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FULL COMMITTEE HEARING ON SMALL BUSINESS ENERGY PRIORITIES

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FULL COMMITTEE HEARING ON SMALL BUSINESS ENERGY PRIORITIES

Wednesday, October 17, 2007

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
Washington, DC.

The Committee met, pursuant to call, at 10:05 a.m., in Room 2360, Rayburn House Office Building, Hon. Nydia M. Velázquez [chair of the Committee] Presiding.

Present: Representatives Velázquez, Cuellar, Altmire, Braley, Clarke, Ellsworth, Sestak, Higgins, Chabot, Bartlett, Akin, Westmoreland and Fallin.

OPENING STATEMENT OF CHAIRWOMAN VELÁZQUEZ

ChairwomanVELÁZQUEZ. Good morning. I now call this hearing to order, entitled Small Business Energy Priorities.

Our Nation's small business owners face many challenges in operating a successful company. The rising cost of energy continues to be one of the major concerns. As negotiations begin on comprehensive energy legislation in the coming weeks, it is critical to ensure that small firms, whether as producers or consumers of energy, are included in those discussions.

Today's panelists will outline their priorities as Congress moves toward a final product. This hearing presents an opportunity to identify outstanding matters and solicit the input of the small business community. Our Nation's energy policies are a public/private partnership and will only work if small firms are able to carry them out.

In August, the House took a major step towards greater energy independence when it passed H.R. 3221, the New Direction for Energy Independence, National Security and Consumer Protection Act. This legislation included the input from 10 different House Committees. It encourages the development of new technologies, promotes greater conservation and efficiency, and calls for more green energy production.

H.R. 3221 contained key initiatives from this Committee that will assist small businesses improve their energy efficiency. With guarantees and lower fees on SBA loans, more small businesses will be able to purchase efficient technology.

The House-passed bill also creates private equity investment companies that will spur funding for additional renewable fuel production. It also requires that the SBA set up a national effort to

educate entrepreneurs on potential energy-efficient products and techniques that can save businesses money. These are just a few of the targeted measures aimed at small firms.

This hearing would allow us to assess the direct and indirect impact of some of the proposed changes. Our focus will be on working to address the unique concerns of small businesses. Representatives of the construction, maintenance, installation and the designing industries are here to talk about how these reforms can work, but only if they are properly implemented. The goal of the comprehensive legislation is to move America forward toward increasing energy supplies and creating smarter usage. This will reduce overall energy consumption and greenhouse gas emissions, all while moving our economy in the right direction. Small businesses obviously will have an enormous role in achieving these goals.

Based on the testimony from the panelists, it is critical that the Federal Government and affected industries have an ongoing dialogue to implement this shift in policy. There must be flexibility in these reforms that allow small businesses to work with regulators to craft workable standards even after the bill is signed into law.

Small firms have been at the forefront of energy efficiency and the development of new technologies. From breakthroughs in green design and construction to the development in cellulosic ethanol, small businesses are the leaders in the field. They have not only been involved in the push for efficiency, but now have a role as suppliers of energy. The energy legislation being examined only seeks to build upon these efforts.

I look forward to hearing the small business community's recommendations to improve upon the final comprehensive energy package. The Committee can draw on this as this Congress works to increase our Nation's energy independence. I appreciate the witnesses coming here today to talk about this important issues, and I look forward to today's discussion.

ChairwomanVELÁZQUEZ. I now yield to Mr. Chabot for opening remarks.

OPENING STATEMENT OF MR. CHABOT

Mr.CHABOT. Thank you, Madame Chair. And thank you for holding this important hearing. We also want to thank all of the witnesses for being here. We will get to your testimony very shortly.

Energy is the lifeblood of the economy. U.S. economic prosperity is closely tied to the availability of reliable and affordable supplies of energy. Even when increases inefficiency are taken into account, significant increases in demand are projected into the future. It is not just the United States that is going to need more energy in the coming years. Our traditional energy supplies will be increasingly strained by dramatic growth in global demand. By the year 2030, the world's energy needs will increase by an estimated 70 percent.

We have had several hearings on this topic throughout this year, and every single small business person who has testified in this room has all said essentially the same thing: The recent volatility in the energy markets have put a tremendous strain on all of them, on all of our small businesses. Small businesses are in the same boat as the rest of us, only theirs is sinking a little faster because small businesses work on very thin profit margins. Even the small-

est fluctuations in cost can be a matter of making a profit that month or going into the red.

Increasing our focus on developing new alternative fuels and energy sources such as ethanol, biodiesel, solar and wind energy will be critical in our making progress on this issue. There can be little doubt that increased demand and consumption of renewable fuels has had a positive impact on our Nation's economy, including small businesses. It is quite apparent, however, that the United States must work towards a balanced and diversified energy policy, including locating and developing our own domestic sources of fossil fuels and improving our nuclear energy technology in order to meet our needs and reduce our dependence on foreign sources of energy.

Disturbingly, we import two-thirds of the oil we consume, much of it from OPEC and much of it from some of the more unstable areas of the world, Iran, Iraq, Saudi Arabia, Kuwait, United Arab Emirates. It goes on and on. Additionally we import oil from Nigeria and Venezuela. At the same time, the number of refineries operating in the United States has decreased from 324 back in 1981 to 148 now. With fewer than half the refineries we had back in 1981, and without building a new refinery since 1976, our energy problem is on track to become an energy crisis. Think of that, not having built an oil refinery in 30 years. That is just unacceptable.

Simply put, we must balance incentives and research into new renewable fuels that will eventually replace our current reliance on fossil fuels with ensuring we have an abundant and affordable source of energy right now. Unfortunately, I don't believe that the major energy bills that we have considered this year have achieved this balance. I do not believe that these bills create any new energy at all. And if anything, it makes fossil fuel energy more expensive, which in turn will make us even more dependent on foreign sources.

I am thankful that we have such an esteemed panel here to discuss the specifics of this bill with us this morning and to see what the experts outside the government think about the direction we are taking on energy policy, and I look forward to the testimony this morning. I want to thank the witnesses and, again, thank the Chairwoman for holding this hearing, and I yield back.

ChairwomanVELÁZQUEZ. Thank you.

ChairwomanVELÁZQUEZ. And I now recognize Mr. Altmire for the purpose of introducing Mr. Thompson.

Mr.ALTMIRE. I want to thank all the witnesses for being here today, especially—I have a constituent. And I want to thank the Chair for allowing me the opportunity to introduce and welcome the constituent from my district, Mr. Frank Thompson of Cranberry.

Mr. Thompson is president of Sweetwater Builders, a residential home builder and land developer company in greater Pittsburgh. He has a lifetime of experience in the home building industry and has served on the executive board of the National Association of Home Builders since 1993. Mr. Thompson has been honored by the National Association of Home Builders for his work in the building code development process, and he has received numerous awards

from the Pennsylvania Builders Association, including the Distinguished Achievement Award in 2005.

Recognized as an expert in the area of residential construction and land development, Mr. Thompson has previously testified before Committees of both the House and the Senate to talk about housing industry issues.

So I would like to thank Mr. Thompson for joining us here today, and I look forward to hearing his testimony.

ChairwomanVELÁZQUEZ. Mr. Thompson, welcome. And you will have 5 minutes to make your presentation. And all the witnesses' testimony will be made part of the record, without objection.

STATEMENT OF FRANK THOMPSON, OWNER, SWEETWATER BUILDERS, CRANBERRY TOWNSHIP, PENNSYLVANIA, ON BEHALF OF THE NATIONAL ASSOCIATION OF HOME BUILDERS

Mr.THOMPSON. Thank you.

Good morning, Madame Chair, Ranking Member Chabot. Jason, thank you for your very kind remarks and other distinguished members of the Committee.

My name is Frank Thompson. I am a fourth-generation small-volume home builder and land developer in a suburb of Pittsburgh, Cranberry Township. I am here representing the National Association of Home Builders, which represents over 235,000 member companies employing millions of individuals in the home building, remodeling, multifamily and light commercial construction industry. I appreciate this opportunity to discuss with you ways to promote residential energy efficiency and the negative impact that section 9031 of the House energy bill will have if enacted on thousands of small businesses that comprise the majority of our Nation's housing industry.

Home builders recognized long ago that energy efficiency is in the best interest of the Nation's economy, environment and security. Small builders play an especially crucial role in implementing and participating in voluntary efficiency programs. A couple of those programs are the U.S. Department of Energy and the EPA has the Energy Star program, and DOE also has a Building America program. In addition to that, there are numerous other volunteer programs, some through companies, some through States, some through locals. There is a wealth of participation by our membership in these programs. We are proud to participate in these programs, and we think they have had a tremendous impact on building energy-efficient housing in this country.

Another valuable incentive for promoting residential energy is the New Energy-Efficient Home Credit, which was enacted as part of the Energy Policy Act of 2005. This tax incentive shifts builders towards greater energy savings in new home construction through a $2,000 tax credit to a home builder who constructs a qualified home. Small builders are particularly interested in this as we found this incentive particularly useful because of the flexibility we have to react to marketplace preferences. We are building a lot of custom homes, and we can incorporate these features that do have the tax incentives into the home, saving our customers thousands of dollars in future utilities.

Unfortunately, the credit is set to expire at the end of 2008, and language to extend it was not included in either the House or Senate energy bills. NAHB strongly encourages Congress to permanently extend the New Energy-Efficient Home Credit. And I would suggest that you consider expanding the amount that is available and certainly look at it as it relates to existing housing.

As a member of the International Code Council, I work with thousands of individuals, businesses, and government agencies, including the Department of Energy and FEMA, that devote their time and expertise to craft benchmarks for building soundness, safety, health and, of course, energy efficiency. The ICC's lengthy Development Committee and voting processes are designed to ensure integrity and inclusiveness, and DOE is an integral part of that. In fact, the 2006 International Energy Conservation Code is actually a major revision of the previous energy code that was drafted by the Department of Energy.

Of course, the roles of State and local governments is also critical in this process as they are the ones on the ground that ultimately implement the codes and make necessary modifications for local geographic needs, a right given to the States in the United States Constitution. Because structural and efficiency needs are different in different areas of the country and need to be flexible for each State, it is crucial that the code process remains open, be based entirely upon consensus and be protected from encroachment by any Federal agency.

Generally the provisions on updating State building codes in section 9031 of the House energy bill create a number of technical and economic problems, particularly for small builders. And I have cited those in my written testimony. This section requires States to adopt certain stringent construction codes and standards, and then requires them to prove that they are 30 percent above the energy code in terms of savings by 2007, and 50 percent above code by 2020. If States do not meet these, then DOE steps in and drafts modified building codes incorporating these increases for the States. This completely undermines the State authority and sets Federal benchmarks for efficiency and building codes that do not—may not realistically account for specific geographic needs or incorporate practical enforcement provisions.

This section would negate the efficiency goals currently determined by the consensus code process, impose excessive cost, and set up an administrative requirement that is likely to be impossible to undertake. Furthermore, home buyers are very sensitive to upfront costs for a new home, particularly for efficiency features that often have long payback periods. This mandate would simply increase costs for new homes, making them even more unaffordable, and if they can't afford that new home, they are going to stay in an existing, less efficient homes.

ChairwomanVELÁZQUEZ. Mr. Thompson, your 5 minutes expired. But if you want to summarize.

Mr.THOMPSON. I will be happy to, Madam Chair.

I appreciate this opportunity to come before you and testify on your concerns, and be happy to answer any concerns you have. Thank you.

ChairwomanVELÁZQUEZ. Thank you.

[The prepared statement of Mr. Thompson may be found in the Appendix on page 4.]

ChairwomanVELÁZQUEZ. Our next witness is Mr. Mitchell Cropp. He is the President of Cropp-Metcalfe, a heating, cooling and plumbing company established in 1979 and based in Maryland, D.C. And Virginia. Mr. Cropp is representing the Air Conditioning Contractors of America and the Plumbing-Heating-Cooling Contractors National Association. ACCA and PHCC represents over 15,000 contractors and HVAC personnel.

Welcome, sir.

STATEMENT OF MITCHELL CROPP, PRESIDENT, CROPP-METCALFE AIR CONDITIONING-HEATING-SECURITY, ON BEHALF OF THE AIR CONDITIONING CONTRACTORS OF AMERICA

Mr.CROPP. Thank you, Madam Chairman Velázquez, and Ranking Member Chabot and members of the Small Business Committee. Thank you for the opportunity to provide testimony on the pending energy legislation and its impacts on the contractors and small businesses of the heating, ventilating, and air conditioning and refrigerating industry, referred to as HVACR.

My name is Mitchell Cropp, and I am president of Cropp-Metcalfe, a heating, cooling and plumbing service company with four branches that serve both residential and commercial clients in the Washington, D.C., metropolitan area. I have been involved in the HVACR industry for the past 50 years. I come before you as a member of both the Air Conditioning Contractors of America and Plumbing-Heating-Cooling Contractors Association. I am a past president of the Virginia chapter of PHCC and a past chairman of the ACCA in 1998. Together these two contractor groups represent tens of thousands of HVACR contractors, distributors and manufacturers across the country.

Let me begin by saying that ACCA and PHCC are strong advocates of energy-efficiency standards and have a long history of promoting energy efficiency. Every day thousands of ACCA and PHCC members help homeowners, small business owners and building managers realize the comfort and the cost benefits of energy-efficient HVACR equipment.

Our industry overwhelming supports routine increases in the uniform Federal appliance efficiency standard for heating and cooling products as described under the Energy Policy and Conservation Act, EPCA, and as amended by the National Appliance Energy Conservation Act.

As you are aware, the House and Senate energy bills as passed propose to allow the Department of Energy to authorize regional standards for commercial and residential heating and cooling products. This is unprecedented. And I am very concerned about those provisions and their potential impacts on the HVACR industry.

Imposing regional standards for heating and cooling products would erase decades of consensus agreement on products covered under the NAECA between manufacturers and energy efficiency advocates, and the harmful impacts would trickle down to the hundreds of thousands of small businesses in the HVACR industry,

which include manufacturers, distributors, contractors and both the commercial and residential consumers that they serve.

The idea of regional standards may sound reasonable. It seems logical that a furnace in Maine would be different than the one in Florida. But regional standards are not very practical for consumers or small businesses. From my viewpoint, I see regional standards increasing the cost of high-efficiency heating and cooling products to the consumer, creating an unenforceable rule that gives a leg up to the unlicensed contractors, and placing an undue burden on the small businesses that struggle in a very competitive market.

Let me explain. As you would expect, a higher efficiency air conditioning product, higher SEER on the air conditioning side, is more expensive to manufacture and install; therefore, it would be more expensive for the consumer. Recently the minimum seasonal energy efficiency ratio, or SER, of all air-conditioning systems increased from a 10 SER to a 13 SER. Contractors and distributors are still adjusting to the unforeseen and unintended consequences due to this transition.

A survey of contractors found that consumers chose more often to repair or maintain older, less efficient equipment instead of upgrading to the high-efficiency SER 13 units due to the increased costs of the higher-efficiency product. As a result, the national inventory remains older and less efficient, including equipment that contains refrigerants that use CFCs, HCFCs, which are known ozone-depleting substances.

Regional efficiency standards will also lead to higher costs for equipment and installation of heating products. Higher-efficiency furnaces are not a plug-and-play product. They are more expensive, they are labor-intensive to install, and they are not always practical. A high-efficiency conventional furnace requires special vending needs that may necessitate costly and time-consuming demolition and renovation. Often this is not practical for the installer or for the consumer. High-efficiency furnaces are not practical in many applications.

There are also other implications to other appliances. For example, upgrading to a higher-efficiency furnace may involve relining a chimney to accommodate a water heater. A survey of contractors found that with installation and labor costs, consumers can expect to pay anywhere between 20 and 50 percent more for a high-efficiency condensing furnace.

ChairwomanVELÁZQUEZ. Mr. Cropp, your time is up.

Mr.CROPP. Thank you.

ChairwomanVELÁZQUEZ. But during the question-and-answer period, you will be able to make any points that at this point you haven't made.

Mr.CROPP. That will be fine. Thank you.

ChairwomanVELÁZQUEZ. Thank you.

[The prepared statement of Mr. Cropp may be found in the Appendix on page 6.]

ChairwomanVELÁZQUEZ. Mr. Mike Rodriguez is the next witness. He is the president of Rodriguez Architects in Coral Gables, Florida. Mr. Rodriguez also spends time with architecture students

serving as a part-time lecturer at the University of Miami. He is representing American Institute of Architects as an officer of the board of directors. AIA represents over 80,000 licensed architects and emerging professionals.

Welcome.

STATEMENT OF MIGUEL A. RODRIGUEZ, PRINCIPAL, RODRIGUEZ ARCHITECTS, INC., ON BEHALF OF THE AMERICAN INSTITUTE OF ARCHITECTS

Mr.RODRIGUEZ. Thank you, Madam Chairwoman, Ranking Member Chabot, members of the Committee. Good morning.

I am Mike Rodriguez, an architect, small business owner and vice president of the American Institute of Architects. Since nearly half of our AIA members own or work for small business firms, we appreciate all that the Committee does for the small business concerns of this country.

One of the most important issues facing my firm, as well as countless small businesses across the country, is energy. Increases in energy prices are apparent in the form of surcharges being passed on by virtually every vendor and supplier we use, yet our ability to pass on these costs, particularly in a professional services environment with long-term design contracts, is severely limited, if at all possible.

The AIA strongly supports policies, programs and incentives that encourage energy conservation and efficiency. We believe that by the year 2030, all new buildings and all significantly renovated buildings should be carbon-neutral. Many organizations have adopted these principles as well, including the U.S. Conference of Mayors, the National Association of Counties and the Alliance to Save Energy.

Today I will discuss a number of important provisions included in legislation before Congress that promote energy efficiency, especially as it relates to the built environment and small businesses. Before I get into specifics however, it is important to understand why energy efficiency is so important to small businesses.

By constructing energy-efficient building systems and technologies, businesses can reduce monthly energy bills, improve worker productivity, increase worker retention and improve the well-being of building occupants. And businesses that show a commitment to the environment often find that is a competitive edge among consumers as they become increasingly attuned to the well-being of the planet. In short, energy-efficient design is not only good for the environment, but good for the bottom line.

To put this policy into action, one of the AIA's major legislative priorities for 2007 has been to extend the energy-efficient commercial buildings tax deduction. This provision provides building owners, many of whom are small business people, with a Federal tax incentive to install energy-efficient systems in their buildings or to construct new energy-efficient buildings.

Currently some energy-efficient systems are more expensive to design and build and install than traditional counterparts. For this reason, the initial increased capital costs can dissuade owners, especially business owners like me who often do not have access to the additional up-front cash necessary to install these systems that

are sometimes costly. The energy-efficient commercial buildings tax deduction addresses this situation and provides owners the financial incentive needed to build in an energy-efficient manner.

The AIA strongly supported the enactment of this tax deduction in 2005; however, it can only be claimed for buildings placed into service by December 31, 2008. And as it often takes several years to move from the building's initial design stage to final completion, many of the buildings on the drawing boards today will not be placed into service until long after the deduction has expired and therefore will be unable to reap the intended tax benefits.

In order to ensure that this vital incentive will make a difference, we believe it must be extended. In addition, we believe that the value of the deduction should be deepened from the current $1.80 per square foot to at least $2.25 per square foot. This will make it an even bigger incentive for building owners. We recognize that deepening this incentive increases the cost to the Treasury, but I propose to you that the cost of failing to act to reduce our energy consumption is far greater to our community, to society and the planet itself.

We are pleased that the House extended the tax deduction until 2013 in its energy bill. I understand the Senate's energy bill does not include any tax incentives for energy efficiency; however, the Senate Finance Committee did approve a tax package that not only extended the deduction, but also deepened it to $2.25 per square foot. The AIA urges Congress to include both the extension and a deepening of the energy-efficient commercial building tax deduction in its final bill.

The energy bill passed by the House also includes a number of other important provisions that will help provide incentives for energy-efficient practices and educate business owners on the benefits of energy efficiency. The AIA strongly supports the provisions under title 3 of the bill and commends this Committee and especially Subcommittee Chairman Shuler for the diligent efforts in crafting the legislation.

We have presented Committee staff with some suggestions on how to make this title even stronger, and I ask permission to include our recommendations into the hearing record. Today, however, I would like to focus on two of these provisions. First, section 3005 would allow Small Business Development Centers to apply for grants to carry out sustainability initiatives. Many business owners I have worked with are simply unaware of technologies, strategies and materials that will reduce their business energy use. Education is key.

Madame Chairwoman, I recognize that my time has expired. Thank you all for the time that you have allowed me. I would be happy to answer questions.

ChairwomanVELÁZQUEZ. Thank you, Mr. Rodriguez.

[The prepared statement of Mr. Rodriguez may be found in the Appendix on page 8.]

ChairwomanVELÁZQUEZ. Our next witness is Mr. Lee Fuller. He is vice president of government relations for the Independent Petroleum Association of America, IPAA, who represents independent oil and natural gas products and service companies across the

United States. IPAA addresses issues in the exploration and production segment of the industry.

Welcome, sir.

STATEMENT OF LEE FULLER, VICE PRESIDENT FOR GOVERNMENT RELATIONS, INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

Mr.FULLER. Thank you very much, Madam Chair, members of the Committee.

The Independent Petroleum Association of America does represent independent petroleum and natural gas producers. IPAA's producer membership is comprised of companies ranging from large, publicly traded companies operating in the upstream segment of the industry to small, individually owned companies. Most employ fewer than 20 employees.

Independent producers drill 90 percent of American oil and natural gas wells, produce approximately 82 percent of American natural gas and produce about 68 percent of American oil. Within this production are America's marginal wells. The operation of these wells is dominated by small business owners of IPAA. The overwhelming number of wells in the United States falls into this category. Approximately 85 percent of America's oil wells and 70 percent of America's natural gas wells are marginal wells. Equally significant, though, while individually small, collectively they provide about 19 percent of America's oil production and 10 percent of America's natural gas production.

Before addressing the specific House energy legislation, it is essential to understand the role of oil and natural gas in America's energy supply. Currently oil and natural gas account for about 65 percent of America's energy supply. Looking forward, energy demand growth will be essential to the growth of the U.S. economy, and all forms of energy will be needed.

Global climate-related initiatives can create shifts in the energy supply mix. However, oil and natural gas will continue to be key components, and American oil and natural gas offer the most national security. Congress needs to clearly understand the implications of global climate strategies in the energy mix as it considers different options.

Recently a Natural Gas Council study of a typical aggressive global climate bill showed that natural gas demand would increase between 20 and 30 percent by 2030. Consequently, if Congress moves forward with global climate initiatives, it needs to fully understand that natural gas demand increases will be a logical result and, correspondingly, that natural gas supply needs to be addressed at the same time.

Turning to H.R. 3221, a bill that has been characterized as a down payment on global climate policy, at issue is how H.R. 3221 addresses these essential energy challenges. Not only does it fail to advance the need to develop more American oil and natural gas, it reverses progress that has already been made. No bill can be considered a down payment on global climate that has one of its key objectives curtailing the development of natural gas.

Title 7 of H.R. 3221 contains nine sections specifically designed to reduce access to American natural gas on Federal lands. The

first four of these provisions repeal or adversely modify provisions of the Energy Policy Act of 2005 that were passed to allow development of important natural gas resources underlying these areas. Just 2 years after enactment, and just as the implementation of these provisions is occurring, H.R. 3221 would change them.

The next four provisions would add new burdens to the development of natural gas underlying on-shore Federal lands.

The final provision would override years of efforts to develop natural gas leasing on former naval oil shale reserves.

Taken together, these sections represent an irrational policy of curtailing the very actions that are needed to meet future natural gas demands.

Title 13, the revenue title of H.R. 3221, is similarly counterproductive. To put a perspective on this issue, IPAA does not oppose tax expenditures designed to encourage the development of American energy, energy efficiency or energy conservation. However, IPAA rejects the concept that increasing taxes on oil and natural gas is essential to develop other energy options.

As described previously, oil and natural gas will continue to be an essential component of America's energy supply. Independent producers largely develop their capital through the wellhead. That is. Their capital for investment in new production and in maintaining existing production comes from the sale of the oil and natural gas that is produced. Moreover, independent producers have a history of reinvesting their income back into new production. When taxes are increased, investment in American production diminishes. This is exactly the consequence of section 13001 of H.R. 3221.

The JOBS Act of 2004 created a deduction for investment in the United States. Section 13001 would deny this deduction solely for the investment in oil and natural gas. Here the case is crystal clear. The deduction is only available for American investment, and its denial means that those dollars were taken from American investment. U.S. oil and natural gas production will be diminished.

The effect on small businesses is twofold. For those small business oil and natural gas producers, investment dollars are taken away. For small business consumers, the availability of American oil and natural gas is diminished.

In conclusion, IPAA's small business members have been actively engaged in producing American oil and natural gas. What do they need from energy policy? Among their clear needs are access to the resource base in America and access to the capital to develop it. H.R. 3221 not only fails to support these needs, but aggressively rejects them.

Thank you very much.

ChairwomanVELÁZQUEZ. Thank you, sir.

[The prepared statement of Mr. Fuller may be found in the Appendix on page 10.]

ChairwomanVELÁZQUEZ. Mr. Cropp, I would like to address my first question to you. The energy bill that passed out of the House proposes an implementation of regional appliance efficiency standards. How would the implementation of regional standards affect

the air conditioning industry? And can you talk to us about some of the challenges these different standards may present?

Mr.CROPP. In the regional makeup, the way I understand it—for instance, if I am in multiple regions, it requires the contractor—number one, the burden is put on the contractor, first of all, to have the products for each region. And therefore, if one is a less efficient region versus the other, it puts a tremendous burden on us for space, for carrying parts on vehicles and, of course, the storage of such. The manufacturers themselves have suppliers to furnish us the products, and they are—they will have their same headaches as we have.

When you look at the high-efficient products, though, we look at it as can the consumer—or is the savings enough, whether or not it is cost-effective, it is a return on their investment. In many applications, we can look at 2- or 3-, maybe as much as $4,000 difference than a current 80 percent furnace to go to a 90 percent furnace. I am talking about furnaces at this point. And it is hard to justify that the life of that furnace is 15 to 20 years, will they get that return, and what did we really save?

Certain applications such as townhouses and condos and what have you, it is very difficult to run your flues or get your flues for aesthetics and so forth, cost-effective. It is not that. In certain applications, we are just going to struggle in the industry. We are concerned about the regulation itself that says you have got to have this size. Who is going to police it? Is it the county's, the local jurisdiction's? There is not a police force out there to regulate that and control it.

ChairwomanVELÁZQUEZ. In terms of regulating efficiency standards, in your opinion, what do you view as an ideal structure?

Mr.CROPP. I think the 80 percent furnace level right now is a good standard to work towards to have. When you start going over that, the requirements for the application and so forth really challenges us as to whether or not it is cost-effective. I think if there was more maybe energy credits or tax incentives for the consumer, maybe they would afford it, could afford it, would do it.

ChairwomanVELÁZQUEZ. If regional standards were implemented, the Department of Energy will have to create a new system. What impact would regional standards have on your industry, small firms and consumers? And also can you tell the Committee why it is important for the Department of Energy to consult with the industry in implementation of regional standards?

Mr.CROPP. Your last question there about consulting with the industry itself, from my many years in this industry, I have always had a problem with setting regulations and had a problem with the manufacturer designing the product and so forth and not consulting the people that put it in, the people that are in direct contact with the consumer themselves. It would be a tremendous challenge in the training arena to be sure personnel are properly trained to take and install such products, and more so in the application of the products is where the challenges come.

When you look, again, as I mentioned earlier, about stocking product, I think you—in regional situations we open up the arena of possibly people bringing in products from one region to another region, and it really does not meet the standards of that region. We

call these people sort of bootleggers or people that do not follow the codes and regulations. Unless there is going to be a method of policing this in some way, shape or form, I see the regulation not working.

ChairwomanVELÁZQUEZ. Thank you.

Mr. Rodriguez, in your testimony you spoke about the energy-efficient commercial building tax deduction, and this provision is set to expire at the end of 2008. As it stands now, the House bill will extend this program until the year 2013. Can you talk to us about the incentives this tax deduction creates, and what will happen if not extended?

I also would like for you to talk to us about—if you had been able to assess the impact that this deduction has had in your industry since it was created in 2005.

Mr.RODRIGUEZ. I would be happy to, Madam Chairwoman. I think the—what happens if it is not extended is actually pretty clear. The intention of the bill was to make this credit available widely. The mere time involved in development of a project from its initial conception, design, permitting, construction and occupancy, which is when you can actually claim the credit, is just so long that the time period—most of the buildings in design today, as I stated, just simply will not meet the time requirements. The extension is necessary in order to allow that. It is also necessary to make it a more memorialized deduction, if you will, so that people can rely on it being there when they actually put their buildings into service.

I think it is too easy to say, well, you know, it is meaningless to me because I am not going to be done in time. The longer extension in possible—I would like it be permanent, but 2013 is a step in the right direction.

As for the impact, I think when you talk about the effect of the additional cost that is borne in order to implement certain energy-efficient provisions, it is just nice to be able to plan—it is a way of amortizing the cost. It is a tax credit. You won't get it initially, you still have got to front the money, but at least you know and you can rely on that money being there, and the burden of carrying the debt on whatever it is that you are doing will be reduced by that. I think it is a win-win on all sides, and I want to repeat, because I don't think it is important—it is important to repeat this as often as possible. Failing to act will have far greater cost impacts than acting now will. And you can say that almost across the board. And it is very critical that we not take this opportunity to make that happen.

ChairwomanVELÁZQUEZ. Thank you.

Now I recognize—I have other questions, but I am going to allow for the Members to be able to make questions, and then I will come back on the second round.

Mr. Chabot?

Mr.CHABOT. Thank you very much, Madam Chair.

Mr. Thompson, I will begin with you if I can. You mentioned that the permanent extension of the new home energy credit which is not currently in the bill could have a pretty significant impact on home builders, and would you go into that a little bit?

Mr.THOMPSON. Sure. Of course, this tax credit has not been available for a very long. The IRS was delayed in clarifying the guidelines, and, of course, now it is ready to expire in 16 months. We are just getting up to speed here and seeing more and more builders taking advantage of the tax credits that are available under it, passing savings—future savings on to their customers. The $2,000 is far less than what it should be, and it needs drastically expanded as it relates to existing homes.

I had an experience recently where a customer was trying to do some energy improvements on their existing home, a 130-year-old house, and chose to insulate the ceiling. It was about a $1,200 improvement. The energy tax credit for doing that was about $60. It basically had no impact on the customer making a decision to make that improvement.

I will suggest to you, and it would be borne out by facts, that by focusing more on existing houses, which have a far greater use of energy than on the most new homes being constructed, we can get a lot more bang for our buck in terms of investment in energy savings.

Mr.CHABOT. Thank you very much.

Mr. Cropp, in your written testimony you mention that when people are forced to install a more expensive high-efficiency HVAC system, they are more inclined to try to fix the older unit than get the more expensive one. How often does this happen? How common is that observation?

Mr.CROPP. We just recently did some checking for the industry to report back to them, and one of them was compressor expenses, a component part of the air conditioning unit engine. It is the heart of it. And we found within the last 12 months that over—we have increased selling of just the replacement compressor itself by over 25 percent. And this means that in the past, we were able to convince the consumer that if the compressor warranties run out, that it is more economical for you to get a complete system. They are now opting out to go with a new compressor because of the increased costs.

The cost of the product is not just that in the HVAC—in the cooling cycle. For instance, the sizes have increased to the point we now need two people to move them around to the backyards, or they are even to the size that the standard vehicles—or vans, they won't fit inside the vans. So we have had to increase that cost to get box trucks. And even down to the point that some gates at people's homes, we can't get them through the gates, so they either have to take the gates down, or we have to get a small crane to lift them over the backyard. So some people think they ought to be getting these products smaller, but they are getting them larger.

But we thought it was—back to your original question. A 25 percent increase in compressor sales is very high for us, and we think the trend will continue to be that way to replace the engine now—the compressor and not the entire system.

ChairwomanVELÁZQUEZ. Would the gentleman yield?

Mr.CHABOT. I will be happy to yield.

ChairwomanVELÁZQUEZ. Mr. Cropp, this Committee reported a portion of the energy bill that provides for affordable loans for the purchase of energy efficiency appliances. Do you believe that the

up-front costs may help more small businesses purchase these appliances?

Mr.CROPP. I really do. I think the more that we can offer less expensive loans, it certainly helps us give them terms, will also give them credits, more tax credits, to put that investment into that building by putting the HVAC products more current, high efficiencies, yes, I think it definitely will help.

ChairwomanVELÁZQUEZ. Thank you. Yield back.

Mr.CHABOT. Thank you. Reclaiming my time.

Mr. Rodriguez, you mentioned in your written testimony that 2 years ago the American Institute of Architects adopted a policy calling for the immediate reduction of the amount of greenhouse gas-producing energy that buildings use. Is this something that you all did on your own, or was it something that came from here in Washington?

Mr.RODRIGUEZ. No, sir. We did not do it strictly on our own. It also did not come from here in Washington. It is actually a consensus that we built over time with several allied groups, probably one of the most notable ones, Mr. Ed Mazria's Architecture 2030. But it is a consensus opinion that was built with a lot of input, and also supported our process for establishing positions is broad-based and includes notification requirements and public comment from our members. So really our entire membership chimed in on those requirements.

Mr.CHABOT. But it wasn't something you were directed from Washington to do? You and your colleagues and associations did it on your own?

Mr.RODRIGUEZ. No, sir. That is correct.

Mr.CHABOT. Thank you.

And finally, Mr. Fuller, in your testimony you mentioned that 3221 fails to advance production of domestic energy, and you mentioned a number of reasons why. First of all, could you comment on the quote—or at least you hear it oftentimes—you know, when you tax something at a higher rate, you essentially get less of it. I think that was one of the points that you were making in additional taxation on some of the things that you all do; is that correct?

Mr.FULLER. Yes, sir. One of the frustrations that we have as this debate has moved forward on energy policy has been the concept that seems to be so prevalent, that there is a need to increase taxes on oil and natural gas production. Prices are high, that is true, but for our companies to put the money that they need into new production, they need as much revenue as they can get because they put it back into the ground.

There was a study done in 2000—or 2004 that showed that independent producers were—the top 50 were reinvesting 150 percent of their American cash flow back into American production projects, which means that if you are reducing their cash flow by $1, you are losing $1.50 in additional U.S. investment.

That is exactly what this bill would do. It would take away investment that is actually—must be going into the United States and use that for tax purposes. That doesn't get us more production. Without more production, you are not going to see the additional supply that would have an effect of responding to the market de-

mand that we do not see disappearing for oil and natural gas. We see oil and natural gas being a deep part of any energy supply mix going forward. Not saying that other things don't need to grow; the strong world economies thrive on energy. That is what they need, and we are going to need all the energy we can get in this country to build the economy we need for the future.

Mr.CHABOT. Thank you. I yield back.

ChairwomanVELÁZQUEZ. Ms. Clarke?

Ms.CLARKE. Thank you very much, Madame Chair. I want to thank you and Ranking Member Chabot as well as my colleague Congressman Shuler for your leadership and hard work in passing H.R. 2389 out of this Committee.

I want to thank the panelists for their testimony and assisting us to grapple with the 21st century national energy policies and concerns.

This bill, which later moved to energy legislation H.R. 3221, seeks to help small businesses develop energy efficiency practices and spurs investment in the production of alternative energy. It is clear to many of us that it is not easy and perhaps not even feasible for small businesses to step up to the plate to do their part to protect the environment. The financial demands associated with this task can be cost-prohibitive. But this bill provides loans, education and investment to small firms to help them become more energy-independent. It also provides good energy practices by modifying existing Small Business Administration programs to provide more flexible loan terms to small businesses that are developing or utilizing new technologies.

I support these measures in the bill because they are smart and efficient ways to increase the flow of capital to small business development and acquire energy-efficient technologies. We must make energy-efficient technology more affordable and accessible to defeat the effects of global warming. This should a goal for this generation; shifting this burden to future generations is simply not an option.

So I want to ask to Mr. Rodriguez, as you know, many small businesses have small profit margins, so the companies' bottom line is very important to them. However, it is difficult to find ways to lower their energy costs without enough capital and personnel to resolve their problem. What do you believe would be the impact of requiring the Small Business Administration to develop a Federal program for educating small firms about energy efficiency?

Mr.RODRIGUEZ. Thank you for the question. You are hitting at something that is near to my heart, the concept of education, of making information available.

In my written testimony, and part of what I cut out to stay on time of my oral testimony, I tell the story of a very small project that we just completed for a repeat client who needed to simply add a restroom to his market in order—because he discovered this is a young man, entrepreneur, in business 6 months has a market that also serves food. He discovered he wasn't making money on the market, but the food was making him money, and it was bringing people to the market. But in order to increase the seats, he had to add restrooms.

And the process of doing that, we suggested to him, because we had to move the existing water heater, that he replace it with a new tankless, much more efficient water heater. And he was all over it. However, that cost was $2,000, which may not seem like a whole lot, but when you look at the magnitude or the lack of magnitude of this renovation, it was a huge piece of his overall cost. So the finance piece is important, but just having the access to the information that enabled him to realize that there was another option there other than moving the same old water heater over is key.

I would like to also say that we also favor expansion of the section 3005 provisions regarding the Small Business Development Centers to allow them to provide information on design, on building design, not simply construction. Design is where true energy savings begin. And there is a lot that can be done with design that can mitigate—with all due respect to my colleagues, mitigate the need to spend a lot more money on MEL systems. If there is information on design, if design can play a part earlier on, then we can take steps in the designing of the building itself, siding it, how you focus openings in the building to capture breezes, how you protect against solar. All of that can help ultimately reduce the energy cost and help reduce the initial cost of implementing those features.

So that part is key, and we do believe and support fervently that the portion of it be expanded. Again, it is building on education because information is power, and small businesses—and I am one—we are tasked enough already with all of the mundane portions of what we do. There is just not enough time. It has got to be ready, it has got to be available.

Ms.CLARKE. Madam Chair, I want to make one final question to Mr. Fuller. The great thing about—Mr. Fuller, this question is directed to you. The great thing that I found about Congressman Shuler's bill is that it will not only help small businesses cope with rising costs, but will increase investment in small businesses that are developing renewable energy solutions. Are you opposed to any bill that will reduce the country's dependence on foreign oil?

Mr.FULLER. No, not at all. We are primarily focused on developing American resources. That is what my members do. We develop 90 percent of the wells in the United States. We think we have serious energy security issues in this country because we are too dependent on foreign oil imports, and we are starting to grow on foreign gas imports as well, much of which comes from unstable areas, as someone pointed out earlier.

The point we are trying to make is that oil and natural gas will continue to be a major component of our energy supply mix. We can do all these other things, and we need to, but we are still going to need oil and natural gas. American oil and natural gas is the most secure that we can get. So we shouldn't be diminishing our ability to produce American oil and natural gas while we are trying to reach all these other policy objectives. That is our concern.

Ms.CLARKE. Thank you, Madam Chair.

ChairwomanVELÁZQUEZ. Mr. Bartlett?

Mr.BARTLETT. Thank you very much.

Mr. Fuller, recognizing that in spite of vastly improved technologies for discovering oil, like 3-D-size-making computer mod-

eling, every year on the average since 1980, we found less and less oil. Now our discoveries year by year are a small fraction of what they were in 1980, as you know. Recognizing that history, if you could pump ANWR, the reserves in ANWR, and offshore tomorrow, what would you do the day after tomorrow?

Mr.FULLER. Well, I think what you are trying to suggest is that we need to be looking for other types of energy sources, and we agree with that. But we also believe that there are significant reserves still left in the United States that can be developed. For example, there is about, I think, 390 or so billion barrels of oil that we still have in areas that we have already developed, yet much of it hasn't been extracted because the technology do it is not advanced enough to move forward and to get that oil. For example, one of the areas that has been recently researched that has shown potential in that regard is the use of carbon dioxide.

Mr.BARTLETT. Let me ask you a question, sir. Isn't $87 a barrel of oil a pretty good incentive for developing these new technologies? The point I am trying to make is that the world's experts believe that we have probably found 95 percent of all the oil we will ever find. Pumping ANWR and offshore tomorrow leaves nothing in reserve for the day after tomorrow.

I have 10 kids, 16 grand kids and 2 great-grand kids. Not with my vote, but this Congress is going to bequeath to them the largest intergenerational debt transfer in the history of the world. Wouldn't it be nice if I left my kids, my grand kids and my great-grand kids a little energy? I think so.

In a former life, I was a home builder, and the other three witnesses are all in one way or another involved in home building. And I would contend that we are doing is satisfying ourselves that we are—that we are addressing the problem of energy with what we are doing in home building, and yet three of the most productive ways of saving energy in our homes I see in a very, very small percentage of homes.

What percent of the new homes built are passed as solar? We do really dumb things in our home design. We put in 6-inch walls with R-19 insulation, and then half of the street-facing windows, which may be north, or half of the street-facing walls, which may be north, are windows. No matter what kind of window you put in, a triple-glazed window is an awful heat source. It is a big hole through which heat goes compared to a wall.

What percent of our homes are passed as solar?

Mr.RODRIGUEZ. If you are addressing the question to me, sir, I don't have the answer, but I will tell you it is minuscule.

Mr.BARTLETT. It is minuscule, and it is a huge, huge way to save energy.

What percentage of our homes have a solar water heater on the roof? It is a huge way of saving energy. What percentage of them have a solar water heater on the roof?

Mr.RODRIGUEZ. That is correct. And again, I don't have a specific number. I will tell you with respect to that—that is an interesting question. The percentage usage was higher. As we began to increase our reliance on electricity, and energy prices were reduced, it started to drop, and now we are starting to see it come back up again.

Mr.BARTLETT. The usual heat pump is tied to the air, which means that when I am air conditioning my home in the summertime, I have to heat up the 100-degree air temperature outside. When I am heating my home with the heat pump in the wintertime, I am having to cool the 10-degree air outside. That is pretty dumb, isn't it, compared to tying my heat pump—we call it geothermal. It is not geothermal. We are not tying it to the magna of the Earth, but we are tying it to the Earth, which is 56 degrees all year long. That seems awfully cool in the summertime and awfully warm in the wintertime.

How many of our heat pumps are tied to the Earth?

Mr.RODRIGUEZ. Minuscule amount.

Mr.BARTLETT. Why are we kidding ourselves we are doing something about energy efficiency when just three of the most efficient ways, the most dramatic ways of saving energy appear in almost none of our homes?

Mr.RODRIGUEZ. If I may, Mr. Bartlett, I think that is your biggest opportunity, is to provide the opportunity for people to avail themselves of that through a variety of ways. First of all, you address design. I am here to tell you that we are not designing things the way we are supposed to be designing them, but there are an awful lot of factors that have to be considered when you make that statement, and it is not just pure design.

We also have to deal with available technologies, so if we don't provide technologies to be broadened and beyond that to look towards new technologies, not making existing technologies better, although that is also a part, then that is an opportunity wasted. That is your greatest opportunity and, I would submit also, challenge. You have to be able to look at the future and that future is not tomorrow; it is X number of days, months, years, maybe decades ahead.

ChairwomanVELÁZQUEZ. Mr. Bartlett, your time has expired, but I will recognize you for 2 more minutes.

Mr.BARTLETT. We can have another round, Madam?

ChairwomanVELÁZQUEZ. Yes, we do.

Mr.BARTLETT. Let me close this round then by saying that we are just giving lip service to energy conservation and leadership has responsibility, and we are behaving as leaders—you all are leaders in your industries, we are leaders here. We are behaving no more responsibly than the parent who gives their kids cookies because that is what the kids want. Leadership has some responsibility, and we are not exercising that responsibility from the top down. We are not exercising that responsibility relative to energy.

Thank you very much. I look forward to a second round.

ChairwomanVELÁZQUEZ. Mr. Ellsworth.

Mr.ELLSWORTH. Madam Chair, I am still inspired by Mr. Bartlett's comments. I will just associate myself with his comments and go to the next round.

ChairwomanVELÁZQUEZ. Ms. Fallin.

Ms.FALLIN. I guess what I would like to know, and I missed a portion of the early on testimony and I apologize, I was at other committee hearings, but what can we do, and maybe you have already covered this, but in light of knowing our energy demands throughout the world and in light of knowing what our housing in

the United States, how much of the energy it picks up and the price of gas and oil, and foreign countries that may be unfriendly to our United States, that we are depending so much on foreign energy, what can we do as a nation to help our families, our consumers, our homeowners use more of the new technology? I have heard a lot about the tax credits and extending those, but are there other things that we can do as Members of Congress that will maybe ease up some of the burdens that we put upon business for the research development that can encourage the energy efficient technologies to be used in our homes?

Any of you. Yes, sir.

Mr.THOMPSON. Ms. Fallin, I think one of the other suggestions the National Association of Home Builders would advance is that we need to explore opportunities through financing. Energy efficient mortgages, they have been around for about 15 years, but we really don't see much activity in them. And I don't have all the answers today for you on that, but I would welcome a dialogue on how we could make them more mainstream in the marketplace and have an impact on bringing these expensive technologies to the mainstream and affordable to America's home buying consumers.

Ms.FALLIN. I am going to ask, you are saying we have had those kind of mortgages in the past?

Mr.THOMPSON. Yes, they have been around for about 15 years. They are not very widespread in their use. You don't see a lot of banks or lenders that are even offering them.

Ms.FALLIN. If I may ask, Madam Chairman, what stops consumers from getting those mortgages? What is the burden or red tape that keeps us from utilizing those more?

Mr.THOMPSON. I don't think there has been enough differential in the rates that they provide or the amount of loan that you can obtain that has made enough difference in the marketplace for people to reach out for them, but I really think there is an opportunity to market them, to improve the advantages to customers considering these energy efficient investments in their home and bringing them to the mainstream.

Ms.FALLIN. If I may, Madam Chairman, are there any rules or regulation or hoops that we make home builders, architects, anyone who deals in energy efficiency that you have to jump through that would—and we want to conserve energy, we want to be conservation conscious, but are there any things that we do in our rules and regulations throughout the Federal Government that don't make sense, that we could look at in Congress that would improve our energy efficiency in our homes?

Mr.RODRIGUEZ. If I may, this may sound a bit pie in the sky, but there is a point there, I think we have to provide incentives for ingenuity. I don't think we do enough of that, so how do we do that? As I said earlier, we have to look further into the future than we are looking. We have to stop talking about stuff and get on with it.

You know, one of my favorite lines is the Paperwork Reduction Act, which added about 2 inches at the bottom of the form to inform us of the Paperwork Reduction Act.

There is no one particular person to blame. That is kind of one of those common-sense things that we kind of missed. But the

greatness of this country has traditionally been its ingenuity, and yet it seems whenever we provide funding or do anything to provide incentives for ingenuity, we weigh it down with reporting requirements, with the forms or with the thresholds that have to be crossed. I think anything we do has to be done with that in mind, keep that down, recognizing that you have to exercise proper stewardship without necessarily sinking the ship by adding too much ballast.

We have to keep that in mind and do everything we can. If we can reward ingenuity, I think that is pretty global and you would address a lot of the items that we are talking about here today.

Ms.FALLIN. Thank you, Madam Chairman.

ChairwomanVELÁZQUEZ. Mr. Thompson, almost everyone here are talking about the fact that education and information has to be part of the equation when we talk about energy and conservation. How can we achieve greater energy efficiency? The legislation that the House sought to increase this type of awareness, but there may be a concern that it also could create a regulatory burden, and the gentlelady was making reference to that.

If this legislation requires home builders to obtain additional energy analysis to indicate whether they meet or exceed the revised energy efficiency levels, what possible effect could this have on your industry?

Mr.THOMPSON. I think a couple comments there would be that the States would have a great deal of difficulty in implementing the requirements to show that their code meets the 50 or 30 percent over code requirement. So the simpler the codes can be, the easier they can be to comply with, the less certification that there needs to be, the less expensive certification, the easier it will be for small businesses to be able to meet those requirements.

Larger businesses will probably have an economy of scale that will help them in that respect, but it will be particularly onerous on the smaller businesses through the complexities.

The ICC code development process takes this into account and I think the consensus process that we have there really tries to bring to the building codes a reasonable degree of simplification and options flexibility, so that for regional differences you can find what is going to be the most cost effective way to achieve on energy efficiency.

ChairwomanVELÁZQUEZ. And if this means that costs are going to be incurred, who would be the one paying for that, builders in this case or consumers?

Mr.THOMPSON. Well, as a builder, if you want to stay in business you have to pass those costs on to your buyers. So it will be the American home buying consumer who will pay for that, or they will say it is not worth the investments in a new home, I am going to buy an existing house, which will be less energy efficient. So we have to strike the right balance there that continues to improve the energy efficiency of the overall stock.

ChairwomanVELÁZQUEZ. Mr. Rodriguez, in your testimony you spoke about increasing the tax credit from $1.80 cents to over $2 per square foot. Can you talk to us about why this is necessary if many builders are already utilizing the tax credit and how will this increase promote greater energy efficiency?

Mr.RODRIGUEZ. We are not seeing the significant use of the credit on the commercial side. The deepening of it simply makes it more worthwhile and in a sense we are promoting rewarding energy efficiency rather than mandating it or regulating it. So the expansion of the credit will have that effect by making it a more viable piece that comes back, but we are just not seeing it being used tremendously, and part of that also has to do with the extension.

ChairwomanVELÁZQUEZ. Uh-huh.

Mr.RODRIGUEZ. We can't minimize that, but we think it is critical to make it real, to make it worthwhile. It is not a dissimilar response to the mortgage answer that was given shortly before. It is just a matter of it is less meaningful at its current rate than it would be at the higher.

ChairwomanVELÁZQUEZ. Mr. Chabot.

Mr.CHABOT. Thank you, yeah, just a couple of final questions. Mr. Fuller, you mentioned, I think, that there are 390 billion barrels of oil that we already know about, but at this point because of the state of technology we can't tap into because they are either too deep or for some reason. Can you expound upon that a little bit?

And also, Roscoe mentioned ANWR, for example, in passing. I think we have—estimates vary but I believe it is around 16 billion barrels of oil there. I think what you said the numbers there, you know it certainly grabs your attention when you consider that ANWR is around 16 billion barrels and you are talking about 390 billion barrels of oil that are already discovered but we can't get to for one REASON or another. Could you expound upon that a little bit?

Mr.FULLER. Yes, I'll try to do that. Essentially you have to look at the history of the development of oil in the United States. Much of the early development, turn of the last century and early on into about half of the last century was at a time we didn't understand as a science of producing oil as well as we do now. So the production that was done, prices were very low. The structure that was controlling how fast things could be produced was in its infancy. It developed over time, but what happened was a lot of oil was left in the ground because we produced maybe 10 percent of a field.

We have been working since then to try to figure out ways to enhance that oil recovery, and we have used a number of different technologies called typically secondary or tertiary coverage. Some of those involve using produced water to try to flood more oil out of a formation using the oil floating on water concept.

Recently we have started to see various types of gas technologies, nitrogen, carbon dioxide, as mechanisms to try to force this basically oil that is still left in these old fields into production. Much of that has happened in marginal wells, very small producing wells, because they have depleted over a long period of time. Much of that is done by the small business component of my membership.

One of the challenges that they have is that as small businesses they don't have a huge research and development capability, they have virtually no research and development capability. So even though the price of oil may be high, this is a technology question, this is a question of how do you develop the technologies to be able to go after those types of reserves that haven't been produced well.

One of the areas that we have worked with a lot with the Congress on is trying to maintain the research and development component of the Department of Energy's fossil energy program for oil and natural gas, which the administration wants to zero out. They view it as a some form of a program that subsidizes the big oil companies. It is not. They do their own research and it is proprietary. My members don't get to utilize it.

The kind of research that could be done, for example, on utilizing carbon dioxide, which is an issue that is getting a lot of attention in the global climate context, to bring more of that oil into production is an area that we think bears a significant potential. The Department of Energy has done studies suggesting that significant amounts of that oil can be produced, and that is an area that we need to go back to again and again and again, because as we learn more things about the nature of developing oil, developing natural gas, the potential for getting that 300 or 90 billion barrels out and into American production can be a big asset to this country.

Mr.CHABOT. Thanks.

And then finally, again Roscoe mentioned a couple things which I thought were quite interesting relative to this whole thing, and Roscoe, by the way, is a nuclear physicist, right?

Mr.BARTLETT. No, physiologist.

Mr.CHABOT. One of those things that a lot of us are not terribly familiar with and so we defer to Roscoe's knowledge. Although I have to say Roscoe said he's got 10 kids, 16 grand kids, I think he has personally been responsible for sort of the energy depletion in our country, but in any event, more power to you, Roscoe.

But Roscoe talked about the solar energy and solar homes and how few that we actually have, the percentage, et cetera. And I actually had the opportunity a while back to go and personally tour kind of an experimental new solar home that is actually a nun in my district out at Mount Saint Joseph, the college, that she along with volunteers and others help and literally built, which is very impressive and I strongly encourage anybody to look into the research that she has done, et cetera.

But at the practical level where somebody would say in Ohio, for example, use to a great extent solar energy for heating water or for heating their home or whatever, could anyone on the panel who wants to take this up, could you discuss the practicalities involved there of say doing it in Cincinnati or Cleveland, which is in the northern part of Ohio obviously versus, say, Arizona where may be more practical. What are we talking here dollars and cents? And why don't more people do it in cooler climates in like say Ohio compared to say Arizona.

Mr.RODRIGUEZ. If I may address that, first of all clearly the sun shines every place to a lesser or greater degree, but one of the more interesting tidbits of data that I heard was Seattle, whom everybody knows is rainy and cloudy 300 some odd days of the year. I wish I had good command of the numbers, but the point was that the solar effect on one wall of a typical home in Seattle given the lack of sunshine, if you will, that they receive was still enough to generate all the solar—all the power that the home needed to run and be off the grid. It may actually be producing in excess.

What are the barriers here? So the first answer to your question is solar is good anywhere. Maybe not in the deep caves somewhere, I might not put a solar ray on the bottom of a missile silo, but certainly where we would be using them.

The problem with solar right now is, I would say, the major one, is cost. The technology is advancing, production is not increasing and we all know the supply/demand thing. Oddly enough photovoltaic cells, the key ingredient is silica, the key ingredient in computer chips, and we all know what happened to the price of computer chips as supply grew.

We need to find a way to reward greater production of photovoltaics to bring that cost down to where it is manageable.

I just did this for my own home in Miami. I didn't implement it, I have been running costs to see what point it reaches where it warrants the investment in it. The last time I did it was a couple years ago, and I estimated about $60,000 to deploy a solar array that would power the house, a small house, 2700 square feet. I recently did it, it is now about 30,000, and it is at the point where I am actually thinking seriously. It is probably not as cheap as I'd like it, but I also like to walk the walk. So I am looking at doing that. But if we get that down, then solar homes become much more viable.

Mr.CHABOT. Mr. Cropp, would you want to weigh in on that? And how would that compare, the 60 or 30,000, to what it would take to have the appropriate heating and air conditioning for a home of say 2700 square feet, as Mr. Rodriguez said?

Mr.CROPP. We are not experienced in doing solar, but in some of the seminars that I have attended—

Mr.CHABOT. I am sorry, what I meant was how would that compare with not going solar, doing the traditional route? I am talking about some comparison, because he said 60 and then you got it down to 30?

Mr.RODRIGUEZ. It is about 30 now.

Mr.CHABOT. So what would a comparable 2700-foot size home cost for the furnace and air conditioning as well.

Mr.CROPP. You were looking at the entire house?

Mr.RODRIGUEZ. Yes.

Mr.CROPP. See, he's talking the entire house. I would be talking just one portion of the house, but on a HVAC side the high efficient AC, a furnace, which would be minimal in the location that he's talking there, you are probably looking at anywhere from about 10 to $14,000 installation. That would give you a very high efficient system.

The other area that was mentioned earlier about geothermal, it all boils down to the cost of the product and the cost of the installation and some of these costs. The reason the industry is not pushing it and aggressively going after it in certain locations is just that, what it costs to drill a hole or what it costs for the labor. The products themselves, if we can give incentives to the manufacturers or to the people that are producing these products, then there is a chance they can get these products cost effective.

Mr.RODRIGUEZ. If I may add, Mr. Chabot.

Mr.CHABOT. Yes.

Mr.RODRIGUEZ. I want to bring our attention back to the holistic approach I talked about earlier, to build on Mr. Cropp's response. There is one direct effect that installing a more energy efficient heating cooling system would have on a solar application, and that is it reduces power consumption, it reduces the draw. By reducing the draw the solar system can be sized down, which in turn reduces the cost of the solar system for installation. So the key is to look at not just installing a solar array, and saying we can be as inefficient as we want because we are doing it, although I suppose I probably couldn't argue with that, because I would think the sun is renewable and we don't face having to deal with it not being renewable. But if we can make water heating more efficient, the appliances more efficient, the HVAC system more efficient, every other piece of that house more efficient, it means you have to build a smaller solar array, drops that cost.

Mr.CHABOT. Thank you very much.

Mr.THOMPSON. If I could add one comment to that. I agree that you need to take both steps. The problem is that now you have added cost in the higher expense of the passive solar system or the geothermal system. In order to keep the cost somewhat curtailed of that we have also spent significant dollars on reducing the consumption in the house. So we have actually increased costs on both sides of the equation there. And so it becomes very difficult for America's home buying consumer to be able to afford it. Please put some incentives in place in the marketplace and the Tax Code that can help them better afford it.

Mr.CHABOT. Thank you very much. I appreciate it. It has been a very informative panel. I think you have all done a very excellent job, thank you.

ChairwomanVELÁZQUEZ. Mr. Sestak.

Mr.SESTAK. Thank you, Madam Chair. I apologize, I read your material and then I listened to your testimony and then I had to step out for another meeting. And so I don't think I have much to offer except maybe an overarching question. And I mean this in an agnostic way. And perhaps, sir, Mr. Rodriguez you could answer first and then Mr. Thompson.

To some degree when you listen to your testimony or read it, the crossover point becomes important, you feel we can get there to where it is an incentive, and there seems to be significant hesitation about that, because I do see two goods here, the environment and truly a global issue and a national issue and the impact upon small business is how you achieve it. And I strongly do believe in the environment as one of, you know, the major survivable issues, so to speak.

How would you address that in the crossover point, because your testimony says you can get there, and his point is, boy, I will tell you, you know, it is kind of okay right now, let's keep it volunteer, you know, before we—I mean this in an agnostic way.

Mr.RODRIGUEZ. And it is taken that way and I appreciate the opportunity to address it. I want to keep beating the holistic hammer. Another thing we have to do is stop making other decisions to proceed entirely on initial cost. We have to look at the life cycle of that building, in this particular reference that we are talking about a home.

Now, if I could build you a home, that was completely off the grid and it would cost you nothing in energy to operate, doesn't that affect the overall cost of the home? It may cost you more to buy, there's no question about that, so then the question becomes at what point do those two lines meet? How much more are you willing to pay for a home? Let's not increase the cost of the home.

I think we have to give a little more credit to the American consumer. They are not all as dumb as we sometimes think they are. If you make the case on a holistic basis and you say we can build you a home that is going to save you energy, you are going to be healthier because we have daylight in it and good air quality, we have appliances that don't kill you with energy usage and you will be able to run it for no money at all so you're not going to have to pay the electric utility X amount of money, or let's not say zero, let's say 10 percent of what you are paying no now, at some point that becomes a pretty easy decision, doesn't it?

I will hit on one other thing, one of the biggest barriers that we have and I think more so in commercial than in residential because our homes are our homes and the average time in a home is—well, the last I read is 7, it is probably a little less now in years, and people are people and they want to be mobile. When it comes to commercial, we are making financing and construction decisions for our buildings on a 5-year cycle. It's very difficult to make a case for life cycle overcoming the initial cost to build something if we are looking at keeping this 5 years. Well, what happens to the poor guys that buys it on the fifth year and first day because they then inherit. When we talk about mortgages, how those decisions are being made and encouraged, looking at buildings as lasting more than 5 years. What would have happened if the folks who built the building right now would have designed it for a 5-year life? Think about it. Okay.

Mr.SESTAK. Okay. Yes, sir.

Mr.THOMPSON. We are already incorporating life cycle considerations into the energy efficiency that we incorporated into houses already. The building codes look at it from that approach on a regular basis. So we can continue to focus on that, but we can't keep it focused solely on new homes. If we are to meet these tremendous energy savings that we hope to, it can't be on the backs of only new homes, only new commercial buildings, unless we look at the entire stock, existing stock of buildings that we have and how we can improve their energy efficiency. We do not have hope of beating the ambitious goals that are being laid out.

Mr.SESTAK. I went to visit the only green school in Pennsylvania in Radnor, and there are 600 wells where it goes down and the water comes up. I just went out there one day to visit and you are right about this crossover point, they don't reach it until beyond that 7-year point where someone doesn't get it back, and I think that is key and we don't do that well in government, because it is appropriations every year.

But sir, for me can you be part of it so that the standards can rise some, I mean not only but to some degree you got to where you were, we are not where we were in 1930, so is there another step to be done?

Mr.THOMPSON. Well, I think we are looking far beyond a 5 or 7-year life cycle for energy efficiency already. In work that I've done and NAHB has done with the Department of Energy, 15 to 30-year life cycle is the way we have looked at different energy improvements.

I offered geothermal heat pumps to many of my customers. Here's how much it costs, here is what the projected payback is, and I find very few, when armed with that information, make the choice to spend the additional money for the geothermal system. Perhaps we need to educate the public better, perhaps we need to put other incentives in place that will help more of those people make those decisions to be more energy efficient. But I will tell you, the builders are out there making those options available to our home buying consumers.

I also wanted to mention that there is a DOE solar decathlon on the mall going on right now. There are several solar houses out there in the 500,000 to $1 million price range.

Mr.SESTAK. I thank you very much. Those are very important. I hear the same argument made by dealers of CAFE standards for cars. I guess it is coming to grip with how does everyone contribute so everyone benefits, that is the hard part, without anyone being hurt badly. Thank you very much.

ChairwomanVELÁZQUEZ. Time has expired.

Mr. Bartlett.

Mr.BARTLETT. Thank you. Rather than to the high cost of geothermal heat pumps, almost every time we build a house we dig a big hole. It is to put a basement in the house. Why don't we just put these pipes under the footer and under the basement floor and insulate over it? Wouldn't that be a pretty cheap way to link it to the Earth?

Germany has somewhere between mediocre and poor insolation, that is not insulation, which is the amount of sunshine you get, and yet Germany is the leading country in the world in installing solar panels.

How many of you know who M. King Hubbert was? Anybody? What a pity it is and it is not your fault. M. King Hubbert was a Shell Oil Company geologist who 51 years ago this year, the 8th day of March in San Antonio, Texas, gave what will in a few years be recognized as the most important speech given in the last century and he addressed a group of oil engineers, and so forth, in San Antonio, Texas. And he told them that the United States in 14 years, by 1970, would reach its maximum oil production.

At that time the United States was king of oil. We were producing and exporting more oil, I think, than any country in the world. And he told them that in just 14 years we would reach our maximum oil production. Shell Oil Company begged him not to do that. It was a silly thing to say and it would make them look silly. He was ridiculed for a number of years, and then right on target in 1970 we reached our maximum oil production.

Mr. Fuller, in spite of drilling more oil wells in our country than all the rest of the world put together, we have 530,000 operating oil wells in our country. We have more than four times as many oil wells in the Gulf of Mexico than all of Saudi Arabia. In spite of all those oil wells we now produce about half the oil. As a matter

of fact, for the lower 48, which is what M. King Hubbert predicted, we now produce less oil, about half the oil that we did in 1970.

It was mentioned in the opening remarks that by 2030 we will have a 70 percent increase for the demand in oil. There will not be 70 percent more oil, just 2 percent growth, and growth in the world is now increasing more than that because of China, India and the Third World trying to industrialize. Just 2 percent growth, doubles in 35 years, it is four times bigger in 70 years, it is 8 times bigger in 105 years and it is 16 times bigger in 140 years. There isn't even a prayer that we will have anything left. We are not going to have half the oil that we have now in 140 years.

As a matter of fact, another great speech given in the last century was given by the father of our nuclear submarine, Hyman Rickover, to a group of physicians in St. Paul, Minnesota. That was just 50 years ago this last year. His widow sat in the gallery when I commemorated that speech on the floor of the House.

He predicted that in 8,000 years of recorded history the age of oil would be but a blip in the history of man. At that time we were 100 years into the age of oil, now we are 150 years into the age of oil.

How many of you know that your government has paid for four major studies on energy futures of the world and that they are now systematically ignoring the counsel of SAIC studies called the Hurst report, Corps of Engineers study done for the Army, the GAO study done—I asked for it through our Science Committee—and the National Petroleum Council which the President asked for, and every one of those reports said that the peaking of oil—by the way, oil production has been constant for the last 30 months, increasing demand, constant production, increasing cost. About every one of those four studies concluded that oil peaking was either present or imminent with its potentially devastating consequence.

Do any of you know anything about those four studies? Again, what a pity. It recognizes the absence, Madam Chair, of leadership in our country.

I thank you very much for holding this meeting. Energy I think will be the overarching issue in this decade. We have about 20 people running for President and not one of them mentions energy. I pulled up their Web sites on energy and the comments there run from silly to really silly for most of them.

So thank you very much for holding this very important hearing and thank you for your testimony, gentlemen.

ChairwomanVELÁZQUEZ. Thank you.

I just want to move a little bit away from the whole oil discussion, Mr. Fuller, and I would like to ask you to address my last question and it is regarding high natural gas prices could have a significant negative impact on agriculture in rural America, and the agriculture sector is a large consumer of natural gas, using it for everything from producing nitrogen fertilizer to drying grain. Farmers are doing their part to reduce natural gas consumption by installing renewable energy and energy efficiency systems and by adopting best management practices to optimize fertilizer use.

What can be done to bring more stability in prices for natural gas and for rural America? Are there alternatives to natural gas usage either in the short or long term?

Mr.FULLER. I can't speak to the last point because I don't know about the alternatives. What we are tending to see is natural gas is in a commodity market, commodity market reacts to supply and demand, and that is what has caused a lot of the volatility. It is—over the past several years we are seeing two dynamics probably flowing. One is in conventional gas, which is the classic type of formation that has been developed for decades and decades, we face significant increases in decline curves. The ability to produce and find that gas is increased. And so say 15 years ago the average annual decline rate was about 16 percent overall, now that average annual decline rate is over 30 percent. That means that to stay even in the United States we have to find and develop and get online new natural gas supplies that exceed the amount that we annually produce from the Gulf of Mexico, which is a world class area for natural gas production. That challenge is what then has the effect of creating the demand-supply interaction that we have seen.

Now recently what we have started to see is as we were developing more unconventional gas, which comes from types of formations that haven't been developed until perhaps the past 15 years, things like shales and tight sands, those tend to have a slower decline rate and we have seen the increase go up.

We are actually probably seeing for this year the first time in quite a while a small increase in natural gas production. Without more supply, we are either faced with demand destruction to bring the market back into alignment or—and therefore we are going to continue to see the kind of volatility that has existed for the past several years.

ChairwomanVELÁZQUEZ. Thank you, Mr. Fuller. Definitely this has been a fascinating hearing and I want to thank all the witnesses for your participation.

Would you like to add?

Mr.CHABOT. Very briefly, Madam Chair. I would just note that neither you, nor I, nor the panel, nor anybody in the room other than Roscoe knew who the heck M. King Hubbert was. I thought this was a very informative hearing and I want to thank you for holding it, and I want to thank the panel for discussing this important topic with us. I yield back.

ChairwomanVELÁZQUEZ. And I just would like to say that yes, there have been concerns that have been raised regarding H.R. 3221, the energy package that was reported out of the House. And I just want to make sure that some of the incentives that are contained in that bill are adequate in terms of promoting efficiency in this country, also that some of the changes that will be implemented in some other areas are done in a way that are workable.

So I will be drafting a letter, sending it to the relevant parties, and I will make that letter available to the members of the committee, raising some of the concerns that were expressed here this morning and any member who wants to be part of that letter is welcome to do so.

I ask unanimous consent the members have 5 legislative dates to enter statements and supporting materials into the record. Without objection, so ordered.

This hearing is now adjourned. Thank you.

[Whereupon, at 11:50 a.m., the committee was adjourned.]

STATEMENT
of the
Honorable Nydia M. Velázquez, Chairwoman
House Committee on Small Business
Hearing on Small Business Energy Priorities
October 17, 2007

Our nation's small business owners face many challenges in operating a successful company. The rising cost of energy continues to be one of their major concerns. As negotiations begin on comprehensive energy legislation in the coming weeks, it is critical to ensure the needs of small firms – whether as producers or consumers of energy – are included in those discussions.

Today's panelists will outline their priorities as Congress moves towards a final product. This hearing presents an opportunity to identify outstanding matters and solicit the input of the small business community. Our nation's energy policies are a public/private partnership and will only work if small firms are able to carry them out.

In August, the House took a major step towards greater energy independence when it passed H.R. 3221, the New Direction for Energy Independence, National Security, and Consumer Protection Act. This legislation included the input from ten different House committees. It encourages the development of new technologies, promotes greater conservation and efficiency, and calls for more green energy production.

H.R. 3221 contained key initiatives from this Committee that will assist small businesses improve their energy efficiency. With enhanced loan guarantees and lower fees on SBA loans, more small businesses will be able to purchase efficient technology.

The House-passed bill also creates private equity investment companies that will spur funding for additional renewable fuel production. It also requires that the SBA set up a national effort to educate entrepreneurs on potential energy efficient products and techniques that can save businesses money. These are a just a few of the targeted measures aimed at small firms.

This hearing will allow us to assess the direct and indirect impact of some of the proposed changes. Our focus will be on working to address the unique concerns for small businesses. Representatives of the construction, maintenance, installation and design industries are here to talk about how these reforms can work, but only if they are properly implemented.

The goal of the comprehensive legislation is to move America forward toward increasing energy supplies and creating smarter usage. This will reduce overall energy consumption and greenhouse gas emissions – all while moving our economy in the right direction.

Small businesses obviously will have an enormous role in achieving these goals. Based on the testimony from the panelists, it is critical that the federal government and affected industries have an ongoing dialogue to implement this shift in policy. There must be flexibility in these reforms that allows small businesses to work with regulators to craft workable standards even after the bill is signed into law.

Small firms have been at the forefront of energy efficiency and the development of new technologies. From breakthroughs in green design and construction to the developments in cellulosic ethanol, small businesses are the leaders in the field. They have not only been involved in the push for efficiency, but now have a role as suppliers of energy.

The energy legislation being examined only seeks to build upon these efforts. I look forward to hearing the small business community's recommendations to improve upon the final comprehensive energy package. The Committee can draw on this as this Congress works to increase our nation's energy independence.

I appreciate the witnesses coming here today to talk about these important issues and I look forward to today's discussion.

Opening Statement

Hearing Name	Small Business Energy Priorities
Committee	Full Committee
Date	10/17/2007

Opening Statement of Ranking Member Chabot

"Good morning. I appreciate your being here today as we examine small business energy priorities. I thank you all for taking the time to share your testimony.

"Energy is the lifeblood of the economy. U.S. economic prosperity is closely tied to the availability of reliable and affordable supplies of energy. However, according to the U.S. Chamber of Commerce, since 1973, U.S. energy production has grown only 13 percent, while U.S. energy consumption has increased 30 percent. Even when increases in efficiency are taken into account, significant increases in demand are projected.

"It is not just the United States that is going to need more energy in the coming years. Our traditional energy supplies will be increasingly strained by dramatic growth in global demand. By the year 2030, the world's energy needs will increase by an estimated 70%.

"We have had several hearings on this topic throughout this year and every single small businessperson who has testified in this room have all said the same thing--the recent volatility in the energy markets have put a tremendous strain on them. Small businesses are in the same boat as the rest of us—only theirs is sinking a little faster. Because small businesses work on very thin profit margins—even the smallest fluctuations in costs can be a matter of making a profit that month, or going into the red.

"Increasing our focus on developing new alternative fuels and energy sources, such as ethanol, biodiesel, solar and wind energy will be tantamount to our making progress on this issue. There can be little doubt that increased demand and consumption of renewable fuels has had a positive impact on our nation's economy, including small business. It is quite apparent, however, that the United States must work toward a balanced and diversified energy policy (including locating and developing our own domestic sources of fossil fuels and improving our nuclear energy technology) in order to meet our needs and reduce our dependence on foreign sources of energy.

"Disturbingly, we import more than two-thirds of the oil we consume, much of it from OPEC, and much of it from some of the more unstable areas of the world--Iran, Iraq, Saudi Arabia, Kuwait, and the United Arab Emirates. Additionally we import oil from Nigeria and Venezuela. The types of countries that we are depending on for our oil have change. At the same time the number of refineries operating in the United States has decreased from 324 in 1981, to 148. With fewer than half the refineries we had in 1981 and without building a new refinery since 1976, our energy problem is on track to become an energy crisis.

"Simply put, we must balance incentives and research into new renewable fuels that will eventually replace our current reliance on fossil fuels with ensuring we have an abundant and affordable source of energy right now. Unfortunately, I do not believe that the major energy bills we have considered this year have achieved this balance. I do not believe that these bills create any new energy at all, and if anything, makes fossil fueled energy more expensive—which in turn will make us even more dependent on foreign sources.

"I am thankful that we have such an esteemed panel here to discuss the specifics in these bills and to see what the experts outside of the government think about the direction we are taking on energy policy. I look forward to hearing the testimony. I yield back."

Statement of Frank Thompson, on behalf of the

National Association of Home Builders

Before the

House Small Business Committee

October 17, 2007

This written statement is respectfully submitted on behalf of the National Association of Home Builders (NAHB), representing more than 235,000 members in the home building, remodeling, light commercial construction, and housing finance industry. As Congress prepares to reconcile the House and Senate versions of energy legislation (H.R. 3221 and H.R. 6), there are a number of energy efficiency issues that need careful consideration because they will have a direct impact on residential construction and the thousands of small businesses that comprise the majority of our nation's housing industry. Specifically, Congress should be promoting voluntary energy efficiency programs, extending tax incentives for highly efficient new home construction, and protecting housing affordability from arbitrary building code increases when adopting new energy policy.

Introduction

Contrary to numbers recently reported by some prominent trade groups, the residential sector of our nation's economy – comprised of manufactured, single-family, and multifamily homes – consumes only about 21% of total energy in the U.S., according to the Energy Information Administration (EIA).[1] Further analysis shows that new single family and multifamily homes, that is, homes constructed between 1991 and 2001, represent only 2.5% of that total, as compared to older homes, those built before 1991, that make up 17.1%. Based on this data, one can conclude that even if all homes built in the U.S. from 1991-2001 consumed zero energy, it would have resulted in energy savings of just 2.5%.

The distinction between energy consumed by newer homes versus older homes is important because it speaks directly to the dramatic improvements in efficiency that have been made in residential construction over the years, mostly as a result of improved building and energy codes. Furthermore, many national interest groups recently have been publicly targeting the nation's built environment as inefficient. Some groups have made policy recommendations to Congress that call for aggressive increases in building and energy code compliance for new construction, despite the fact that data clearly shows that newer homes and buildings are much more efficient.

To be sure, energy efficiency is a priority for our nation's home builders and has been for many years. NAHB members, which build about 80% of all the new homes in the U.S., have been engaged in several public-private partnerships and have sponsored many residential energy events and programs to bring public awareness to residential energy efficiency. Most importantly, NAHB

[1] U.S. Department of Energy, Energy Information Administration. *Annual Energy Review*. 2001 Residential Energy Consumption Survey.

members have taken the lead to undertake the development of the first National Green Building Standard for residential construction that is approved and accredited by the American National Standards Institute (ANSI).

Additionally, home builders also have taken advantage of a federal tax incentive that passed as part of the Energy Policy Act of 2005. This program allows a $2,000 tax credit for new homes achieving a 50% energy savings. The incentive is particularly meaningful to smaller, custom home builders that have the flexibility to incorporate its use into their building plans and truly begin to shape the market. Regretfully, Congress did not pass an extension for this credit in either of the recent House and Senate energy bills.

Finally, and most importantly, Section 9031 of the House energy bill (H.R. 3221) contains provisions on state building codes that create a number of technical, economic, and administrative problems, particularly for small builders. This provision requires States to prove that they have adopted the 2006 IECC for residential and the ASHRAE 90.1-2004 construction code and standard and then must achieve 30% above-code energy savings for new homes and major renovations by 2010, and 50% above by 2020. Further, if States cannot prove that they achieve these benchmarks, then the provision gives new authority to the DOE to draft modified building codes incorporating these increases for States and authorizes $500,000 per state to implement the new codes. This provision completely undermines State authority and sets federal benchmarks for efficiency and building codes that neither realistically address specific geographic needs, nor consider practical enforcement mechanisms.

Supporting Voluntary Energy Efficiency Programs

NAHB has long recognized that energy efficiency is in the best interest of the nation's economy, environment, and security. NAHB members have responded to these critical issues by implementing voluntary energy programs that educate builders about the benefits of higher energy-efficient construction by demonstrating that building with energy conservation in mind is both practical and profitable. Within this framework, smaller builders play a crucial role because they are often on the cutting edge of technology changes and can begin to implement efficiency programs that create meaningful results that are demonstrative for the broader industry.

NAHB is a proud partner with the U.S. Environmental Protection Agency and the Department of Energy (DOE)'s Energy Star® Home program, which, to date, has resulted in the construction of over a half-million above-code homes. NAHB also participates in DOE's Building America Program, which conducts systems engineering research to produce homes that consume 30% to 90% less energy on a community-wide basis, that integrate Zero Energy Home technology and power systems, and that reduce home builders' construction time and waste and increase productivity with new, innovative energy-saving materials and technologies.

Coordinated through our members, voluntary programs and government-sponsored efficiency programs like these help further NAHB's considerable support to existing efforts nationwide. All of these programs achieve marked levels of energy efficiency and offer effective energy-efficient financing alternatives and provide options for energy upgrades to existing housing as well. Many of our builder members have even been honored with the prestigious awards for achieving excellence in energy efficiency, including some who have received the Energy Value Housing Award. NAHB is wholeheartedly committed to encouraging greater energy efficiency in housing throughout the United States and strongly believes that a voluntary, market-driven approach is the best way to address this nation's residential energy concerns.

Extending Tax Incentives for New Energy-Efficient Homes

Another important tool for promoting residential energy efficiency is to utilize the nation's tax code. The Internal Revenue Code Section 45L New Energy Efficient Home Credit, which was enacted as part of the Energy Policy Act of 2005, is a key market incentive that shifts builders towards significant energy savings in new home construction. The program allows a $2,000 tax credit to a home builder who constructs a qualified new energy-efficient home, certified to achieve a 50 percent reduction in energy usage, thereby adding a highly efficient home that will likely remain part of the nation's housing stock for 60 years or more.

Tax incentives are effective ways to promote energy efficiency because they combine the tax incentive with market-determined supply and demand for home construction. Other approaches, such as a non-market-based mandate, require government officials to sort through reports in order to enforce rules and verify compliance. Meanwhile, a tax incentive simply reduces the cost of certain behaviors, such as building energy-efficient homes, thereby encouraging that behavior. Further, with a tax credit, important production decisions are still reserved for builders, buyers and home owners. Consequently, a tax credit program costs little to operate and does not require expensive administrative oversight that is usually associated with a mandate.

NAHB has learned from its members that the credit is particularly beneficial to small home builders, who in many cases have the flexibility to react to marketplace preferences, such as the demand for highly efficient homes. The credit can be an effective means of developing and maturing this market, which would yield long term benefits with respect to our nation's energy needs.

Unfortunately, the credit is set to expire at the end of 2008. An extension of the credit was included in legislation approved by the Senate Finance Committee (H.R. 6, the *Energy Advancement and Investment Act of 2007*) but was not included as part of the House energy bill (H.R. 2776, the *Renewable Energy and Energy Conservation Tax Act of 2007*). The limited window of applicability of the credit limits its use. Home building is a lengthy process, and builders are unlikely to participate in a program that may end before the construction process is completed. To improve the scope of the tax credit program, Congress should permanently extend the 45L credit.

Congress should also increase the dollar amount of the credit. Achieving the 50% threshold required by statute is an expensive proposition, especially for smaller builders. Home builders report that the increased construction cost required to meet the 45L requirement can equal several thousand dollars. In conjunction with the required basis adjustment (which reduces the value of the credit to approximately $1300), at its current $2000 value, the credit is somewhat limited in its effect on the marketplace.

Finally, Congress could also improve the regulatory implementation component by clarifying Section 45L to ensure that all homes meeting the energy efficiency requirements qualify. The IRS has adopted that position that certain rental properties and homes not sold to a third party do not qualify for the credit, even when they achieve the efficiency benchmarks set forth in the legislation. This uncertainty with respect to the qualifying rules further limits builder participation.

Updating State Building Codes

Building Code Development Process

The voluntary consensus code development process that exists in the U.S. today is composed of a number of important elements. Individuals from the federal, state, and local government, builders, interest groups, building supplier manufacturers, and code officials are integral to the process at its core. Literally, thousands of individuals devote their time, resources, and most importantly, their expertise, to develop requirements for building structure, safety, health, and energy efficiency that are agreed-upon, that protect human life, and that preserve the environment. This process exists so that state and local governments can rely upon the integrity of the established benchmarks, as identified by a diverse group of experts, and so they can have the flexibility to factor in regional or local differences to accommodate specific geographic needs and preferences.

On the single-family residential side, the outcome of this process is the development of a model code that is published and managed by the International Code Council (ICC), the preeminent authority on building codes in the United States. The ICC, established in 1994 as a nonprofit, is dedicated to building safety and fire prevention, and to providing the highest quality codes, standards, services, and products for all aspects of the built environment. To date, the ICC has developed and made available the following codes for safer and healthier communities:

- International Building Code®
- International Energy Conservation Code®
- International Code Council Electrical Code Administrative Provisions ®
- International Existing Building Code®
- International Fire Code®
- International Fuel Gas Code®
- International Mechanical Code®
- ICC Performance Code™
- International Plumbing Code®
- International Private Sewage Disposal Code®
- International Property Maintenance Code®
- International Residential Code®
- International Urban-Wildland Interface Code™
- International Zoning Code®

The development process for these codes allows any interested person or group to submit a change, called a code change proposal, and then allows that person or group to participate in the proceedings where that change, and thousands of others, are considered. The proposals are brought before a consensus committee comprised of representatives from both the construction industry and the code regulators, thus ensuring input from all sides of the regulated community. The committee listens to proposals, hears debate, and then presents recommendations to the eligible voting members. The eligible voting members then must ratify or decline the committee's recommendations and/or propose alternatives. The results of the votes are published, and then each public proposal is again balloted individually to eligible voters. Final action on the proposals then results from the aggregate count of all votes, which is critical to ensure that late-breaking technical advances can be accommodated appropriately and that any concerns are addressed in a fair and

equitable manner. This rigorous process involves many meetings, reviews, and technical analyses to ensure quality, integrity, and cost-effectiveness.

Every aspect of the code development process is designed to ensure that no one entity has an upper hand in any of the considerations that must be made when establishing criteria for the safety, health, and energy efficiency of our nation's housing stock. The role of state and local governments is critical as they are the ones that ultimately adopt the codes, and modify as necessary, for enforcement purposes within their respective jurisdictions. Because the structural and efficiency needs are very different from homes built in Florida or New York, versus homes built in Oregon or New Mexico, for example, it is crucial that the code process remain open, be based entirely upon consensus, and be protected from overarching encroachment by any federal agency. The Constitution preserves the right for states to adopt building and safety codes that best fit their specific needs. Any attempt to give the federal government (through an agency) the authority to supersede this right, as included in the provisions in H.R. 3221, and to federalize the state building code process runs contrary to the very foundation of law in the United States.

The Role of the DOE

To be sure, the DOE already plays an important role in the development of consensus-based building codes in the U.S. today. As an interested party in residential energy efficiency and in promoting conservation, the DOE participates actively in the established code development process alongside thousands of local building code officials, builders, and other groups. The DOE submits its own code change proposals and votes accordingly to their positions and preferences with respect to the baseline codes. As a federal agency, the DOE carries a lot of weight at the code hearings and is very influential. It is completely false to assume that the DOE is somehow unable or unwilling to provide guidance on building code development or to recommend more aggressive benchmarking in terms of efficiency, if it is so warranted. The DOE already fully participates in the development of residential building codes. For Congress to legislate new authority for DOE to draft additional "modified" codes, in addition to its current authority, would allocate a level of supremacy to DOE that would fundamentally alters the entire process.

Additionally, new authority for the DOE to draft modified building codes could present a major logistical problem that is impractical for the agency to undertake. Over the past several years, the DOE has received harsh criticism about its performance on issuing rulemakings for a number of home appliances. Several interest groups have testified that Congress should allow DOE to relegate more authority to States to establish regional appliance standards, due in part to the delinquency of DOE and its alleged inability to keep up with State's specific efficiency needs. Ironically, many of the same groups are actively lobbying to give DOE even greater, more burdensome responsibility with more frequent deadlines relative to State building codes. As already explained, the development of building codes in the U.S. is a lengthy process which involves thousands of individuals and countless hours of review. It is questionable whether DOE can undertake such a task alone, particularly in light of the very small budget allocation for staff and resources.

Therefore, Congress needs to carefully consider the impact of this provision with respect to DOE's capacity to draft and implement building codes. The supposed need to create a federal backstop for State shortcomings is simply not plausible given the manner in which DOE is already involved the code development process. Congress should not try to subvert the consensus-code development process to accommodate impractical code changes by giving the DOE more responsibility and authority than is warranted.

Specific Concerns with H.R. 3221, Section 9031

I. Technical Concerns

There are numerous technical concerns that follow increasing building energy codes to 30% and 50% above the 2006 IECC. A few examples include:

a. Significant code increases require more airtight homes, making ventilation specification extremely important, or often mandatory. For example, a builder could be required to install a mechanical fan in order to circulate air throughout the home. Not only will this mechanical device potentially reduce energy savings, but it will add additional costs to the homeowner. Furthermore, without proper air flow in a home, moisture concerns arise due to the combination of tightness and higher insulation levels that can impede air from drying wet materials, potentially leading to mold or other indoor air quality concerns.
b. In areas of the country susceptible to hurricanes, impact-resistant windows that meet the higher energy efficiency specifications are seldom available and are *very* expensive.
c. Many areas of the country that traditionally have not had to achieve higher insulation levels – Kentucky, Tennessee, North Carolina, Virginia, Missouri (regional) – could require new lumber specifications for 2x6 walls, rather than 2x4s, or may need to use walls with insulated sheathing. This would entail significant additional costs.
d. These benchmarks far exceed a variety of successful existing programs for energy-efficient homes that do not reach the 50% benchmark. For example, Energy Star® homes are significantly below the 30% and 50% levels.
e. Many State and local governments are undertaking locally-grown and enforced green building programs that produce energy *and* resource efficient homes. These programs would be obsolete if federal DOE sets benchmarks for energy efficiency that do not adequately account for the sustainability framework in a green program.

II. Economic Concerns

Because cost concerns are extremely important and housing affordability must be maintained in any proposed code increase, NAHB is very concerned about the cost implications of this provision. These include:

a. These efficiency targets do not address cost-effectiveness based on a reasonable payback to the first time homebuyer. There is no reasonable payback period to home buyers integrated into the date-specific goals established in this provision.
b. The above-code benchmarks almost necessitate the use of higher efficiency appliances and equipment, which adds significant costs to the builder and, ultimately, the homebuyer.
c. The provision requires States to include a "demonstration" that a State's code meets or exceeds the 2006 IECC. If such demonstration requires an energy analysis, or performance rating, complete with blower door and duct testing, this

would be an incredibly costly expenditure during a home's construction that produces absolutely no energy savings.

d. Some states have already chosen not to adopt the 2006 IECC (e.g., Indiana, South Carolina) because of its negative impact on housing affordability.
e. Using average incomes and mortgage qualifying information from across the country, the NAHB has determined that a $1,000 increase in the cost of a home prevents 217,000 potential home buyers from affording it.

Conclusions/Recommendations

NAHB appreciates the efforts of Congress to try to improve the energy efficiency of our nation's housing and we congratulate the government for operating successful programs like Energy Star® and Building America as they cooperatively work with home builders, both large and small, to conserve energy in a cost-effective and affordable manner. However, NAHB has serious concerns about updating State building and energy efficiency codes and standards, as envisioned in H.R. 3221. Not only would this ultimately negate the efficiency objectives that are determined by the consensus code process, but it will also impose unwanted and exorbitant costs on homebuyers, violate States' rights, and set up an administrative requirement that is likely impossible to achieve.

The fact that newer homes are significantly more energy efficient than older homes is evidence that the consensus code development process in the U.S. works as intended. Homes today are safer, healthier, and more efficient than homes built just 20 years ago, primarily as a result of building code improvements at the State and local level. Because energy efficiency means different things in each area of our country, it is imperative that the code process remain open, flexible, and dynamic. In addition to preserving the right for States to make positive determinations about efficiency benchmarks that achieve meaningful results, Congress can implement effective market incentives that incent the construction of super efficient homes without skewing established supply and demand frameworks. Furthermore, mandatory benchmarks and rigorous federal oversight for State building codes only adds more administrative costs to the government, with questionable effectiveness and feasibility.

NAHB members have long supported voluntary efficiency programs and continue to educate both our members and the public about the benefits of efficiency in home construction. NAHB pushed for many years to get tax incentives for highly efficient new home construction and asks that Congress extend the Section 45L incentives permanently. Lastly, NAHB urges Congress to avoid subverting States' jurisdiction and give code-writing authority to the DOE to implement arbitrary building code increases that have no technical or economic justification and that would require major changes to general construction not found in current practices.

Smaller builders are at the cutting edge of energy-efficiency technology in home construction. They are on equal footing with large builders and government agencies when it comes to the development of efficiency benchmarks and building codes and that process should remain intact. Congress has a golden opportunity to preserve and promote further growth in residential energy efficiency and NAHB looks forward to being a partner with the government in that effort, both now and in the future.

Written Testimony of
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On Behalf of the
Air Conditioning Contractors of America (ACCA)
and the
Plumbing-Heating-Cooling Contractors Association (PHCC).

Submitted To the House Small Business Committee
Full Committee Hearing on "Small Business Energy Priorities"

October 17, 2007

Chairwoman Velazquez, Ranking Member Chabot and members of the Small Business Committee, thank you for the opportunity to provide testimony on the pending energy legislation and its impacts on the contractors and small businesses of the heating, ventilation, air conditioning, and refrigeration (HVACR) industry.

My name is Mitchell Cropp and I am the President of Cropp-Metcalfe, a heating, cooling, and plumbing service company with 4 branches that serves both residential and commercial customers in the Washington, DC metro area.

I come before you as a member of both the Air Conditioning Contractors of America (ACCA) and the Plumbing-Heating-Cooling Contractors Association (PHCC). I served as the ACCA Chairman in 1998, and am a Past President of the Virginia state chapter of the PHCC. Together these two contractor groups represent tens of thousands of HVACR contractors, distributors, and manufacturers across the country.

ACCA and PHCC are strong advocates of energy efficiency standards and have a long history of promoting energy efficiency. Every day, thousands of ACCA and PHCC members help homeowners, small business owners, and building managers realize the comfort and cost benefits of energy efficient HVACR equipment. Our industry overwhelmingly supports routine increases in the uniform federal appliance efficiency standard for heating and cooling products as prescribed under the Energy Policy and Conservation Act (EPCA), and as amended by the National Appliance Energy Conservation Act (NAECA).

As you are aware, the House and Senate energy bills as passed propose to allow the Department of Energy to authorize regional standards for commercial and residential heating and cooling products. Such a scheme is unprecedented, and I am very concerned about these provisions and their potential impacts on HVACR contractors.

Imposing regional standards for heating and cooling products would erase decades of consensus agreement on products covered under NAECA between manufacturers and energy efficiency advocates and the harmful impacts would trickle down through the hundreds of thousands of small businesses in HVACR industry: manufacturers, distributors, contractors, and both the commercial and residential consumers they serve.

Regional standards may sound reasonable, but they are not very practical. It seems logical to require a higher efficiency furnace in Maine than in Florida or a more efficient air conditioning unit in Texas than in Michigan, but the devil is in the details.

From my vantage point, I see regional standards increasing the costs of high efficiency heating and cooling products to consumers, creating an unenforceable rule that gives a leg up to the unlicensed contractors, and placing an undue burden on the small business that struggle in a very competitive marketplace.

I. Increased Costs
As you would expect, a higher efficiency air conditioning product, (higher SEER) is more expensive to manufacture and therefore, more expensive for the consumer. But you would not expect them to be heavier, have a larger footprint, or be more expensive to install. These factors increases make it more difficult for the consumer to recoup the added investment in the higher efficiency product.

Less than two years ago, the Department of Energy raised the minimum Seasonal Energy Efficiency Ratio (SEER) of all residential air conditioning systems sold or imported into the United States from 10 to 13 SEER. Contractors and distributors are still adjusting to the unforeseen and unintended consequences to this transition. A survey of contractors following the transition found that consumers more often chose to maintain older, less efficient equipment instead of upgrading to the higher efficiency SEER 13 units due to the increased costs. As a result, the national inventory remains older and less inefficient, including equipment that contains refrigerants that use Chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs), known ozone depleting substances. Implementation of this increase in energy efficiency impeded the changeover to a more efficient national inventory while denying many consumers the long-term benefits of energy efficient cooling equipment.

Regional efficiency standards will also lead to higher costs for equipment and installation for heating products. Higher efficiency furnaces are not "plug and play"; they are more expensive to install, adding more labor costs to a job. A high efficiency, condensing furnace requires special venting needs that may necessitate costly and time consuming installations, or in some cases demolition and renovation. Often, this is not practical for the installer or desirable by the consumer. And higher efficiency furnaces are not practical in townhouse, due to the venting requirements and the reduced heating load. There are also implications to other appliances. For example, upgrading to higher efficiency furnace may involve relining a chimney to accommodate an orphaned water heater. A survey of contractors found that with installation and labor costs, consumers

can expect to pay anywhere between 20-50% more for a high efficiency, condensing furnace.

II. Enforcement
There is no practical way to enforce regional standards without some form of HVACR police. Indeed, there is no analogous situation because no other consumer white good covered under NAECA faces regional standards. But the House and Senate bills firmly place the liability on the contractor, without a mechanism for enforcement. Enforcing regional standards at the state or local level is virtually impossible without severe oversight. State or local building code officials are ill equipped to handle this task.

The industry knows from experience that well intentioned laws that aren't enforced only suit the bad actors. Section 608 of the Clean Air Act places costly handling requirements on handling CFCs and HCFCs for contractors. Non compliant contractors are rarely punished because the law is almost never enforced by the US EPA.

As a contractor that serves multiple states, I am very concerned about the enforcement of regional standards along the borders between regions. I see this scheme creating a ripe opportunity for "bootleggers" and "moonlighters". Unlicensed installers could purchase lower efficiency equipment in one region and install it in an adjoining region, jeopardizing the consumer's health and safety. The current system of a single federal standard at the manufacturing level provides a basic and simple method for enforcement and assures that all equipment provides the minimum efficiency.

III. New burdens
Creating regional standards will wreak havoc on the industry's supply and distribution system while placing an undue burden on contractors. Under a system of regional standards, contractors and distributors that serve multiple states would have to keep separate inventories, tying up warehouse space and causing administrative burdens. The current single national standard allows contractors, and the distributors they rely on, to respond to equipment shortages when they occur. Regional standards will take away the portability of heating and cooling products.

The imposition of regional standards will force HVACR small business employers to do more training, handle more paperwork, and make it more difficult to recoup an investment in new equipment.

IV. Alternatives
There are several alternatives to creating regional standards for heating and cooling equipment that are proven to put in place more energy efficient products. ACCA and PHCC endorse H.R. 2389, Rep. Shuler's Small Energy Efficiency Act that will encourage small businesses to upgrade by expanding eligibility under current federal loan programs to energy efficiency improvements. The Small Energy Efficiency Act will help America's small businesses take advantage of newer, more efficient heating, ventilation, and air conditioning (HVAC) technologies. This important bill will encourage small

business owners to upgrade to systems with lower operating costs instead of simply maintaining their inefficient systems through repair.

ACCA and PHCC have advocated in the past for tax credits and other financial incentives to make higher efficiency equipment more attractive to the consumer. Provisions in the Energy Policy Act of 2005 put in place tax credits for certain qualified heating and cooling products that residential consumers are taking advantage of right now.

Once again, I appreciate the opportunity to present the views of the HVACR contractor and thank you for your time today. I would be pleased to answer any questions you may have.

THE AMERICAN INSTITUTE OF ARCHITECTS

STATEMENT OF
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"Small Businesses and Energy Opportunities"

United States House of Representatives
Committee on Small Business

-

October 17, 2007
Rayburn House Office Building

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Madam Chairman, Members of the Committee — good morning. I am Mike Rodriguez, an architect, small business owner, and vice president of the American Institute of Architects. Since nearly half of the AIA's members own or work for small firms, we appreciate all that this Committee does for small businesses.

One of the most important issues facing my firm, as well as countless small businesses across the country, is energy. Increases in energy prices are apparent in the form of surcharges being passed on by virtually every vendor and supplier we use. Yet our ability to pass on these costs, particularly in a professional services environment with long term design contracts, is severely limited, if at all possible. With energy prices expected to increase, yet again this winter, I commend the committee for holding this hearing on how new energy policies can help small businesses continue to flourish.

The American Institute of Architects strongly supports policies, programs, and incentives that encourage energy conservation and energy efficiency. Nearly two years ago, the AIA adopted a policy calling for the immediate reduction of the amount of greenhouse gas-producing energy that buildings use. We believe that by the year 2030, all new buildings and significantly renovated buildings should be carbon-neutral. Many organizations have adopted these principles, too, including the U.S. Conference of Mayors, the National Association of Counties, and the Alliance to Save Energy. In addition, the EPA's Energy Star program has incorporated our energy targets into its Target Finder program, which helps businesses measure their energy use and set energy reduction goals.

Today, I will discuss a number of important provisions included in legislation before Congress that promote energy efficiency, especially as it relates to the built environment and small businesses. Before I get into specifics, however, it is important to understand why energy efficiency is so important to small businesses. By constructing energy efficient buildings, systems and technologies, businesses can reduce monthly energy bills, improve worker productivity, increase worker retention, and improve the well-being of building occupants. Moreover, by integrating energy efficiency into their businesses,

small entrepreneurs can have a significant impact on the quality of life in their communities. Lastly, businesses that show a commitment to the environment often find that they have a competitive edge in the marketplace among consumers who are increasingly attuned to the well-being of the planet.

Therefore, the AIA strongly believes that energy efficient design is not only good for the environment, but good for the bottom line as well. To put this policy into action, one of the AIA's major legislative priorities for 2007 has been to extend the energy efficient commercial building tax deduction. This provision provides building owners, many of whom are small business owners, with a federal tax incentive to install energy efficient systems in their buildings or to construct new energy efficient buildings.

This incentive allows building owners to claim a tax deduction of up to $1.80 per square foot of building area for the installation of systems that reduce the total energy and power costs by 50 percent or more when compared to a specific industry standard for energy efficiency, ASHRAE 90.1. The three building systems eligible to secure the tax deduction are the interior lighting systems; heating, cooling, ventilation, and hot water systems; and building envelope systems.

Currently some energy efficient systems are more expensive to design, build and install than their traditional counterparts. For this reason the initial increased capital costs can dissuade owners from installing these systems, especially small business owners like me who often do not have access to the additional, up-front cash necessary to install these sometimes costly systems. The energy efficient commercial buildings tax deduction addresses this situation and provides building owners the financial incentive needed to build in an energy efficient manner.

The AIA strongly supported the enactment of this tax deduction in 2005; however, it can only be claimed for buildings placed into service by December 31, 2008. As it often takes years to move from the building's initial design stage to final completion, many buildings on drawing boards today will not be placed into service until long after the deduction has

expired and therefore will be unable to reap the intended tax benefit. In order to ensure that this vital incentive will make a difference, we believe that it must be extended.

In addition, we believe that the value of the deduction should be deepened, at least to $2.25 per square foot. This will make it an even bigger incentive for building owners, who as you know have to invest additional funds into energy efficient technologies. We recognize that deepening the incentive increases the cost to the Treasury. However, the cost of failing to reduce our energy consumption is far greater to our communities, society and the planet itself..

Therefore, the AIA urges Congress to extend the energy efficient commercial building tax deduction for a sufficiently long and predictable period, and to deepen its value, to allow designers of future structures to factor it into their financial calculus. We are very pleased that the House took this action in its energy bill, H.R.3221, which extends the tax deduction until 2013.

I understand that the Senate's energy bill, H.R. 6, does not include any tax incentives for energy efficiency. However, the Senate Finance Committee did approve a tax package that not only extended the deduction but also deepened it to $2.25 per square foot. The AIA urges Congress to include both the extension and the deepening of the energy efficient commercial building tax deduction in the final energy bill that is sent to the president.

The energy bill passed by the House also includes a number of other important provisions that will help small businesses cope with rising energy prices, provide incentives for energy efficient practices, and educate business owners on the benefits of energy efficiency. The AIA strongly supports the provisions under Title III of the bill and commends this Committee, and especially Subcommittee Chairman Shuler, for their diligent efforts in crafting this legislation. We have presented Committee staff with some suggestions on how to make this Title even stronger, and ask permission to include our recommendations into the hearing record.

We have seen numerous studies that show that the initial costs of building green can be quickly recouped in the first few years of operation due to reduced energy costs. But it has been a challenge getting that message through a system where first costs are often the only thing that financial institutions see. So we are very pleased that the Committee included provisions under Title III that provide loan opportunities small businesses can utilize to become more energy efficient.

For example, Section 3003 of H.R. 3221 expands the eligible uses of 504 loans from the Small Business Administration, so that businesses can use these loans for sustainable (or low-impact) designs that produce buildings that reduce the use of non-renewable resources and minimize environmental impact. This provision also provides larger 504 loan limits to help small businesses develop energy efficient technologies. The AIA strongly supports this provision, as 504 loans are an effective financial tool that allows small businesses to expand. Given the numerous benefits of energy efficiency and sustainable design, it is in our nation's best interest to allow small business owners to utilize 504 loans to grow their businesses in an energy-friendly manner.

Another key provision under Title III that the AIA strongly supports would help create small business sustainability initiatives across the country. Section 3005 would allow Small Business Development Centers to apply for grants to carry out sustainability initiatives. These initiatives would provide support to small- and medium-sized businesses who wish to pursue energy efficient practices, explore green building options, and secure financing to achieve greater energy efficiency.

Many business owners I have worked with are simply unaware of technologies, strategies, and materials that will reduce their business's energy use, often through increased energy efficiency. As small business owners, they are often just too busy running their companies to seek out these opportunities. Just recently I worked with a small entrepreneur on a simple renovation to add a restroom to his market, allowing him to increase the amount of patron seating on premise. During our initial consultations we

were able to point out several simple opportunities for energy savings that will be implemented in the renovations. These simple changes will reduce his energy costs by at least 5 percent. The Section 3005 provisions will provide the resources necessary to help similar business owners learn of the opportunities that currently exist in the marketplace to reduce their business's energy consumption and ultimately save money.

The AIA strongly supports this provision. We also recommend that this section be expanded so that the Small Business Development Centers are allowed to provide information on green building *design*, and not simply on green building construction. Since the initial design of the project is the critical point at which the amount of energy a building will ultimately use is largely determined, teaching businesses about sustainable design will undoubtedly help them achieve greater energy efficiency.

The AIA also strongly supports Section 3006, which creates a new federal program to help small businesses become more energy efficient. This program would require the SBA to partner with the Department of Energy and the Environmental Protection Agency to develop a program to assist small businesses in becoming more energy efficient, understanding the cost savings from improved energy efficiency, and identifying financing options for energy efficiency upgrades. The AIA is very interested in how this program will eventually be carried out, and we look forward to working with the committee and federal agencies to ensure that the program includes information on sustainable design techniques and how they can benefit small businesses.

We also recommend that the provision include language that requires the SBA to make information available to small firms about the Energy Star Challenge for Architects. The Challenge, which is in its second year, enables design firms to run their projects through the Energy Star's Target Finder program, providing recognition for those projects that are designed to achieve Energy Star designation. Imagine the possibilities if small businesses could be true collaborative partners with their designers to make their projects national models of energy efficiency.

With technologies and materials constantly changing, it is easy for a small entrepreneur to be left behind. I believe that the federal government, particularly the SBA, can play a key role in helping educate small business about how they can become more energy efficient in a cost-effective way. Sections 3005 and 3006 of HR 3221 will do just this. We urge the House and Senate to retain the provisions under Title III that will help our nation's small businesses become more energy efficient.

Small businesses have always been at the forefront of innovation and progress in this country. With the help of this Committee, they can help us lead the way on designing and building a more sustainable future. Thank you, Madam Chairman and members of the Committee, for giving me the opportunity to testify today. I will be pleased to answer any questions you may have.

Testimony

Of

Lee Fuller

On Behalf Of The

Independent Petroleum Association of America

Before

Committee on Small Business

U.S. House of Representatives

October 17, 2007

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This testimony is submitted on behalf of the Independent Petroleum Association of America (IPAA). IPAA represents independent petroleum and natural gas producers, the segment of the industry that is affected the most when national energy policy does not recognize the importance of our American resources. IPAA's producer membership is comprised of companies ranging from large publicly traded companies operating in the upstream – exploration and production – segment of the industry to small individually owned companies. Most employ fewer than 20 employees. Independent producers drill 90 percent of American oil and natural gas wells, produce approximately 82 percent of American natural gas and produce about 68 percent of American oil – well above that percentage of the oil in the lower 48 states. Within this production are America's marginal wells. The operation of these wells is dominated by small business members of IPAA. The overwhelming number of wells in the United States falls in this category. Approximately 85 percent of America's oil wells and 70 percent of America's natural gas wells are marginal wells. Equally significant, while each marginal well is a small producer, collectively, they provide about 19 percent of America's oil production and 10 percent of America's natural gas production.

Before addressing the specific House energy legislation, it is essential to understand the role of oil and natural gas in America's energy supply. They are critical. Currently, oil and natural gas account for about 65 percent of America's energy supply. Clearly, people recognize the role that oil plays in fueling most of the nation's transportation. Similarly, the role of natural gas for heating is widely understood. But, it is equally important to understand that natural gas is an essential feedstock for many chemical processes and for fertilizer manufacturing. It is a key source for process heating in both the chemical and manufacturing segments of American industry. Consequently, in addition to their direct role in energy supply, oil and natural gas are

linked to the success of other energy supply options. Ethanol requires fertilizer for the crops and natural gas for processing. Windmills and solar cells must be manufactured and transported. Moreover, these are technologies that are intermittently available and when they are not providing power, it is most likely that natural gas will be the fuel used to meet that power need.

Looking forward, energy demand growth will be essential to the growth of the U.S. economy and all forms of energy will be needed. Projections by the Energy Information Administration (EIA) show energy demand increasing by about 30 percent over the next 25 years. As U.S. energy demand grows, the percentage supply of oil and natural gas stays about the same – meaning that more oil and natural gas will be needed.

Global climate related initiatives can create shifts in the energy supply mix. However, oil and natural gas will continue to be key components and American oil and natural gas offer the most national security. Congress needs to clearly understand the implications of global climate strategies on the energy mix as it considers different options. Recently, the Natural Gas Council (NGC) – comprised of IPAA, the Interstate Natural Gas Association of America, the Natural Gas Supply Association and the American Gas Association – conducted an analysis of a typical, aggressive global climate bill. NGC utilized the same energy-economic model used by EIA to analyze global climate bills. NGC analyzed S. 280, the McCain-Lieberman bill, with the National Energy Modeling System (NEMS). NGC chose S. 280 because it had been analyzed with the NEMS and it was representative of an aggressive proposal to reduce greenhouse gas (GHG) emissions. However, the earlier EIA analysis produced results that seemed anomalous to the NGC members – namely, flat or lower demand for natural gas. Digging into the modeling process showed the NEMS produced an inordinately high reliance on nuclear energy growth to meet the demands of S. 280. When more reasonable assumptions were input, the NEMS showed

that natural gas demand would increase between 4 and 6 trillion cubic feet by 2030. Consequently, if Congress moves forward with global climate initiatives, it needs to fully understand that natural gas demand increases will be a logical result. And, correspondingly, that natural gas supply needs to be addressed at the same time.

It is similarly important to give a broad sense of the federal energy policy issues important to small business producers. American oil and natural gas producers in many areas but among the most important are the following:

1. Access to the natural resource base that is controlled by the federal government;
2. Access to the capital needed to produce American resources through tax policies that allow producers to retain their cash flow and reinvest it;
3. A reasonable environmental regulatory structure that creates sound and cost effective regulations with real environmental benefits; and,
4. Support for developing the American workforce which – at the federal level – has been largely related to federal research and development funding that typically involves programs through the nation's university system, educating the next generation of petroleum engineers and geologists.

Turning to H.R. 3221 – a bill that has been characterized as a "down payment" on global climate policy – at issue is how H.R. 3221 addresses these essential challenges. Not only does H.R.3221 fail to advance the need to develop more American oil and natural gas, it reverses progress that has already been made. No bill can be considered a down payment on global climate that has as one of its key objectives curtailing the development of natural gas.

Title VII of H.R. 3221 contains nine sections specifically designed to reduce access to American natural gas on federal lands. These are:

Sec. 7101. Fiscally responsible energy amendments.

Sec. 7102. Extension of deadline for consideration of applications for permits.

Sec. 7104. Limitation of rebuttable presumption regarding application of categorical exclusion under NEPA for oil and gas exploration and development activities.

Sec. 7105. Best management practices.

Sec. 7221. Surface owner protection.

Sec. 7222. Onshore oil and gas reclamation and bonding.

Sec. 7223. Protection of water resources

Sec. 7224. Due diligence fee.

Sec. 7604. Roan Plateau, Colorado.

The first four of these provisions repeal or adversely modify provisions of the Energy Policy Act of 2005 that were passed to balance access to multiple-use federal lands and allow development of the important natural gas resources underlying these areas. Just two years after enactment and just as the implementation of these provisions are occurring, H.R. 3221 would change them. The next four provisions would add new burdens to the development of natural gas underlying onshore federal lands. The final provision would override years of effort to develop natural gas leasing of former naval oil shale reserves that has been conducted under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act

(NEPA). Taken together, these sections represent an irrational policy of curtailing the very actions that are needed to meet future natural gas demand in a bill that is titled the "New Direction for Energy Independence, National Security, and Consumer Protection Act''. These sections would increase energy dependence, reduce energy security and harm the consumers of natural gas.

Title XIII, the revenue title of H.R. 3221 is similarly counterproductive. To put a perspective on this issue, IPAA does not oppose tax expenditures designed to encourage the development of American energy, energy efficiency or energy conservation. However, IPAA rejects the concept that increasing taxes on oil and natural gas is essential to develop other energy options. As described previously, oil and natural gas will continue to be an essential component of America's energy supply and the more of this energy that can be produced in the United States, the better for American energy security. Independent producers largely develop their capital "through the well head". That is, their capital for investment in new production and in maintaining existing production comes from the sale of the oil and natural gas that is produced. Moreover, independent producers have a history of reinvesting their income back into new production. A John S. Herold analysis concluded that, in 2004, the top 50 independent producers were reinvesting 150 percent of their American cash flow back into American projects — borrowing money to invest more into the United States. When taxes are increased, investment in American production diminishes. This is exactly the consequence of Section 13001 of H.R. 3221. The JOBS Act in 2004 created a deduction for investment in the United States. Section 13001 would deny this deduction solely for investment in oil and natural gas. Here, the case is crystal clear. The deduction is only available for American investment and

its denial means that those dollars are taken from American investment. U.S. oil and natural gas production will be diminished.

The effect on small businesses is twofold. For those small business oil and natural gas producers, investment dollars are taken away. For small business consumers, the availability of American oil and natural gas is diminished.

In conclusion, IPAA's small business members have been actively engaged in producing American oil and natural gas. What do they need from energy policy? Among their clear needs are access to the resource base in America and access to the capital to develop it. H.R. 3221 not only fails to support these needs, it aggressively rejects them.

October 15, 2007

The Honorable Nydia Velazquez
Chairwoman, House Small Business Committee
2361 Rayburn House Office Building
Washington, DC 20515

Re: Small Business Committee Hearing, Wednesday, October 16, 2007

Dear Chairwoman Velazquez:

The Heating, Airconditioning & Refrigeration Distributors International (HARDI), representing more than 460 wholesale distributor member companies, 300 manufacturing companies, and 150 service vendor companies that distribute, produce, or facilitate the sale of heating, ventilation, air-conditioning, and refrigeration products and systems to residential, commercial, and light commercial markets, wishes to thank you again for your support and your efforts during floor debate of H.R. 3221 to protect over 1,000 HVAC businesses that are being threatened by current attempts to recklessly establish regional efficiency standards on heating and cooling equipment.

HARDI is extremely encouraged to hear that your committee is holding hearings to ascertain the potential damage this bill- with the regional standards provision- would have on small businesses including those who not only sell and install, but also purchase and rely on functioning heating and cooling systems. We were even further encouraged to hear that a licensed HVAC contractor will be testifying at this hearing. Our members rely on those contractors so a threat to them is certainly a threat to us. However, we felt compelled to communicate some of the concerns unique to wholesale distributors presented by regionalized efficiency standards for your consideration during your hearings.

HVAC distributors have very little time and their contractor customers have even less so the time they spend together when supplying a project is invaluable. This is when specs are reviewed and double checked and steps are taken to ensure properly matched and sized equipment and components. If equipment standards are regionalized- adding liability to contractors and distributors alike- much of this time will be spent verifying and documenting the installation locations of every piece of equipment purchased. This adds cost and is definitely not in the best interests of the customer. Secondly, we have great concerns about distributors and contractors being forced to sell and install equipment ill-sized for many applications to remain in compliance with a higher regional efficiency standard. Just as we've seen with the recent increase to a 13 SEER standard in cooling equipment, not every application justifies a higher SEER or AFUE level resulting in excessive energy use or increased repair of old equipment that would have normally been replaced by new, mid-efficiency equipment.

It is also important to note that air-conditioning equipment increases considerably in size and weight as the SEER level raises. Carrying costs rose over 30% for distributors from 10 SEER units to 13 SEER units largely because fewer of the larger units fit on a truck or in existing warehouses. Lift machines were necessary to load and unload equipment and distributors often have to supply labor to help contractors get the larger units to and around job sites. All of these hidden costs combined with the sticker-shock-induced drop in new equipment sales have got the distributor trapped with more cash tied up in inventory rather than new locations, new people, and new products. There is little doubt distributors would be forced to re-evaluate their service territories depending on how regional boundaries were drawn meaning employment, construction, and product availability decisions would be driven by legislative policy rather than the needs of the market.

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HARDI

HEATING, AIRCONDITIONING & REFRIGERATION DISTRIBUTORS INTERNATIONAL

Finally, what will regionalized standards do to the current Energy Star ratings on HVAC products? Energy Star has been a powerful tool for voluntarily encouraging the installation of higher efficiency equipment but the valuable rating system would be compromised if a piece of equipment qualified for utility rebates or tax credits on one side of the street but not the other. Further, this would contribute to distributor's current concern that the middle market is being priced out of HVAC systems as efficiencies are increased and their installations become more sophisticated, extensive, and costly.

Thank you again for holding this important hearing and considering the serious ramifications that small businesses would suffer from Section 9004 of H.R. 3221. HARDI hopes these specific distributor concerns will be included in any discussions throughout your hearing. For further information please contact Talbot Gee, HARDI Vice President at (614) 488-1835 or via email at tgee@hardinet.org.

Sincerely,

Donald L. Frendberg
HARDI Executive Vice President & C.O.O.

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Richard Roldan
President and CEO
National Propane Gas Association
Written statement for the record
House Small Business Committee
"Small Business Energy Priorities"
October 17, 2007

Madam Chairwoman and members of the committee, I am Rick Roldan, the President and Chief Executive Officer of the National Propane Gas Association (NPGA). I would like to thank Chairwoman Velazquez for holding this important hearing and affording the propane industry the opportunity to offer its perspective on energy policy for the record.

Introduction

First, I want to talk a little bit about our association and our industry. NPGA is the national trade association for the propane industry in the United States. With the vast majority of its membership being comprised of small businesses, NPGA boasts a membership of over 3,500 companies representing every segment of the propane industry. As the national trade association for the propane industry, NPGA has been active in a variety of federal policy issues, including issues related to energy policy. Specifically, NPGA was very actively involved in the formulation of proposals to provide federal tax incentives for alternative transportation fuels, including propane, which eventually became law via enactment of the 2005 Energy Bill and the 2005 Highway Bill.

Liquefied petroleum gas (LPG), or propane as it is commonly referred to, is a trusted and reliable energy source that is used by millions of Americans each day. More than 14 million families and thousands of businesses use propane to fuel their furnaces, water heaters, air conditioners, outdoor grills, fireplaces, dryers and stoves. In addition, propane is used to power a great variety of on and off road vehicles as well as a wide range of equipment. Because of its unique characteristics it is a particularly vital energy source for the farm community and rural America in general as well as other more remote areas of the country.

Propane is a clean, versatile, and safe alternative fuel. Considering the amount of attention that has been given to global warming and emissions I want to specifically note the environmentally friendly characteristics of propane. Propane compares very favorably to gasoline when it comes to green house gas (GHG) emissions, especially when one considers the entire fuel cycle. A full fuel cycle analysis includes consideration of emissions at each stage of the fuel's production, refining/processing, transmission, distribution, storage and actual use in the vehicle itself. Indeed, I would strongly argue that the full fuel cycle is the only way to properly and fully assess a fuel's

contribution to GHG emissions, and I would urge Congress to keep this in mind as it considers issues relating to GHG emissions. In any event, studies indicate that propane can reduce GHG emissions of carbon dioxide, methane, and nitrous oxides by as much as 20% when compared to conventional gasoline.*

In addition to its environmental benefits, propane plays a key role in meeting America's energy needs. Propane is produced through crude oil refining and also natural gas processing. As a product of these processes, its subsequent uses make every gallon of crude and cubic foot of natural gas go that much further by being used for purposes that would otherwise require gas or oil thus reducing the demand for more imported crude or natural gas. The United States imports very little propane as approximately 90% of propane is produced in this country.

As mentioned above, propane was an important part of the 2005 Energy and Highway Bill incentives for alternative fuels, vehicles, and infrastructure. Those provisions provided a 50 cent per gallon credit for alternative fuels, a range of credits for alternative fuel vehicles, and a credit of up to $30,000 for infrastructure (fueling stations). These credits expire on various dates but all of these credits will expire by 2011. Although propane does not get the same attention as ethanol, the fact is that there are roughly 200,000 dedicated propane powered vehicles on the road today and we hope to have many more on the road in the coming years thanks to the aforementioned tax incentives.

Recommendations

We would recommend that Congress extend all three alternative fuel related tax incentives as it will take more time than is presently allotted to get the alternative vehicle industry fully off the ground. Plans for vehicles and infrastructure don't happen overnight. Both are a huge investment, and the kind of commitment that we need may not come to fruition if investors and businesses do not see the long term commitment to these fuels by our policy makers. Moreover, as the members of this Committee may know, it costs much less to renew these credits now under the Joint Committee on Taxation scoring procedures than to wait and renew them at the last minute when they are about to expire. A striking example of that scoring issue relates to the Alternative Minimum Tax (AMT) which becomes a bigger problem for more Americans every year and has consequently become more and more expensive to correct.

Another perspective that I would like to share in regard to alternative fuel credits generally, relates to the matter of equity between the varying alternative fuels. All the alternative fuels should be treated the "same" as far as tax incentives are concerned. Granted there are differences among the fuels when it comes to efficiency and environmental consequences and we understand that Congress may need to take such things into account when it formulates tax incentives. However, Congress should try its utmost not to pick winners and losers between the varying alternative fuels. The federal playing field of tax incentives for alternative fuels should be as level as possible so that after the incentives are in place the market can pick the winners and losers. For example, giving ethanol more tax incentives or other federal preferences beyond what other

alternative or renewable fuels receive does not make for good policy in our opinion. All alternative fuels should be treated equally and let the market determine the advancement of technology and competitiveness among all alternative fuels.

Finally, I want to mention an oversight in the 2005 Highway Bill related to the 50 cent per gallon fuel credit. Mixed fuels that have a per gallon tax credit are able to file for and receive their full fuel credit multiple times throughout the taxable year. When the fuel credit was added for propane and a number of other alternative fuels in the 2005 Highway Bill, the ability to file and receive the full amount of the credit (50 cents per gallon) throughout the year was inadvertently left out of the legislation. This means that these alternative fuels cannot receive their credit until the end of the taxable year in contrast to other fuels that can take it throughout the year. This is an inequity that needs to be corrected. Both the Senate Finance Committee and the House Ways and Means recognized this problem and intended to correct this matter by incorporating the appropriate fix in the 2006 Technical Corrections package, S. 4026 in the Senate and H.R. 6264 in the House. Unfortunately, the legislation was not enacted before the 109th Congress adjourned. We would strongly urge the 110th Congress to include this technical fix in any energy tax legislation that might move this year. This change is important as a matter of equity between the fuels and also as a way of providing, in effect, a stronger incentive to use alternative fuels, which after all was the goal of the legislation from the beginning. Certainly being able to file for and receive the tax credit at various times during the year is clearly a financial benefit to all of our small business members.

Conclusion

To conclude, we commend the Chairwoman and the Committee for exploring and evaluating the concerns of the small business community with respect to energy policy and we look forward to working with the Congress as it continues to develop energy legislation this year.

** Two Studies as Source for this Information: (1) Greenhouse Gas Emission Impacts of LP-Gas Vehicles, A Well-to-Wheels Study; Interim Report, Prepared for World LP-Gas Association by Dr. Michael Wang, June 2002; (2) LPG for Motor Vehicles: A Total Fuel Cycle Analysis of Emissions of Urban Air Pollutants and Greenhouse Gases; Dr. Mark Delucchi, Institute of Transportation Studies, University of California-Davis, 1998*

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