

Written Testimony to US Senate Committee on Energy and Natural Resources

Energy Efficiency Hearing, June 28, 2012

From Rick Barnett, Corvallis, Oregon, July 11, 2012

Thank you for the opportunity to share my views on non-federal programs for financing energy efficient building retrofits. I have been a residential builder and efficiency advocate for 30 years. Since the 70's, building contractors have engaged in efficiency retrofits, guided by consumer demand and the local building department. Based on their experience with installations, contractors continue to market insulation, efficient equipment, and reduced heat loss. The homeowner is assured of a proper job with the building official's verification of meeting code standards.

I appreciate your effort in gathering this cross section of efficiency expertise, and providing an excellent status report of the industry today. Mr. DeBoer (*The Real Estate Roundtable*) has succinctly cast the untapped potential of efficiency: "Our nation faces significant economic, employment and energy challenges. One way to address these challenges is by upgrading the nation's commercial building infrastructure through energy efficiency "retrofits"." I believe that the same opportunity is available with residential efficiency.

From this sampling of program models, I point to the *United Illuminating Company's* "Small Business Energy Advantage Program" as the best example of efficiency being delivered without public sector involvement via ARRA/tax dollars, energy agencies or local tax departments. With in-house, on-bill financing, this utility program simply connects contractors to interested energy customers. As Ms. Borrelli, *United Illuminating Company's* representative, testified, "by making investments in energy efficiency appear similar to traditional utility investments, the utility is encouraged to invest in energy efficiency". If utilities use this model for residential programs, they will invariably improve the product being sold and their return on investment.

The economic opportunity has been documented for many years: as referenced in Ms. Leeds' (NYCEEC) testimony, the *Rockefeller/Deutsche Bank (2012)* and *McKinsey (2009)* Reports outline the conservation and employment potentials. Unfortunately, since residential retrofits were included in ARRA, my expectation for contractor jobs has not been met. Rather, I've seen the emergence of a new marketing and verification system, running parallel to the historical marketing role of contractors, and oversight role of Building Officials. Mr. Rogers (*GoodCents Holdings, Inc.*) graphically identifies some of the new administrative elements on page 12 of his testimony: only one of his "Six Common Elements" is about installing insulation.

The value of streamlining the new trend is not just about better delivery of efficiency: it's also about improving the efficiency being delivered. In the current trend, most thermal retrofits bring very leaky homes into the range of code standards, which have contributed to the need to reduce residential demand. Fortunately, existing technology is able to produce "net zero", making higher standards available to capture the full economic potential.

Such a transition to high performance and lower energy bills will be facilitated by using "Home Performance Scoring", where a number is used to rate a building's measured thermal performance. With evaluation based on a numerical score, the existing checklist-style energy code could be simplified.

From my building experience, I believe that a better return on investment is available from higher performing retrofits. This occurs because thermal upgrades are labor intensive: using better materials doesn't significantly increase the cost, but results in significantly better performance. With an elevated private sector role, I am confident that efficiency investments would continue improving, until we routinely optimize the performance of our buildings. Why should we expect anything less?

Utilities have been increasing their commitment to efficiency, producing programs like *United Illuminating Company*. I agree with Ms. Borrelli's concluding statement, that utilities "are able to utilize utility funds for the benefit of both the customers and the utility". I am confident that more efficiency and construction jobs can be delivered at a lower cost by continuing to expand utility programs. Their private sector perspective motivates them to maximize the energy savings per dollar invested, and fully capture the economic potential of existing buildings.

When I talk to people about the opportunity represented by our existing buildings, the question of capital is quickly raised. I believe that the key to attracting an adequate flow of capital is to get better at delivering really good efficiency. I ask the Energy and Natural Resources Committee to encourage a new commitment by the private sector, to unlock this residential energy asset.