The Home Star Energy Retrofit Act of 2010: Operational and Market Considerations

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Summary

The Home Star Energy Retrofit program as proposed is intended to promote both greater residential energy-efficiency and increased employment in the home remodeling, energy services, and related manufacturing industries. Two very similar Home Star programs are detailed in legislation proposed in the House and Senate. The House of Representatives version, the Home Star Energy Retrofit Act of 2010 (H.R. 5019), was introduced on April 14, 2010, by Representative Peter Welch and 44 cosponsors. H.R. 5019 passed with amendments on May 7, 2010, and was referred to the Senate Finance Committee. The latest Senate proposal was included as Division C Title XXX of the Clean Energy Jobs and Oil Company Accountability Act of 2010 (S. 3663) introduced by Senator Harry Reid on July 28, 2010.

Home Star would employ a two-tiered structure for energy-efficiency rebates. Its Silver Star program tier would provide up to $3,000 per home in prescriptive rebates for straightforward home upgrades, including insulation; efficient heating, ventilation, and air conditioning units; new windows; and other measures. The Gold Star program tier would offer $3,000 rebates for more comprehensive energy retrofits achieving at least 20% energy savings, with rebates increasing up to $8,000 per home for retrofits achieving 45% energy savings. The Senate version would also offer up to $1,200 per home for comprehensive water efficiency retrofits. Quality assurance inspectors would visit 10% to 20% of participating homes to ensure measures are properly installed. H.R. 5019 authorizes $6 billion in funding for the program. S. 3663 authorizes $5 billion.

In both the House and Senate versions, the proposed Home Star program may present an opportunity for both energy-efficiency and employment in the United States. The program targets the residential sector, which numerous studies have shown to be among the largest sources of cost-effective energy-efficiency opportunity in the United States. It also targets a wide base of currently unemployed or under-employed residential contractors. Structurally, the Home Star program seeks speedy implementation by building upon prior experience with both federal and state energy-efficiency programs to provide operating models that might be replicated nationwide. Nonetheless, several operational aspects new to such a federal program, or not previously tried for a program of Home Star's scale, may warrant further attention from Congress. These include the use of rebate aggregators, a two-tiered rebate structure, technical standards, and the general availability of rebates to all who may want them. Key market issues include the inclusion of a "Do-it-Yourself" rebate option, high expectations for program participation, and promoting the growth of a self-sustaining home weatherization industry. Given that it would be a new federal program, the level of homeowner participation implied by the rebate funding provisions in the Home Star proposal would far exceed that achieved by comparable programs in their initial years.

Taken together, Home Star's key operational requirements may present greater challenges than some proponents suggest, and may present unanticipated obstacles to speedy and consistent program implementation across the country. As Congress examines details of the Home Star proposal, focusing on tradeoffs between rapid implementation, operational complexity, and energy-efficiency impacts may be important. Balancing the twin goals of short-term job creation and long-term investment in cost-effective energy savings could also be an ongoing challenge.

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Introduction

Congress is concerned about widespread U.S. unemployment in the wake of the recent economic recession. As of June 2010, the nation's jobless rate stood at 9.5%.[1] Particularly hard hit have been workers in the residential contracting industry, which, by some estimates, faces unemployment on the order of 25%.[2] At the same time, policy makers have been concerned about volatility in global energy prices, and the environmental and economic impacts of climate change. Both Congress and federal agencies have been promoting policies to improve the energy-efficiency of the U.S. buildings stock as a means to substantially reduce U.S. energy costs and associated CO_2 emissions. According to the Department of State's 2006 *Climate Action Report*, "by using commercially available, energy-efficient products, technologies, and best practices, many commercial buildings and homes could save up to 30 percent on energy bills."[3]

The proposed Home Star Energy Retrofit program is intended to promote both greater residential energy-efficiency and increased employment in the home remodeling, energy services, and related manufacturing industries. Two very similar Home Star programs are detailed in legislation proposed in the House and Senate. The House of Representatives version, the Home Star Energy Retrofit Act of 2010 (H.R. 5019), was introduced on April 14, 2010, by Representative Peter Welch and 44 cosponsors. H.R. 5019 passed the House with amendments on May 7, 2010, and was referred to the Senate Finance Committee. The Senate proposal was initially introduced under the Home Star Energy Retrofit Act of 2010 (S. 3177), which was introduced by Senator Jeff Bingaman and two cosponsors on March 25, 2010. This proposal was superseded by the Home Star Energy Retrofit Act of 2010 (S. 3434), which was introduced by Senator Bingaman and 15 cosponsors on May 27, 2010, and also referred to the Finance Committee. A third Senate version, the Home Star Retrofit Act of 2010, was included as Division C Title XXX of the Clean Energy Jobs and Oil Company Accountability Act of 2010 (S. 3663) introduced by Senator Harry Reid on July 28, 2010. H.R. 5019 authorizes $6 billion in funding for the program. S. 3663 authorizes $5 billion. The program would be administered by the Department of Energy (DOE) in both cases.

This report focuses primarily on operational and market aspects of the proposed Home Star program. In particular, it addresses only limited aspects of job creation and economic stimulus potential of the program. For the sake of brevity and clarity, the report does not cite specific sections in the House or Senate bills related to Home Star; the provisions discussed below are found in both bills. Accordingly, the report refers to one Home Star program, even though the program appears in slightly different forms in the House and Senate bills. Some significant differences between the House and Senate versions are noted. Other differences between H.R. 5019 and S. 3663 may be significant in other policy contexts that are beyond the scope of this report.

Operational Issues

Home Star would employ a two-tiered structure for energy-efficiency rebates. Its Silver Star program tier would provide up to $3,000 per home in prescriptive rebates for straightforward

[1] U.S. Department of Labor, *Employment Situation Summary*, USDL-10-0886, July 2, 2010, http://www.bls.gov/news.release/empsit.nr0.htm.

[2] Home Star Coalition, "Senate Hearing Puts HOME STAR's Job-Creating Potential in the National Spotlight," press release, March 11, 2010, http://www.homestarcoalition.org/documents/HSC_Release_031110.pdf.

[3] U.S. Department of State, *U.S. Climate Action Report—2006*, July 2007, p. 40.

home upgrades, including insulation; efficient heating, ventilation, and air conditioning units; new windows; and other measures. The Senate version would also offer rebates for water-saving products or services certified under the U.S. Environmental Protection Agency's WaterSense program. Under Silver Star, contractors are guaranteed a fixed rebate amount for installing qualified measures, as long as they complete the necessary rebate applications and agree to post-installation quality assurance inspections. Silver Star rebates would be paid automatically to contractors upon job completion and submission of a rebate request. Quality assurance inspectors would visit 10% to 20% of Silver Star participating homes (depending upon the certification of the contractor) to ensure measures were properly installed.

The Gold Star program tier, by contrast, would offer $3,000 rebates for more comprehensive energy retrofits achieving at least 20% energy savings, with rebates increasing to as much as $8,000 per home for retrofits achieving 45% energy savings. The Senate version would also offer up to $1,200 per home for comprehensive water efficiency retrofits. Under Gold Star, contractors would use specialized software to model a home's baseline energy/water use, then propose a set of retrofit measures to improve that baseline, based on the modeling software calculations. Retrofit measures could include those covered under Silver Star, or additional measures that could yield significant savings. Before paying rebates, Gold Star would require "testing out" to document actual energy/water savings once installation had been completed. Quality assurance inspectors would visit 10% to 15% of Gold Star participating homes.

The proposed Home Star program may present a significant opportunity for both efficiency improvements and employment in the United States. The program targets the residential sector, which numerous studies have shown to be among the largest sources of cost-effective energy-efficiency (and water-efficiency) opportunities in the United States.[4] It also targets a wide base of currently unemployed or under-employed residential contractors. Structurally, the Home Star program seeks speedy implementation by building upon prior experience with both federal and state energy-efficiency programs to provide operating models that may be replicated nationwide. Nonetheless, several operational aspects of the program would be new to a federal program, or have not been tried for a program of Home Star's scale. CRS has identified a number of key considerations which may warrant further attention as Congress reviews the Home Star program's operational details.

Rebate Aggregators

The Home Star proposal requires the DOE to implement a federal rebate processing system and website with information about the program. It also directs the DOE to develop a network of "rebate aggregator" intermediaries to administer the program on the agency's behalf—facilitating participation, processing rebates, and supporting quality assurance of energy retrofits. The DOE has stated that it expects "a couple of hundred" organizations to serve as aggregators, including home improvement retail stores (e.g., Lowe's, Home Depot, True Value), existing energy-efficiency programs, state agencies, and, potentially, trade groups and other contractor associations.[5] Rebate aggregator applicants would have to demonstrate the ability to administer the rebate process and would need to have financial systems to process and track rebate

[4] See, for example: McKinsey & Company, *Unlocking Energy Efficiency in the U.S. Economy*, July 2009, p. 10; National Academy of Sciences, *Real Prospects for Energy Efficiency in the United States*, National Academies Press, 2010, pp. 31-84.

[5] Cathy Zoi, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy, Testimony before the Senate Committee on Energy and Natural Resources, March 11, 2010.

transactions in conjunction with the DOE. The rebate aggregator function is intended to speed program implementation by taking advantage of existing energy-efficiency program infrastructure and contractor relationships.

Stakeholders have raised a range of questions regarding Home Star's rebate aggregator function. Some are examining the ability of the DOE to establish and manage rebate operations with a multitude of potential aggregators in a timely and consistent manner. Contractor groups have expressed concerns that, by virtue of their size, location, or sophistication, some rebate aggregators may have an advantage in promoting rebates among the groups they serve, leading to potentially inequitable distribution of rebates among contractors or homeowners. To address these concerns, some have proposed that the DOE serve directly as the sole, national rebate aggregator, or as an additional default national aggregator, to ensure the availability of rebate aggregation services to every community or contractor in the United States.[6] Whether the DOE is capable of fulfilling such a role, especially the processing of individual contractor rebates, is unclear. As an alternative to a national default aggregator, S. 3663 would give priority to reviewing the applications of prospective rebate aggregators that offer to serve all qualified contractors within a defined geographic region.

Because of the volume of anticipated rebate transactions under Home Star (2 to 4 million homes or more), some stakeholders anticipate that specialized rebate processing firms may be contracted by aggregators for Home Star transaction processing. For example, one national home improvement retailer has stated that, should it choose to be a Home Star rebate aggregator, it would likely contract out Home Star rebate processing to its existing rebate processing contractor.[7] Such processing companies focus exclusively on rebate transactions and offer the advantages of quick execution, economies of scale, and the ability to adapt existing capabilities to accommodate new rebate programs. However, such arrangements among numerous rebate aggregators raise questions about the complexity, speed, and cost of establishing and maintaining the administrative "back office" of the Home Star program—especially the requirements for data and financial computer system integration with the DOE's systems. Since some rebate processing companies reportedly have experienced problems with consumer access or transactions, in some cases linked to information technology (IT) failure, some stakeholders have expressed concerns that the current Home Star proposals provide insufficient time for implementing and testing new software and systems required under the program.[8] Such stakeholders suggest that any errors, limitations, or inconsistency in administering the program's rebate processing functions could create transactional bottlenecks or confusion among contractors and thereby reduce Home Star's overall market effectiveness.

Two-Tiered Rebate Structure

While Home Star's two-tiered rebate structure offers a mechanism to capture the highest levels of energy savings from very inefficient homes, some have expressed concerns that this structure may unintentionally discourage energy-efficiency investments due to "cream skimming." Cream skimming of energy-efficiency opportunities, "in which relatively certain (but relatively shallow) energy savings opportunities are selected in favor of more promising but more complex and uncertain measures," has long been documented as a challenge to efficiency retrofits in

[6] Larry Laseter, Masco Home Services on behalf of the Home Star Coalition, Response to questions for the record from the Senate Energy and Natural Resources Committee, March 30, 2010.

[7] Jay Rebello,Vice President, Lowe's Companies, personal communication, March 5, 2010.

[8] Brian Gaar, "Comptroller Looks Hard At Appliance Rebate Foul-Ups,"*Austin American-Statesman*, April 9, 2010.

buildings.[9] Because the Silver Star rebates are simple, require no simulation or testing capabilities, require no post-installation performance documentation, and involve no risk of underperformance, they may be substantially more attractive to general contractors than Gold Star rebates. The added complexity and administrative requirements of Gold Star may prove too burdensome to some contractors if they believe they have a sufficient pipeline of Silver Star opportunities. Moreover, many contractors with no additional training could begin work under the Silver Star program immediately. Financially constrained homeowners might also prefer the Silver Star program because it would require less investment and less risk on their part.

To the extent that contractors participating in Silver Star are from specialized trades (e.g., plumbers) rather than general contractors or integrated weatherization contractors, the structure of Silver Star rebates could also concentrate participation in certain categories of measures. For example, window installation companies may not be able or willing to install water heaters, another Home Star measure. Likewise, plumbing companies promoting efficient water heaters may not offer other weatherization services. General contractors could offer all the Silver Star measures through their existing networks of subcontractors, but there may not be sufficient profit opportunity to attract them to this kind of work. So participating homeowners in some markets may face the prospect of dealing with multiple specialty contractors if they seek to take advantage of the full array of Silver Star retrofit opportunities—an inefficient and inconvenient prospect. Consequently, homeowners may choose to pursue only one or two Silver Star measures, even if they could benefit from additional measures or a whole house energy retrofit. A result could be widespread adoption of a few categories of Silver Star measures that end up being the most economically attractive or the most aggressively marketed by installation contractors, with a resulting concentration of program benefits among those contractor groups and associated manufacturers.

For the reasons above, Home Star may experience lower-than-anticipated participation in some Silver Star measures and in the Gold Star program overall. To the extent that homes are highly inefficient, but participate only in one or two Silver Star rebates, some of their energy inefficiency might become locked in because additional measures would become less cost-effective to address later, after the "lower-hanging fruit" of Silver Star measures had been implemented. Such behavior, if it materializes under the Home Star program, might not affect the overall number of jobs associated with the program as a whole, but it could have important implications for the distribution of expenditures within the program, the immediate capture of energy savings, and its ultimate impact on the long-term energy-efficiency of the nation's housing stock.

Technical Standards

An implementation issue of interest among some stakeholders is how the Home Star program's technical standards requirements may influence the speed and breadth with which the program might be implemented. For programs like Home Star, technical standards can help to ensure home services are provided at an appropriate level of quality and consistency across numerous contracting companies. The selection of particular standards for the program also may determine which contractors initially would be eligible to participate in the program and what home energy information they would be able to provide for program management and evaluation. Consequently, the choice of standards influences both the complexity of program deployment and its administrative needs.

[9] Evan Mills, Steve Kromer, Gary Weiss, and Paul A. Mathew, "From Volatility to Value: Analysing and Managing Financial and Performance Risk in Energy Savings Projects," *Energy Policy*, vol. 34, no. 2, January 2006, p. 191.

Home Star's requirements for whole home simulation software to be used by contractors include (explicitly or by reference) software packages authorized by the DOE's Weatherization Assistance Program, the Internal Revenue Service, and equivalent programs certified by states. By adopting these widely used home simulation software packages, Home Star intends to facilitate contractor participation, since many are already skilled in using one or more of these software programs. From an administrative perspective, however, approving multiple software programs and versions on a national scale may also complicate efforts at quality control because of differences in the format, content, or transferability of home simulation information. The inclusion of water-efficiency measures and modeling in the Senate version adds additional modeling complexity to the program. Such differences also may make comparisons of buildings and contractors participating in Home Star more difficult.

Contractors who satisfy Home Star's training certification standards would face less frequent quality inspection than uncertified contractors. For workforce certification, the program specifically authorizes existing skills standards established by the Building Performance Institute (BPI), North American Technician Excellence, and the Laborers' International Union of North America (LIUNA). The Senate version also authorizes standards from the Home Builders Institute. Unlike the home simulation software requirements, however, there may be other training standards in widespread use that are not initially approved for Home Star certification. Other standards could be authorized for Home Star if approved by the Secretary of Energy, in consultation with the Secretary of Labor and the U.S. Environmental Protection Agency (EPA) Administrator. However, the Home Star proposal offers limited process or approval criteria for such authorizations. As a result, contractors may need to undertake additional, potentially redundant, training or wait for the program to accept other standards. Retraining or certification delays may put them at a competitive disadvantage.

Taken together, Home Star standards provisions for home simulation software and contractor certification illustrate the attempt to balance quick program execution against operational simplicity. The EPA's recent experience with residential contractor certification under its 2008 lead rule demonstrates that such certification can be an unexpected bottleneck for program implementation.[10] If contractors wishing to participate in Home Star believe they face time-consuming or costly training requirements, they may forgo certification altogether, accepting higher job inspection rates as an acceptable alternative. Such an outcome might undermine the intended purpose of the employee training standards—a more capable workforce, better contract work, and lower costs for quality control.

Availability of Rebates

An issue related to the distribution of rebates is the availability of rebates to all homeowners who want them. Some stakeholders have raised the possibility that uneven implementation of Home Star may lead to the uneven distribution of rebates geographically or across specific measures if Home Star's rebate funds are quickly committed. Since Home Star rebates would be available nationwide on a first-come, first-served basis, no state or contracting sector would be guaranteed any amount of rebate funding. So it is conceivable that a limited number of states or contracting sectors could capture the bulk of the rebate funding available if they are faster "out of the gate" than others. Well-prepared Home Star initiatives in larger states could capture all of the Home Star funding before aggregators in smaller states could catch up.

[10] Dan Testa, "With New EPA Lead Requirements, Contractors Scramble to Get Certified," *Flathead Beacon*, Kalispell, MT, April 18, 2010.

Allocation of Home Star funds by state has been suggested as one way to ensure a broad distribution of rebates, but some stakeholders believe that the allocation process could be time-consuming and contentious. A reservation system for rebates could also be used, but such reservation systems have sometimes led to rapid oversubscription of rebates when they first become available, and they may not address the potential concentration of rebates among a limited number of measures. For example, well-organized window installers in a particular state could pre-sell numerous window retrofits in anticipation of the Home Star program, then reserve rebates for the anticipated jobs *en masse* in the first hour of the program. Oversubscription of reservations for appliance rebates occurred in a number of states implementing appliance rebate programs under the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5), so it may be a possibility for Home Star as well.

S. 3663 would review the distribution of rebates among the states during program implementation, offering "technical assistance funding" to states that "have not sufficiently benefited" from the Home Star program.[11] What "technical assistance" and "sufficient benefit" entail is unclear, however, and whether such remedies could be implemented quickly enough to help an underperforming state is an open question. Consequently, the ultimate concentration of Home Star rebate benefits among a limited number of states or home contracting sectors might be an issue for Congress. Of course, if homeowner interest in Home Star is less than expected, the availability of rebate funding may not be a barrier to participation, but it may raise other questions about the overall impact of the program discussed further below.

Market Issues

In addition to the specific operational issues discussed above, three overarching market issues may also warrant further congressional consideration—a "do-it-yourself" option, expectations for program participation, and anticipated growth in the weatherization industry.

"Do-it-Yourself" Option

An issue of ongoing debate is the inclusion of "do-it-yourself" (DIY) rebates for Home Star products purchased without installation services. The Home Star proposal contains such rebates, up to $250 per home, for insulation and air sealing products. DIY rebates are viewed by some as important to ensure sufficient consumer demand for qualified products and to make Home Star funds accessible to homeowners with limited budgets for home weatherization projects.[12] Because DIY products would not necessarily increase employment opportunities for contractors, however, some policy makers do not favor a DIY option under Home Star. Others are concerned that it would be difficult to ensure the quality of DIY installations, so that the federal government would not know how much energy savings could be attributed to them. They favor funding only measures installed by professionals with explicit and formalized quality control. As Congress continues to debate the Home Star proposal, the size and scope of a DIY option may warrant further attention.

[11] § 3016(i)(2)

[12] U.S. Chamber of Commerce, *Letter on the "Home Star Act of 2010,"* Washington, DC, March 10, 2010, http://www.uschamber.com/issues/letters/2010/100310homestar.htm.

High Expectations for Program Participation

In its first two years as a new federal energy-efficiency initiative, Home Star may face challenges achieving the high levels of homeowner participation implied by its level of appropriations. The Home Star proposal in H.R. 5019 authorizes appropriations of $6 billion through FY2011, to remain available until expended. The proposal in S. 3663 authorizes $5 billion through FY2012. Under the House proposal, if $6 billion in appropriated funds were expended through 2012, and combining both Silver Star and Gold Star, CRS estimates that total participation in Home Star could be nearly 2 million homes in the first two years of the program or 1.6% of all U.S. residential housing units in 2008. Others have projected participation rates as high as 5 million for the program.[13]

Experience with programs similar to Home Star offers some perspective on the aggressiveness of these participation goals. For example, under the DOE's Weatherization Assistance Program (WAP), home weatherization projects directly funded by the program reached approximately 2 million in 1992, 15 years after the program was initiated (**Figure 1**).[14] The WAP program's peak year of annual participation was 1981, during which the program weatherized 353,000 homes. The ARRA sharply increased funding for the WAP program and raised associated weatherization goals to 586,015 homes over the three-year life of the act, but the program has not been meeting these goals. Although weatherization rates under ARRA funding have since accelerated, the DOE's Inspector General reported that only 30,297 of the planned 586,015 weatherization projects were completed by February 16, 2010.[15] According to the DOE, 25,231 homes were weatherized in May 2010, for a total of 134,167 homes weatherized with ARRA funding through May 2010.[16]

[13] Bracken Hendricks and Tom Kenworthy, "HOME STAR: Putting Americans Back to Work," Center for American Progress, Washington, DC, February 23, 2010, http://www.americanprogress.org/issues/2010/02/home_star_back_to_work.html.

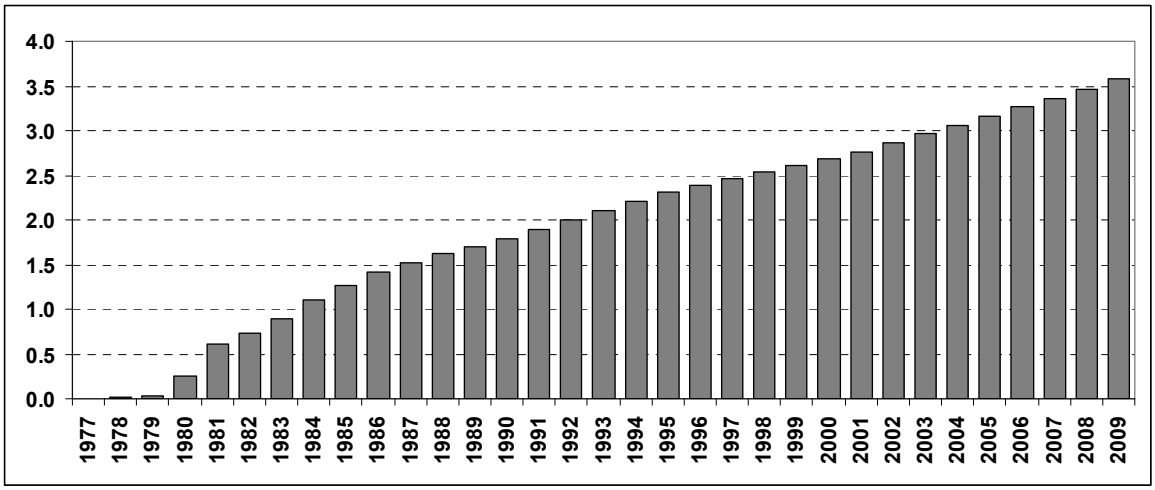
[14] The DOE estimates that approximately 2.8 million additional homes were weatherized through 2008 by state programs leveraging core weatherization funding from DOE.

[15] U.S. Department of Energy, Office of Inspector General, *Progress in Implementing the Department of Energy's Weatherization Assistance Program Under the American Recovery and Reinvestment Act*, OAS-RA-10-04, February 2010, Appendix II.

[16] U.S. Department of Energy, "Homes Weatherized by State for May 2010," online table, July 21, 2010, http://www.energy.gov/recovery/documents/Homes_Weatherized_by_State_for_May_7.21.10.pdf.

Figure 1. DOE Weatherization Assistance Program—Cumulative Homes

(Millions)



Source: U.S. Department of Energy, Office of Weatherization and Intergovernmental Program, Personal communication, March 7, 2010, and "Homes Weatherized by State," February 19, 2010, http://www.energy.gov/recovery/documents/Homes_Weatherized_By_State_Dec2009.pdf.

New York's Home Performance with ENERGY STAR Program, which is similar in most respects to the Gold Star component of the Home Star program, served just under 30,000 homes over its first nine years of operation (**Figure 2**). This total represents 0.75% of the 4.0 million homes in New York potentially eligible for the program.[17] Achieving this enrollment rate among the 97.1 million similar homes across the entire United States would yield approximately 728,000 program participants.

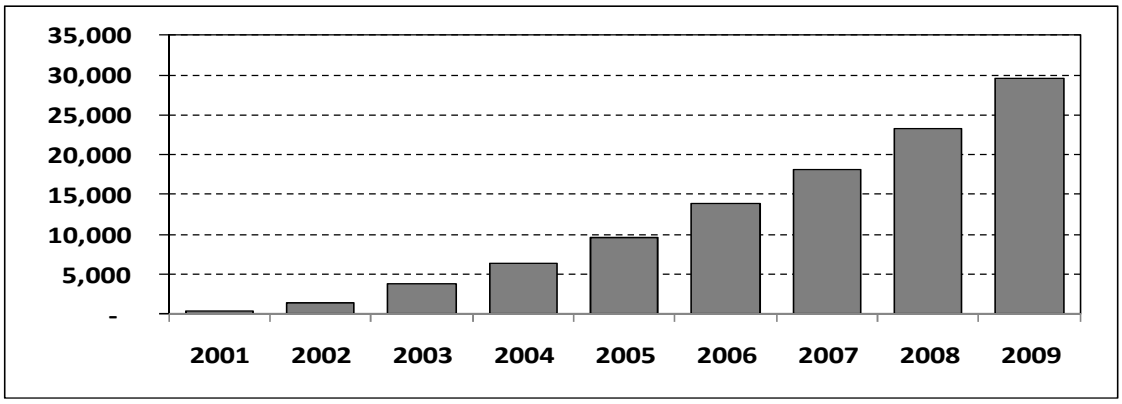
Comparing participation rates expected for Home Star with those experienced by the WAP program or the Home Performance program in New York is only suggestive. There are significant differences in the structure of these programs as well as in their funding, target markets, and the time periods of their operation. In particular, the ARRA-funded weatherization under the WAP program have been hampered by Davis-Bacon wage requirements, Buy American requirements, historic preservation requirements, and other administrative issues that the Home Star program is not expected to face. Furthermore, it is possible that general economic conditions in the United States over the next few years may lead to comparatively higher or lower participation in Home Star than those realized by the WAP or New York programs. Nonetheless, these comparisons suggest that the level of homeowner participation implied by the rebate funding provisions in the Home Star proposal would far exceed that achieved by comparable programs in their initial years. Implementation experience and supporting infrastructure developed through the WAP program, Home Performance with ENERGY STAR, and similar state programs could help Home Star achieve higher market penetration more quickly than the earlier programs, but to what extent remains to be seen. Consequently, Congress may consider alternative options for Home Star

[17] U.S. Census Bureau, *The 2010 Statistical Abstract*, "Table 954 - Housing Units by Units in Structure and State: 2007," 2010, http://www.census.gov/compendia/statab/2010/tables/10s0954.pdf. Potentially eligible homes are assumed to include 1-unit detached homes and up to 4-unit attached homes. There are 5.2 million homes in these categories statewide in New York, but approximately 1.2 million homes are either ineligible for this program because they are in the service territory of the Long Island Power Authority, or are not targeted by the program for other reasons.

program administration and funding if its enabling legislation is enacted and initial participation rates differ significantly from its initial goals.

Figure 2. New York Home Performance with ENERGY STAR Program

(Cumulative Homes)



Source: New York State Energy Research and Development Authority, Home Performance with ENERGY STAR Program, personal communication, March 8, 2010.

Promoting Growth of a Weatherization Industry

One of the motivations for the Home Star program, particularly the Gold Star rebates, is to support the development of a self-sustaining energy-efficiency contracting industry in the residential sector. As one group supporting the program has stated, Home Star "invests in building a sustained market for energy-related home construction jobs that will keep producing economic benefits well into the future."[18] However, while Home Star would undoubtedly benefit companies currently engaged in for-profit home weatherization services, such contractors comprise only a fraction of the home construction workforce the program seeks to benefit with new jobs. There is little evidence that, after Home Star rebates are expended, contractors from the traditional home construction industry will continue to pursue home energy retrofit services in favor of conventional homebuilding and remodeling. Indeed, some home building contractor associations believe that the contractors they represent will return to their traditional homebuilding work as soon as U.S. home sales begin to improve. Furthermore, CRS has found little market evidence of a growing, self-sustaining home weatherization industry across the states without the benefit of federal or state weatherization incentives. Although some Home Star proponents believe that the federal program will motivate states and localities to continue similar efforts after Home Star is completed in 2012, such an outcome is highly uncertain.

Conclusion

The proposed Home Star program may present an opportunity to improve residential energy-efficiency and increase related employment, but it contains a number of operational elements that have yet to be tested—and may be challenging to implement—on a national scale. Key market aspects of Home Star are also unpredictable. In particular, achieving the program's high expectations for homeowner participation would appear to be unprecedented for the types of

[18] Hendricks and Kenworthy, February 23, 2010.

contractor-installed measures it includes. Taken together, Home Star's key operational requirements may appear more challenging than many may anticipate, and may present unanticipated obstacles to speedy and consistent program implementation across the country. As Congress examines details of the Home Star proposal, focusing on tradeoffs between rapid implementation, operational complexity, and energy-efficiency impacts may be important. Balancing the twin goals of short-term job creation and long-term investment in cost-effective energy savings could also be an ongoing challenge.

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