the realization of energy efficiency as a resource. The sustainable energy utility model⁹ is a comprehensive customer or participant-based framework for the delivery of energy services. It offers a promising alternative to existing centralized, commodity-based utility models.

Case Study of Community-based Energy Efficiency Deployment: Lessons from NYSERDA's Green Jobs/Green NY (GJGNY) Initiative

The Green Jobs/Green NY (GJGNY) Act of 2009 remains a watershed victory for local communities across New York State struggling with high household energy burdens, joblessness, and the disparate impacts of climate change and environmental policymaking. A loose coalition of community groups and industry stakeholders successfully mobilized to win passage of the legislation, win representation on the GJGNY Advisory Council, and eventually win a role implementing the program in targeted communities across the state.

The GJGNY program provides New York State with an existing model for community-based energy efficiency and clean energy program implementation.

Since 2011, PUSH Buffalo has served as a GJGNY CBO for the Western Region. Below are some of PUSH's achievements to date:

Demonstrated an ability to effectively drive market demand for whole-house energy efficiency retrofits in the Western Region by utilizing grassroots marketing strategies and leveraging centers of influence

GJGNY's most defining feature has been the institutionalization of a role for Constituency Based Organizations (CBOs) in NYSERDA program delivery, market transformation, workforce development, and administration of community benefits agreements with Home Performance contractors.

4. See, <http://www.dcsun.org/bulk-purchases/>

5. http://www.dcsun.org/wp-content/uploads/2013/10/dc-community-solar-one-pager_final.pdf

6. <https://joinmosaic.com/>

7. <http://www.groundswell.org/programs/for-homes>

8. <http://www.greentechmedia.com/articles/read/This-May-Be-the-Most-Innovative-Energy-Efficiency-Financing-Tool-Yetkj>

9. http://ceep.udel.edu/wp-content/uploads/2013/08/2009_es_BSTS_SEU_model_DE_Wash-DC_Houck_Rickerson_2.pdf

- Created a trusted, socially responsible brand identity, PUSH Green, that is steadily gaining recognition in the local energy efficiency marketplace;
- Utilized a mix of grassroots outreach methods, including door-to-door canvassing, community mobilization events, house meetings, and 1-on-1s, to reach households and small businesses in economically distressed communities;
- Secured endorsements and collaborated on direct mail campaigns with Village of Kenmore Mayor Patrick Mang, City of Buffalo Common Council member Michael J. LoCurto, and New York State Assemblyman Sean Ryan;
- Leveraged investments in a local Green and Healthy Homes Initiative program to provide households eligible for Assisted Home Performance with Energy Star with matching grant funding for whole house energy efficiency improvements and building repairs. PUSH also leveraged its participation in Green Jobs/Green NY to secure incentive grant funds for a small commercial green building retrofit program from the Regional Economic Development Council in the Western Region.
- As of February 2014, PUSH Buffalo's grassroots marketing and outreach efforts have resulted in:

- » Over 800 customer leads referred to the Home Performance with Energy Star program (Statewide CBO total: 5,140)
- » Nearly 500 completed Home Performance with Energy Star audits (Statewide CBO total: 3,423)
- » Nearly 200 Home Performance with Energy Star retrofits (Statewide CBO total: 852)
- » Over 50 bundles of aggregated residential retrofit projects distributed to contractors
- » Nearly \$1 million of economic impact in targeted communities (total \$ amount for all installed retrofit projects attributed to PUSH Buffalo)

Developed a model for consumer and community advocacy that serves as the central feature of PUSH's brand identity and market transformation activities

- Created a brand identity that promotes PUSH Green as a trusted, independent community partner motivated by the triple bottom line benefits of energy efficiency investments - community resilience, environmental conservation, and job creation;
- Fielded a team of BPI certified Community Energy Advocates responsible for:
 - » Establishing customer expectations;
 - » Leveraging a compelling value proposition to motivate customer participation;
 - » Raising awareness around the benefits of energy efficiency and participation in NYSERDA's programs and financing;
 - » Pre-screening customers and performing visual inspections of existing conditions in customers' homes during 1-on-1 home visits;
 - » Pre-qualifying customers for NYSERDA financing with Energy Finance Solutions;
 - » Monitoring proposed contractor work scopes for comprehensiveness and affordability, and when necessary working with contractors and customers to tailor workscope to better meet customers' comfort and finance needs;
 - » Representing customers' interests in high-level conversations with program administrators;
 - » Connecting with other community members through customer referrals and endorsements.



Pioneered an approach to customer aggregation that delivers value to households, contracting firms, local workforce, and NYSERDA

General features

- Geographic targeting to incentivize participation in underserved and high energy burden communities in the City of Buffalo and first ring suburbs;
- Aggregating individual projects into 5 to 10 unit project bundles to promote economies of scale in relation to project locations and coordination of bundle assignment and management;
- Collaborative project management throughout the project lifecycle to maintain customer interest, enable efficient problem identification and resolution, and monitor contractors' responsiveness to customer needs and desires;
- Creation of a transparent mutual accountability structure - a local Green Jobs/Green NY stakeholder roundtable - and development of a monthly community impact scorecard.



Value for households:

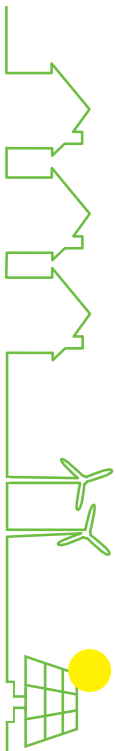
- Created a community-scale pricing schedule in which customers are rewarded with a percentage discount off the cost of installed retrofit work;
- Availability of a preferred contractor list from a trusted community partner cuts down on transaction costs associated with contractor selection;
- Community Energy Advocates provide hands-on concierge service to customers enrolled in PUSH's Aggregation Pilot, the *Friends and Neighbors Program*;
- Customer referral incentives that leverage social capital and promote civic engagement around energy conservation and community benefits.

Value for contractors:

- Reduced client acquisition costs enable contractors to focus on technical execution of whole house energy audits and work scope installation;
- Customers referred to contractors as part of bundled project assignments are pre-screened and pre-approved for free or reduced cost energy audits and program financing;
- Workforce referral partner to coordinate worker training, recruitment, and placement;
- Cross-branding with trusted community partner as part of the *Friends and Neighbors Program* deepens market penetration and trust within targeted communities;
- Increased awareness of business services, like on the job training wage subsidy programs, to mitigate operating costs and provide avenues to engaging with emerging workers;
- Access to non-profit training provider and service networks to meet new and incumbent worker training and wraparound support needs.

Value for workers:

- Workforce intermediary advocating with employers for workers' interests and needs as they make transitions into clean energy industry sectors;
- Access to family sustaining wage and benefit rate for technical work performed in the *Friends and Neighbors Program*;
- Certified payroll reporting requirement to ensure workers are receiving appropriate wages and benefits;



- Institutionalized mechanism to leverage the growth of emerging contracting businesses to meet the employment needs of disadvantaged communities.

Value for NYSERDA

- Cross-branding with trusted community partner around innovative program delivery model that benefits underserved market segment.

Collaborated with Home Performance contractors in developing and using shared project management systems that reinforce customer expectations, rationalize work flow, and enable accountability throughout project life cycles

- Created cloud based project management tools with contractors in order to track and manage customer service activities, project scheduling milestones and deadlines.

Served as workforce intermediary and advocate connecting disadvantaged community residents in search of training and jobs with affiliated contractors in the energy efficiency, sustainability, and general construction industry sectors

- Worked to align pre-existing federal and New York State workforce training investments with current job pathways by identifying and pooling trained and certified community members for referral to contracting businesses in the energy efficiency and clean energy sectors;
- Organized grassroots outreach and community recruitment events to promote training and job opportunities;
- Leveraged public sector training and affordable housing development investments to create innovative opportunities for hands-on learning at clean energy retrofit job sites located on the West Side of Buffalo;
- Negotiated a standing commitment with local workforce development system representatives to staff drop-in hours on the West Side of Buffalo;
- Since early 2012, PUSH has referred approximately 80 community members to industry recognized training and has placed over 20 people in jobs in green industry sectors.



Conclusion

Together, the recommended policies and programs would promote resiliency by giving communities more control over their energy futures. Achieving these ambitious aims would require careful coordination and communication between community-based anchors, investor-owned utilities, and policymakers in the Governor's energy office and state agencies including NYSERDA, the PSC, the Environmental Facilities Corporation and HCR. A proposal issued in late April 2014 by the Department of Public Service, entitled Reforming the Energy Vision (REV), provides some common ground for stakeholders to begin working together to achieve these recommendations. The proposal calls for a fundamental shift away from the existing model of centralized energy production and bulk transmission to an alternative decentralized model based on distributed generation, community microgrids, and customer demand response services. The REV reimagines a regulatory framework for investor-owned utilities that would enable utilities to coordinate local and regional markets for energy services and experiment with the deployment of new technologies. Community-based organizations could play a critical role in this transformation by safeguarding customer and community interests in potentially volatile emerging markets.

Achieving resiliency through expanded community-level energy production and broadened access to energy efficiency could also be supported by the programmatic structure of the state's emerging Green Bank. Germany offers a model¹⁰ for the state finance of energy agendas rooted in communities and focused on decentralization of production and broad adoption of energy efficiency measures. In Germany, for example, the national development bank lent more than 40 billion dollars for energy efficiency improvements at 1-2% interest from 2009-2011, leveraging 90 billion dollars in total investment for measures that reduce consumption. German homeowners can borrow up to 125,000 dollars through the bank for renewable and energy efficiency improvements.



10. <http://www.theguardian.com/environment/damian-carrington-blog/2012/may/24/green-investment-bank-energy-efficiency>