

Green and Healthy Housing Initiative: A Draft Proposal for an ARRA Inter-Agency Collaboration

The Problem

Decades of chronic disinvestment in low-income, minority communities have left over six million families trapped in unhealthy and inefficient housing. The evidence is clear and compelling that this unsafe and unhealthy housing stock leads to wealth depletion, abandoned properties, housing instability, potential homelessness, and increased risk of housing-based illnesses that undermine the long-term health, development, and productivity of millions of American children. Every year, this unhealthy housing is the source of an estimated 250,000 cases of childhood lead poisoningⁱ, 800,000 asthma-related emergency room visitsⁱⁱ, 20,000 carbon monoxide poisoningsⁱⁱⁱ, and 13 million preventable home-related injuries.^{iv} Furthermore, the related economic losses from unhealthy housing spill well into the billions annually.

Several federal programs exist across multiple agencies to address the above-mentioned problems. Unfortunately, the programs do not currently allow for a holistic solution that would maximize available funding, but they instead operate in silos that attempt to keep separate problems that coexist and interact in the lives of American families. In the best case scenario, these silos create duplicative and sometimes conflicting work that results in inefficient and therefore wasteful use of federal funds. In the worst case scenario, the inability to blend program funds to reach the most vulnerable families who face many of these issues simultaneously forces local implementers to spread limited resources thinly by targeting one specific problem per family per house visit – leaving all other problems unsolved. For example, it is quite common for contractors to remove lead paint from a home but to leave behind asthma-inducing mold and mildew. (Attachment A provides some stories about how this work originated and how it has impacted real families.) While the scope of this problem is large, it is imminently solvable with federal leadership to implement and bring to scale blended, cost-effective, and time-efficient interventions that truly improve people's homes and lives. Some localities have already begun testing styles of implementation that would provide a more holistic approach. (Information about a select group of these localities is available in Attachment B.)

The Opportunity

The American Recovery and Reinvestment Act (ARRA) provides an historic opportunity to address long-standing disparities and to transform low-income communities. By effectively integrating and coordinating several inter-related programs, the Green and Healthy Housing Initiative (GHHI) has the potential to yield the following results in 40-50 cities with the most distressed neighborhoods containing high concentrations of unsafe, dilapidated housing and high rates of unemployment:

1. Approximately 7,500 affordable, green, healthy housing units annually per site;
2. Approximately 675 new sustainable “green collar” jobs per site;
3. At least 25 new sustainable small businesses and social enterprises per site;
4. Measurable improvements in child health and development outcomes as indicated by reductions in elevated blood lead levels, incidence of asthma and other respiratory diseases, and absences from school due to asthma and other respiratory ailments; and
5. Facilitation of ARRA funding reaching and ensuring triple-bottom-line benefits to some of the hardest to reach populations and places in the nation.

The mandate and special opportunity for the Office of Recovery Implementation is clear, albeit complicated to execute: *Create an operating context that facilitates (A) aligning programs, (B) blending funds, and (C) coordinating agencies and efforts in order to improve life outcomes for millions of American families.* (Detailed information on the federal agencies, programs, and funding streams that the GHHI will target for alignment, blending, and coordination is available in Attachment C.)

The Communities

The GHHI will target urban communities suffering from long-term disinvestment and neglect – communities that are often populated by low-income, minority families with little access to opportunity. The GHHI will target 40-50

cities, including some of those listed below. (A matrix that provides detailed information on a select group of prospective sites is available in Attachment D.)

- Atlanta
- Baltimore
- Battle Creek
- Camden
- Cincinnati
- Chicago
- Detroit
- Flint
- Houston
- Los Angeles
- Milwaukee
- Minneapolis/ St. Paul
- Newark
- New Haven
- Omaha
- Philadelphia
- Providence
- Richmond
- Savannah
- Seattle
- St. Louis
- Washington, DC

The Stakeholders

Several foundations have already begun engaging in conversations about the GHHI. We anticipate that approximately a dozen foundations will partner with the federal government on the implementation of GHHI, particularly on issues of program design, capacity ramp-up, data development, evaluation, and creation of financial pools for bonding or insurance for start-up contractors. Scores of additional foundations could be recruited to participate in local funding consortia formed to respond to local capacity needs. This list illustrates the types of foundations that will likely partner on the GHHI:

- The Annie E. Casey Foundation
- California Endowment
- Charles Stewart Mott Foundation
- Chicago Community Trust
- The Cleveland Foundation
- Hartford Foundation
- Heinz Endowment
- The Kresge Foundation
- The John D. and Catherine T. MacArthur Foundation
- The Prudential Foundation
- Robert Wood Johnson Foundation
- The Skillman Foundation
- Surdna Foundation
- William Penn Foundation
- W.K. Kellogg Foundation
- The Robert W. Woodruff Foundation

Additionally, the establishment of a GHHI development consortium could take the lead on designing the overall initiative and developing comprehensive technical assistance capacity for local delivery systems. Here is a preliminary list of the organizations that might participate in the consortium as well as their respective responsibilities. (A brief overview of each group is available in Attachment E.)

- The Alliance for Healthy Homes – review of best practices
- The Coalition to End Childhood Lead Poisoning – program design and capacity building
- Community Colleges – training and certification
- Community Wealth Ventures – sustainable social enterprise
- The Council on Foundations – leadership with philanthropic partners
- Jobs for the Future – training
- Living Cities – capacity building
- The National Center for Healthy Homes – research and evaluation
- National Fund for Workforce Solutions – training
- PolicyLink – policy and advocacy
- U.S. Chamber of Commerce and the Business Civic Leadership Center – small business development
- Leading green housing and energy efficiency groups still to be identified

Removing Barriers: Urgent Priority for a Public/Private/Philanthropic Partnership

There are three principal barriers to implementing this initiative as it attempts to provide triple-bottom-line results to the hardest to reach populations and places: 1) in all too many instances, there is insufficient local capacity in terms of fully

licensed, certificated, and bonded intermediaries; 2) few sites have the standing capacity to accelerate and expand training programs and to provide support and technical assistance that would promote the development of small businesses and social enterprises; and 3) the current array of funding sources for this initiative spans multiple programs in several cabinet departments and agencies.

The first two barriers can be addressed through an effective public-private-philanthropic partnership in which a group of national foundations and high capacity intermediaries agree to work with the Office of Recovery Implementation to co-design a process, to develop an accelerated capacity building plan, and to identify the best practices and most promising programs to do so. The third barrier lies uniquely within the province of the Office of Recovery Implementation. The Office of Recovery Implementation must take the lead in building the relationships, pathway arrangements, memoranda, and working groups that will optimize (A) alignment of the various programs, (b) blending of the funding streams and sources, and (C) coordination of the various agencies and offices. (Several specific recommendations for removing barriers are included in Attachment F.)

ⁱ Jones, R. et al. Accepted for publication 2008. Trends in blood lead levels and blood lead testing among U.S. children aged 1 to 5 years: 1998-2004. [Pediatrics](#).

ⁱⁱ “New Asthma Estimates: Tracking Prevalence, Health Care and Mortality,” NCHS, CDC, 2001.

ⁱⁱⁱ “Carbon Monoxide Poisoning.”DHHS- CDC. April 27, 2009. <<http://www.cdc.gov/co/faqs.htm>>

^{iv} *State of Home Safety*. Home Safety Council. <http://www.homesafetycouncil.org/state_of_home_safety/sohs_2004_w003.aspx>

How Healthy Homes Originated: The Story of Richard Harris and Larry Brown

The innovative idea to align programs and blend funds to create holistic and efficient solutions to housing-related health problems arose from two members of the staff at the Coalition to End Childhood Lead Poisoning in Baltimore, Maryland. In October 2000, Richard Harris and Larry Brown, then an Americorps worker and now a full-time Assistant Crew Chief, began talking with the Coalition's executive director, Ruth Ann, about their personal conflict – as workers and members of the community – with going into houses solely for lead remediation work and leaving behind a host of other health and safety risks. They were troubled that many families who were experiencing asthma and allergy problems continued to experience these health problems even after they had “fixed” their house. Additionally, they knew too many families had to take their children to the emergency room after receiving radiator burns or being injured due to faulty handrails. One day, Larry Brown finally said to Ruth Ann, “If you can just get us the money, we can make sure that these kids are healthier. We can do a lot more – lead is important, but we need to look at the whole house.” Larry knew what his community needed, and thus began in earnest the Coalition's work on Healthy Homes.

How Healthy Homes Helped the Mitchell Family

The Mitchell family is an African-American family of four who own a two-story row home constructed in 1905 in Baltimore, Maryland. The two Mitchell children are 2 years old and 15 years old, and they both suffer from asthma and receive regular treatment at Johns Hopkins Hospital and the Harriet Lane Clinic. Following a referral to the Coalition to End Childhood Lead Poisoning's Safe at Home Program – a Healthy Homes demonstration project that offers a customized menu of interventions to address multiple home-based hazards – the Mitchell home received an intensive level Healthy Homes intervention, including pest management, indoor allergen reduction, installation of an air filtering unit in the children's bedroom, and lead hazard reduction. Additionally, to reduce the risk of household injury, the construction crew installed smoke alarms, a carbon monoxide alarm, cabinet locks, and electrical outlet covers. The family was also provided with a HEPA-Vacuum and an indoor allergen/lead dust prevention cleaning kit to sustain the intervention. In the family's most recent report, Ms. Mitchell stated that the children's asthma conditions have improved and she has not had to take either of her children to the emergency room since the intervention. They also feel that the health education component of the program prepared them to implement all of the interventions appropriately.

Innovative Green and Health Housing Work			
City	Agency/Organization	Program Profile	Program/Funding Challenge
Baltimore, MD	Coalition to End Childhood Lead Poisoning	<p>The Coalition's "Safe at Home" program provides a menu of Healthy Home interventions. Each housing unit receives a whole Environmental Health-based Home Assessment, involving a Lead Risk Assessment, Energy Auditing, Allergen Testing (dust mites, rodents, pests), as well as visual safety and structural assessments. A scope of work and Household Action Plan is developed, featuring both housing interventions as well as family education and advocacy actions (i.e. legal services, referral services, health/behavioral changes).</p> <p>Weatherization activities such as insulating attics and walls, ensuring proper air flow and ventilation take place, and issues such as lead, mold, pest management and healthy indoor air are addressed by trained and certified personnel. Families work simultaneously with community health educators and nurses and are linked to other supportive services (legal, health, educational, employment, etc.) as needed.</p>	<p>The Coalition blends Federal lead and Healthy Homes funds (HUD LEAP and HUD Healthy Homes Demonstration) with CDBG and private foundation funds to achieve Greener, Healthier and more stable housing. This style of public-private partnership shows great promise.</p> <p>The Coalition also employs from the Community and has plans in place to help create community-owned Green and Healthy Contractor businesses.</p>
Minneapolis, MN	Sustainable Resources Center (SRC)	<p>SRC operates both DOE-funded weatherization and HUD-funded lead hazard control programs. It also received a Lead Elimination Action Program grant this year enabling it to provide both services in 215 homes. By coordinating these funding streams SRC is able to address a multitude of healthy homes issues, including lead, energy use, indoor air quality and combustion safety, but important gaps remain (e.g. pest control, radon, moisture control).</p>	<p>Though the SRC is leveraging program activities to reduce duplicative efforts, weatherization dollars are not an allowable source of matching funds for the lead grant due to current program restrictions. Consequently, the SRC sought match funding from a local window manufacturer provided through a discount and with State funds, but the longevity of this arrangement is highly uncertain given enormous budget shortfalls.</p>

Innovative Green and Health Housing Work			
City	Agency/Organization	Program Profile	Program/Funding Challenge
San Diego County, CA	San Diego County Weatherization Program, CA	<p>The goals of the Weatherization Program are to reduce heating and cooling costs for low-income families by improving the energy efficiency of their homes and to ensure their health and safety. Households who are income-qualified receive a complete home assessment from a Weatherization Assessor, who checks all combustion appliances to learn of health and safety hazards and to prioritize families accordingly. Following the assessment, a certified work crew comes to the home to do some or all of the following:</p> <ul style="list-style-type: none"> • Repair or replace the furnace, water heaters, and stoves, if necessary; • Install a carbon monoxide alarm; • Install infiltration reduction measures which include caulking, window repair/ replacement, weather-stripping, switch and outlet gasket, door repair/ replacement, attic insulation, compact fluorescent lamps and microwaves; and • Install water-saving measures, including low-flow showerheads (regular and hand held), faucet restrictors, and water heater blankets. 	<p>This program attempts to wrap as much “healthy” around weatherization without extra funds – but it could benefit greatly from flex funding to address lead and allergens. Due to funding streams, they cannot currently do a full set of IPM or window replacement.</p>

Potential Programs to be Leveraged by Green and Healthy Housing Initiative			
Agency	Program	Funding	Potential Use
Commerce	Economic Development Assistance	\$150 million	Create jobs and generate private sector investment by promoting comprehensive, entrepreneurial and innovation-based economic development efforts.
DOE	Energy Assistance and Conservation Block Grant Program	\$3.2 billion	Provides grants to State and Local Governments to increase energy efficiency and reduce energy consumption including: window replacement & insulation, could leverage with local cool roof programs, lead hazard control programs, home rehab programs (Need to assure all funds are used in a lead safe and healthy manner)
DOE	State Energy Program	\$3.1 billion	Provides grants to State energy offices. States can use grants to address their energy priorities including the use of energy efficiency technologies (Need to assure all funds are used in a lead safe and healthy manner)
DOE	Weatherization Assistance Program	\$5 billion	Window replacement, sealing of cracks, lighting retrofits, new furnaces/HVAC system upgrades, moisture control
DOL	Adult Employment and Training Activities Program	\$500 million	Housing remediation (lead, environmental hazards that undermine energy efficiency and health) workers
DOL, HHS/CDC	Health Worker Training Program	\$250 million	Health Workers – Can be used to train health workers in how to identify needs to green and healthy housing interventions, train residents on maintain healthy home behaviors and addressing related health issues for residents while interventions occur (smoking, nutrition)
HHS/CDC	Prevention Wellness Trust Program	\$1 billion	Supportive program for Healthy Homes, Lead and Asthma control (all of which support energy efficiency/retrofitting); community service delivery to improve health outcomes and reduce chronic diseases
HUD	Choice Neighborhoods Program	\$250 million	Replacement for HOPE 6 may provide opportunity to launch a comprehensive Green and Healthy Housing Strategy in Older, Distressed Urban Communities that includes Housing and Job Development
HUD	Community Development Block Grant Program (CDBG-R)	\$1 billion	Use as supportive funds for identified projects for “matching funds” to provide personnel, address structural defect repair (roofs) and other operational support; energy efficiency is a priority objective for CDBG-R funds
HUD	Green Retrofit Program for Section 8 Multifamily Housing Program	\$250 million	Energy efficiency projects for the green retrofitting of 25,000 multifamily units
HUD	HOME Program	\$2.25 billion	Use as supportive funds for identified projects
HUD	Neighborhood Stabilization Program	\$2 billion	Integrating energy efficiency is a priority program objective
HUD	Office of Healthy Homes and Lead Hazard Control Healthy Homes Programs	\$19 million	Interventions, research, studies, testing, and demonstration efforts, including education and outreach concerning lead-based paint poisoning and other housing-related diseases and hazards
HUD	Office of Healthy Homes and Lead Hazard Control Lead Grant Programs	\$81 million	To specifically address identified lead hazards in the home (windows) – Need to allow for broader code enforcement related repair/flex dollars to cross reference with weatherization and energy efficiency
HUD	Public Housing Capital Funds Program	\$600 million	Energy efficiency improvement projects in public housing

Sites <i>Targeted Neighborhood</i>	Lead Grantee(s)	Capacity Development Intermediary	Training & Workforce Development Intermediary	Social Enterprise Development Intermediary	Philanthropic Partners
Atlanta <i>NPU-V: neighborhoods in SW Atlanta (Adair Park, Mechanicsville, Peoplestown, Pittsburgh, Summerhill/Capitol Homes); targeted area for The Annie E. Casey Foundation's strategic investments</i>	The Center for Working Families Sustainable Neighborhood Development, Inc.	The National Coalition to End Childhood Lead Poisoning	Atlanta Technical College	Community Construction Collaborative (3-C)	<ul style="list-style-type: none"> • The Annie E. Casey Foundation • Centers for Disease Control and Prevention • Living Cities • Community Foundation of Greater Atlanta • The Robert W. Woodruff Foundation • The Arthur M. Blank Foundation
Baltimore <i>East Baltimore: middle east section of neighborhood adjacent to Johns Hopkins Hospital; single largest redevelopment project area in Baltimore, transforming 88 acres with \$1.8 billion in new investments</i>	East Baltimore Development, Inc. The Uplands Southwest Baltimore Redevelopment Projects Park Heights Redevelopment Effort	The Coalition to End Childhood Lead Poisoning	Job Opportunities Task Force Baltimore Workforce Investment Board	Community Wealth Ventures	<ul style="list-style-type: none"> • The Annie E. Casey Foundation • The Harry and Jeannette Weinberg Foundation • The Aaron and Lillie Straus Foundation • Baltimore Community Foundation • Abell Foundation • Goldseker Foundation • Jacob and Hilda Blaustein Foundation • Zanyvl and Isabelle Krieger Family Fund
Louisville <i>Four neighborhoods – California, Phoenix Hill, Smoketown, Shelby Park – which are the targeted areas for the local Making Connections initiative and The Annie E. Casey Foundation's strategic investments. Smoketown is the sole focus for Metro Louisville's NSP2 application, and potentially for targeting of other ARRA investments.</i>	Making Connections Louisville / Network Center for Community Change New Directions Housing Corp Housing Partnership, Inc.	The National Coalition to End Childhood Lead Poisoning	Jefferson County Technical College Seedco	Community Ventures Jewish Family and Career Services	<ul style="list-style-type: none"> • The Annie E. Casey Foundation • Chase Foundation • PNC Foundation • Living Cities • Neighborhoods (technical assistance) • The Community Foundation of Louisville • The Gheens Foundation • The Brown-Foreman Corporation

Sites <i>Targeted Neighborhood</i>	Lead Grantee(s)	Capacity Development Intermediary	Training & Workforce Development Intermediary	Social Enterprise Development Intermediary	Philanthropic Partners
Providence <i>Low income southside neighborhoods (including Making Connections neighborhoods); Olneyville; eventual expansion citywide.</i>	City of Providence, Mayor's Office and Planning Department Pathways to Opportunity Office Community College of Rhode Island Laborers Union	The National Coalition to End Childhood Lead Poisoning	Workforce Solutions (Providence/Cranston Workforce Investment Board)	Capital Good Small Business Development Center at Johnson and Wales University	<ul style="list-style-type: none"> • The Annie E. Casey Foundation • Walmart Foundation (funding available through US Conference of Mayors) • United Way of Rhode Island • The Rhode Island Foundation

Alliance for Healthy Homes (www.afhh.org)

The Alliance for Healthy Homes is a national, nonprofit, public interest organization working to prevent and eliminate hazards in homes that can harm the health of children, families, and other residents. These hazards include lead, mold, carbon monoxide, radon, pests, and pesticides. To reach its goals, the Alliance for Healthy Homes works closely with and provides technical support and assistance to policy makers, community-based organizations, the housing industry, researchers, local, state, and federal government agencies, as well as other stakeholders.

Coalition to End Childhood Lead Poisoning (www.leadSAFE.org)

The Coalition to End Childhood Lead Poisoning is a national non-profit organization that creates, implements, and promotes programs and policies to eradicate childhood lead poisoning and further healthy homes. The Coalition was originally founded in 1986 as Parents Against Lead, a grassroots volunteer effort. Today, the Coalition is a nationally recognized policy, advocacy and direct service organization headquartered in Baltimore, Maryland. The Coalition's services extend throughout the states of Maryland and Delaware, as well as to St. Louis and Miami. The organization also provides advisory services to organizations such as the U.S. Conference of Mayors.

Community Wealth Ventures (www.communitywealth.org)

Community Wealth Ventures (CWV) is a social enterprise consulting firm that helps nonprofit organizations design and build revenue-generating ventures with the goal of increasing their financial self-sufficiency and capacity to deliver services. CWV's services assist nonprofit organizations in identifying their assets; assessing opportunities; developing strategic marketing and business plans; and building appropriate ventures – specifically business ventures or corporate partnerships. CWV also assists in developing strategic alliances between nonprofits and building capacity as it relates to the implementation of a venture.

The Council on Foundations (www.cof.org)

The Council on Foundations is an Arlington, Virginia-based nonprofit membership association of some 2,000 foundations and corporate giving programs. The Council is a voice of philanthropy at the national level and a valued partner globally. The Council provides the opportunity, leadership, and tools needed by philanthropic organizations to expand, enhance, and sustain their ability to advance the common good. It also strives to increase the effectiveness, stewardship, and accountability of the sector.

Jobs for the Future (www.jff.org)

Jobs for the Future (JFF) works to accelerate opportunities for people to advance in education and careers. In partnership with states and communities; national and local funders; and other organizations, JFF works through the following approaches: 1) researching, analyzing and developing policies that support people to succeed in family-sustaining careers; 2) implementing practical on-the-ground projects to develop models of helping youth and adults acquire the skills that employers require; and 3) advocating and sharing lessons to influence the policies and practices driving our nation's educational and workforce development systems.

Living Cities (www.livingcities.org)

Living Cities (LC) is an extraordinary philanthropic, corporate, and public sector partnership established to bring opportunities and the power of mainstream markets to urban neighborhoods and residents historically left behind. LC supports bold, promising approaches that take advantage of the city's unique role as America's engine for economic prosperity and that have the potential to transform the lives of low-income people and the communities in which they live. LC also promotes policies at the local, state, and national

level that help align private and public resources to support the scaling and sustainability of successful approaches to making our cities work for all.

The National Center for Healthy Housing (www.nchh.org)

The National Center for Healthy Housing (NCHH) conducts research on key aspects of childhood lead poisoning and lead hazard control and reducing exposure to allergens and other residential hazards. The results of its research have been used to shape federal and state regulations.

The National Fund for Workforce Solutions

The National Fund for Workforce Solutions seeks to improve employment, training, and labor market outcomes for low-income individuals. The Fund's support will improve both the quality of jobs and the capacity of workers by promoting change at three levels: individual, institution, and system. The result: better jobs, better workers, and a better workforce development system. The Fund is a new national funding intermediary. Its investors will capitalize this effort with \$30 million to \$50 million, which the Fund will use both to increase the number of local and regional workforce partnerships and to expand the scale of existing partnerships.

PolicyLink (www.policylink.org)

PolicyLink is a national research and action institute advancing economic and social equity by Lifting Up What Works.® Founded in 1999, PolicyLink connects the work of people on the ground to the creation of sustainable communities of opportunity that allow everyone to participate and prosper. Such communities offer access to quality jobs, affordable housing, good schools, transportation, and the benefits of healthy food and physical activity. Guided by the belief that those closest to the nation's challenges are central to finding solutions, PolicyLink relies on the wisdom, voice, and experience of local residents and organizations. Lifting Up What Works is our way of focusing attention on how people are working successfully to use local, state, and federal policy to create conditions that benefit everyone, especially people in low-income communities and communities of color. We share our findings and analysis through our publications, website and online tools, convenings, national summits, and in briefings with national and local policymakers. Our work is grounded in the conviction that equity—just, fair, and green inclusion—must drive all policy decisions.

U.S. Chamber of Commerce (www.uschamber.com/sb/default.htm)

The U.S. Chamber of Commerce is the world's largest business federation representing 3 million businesses of all sizes, sectors, and regions, as well as state and local chambers and industry associations. More than 96% of U.S. Chamber members are small businesses with 100 employees or fewer.

Barrier Removal Recommendations for the Office of Recovery Implementation

Preliminary List of Recommendations

1. Waive all provisions and provide time-limited exemptions for matching federal funds with federal funds across programs.
2. Allow up to 15% of each identified grant program as listed on Attachment A flexible dollars to address home-based environmental health hazards, window replacement or issues of energy efficiency. This “weatherization plus” would empower local governments to implement a more comprehensive Green and Healthy Housing program to assure that assistance goes to people with the most need. Under “weatherization plus,” regulations by DOE would work in concert with HUD lead hazard control standards.
3. Mandate that all federally supportive housing intervention grant programs (weatherization, energy efficiency, NSP, HOME, CDBG) and federally supported housing (i.e., Housing Choice Voucher/Section 8) are in full compliance with lead safe work practices in units built before 1978 – and require lead dust clearance testing if work disturbs more than 2 sq. feet of lead-based paint.
4. Allow Medicaid programs to pay for environmental investigations and prescriptive environmental health-based housing interventions such as window replacement or proven healthy homes interventions to complement energy efficiency. By providing reimbursement for interventions to address housing-related illnesses (asthma, lead poisoning and safety/injury hazards), we will increase the effectiveness of primary prevention efforts at the state and local level and leverage comprehensive efforts being made through energy conservation investments.