



1250 Elko Drive
Sunnyvale, CA 94089

March 24, 2009

Richard Karney, P.E.
U.S. Department of Energy
1000 Independence Avenue, SW
Washington DC 20505

Re: Revised criteria for Energy Star for Windows, Doors and Skylights

Dear Mr Karney:

Serious Materials commends the Department of Energy's effort to promptly revise Energy Star for Windows. We agree that promoting ongoing consumer awareness of energy efficiency opportunities is a key objective in achieving America's goals for energy security, environmental health, and a strong economy. Serious Materials is in complete alignment with you and with Energy Star to create a strong program that recognizes the best performing products and those that are most suited to save the public on future energy costs.

However, while we agree on the objective and commend DOE's prompt action, we believe that delivering on the objectives requires taking a far stronger stand for energy efficiency on behalf of the American public than DOE currently proposes.

The revised criteria for Phase I 2009 Energy Star do not go far enough to highlight and differentiate superior window and door products. As with the previous draft, the proposed criteria only modestly outperform IECC national code requirements. These weak proposed criteria offer virtually no differentiation for high performance products in the market. This approach seriously under-delivers on the promise and opportunity of Energy Star. Compounding the problem, the proposed Phase I criteria would be locked in place for years before a proposed Phase II is eventually implemented in 2013 or later.

Since the first draft criteria, DOE has had the benefit of following the guidance of legislation in the form of the American Recovery and Reinvestment Act of 2009 and its more aggressive approach to energy conservation via windows. The ARRA criteria fell generally in line with the IECC criteria and should be considered the modern window performance baseline. Energy Star



1250 Elko Drive
Sunnyvale, CA 94089

labeled products should provide differentiation between windows qualified for this basic tax credit and those that exemplify the high performance currently possible using today's technology.

By locking in such lackluster performance for years, there would remain little to no pressure on manufacturers to deliver highly efficient products that could save the country hundreds of millions of dollars annually. The DOE's own research data shows that stronger performance requirements could save consumers approximately 20 trillion BTUs of unnecessary energy consumption. This additional consumption represents approximately \$200M per year in consumer energy expenses and an additional 2.3 billion pounds of greenhouse gas emissions (based on 117.08 pounds of CO₂ per million BTUs). The savings possible from an aggressive change to windows alone eclipses the saving of all other Energy Star product programs combined. Energy Star needs to show greater leadership now.

At a minimum, we submit that: **a) the revised Phase 1 proposed criteria should be further modified to meet or exceed the performance stipulated in the ARRA (U-factor 0.30 or less, and SHGC 0.30 or less); and b) that Energy Star immediately begin work on a Phase 2 criteria intended for implementation at the beginning of 2010.**

Alternately, if DOE is unable to follow such a leadership path at this time, Energy Star should promptly adopt a two tiered labeling program. Taking the lead from Secretary Chu, the windows criteria could initiate a 'superstar' category of products, which would be an extension of the Energy Star program that would highlight the top 5 percent or 10 percent of performers. Such a program would address Dr. Chu's stated concerns that today's Energy Star standards are not "as aggressive as they should be." Precedent for this has already been set by the EPA in the automotive product category with the SmartWay and SmartWay Elite classifications. There are few SmartWay Elite cars available today, but the designation offers important differentiation to consumers and even fleet purchasers in making informed choices regarding the best performing cars available.



1250 Elko Drive
Sunnyvale, CA 94089

Thank you for your diligence and perseverance in furthering the Energy Star brand, and consumer and environmental benefits by giving window manufacturers a tool with which to measure and highlight their constantly improving product family. I look forward to the improved criteria and a stronger Energy Star brand in the marketplace in the future.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Brandon Tinianov', with a large, stylized flourish above the name.

Brandon Tinianov, Ph.D., P.E., LEED AP
Chief Technology Officer
Serious Materials, Inc.