



Catalyzing "Green Jobs-Green NY" for economic recovery that eliminates disparities: Why New York State needs the federal Home Star program.

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This fall, advocates for high-road jobs, business and the environment will resume efforts to pass federal "Home Star" legislation. Home Star is an important grant program to incentivize US homeowners to improve the energy efficiency of their homes, and lower their housing costs; reduce US electric, gas and oil consumption; and boost the capacity of a high-road residential energy efficiency industry.¹

On a national level, we urgently need Home Star to catalyze the development of a contracting industry that can green our buildings (which needlessly generate about half of our total greenhouse gases, and foster over-dependence on unsustainable fuels.) Recent national efforts to implement energy programming, whether for green jobs or for environmental goals, have been hugely hampered by the limited capacity and patchwork quality standards of an underdeveloped green contracting industry.

But New York is a special case. Here, state policy has already defined a retrofit industry with good quality standards. A strong base of local contracting firms is ready to expand capacity, waiting only for an increase in consumer demand. The foundations for Home Star to take off in New York have been laid, first by decades of work in New York's Energy Agency, and more recently through planning to implement the Green Jobs-Green NY program. In New York, Home Star will be especially important for transforming a "jobless recovery" into a *real* recovery, and especially effective in achieving energy and housing cost reductions.

This short paper outlines how Home Star can critically boost the groundbreaking Green Jobs-Green NY program, and generate a booming, equitable – and lasting – green economy for New York State.

Green Jobs-Green NY: Where we are now

New York State, through its energy agency, NYSERDA, is currently preparing to roll out the Green Jobs-Green NY (GJGNY) retrofit program, launching the first audits and retrofits this winter. GJGNY is an innovative, ambitious program providing a capital bridge that allows homeowners to finance retrofits with energy cost savings that materialize *after* the retrofit. It solves many other long-standing barriers to scaling up retrofits, including lack of trust in information, contractors or programming; lack of access to capital; lack of qualified contractors; intention to move out of the home; and lack of "push" – support to overcome homeowners' inertia.

GJGNY sets an unprecedented target of retrofitting one million homes within 5 years, creating over 14,000 retrofit-specific jobs (60,000 job-years) that will form the basis of a sustainably-scaled retrofit industry that persists into the future, and bringing \$5 billion in investment capital into New York State. To do this, GJGNY is implemented through community-based organizations that are already using their power of local opinion-leadership to seed the ground for mass demand for retrofits, and are facilitating direct relationships between job trainers and the contractors who will hire new local workers.

Most critically, the jobs created by GJGNY will *all* be good jobs, and will set the standard for the emerging industry catalyzed by the program. The state legislature, in allocating Regional Greenhouse Gas Initiative funds to create the program, made a major commitment to ensuring that jobs are paid at a decent wage; that they include meaningful training and career paths; and that standards for local, targeted hiring are developed by the community groups who are organizing their neighborhoods around

¹ A summary of Home Star's incentives is available at www.homestarcoalition.org/about.html (as of Sept. 8, 2010.)

retrofits as an economic development tool. On the strength of this commitment in both legislation and action by the legislature, the Center for Working Families is working with NYSERDA and stakeholders statewide to establish high-road standards for GJGNY.

Home Star will dramatically extend the limits of GJGNY

GJGNY holds enormous power to build an equitable green economy in New York State that makes real inroads into the state's racial and economic disparities – power that extends as far as GJGNY is able to interest homeowners in retrofits, maximize the investment in each home, and employ workers to carry out those projects. But GJGNY is also subject to limits on the housing and households it can serve.

Expanding retrofit workscopes

The limits on homeowners' use of GJGNY for retrofits, and on the size of retrofit projects that homeowners undertake, are overwhelmingly financial. Retrofits financed through GJGNY are to be paid back in full by the homeowner. Therefore, GJGNY financing sensibly requires that the amount financed be repayable through energy savings within 10-20 years.

This restriction is eased by utility rebates, tax credits and other sources of cash that can reduce ("buy down") the amount to be financed through GJGNY. Buy-downs dramatically extend the capacity of the program to perform retrofits – because these measures produce "off the books" savings that reduce the repayment of the financed amount.

In many cases, the buy-down amount is not enough to push the homeowner to do a deeper retrofit – a \$400 utility rebate for an efficient furnace, for instance, is not enough to allow a cash-strapped homeowner to add a solar thermal hot water system to their workscope. Larger incentives are generally in the form of tax credits, so homeowners can only use them to reduce the financeable amount if they can float the same amount of money they'll be receiving later. In those cases, the incentive payment is so disconnected from the overall retrofit project that it is unlikely to push the owner to take on a bigger retrofit project.

The proposed federal Home Star program is the only incentive on the horizon big enough to move homeowners reliably to broaden their workscopes. Through "point of sale" rebates to contractors, Home Star is expected to save participating homeowners \$200 to \$500 per year in energy costs and provide various rebates of up to the lesser of (1) \$8,000 or (2) half of the total retrofit costs for eligible Gold Star energy efficiency measures.

The Center for Working Families estimates that in 2011-2012, GJGNY will accomplish retrofits of 60,000 units including about 36,000 one-to-four unit buildings if Home Star is not available. However, if Home Star is available during those years, GJGNY could reach to 135,000 units in 81,325 one-to-four unit buildings. If each of those retrofits used just \$3000 in Home Star incentives to augment their project, the infusion of work to the contracting industry would amount to about \$244 million.

In fact, the cash infusion to New York is likely to be substantially bigger. New York has developed strong community-labor-business collaborations around GJGNY – and as a result, the state is well positioned to create the fully-certified workforce needed to unlock Gold Star incentives for homeowners. New York's homeowners are also perfectly poised to draw down the maximum incentive levels made available under Home Star, since GJGNY will eliminate the need for homeowners to contribute up-front cash for retrofits. **If New York homeowners participating in GJGNY used Gold Star incentives of \$8000, the infusion of work to New York's contracting industry – and cash to the state's economy – would amount to about \$651 million, nearly 11% of Home Star's entire nationwide benefit.**²

² While it is unlikely that all GJGNY projects would be eligible for \$8000 "Gold Star" incentives, New York has disproportionate capacity to claim a share of nationwide Home Star's payouts. For reference, New York has about 6% of the country's housing units.

Bringing retrofits to more homes, including homes in deep disrepair

GJGNY financing restrictions mean that retrofits can't be performed on homes that need significant repairs. Retrofits require that the building envelope be in decent condition in order to produce savings, and savings must be adequate to repay project costs. Additionally, BPI-certified contractors are barred from performing work on homes that fail basic health and safety tests. Even the Weatherization Assistance Program, which allows a margin for repair within the overall project cost, cannot reach many homes in urgent need of retrofits because housing conditions are too poor.

Example: An audit of a two-family home finds that a \$15,000 investment in air-sealing, insulation and replacement of a very inefficient furnace would likely see a 14-year payback – except that an old, leaking roof lets in so much air that the current payback is more like 40 years.

The cost of repairing the roof is \$5,000, which is too much to roll into the overall retrofit project cost without exceeding the allowable payback period. The owner cannot afford to fix the roof on her own.

A \$7,500 Home Star incentive (half of the \$15,000 retrofit cost) reduces the cost of the \$20,000 project – retrofit plus roof repairs – to \$12,500. Green Jobs-Green NY finances the \$12,500, which the homeowner repays out of the energy savings achieved by the repair/retrofit project.

The house gets both a GJGNY retrofit and a roof repair – neither of which would have been possible without Home Star's incentive.

GJGNY is flexible enough to overcome this barrier, though, if outside capital can buy down the total cost of the project. **Home Star is currently the only program that can provide a buy-down at the scale needed to bring these homes – homes that tend to gain most from retrofits in both terms of energy savings and home environmental threats - into the program.**

Given the deep community focus of GJGNY, adding capacity to reach distressed buildings and homeowners will provide a major boost to community organizing around retrofits – enhancing not just uptake, but local engagement in the training-to-jobs pipelines that ensure retrofit work reaches long-term unemployed, low income, minority and other critical target workers.

In turn, the successful large-scale entry of community members into retrofit jobs will allow the state legislature to continue its intensive levels of support for job-focused retrofit programming, and cement GJGNY in New York State's line-up.

Bringing more takers to GJGNY

In addition to expanding the limits of financing, **Home Star will generate massive additional interest in retrofits that will ultimately fall to GJGNY – and will accordingly be subject to GJGNY standards for targeted hiring, training and jobs.** Contractors statewide are already reporting that homeowners who would not otherwise be interested are inquiring into retrofits because of “buzz” around Home Star (and in fact, that homeowners are deferring work in anticipation of Home Star and GJGNY.)

For contractors in an uncertain industry that has been deeply shaken by the current economic downturn – and where seasonal fluctuations in demand already create huge difficulties in training and maintaining a quality workforce – Home Star's capacity to drive demand and lower customers' project costs is a major incentive to sign up as GJGNY contractors, and adopt high-road job and hiring standards. Without Home Star, contractors are far likelier to adopt a wait-and-see stance on GJGNY, which will delay GJGNY's capacity to scale up both retrofits and jobs.

How quickly can a residential retrofit market scale up in New York State?

The Center for Working Families, which developed the GJGNY policy blueprint in close consultation with economists as well as NYS stakeholders, estimates that for a sustainably-scaled New York State retrofit economy, in which retrofits average about \$5,500, the state would need about 14,000 *new* workers. This number of workers, combined with the existing workforce that currently performs “investment

grade” retrofits³ on about 12,000 New York State units per year, can retrofit just under 400,000 units per year, or about 5% of the state’s housing stock.

GJGNY is currently slated to add 20,000 units in its first year to the *combined* 26,000 units previously retrofitted each year by the low-income Weatherization Assistance Program and by NYSERDA programs requiring up-front investments from homeowners. In each of the following three years, GJGNY should double or triple its delivery of completed retrofits in order to reach program goals (see table below) – and certainly could do so, contingent on continued attention to the program by NYSERDA, labor advocates and community groups. However, NYSERDA has not laid out any particular ramp-up schedule beyond a goal of 20,000 units in Year 1.

NYSERDA’s lack of ramp-up commitment is pegged to concerns about the limitations on financing, limitations on customer uptake, and limitations on the training and work capacity of contractors in the home performance industry.

The implementation of Home Star would overcome virtually all of these concerns – alleviating the pressure on financing created by payback periods, dramatically increasing the number of households who *can* perform and are *interested* in performing retrofits, and positioning New York to take advantage of union-driven training infrastructure that will exponentially increase the high-quality retrofit workforce available to New York.

Implementing Home Star would also increase the value of retrofits, so that the number of jobs created *per retrofit* will be higher than under GJGNY alone. Depending on the persistence of Home Star incentives, the elevated number of workers generated might continue to be employed in a beefed-up retrofit industry, or – trained and experienced in both building science and construction – they could become the basis for spin-off economies in other green endeavors, from new building to manufacturing to training and academics.

Projected GJGNY ramp-up schedule without Home Star support				Potential GJGNY ramp-up schedule if Home Star is in place			
	Units retrofitted	Jobs added ⁴	Workers in perm jobs		Units retrofitted	Jobs added	Workers in perm jobs
Y1	20,000	741	741	Y1	35,000	1,458	1,458
Y2	60,000	1,481	2,222	Y2	100,000	2,708	4,166
Y3	175,000	4,259	6,481	Y3	250,000	5,556	9,722
Y4	360,000	6,852	13,333	Y4	385,000	5,000	14,722
Y5	385,000	926	14,259	Y5	385,000	0	14,722
Total	1,000,000	14,259		Total	1,155,000	14,722	

Because New York is already poised to enact Green Jobs-Green NY, **Home Star will bring thousands of jobs to New York several years ahead of schedule, and build demand for retrofits that will persist under GJGNY for years after Home Star ends.** Home Star and GJGNY together will drive earlier statewide recovery through contracting, associated manufacturing and increased consumer spending power.

Green Jobs-Green NY needs Home Star to drive sustainable recovery

New York urgently needs to ramp up its retrofit industry. We need retrofits to reach deep into the pool of homes that have not yet been reached by NYSERDA and WAP programs, but where retrofits can have the most impact. We need to lower the staggering energy costs of these aging buildings whose

³ “Investment-grade” retrofits are projects performed to high standards of building science, including test-in and test-out audits, and based on enough data about the building’s energy use to allow for an accurate determination of the project’s payback period.

⁴ The number of jobs created by each retrofit is higher with Home Star than without it, because retrofit workscopes and project values are bigger. For these estimates, GJGNY alone is assumed to generate 1 job per 27 retrofits, and GJGNY with Home Star is (quite conservatively) assumed to generate 1 job per 24 retrofits.

owners lack access to money for repairs and upgrades. And we need the jobs created by the emerging retrofit industry to be good jobs – better and more secure than they have been in a market hampered by limits on both financing and information.

Green Jobs-Green NY will make strong advancements on these needs, but in relation to the need, GJGNY will be slow to start. Home Star can act as a catalyst for GJGNY: increasing the value, workscope and energy savings of retrofits; allowing job growth to take place far earlier in the program; and dramatically increasing the confidence of contractors and consumers alike in a high-road, career-building retrofit industry. **As the state struggles under the combined burdens of long-term unemployment and the recession-driven shrinking of opportunity, Home Star can – and should – leverage GJGNY’s progress and play a central role in getting New Yorkers back to work.**

Data on GJGNY are sourced from “Green Jobs/Green Homes NY,” the policy blueprint created by the Center for Working Families in advance of the New York State Green Jobs-Green NY Act of 2009. Economic analysis in that report by Skip Laitner, Director of Economic and Social Analysis, American Council for an Energy-Efficient Economy (ACEEE.) Thanks to Claudia Preparata of Green for All for fact-checking and editing.