International Association of Certified Home Inspectors

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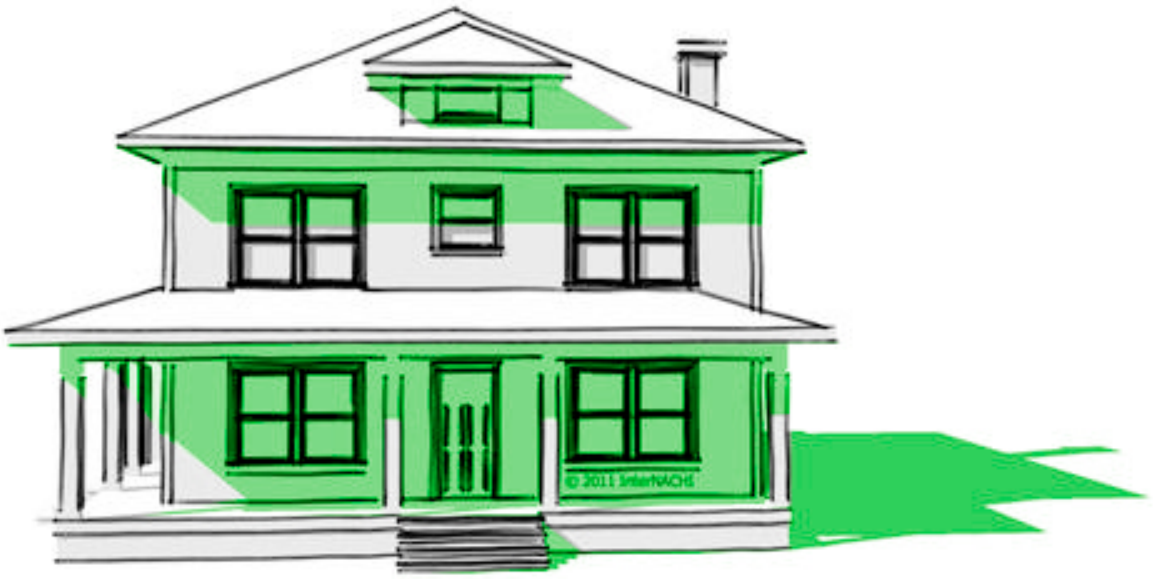
How InterNACHI Can Provide the Direct Link between Homeowners and the U.S. DOE's "Recovery Through Retrofit" Program



A white paper on private-sector solutions for implementing the "Recovery Through Retrofit" Program

BACKGROUND

What is Recovery Through Retrofit?

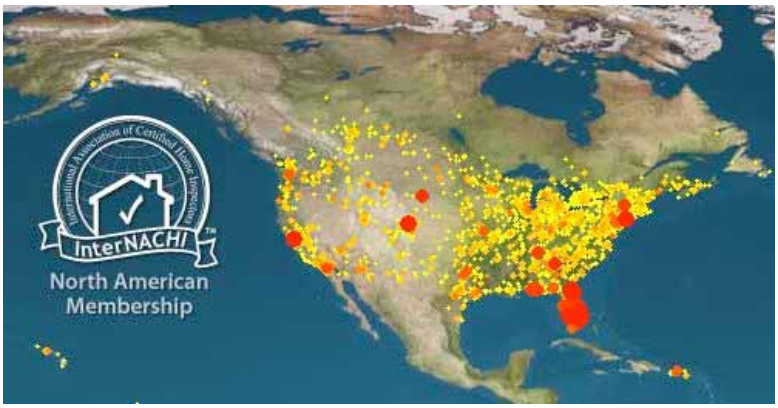
In 2009, Vice President Joe Biden announced a series of initiatives described in the Recovery Through Retrofit Report, which are designed to lay the groundwork for a self-sustaining industry to retrofit homes for energy efficiency. They include a new national Home Energy Score Program that will help homeowners make cost-effective decisions about home energy improvements.

http://www.whitehouse.gov/administration/eop/ceq/initiatives/retrofit

"The initiatives announced today are putting the Recovery Through Retrofit Report's recommendations into action – giving American families the tools they need to invest in home energy upgrades," said the vice president. [1] "Together, these programs will grow the home-retrofit industry and help middle-class families save money and energy." [2]

About InterNACHI

InterNACHI, the International Association of Certified Home Inspectors, is the world's largest organization of residential and commercial property inspectors who perform more than 10,000 property inspections every day. As a federally tax-exempt, 501(c)(3) non-profit, InterNACHI provides professional training, accredited education and certification. InterNACHI's training and Continuing Education courses have been awarded more than 800 government approvals and accreditations. [3]



InterNACHI-Certified Professional Inspectors® are committed to providing consistent, accessible and trusted information to their clients about their properties' condition and energy

efficiency. InterNACHI's broad mission is to educate homeowners by helping them understand the functions, materials, systems, components and proper maintenance of their properties. [4]

BARRIERS TO IMPLEMENTATION

Three Key Barriers Identified

The Recovery Through Retrofit Report identified three key barriers that have prevented the cohesive formation of a self-sustaining retrofit market, despite the obvious and well-documented economic and environmental benefits of improving home energy efficiency.

- **Barrier #1: Access to Skilled Workers**
  There currently are not enough skilled workers and green entrepreneurs to expand weatherization and efficiency retrofit programs on a national scale.

- **Barrier #2: Access to Financing**
  Homeowners face high upfront costs for retrofits, and many are concerned that they will fail to recoup the value of their investment if they later choose to sell their homes. The upfront costs of home-retrofit projects are often beyond the average homeowner's budget and outweigh the perceived value of the energy upgrades.

- **Barrier #3: Access to Information**
  Consumer-homeowners do not have access to straightforward and reliable information on all the different aspects of home energy retrofits in order to make informed decisions.

These combined barriers serve to block the consumer-homeowner's access to the vital resources that comprise the Recovery Through Retrofit Program. It is by addressing these barriers that InterNACHI can serve as the direct conduit between the resources that are key to the success of Recovery Through Retrofit and the homeowners who need them.

SOLUTIONS

Solutions to Barrier #1: Access to Skilled Workers

The Recovery Through Retrofit Report identified the fact that there are not enough skilled workers and green entrepreneurs to expand weatherization and efficiency-retrofit programs on a

national scale. The report calls for a uniform set of national guidelines for training residential retrofit workers.

InterNACHI is developing inspection report narratives based on the DOE Guidelines for Home Energy Professionals. The narratives are designed to be used in standard inspection reports to advise clients on how to find and hire home performance contractors with the appropriate credentials so that work is completed properly and generates the expected energy savings.

InterNACHI offers and is continuing to develop additional online educational and training courses for home energy professionals. As an EPA-approved training provider, InterNACHI currently offers the EPA-approved *Lead Safety for Renovation, Repair and Painting* course online at http://www.nachi.org/lead-safety-rrp-course.htm.

InterNACHI is developing a series of new online courses for home energy professionals who want to enter the home energy-retrofit market. This set of courses will provide building science education and training to contractors in the energy inspection industry. The first course in this training series, *The House as a System*, is available free online at http://www.nachi.org/house-as-a-system.htm.

Solutions to Barrier #2: Access to Financing

The Recovery Through Retrofit Report identified homeowners' high upfront costs for retrofits. InterNACHI already educates homeowners about the value of energy efficiency, and, in terms of Recovery Through Retrofit, can help persuade them of the value of energy upgrades so that their expectations and perceptions align with the rationale of a long-term return on investment.

To demonstrate its initiative and commitment, InterNACHI is participating in and has hosted meetings with collaborative groups, both locally and nationally, made up of gas and electric utility representatives and other stakeholders. We are working to leverage the home inspection industry in contractor development and consumer outreach and education that includes energy-upgrade rebates that are administered by participating utilities.

Solutions to Barrier #3: Access to Information

The Recovery Through Retrofit Report identified the typical homeowner's lack of access to information as the key barrier to a strong nationwide market for home energy upgrades.

However, in November 2010, U.S. Secretary of Energy Stephen Chu said, "The Home Energy Score will help make energy efficiency easy and accessible to America's families by providing

them with straightforward and reliable information about their homes' energy performance and specific, cost-effective, energy-efficiency improvements that will save them money on their monthly energy bills." [5]

In order to calculate a Home Energy Score, a qualified assessor must conduct a brief walk-through of the home and collect about 45 data points. The assessor then uses the U.S. Department of Energy's (DOE) Home Energy Scoring Tool to estimate a home's energy use, convert that data into a score, and develop recommendations for energy improvements. [6]

On March 16, 2011, Secretary Chu announced, "The Department of Energy is working to develop a strong home retrofit industry. We are creating a state-of-the-art tool that home inspectors can use on a handheld device to assess energy-savings potential and identify the most effective investments to drive down energy costs." [7]

The most critical time to educate homeowners is during a home inspection.

InterNACHI received a full license to develop its own residential energy calculator called the Energy Savings Report (ESR), which can be viewed online at http://www.nachi.org/hes.htm. InterNACHI's Energy Savings Report Tool runs on the engine that drives the DOE's Home Energy Saver (HES) tool (http://hespro.lbl.gov/pro/), the web-based residential energy calculator developed by the U.S. Department of Energy's Lawrence Berkeley National Laboratory.

InterNACHI's ESR Training and Certification Program qualifies individuals to perform non-diagnostic "clipboard" energy inspections, such as the Home Energy Score. As a partner of the DOE's Home Energy Score, InterNACHI and its trained and certified home inspectors will use the software tool to generate:

- a Home Energy Score between 1 and 10, which will be presented as part of a simple graphic that will help homeowners understand their home's current efficiency level and how it compares to other homes in the area;
- an estimate of how much money could be saved by making energy retrofits; and
- a personalized list of recommended improvements, with estimated annual savings and an estimated payback period for each upgrade.

By adding the Home Energy Scoring Tool to their work belts, InterNACHI home inspectors can target homeowners with useful consumer education, motivate them to take action, and use the established inspector-client relationship to ensure follow-through.

Making U.S. Buildings More Energy-Efficient

To build a clean energy future, we need to make our homes and buildings more energy-efficient to save energy and save consumers money. The greatest potential for saving energy is making buildings more efficient.

Doing so will accomplish three goals that are both short-term and long-term, including:

- laying the foundation for sustained economic growth;
- driving demand in the construction and manufacturing sectors; and
- creating hundreds of thousands of good jobs across the country.

The U.S. Economy and the Environment are Linked to Buildings

The U.S. economy and the environment are linked to the buildings we inspect and the energy they use. The U.S. consumes more energy than anyone else on the planet – about 20% of the total global demand.

The nation's 114 million households and more than 74 million square feet of commercial floor space account for:

- 42% of U.S. primary energy consumption;
- 39% of all U.S. greenhouse gas emissions; and
- 74% of all U.S. electricity consumption.

And the homes we live in – the homes we inspect – devour 23% of all U.S. energy.

“Improving building energy efficiency on a large scale is a challenge we can't afford not to take,” said Secretary Chu. “It will create jobs, reduce energy waste, save our businesses and institutions money, and reduce our dependence on foreign oil.” [8]

Large-Scale Trend

For many years, the energy audit industry has been providing consumers with information about home performance. That trend has shifted. [9] Five things have affected the energy audit industry, and none of them has to do with energy. They all concern money:

1. Auditors aren't seeing a strong return on investment by offering comprehensive energy audits (with blower door testing).
2. Consumers are resisting paying for comprehensive energy audits, especially in this economy.
3. Our national debt has put us in a de-regulatory mode well into the foreseeable future.
4. Utility companies are cutting back on subsidized energy audits.
5. There's little follow-through by homeowners on the recommendations produced by comprehensive energy audits, so there's no retrofit work being done.

The 2012 International Standards of Practice for Inspecting Commercial Properties states:

> "The level of due diligence should be set where the cost, in time and money, of acquiring information about the subject property will not likely exceed the value of that information." [10]

The upfront costs of a comprehensive energy audit often outweigh the value of the information it provides.

A recent study shows that the industry is moving away from a strict energy-audit approach and toward a more market-driven philosophy. The importance of engaging and educating the public in energy efficiency has never been greater. [11] To target and motivate homeowners on a national scale, a new educator is needed, and InterNACHI is already fulfilling that role.

By doing what they do best – educating homeowners – InterNACHI home inspectors can knock down Barrier #3 by providing consumers with access to information on a large scale. Educating homeowners is the most cost-effective measure in motivating them to take action in saving home energy. The new educators – InterNACHI-Certified Professional Inspectors® – are the trusted, third-party professionals capable of engaging and motivating homeowners.

From Clipboard Audits to Home Energy Improvements

Home inspectors are the right messengers. Thousands of times a day, all across the nation, they are sitting at the breakfast table with homeowners and their real estate agents. And the conversation over coffee is as much about energy as it is about the home's condition and safety issues.

Home inspectors can influence the decisions of homeowners and motivate them to take action. InterNACHI's Home Inspector Code of Ethics (http://www.nachi.org/code_of_ethics.htm) eliminates all conflicts of interest, which home-performance contractors suffer from.[12] Every

year, millions of homeowners use the recommendations provided by their home inspectors to perform home improvements, including energy upgrades.

Home inspectors are:

- the trusted, credible face of the community;
- the best at educating homeowners; and
- in control of deep-market penetration with affordable services consumers are demanding.

Home inspectors can:

- perform non-diagnostic energy inspections;
- educate home buyers, home sellers and their agents; and
- motivate homeowners to save energy, increase their comfort, and protect the environment.

SUMMARY

"There's no reason there shouldn't be at least 100 million energy-efficient homes in the U.S.," said Vice President Biden. [13]

To meet that goal, organizations with a vested interest in energy-efficiency improvements should:

- leverage the existing home inspection industry;
- promote home inspections for targeting and educating homeowners; and
- support the Home Energy Scoring Tool as the method for creating the opportunity for energy-efficiency upgrades.

InterNACHI is well-positioned to serve as the conduit between the DOE and the goals of its Recovery Through Retrofit Program and American homeowners and their desire to upgrade their homes for greater energy efficiency and savings.

InterNACHI is already performing the following functions and can work in tandem with the DOE to promote its goals for Recovery Through Retrofit. InterNACHI:

- develops, promotes and implements training modules for the inspection, construction and energy-retrofit industries;
- provides homeowners with clear and easily accessible information on how to make energy-efficiency improvements and find energy-efficient homes for home buyers;
- develops consumer-oriented webpage content that emphasizes the importance of home energy efficiency and the elements of a high-performing house;

- develops educational and outreach pieces for home inspectors to incorporate into their business practices that help homeowners access information about saving energy, increasing their comfort in their homes, and protecting the environment;
- supports the development and promotion of webinars, training modules and outreach materials focused on educating real estate professionals about energy efficiency and home performance; and
- uses its own Energy Savings Report Tool to empower homeowners and renters to save money, live better, and help the earth by reducing energy use in their homes.

InterNACHI Resources:

- "The House as a System" online course: http://www.nachi.org/house-as-a-system.htm
- Green Resources for Inspectors and Consumers: http://www.nachi.org/green.htm
- Free Inspector Education and Training: http://www.nachi.org/education.htm
- "Green Building" online course: http://www.nachi.org/greenbuildingcoursereleased2007.htm
- Move-In Certified™ Green Inspection Checklist: http://www.moveincertified.com/green
- "Energy Auditor" course: http://www.nachi.org/energy-audit-course.htm
- Energy Inspection videos: http://www.NACHI.TV
- Consumer Library: http://www.nachi.org/articles.htm
- "10 Easy Ways to Save Energy in Your Home": http://www.nachi.org/increasing-home-energy-efficiency-client.htm
- InterNACHI's Vision and Mission Statement: http://www.nachi.org/vision-mission-statement.htm
- InterNACHI's Standards of Practice for Inspecting Residential Properties: http://www.nachi.org/sop.htm
- International Standards of Practice for Inspecting Commercial Properties: http://www.nachi.org/comsop.htm
- InterNACHI's Home Inspector Code of Ethics: http://www.nachi.org/code_of_ethics.htm
- Recovery Through Retrofit by Executive Office of the President of the U.S.: http://www.whitehouse.gov/assets/documents/Recovery_Through_Retrofit_Final_Report.pdf

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Notes:

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4. InterNACHI Curriculum Approvals and Accreditations: http://www.nachi.org/education.htm
5. InterNACHI's Vision and Mission Statement: http://www.nachi.org/vision-mission-statement.htm
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