Date: 10/17/19

To: Douglas W. Anderson
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U.S. Environmental Protection Agency

RE: Energy Star 7.0 Discussion Comments

Thank you for the opportunity to comment on Energy Star 7.0. Listed below is the feedback from Windsor Windows & Doors from the discussion document.

**EPA requests stakeholder feedback for the following questions:**

1. Are there better data sources for available products than those proposed in this Discussion Guide?
   - We feel the best data are products that are currently available for sale by manufacturers and not necessarily all options that are listed in the CPD.

2. What are the most common pathways (component combinations) that manufacturers use to make ENERGY STAR certified products?
   - Surface #4 LoE coatings
   - Triple I.G.
   - Incorporation of thermal breaks on aluminum and aluminum clad products
   - High-solar LoE coatings (for the Northern Zone trade-offs)

3. Are there pathways represented in the NFRC CPD that should not be considered viable pathways?
   - Technologies not commercially available
   - Cost-prohibitive materials or technology whereas the payback period exceed the life of the products.

4. Among the most common pathways, which (if any) energy performance ratings should EPA consider to be outliers?
   - Products that are in the CPD but not currently available in the marketplace.

5. What sources should EPA consider when evaluating what is a reasonable payback period for building materials like WDS?
   - Retail pricing of window & door products
   - Regional energy costs
   - RESFEN models
   - Average length of home ownership
   - Reasonable lifespan of product

6. What other methods for estimating the incremental costs of energy performance improvements for windows, doors, and skylights should EPA consider?
   - No additional suggestions.
7. Which incremental cost estimation methods are the most accurate?
   a. Retail pricing

8. Are there any additional component categories that EPA should consider researching?
   a. No additional suggestions.

9. Should EPA consider combining the ENERGY STAR Southern and South-Central climate zones?
   a. Yes. As long as the U-Factor requirements is not less than 0.35

10. What impact would the potential merging of these climate zones have on consumers and partners?
    a. It depends what the criteria will be. Coastal / impact products may be heavily affected.
    b. Simplification – both on the manufacturer and consumer end.

11. Should EPA consider setting a minimum SHGC in the Northern climate zone?
    a. No. The current optional Northern Zone trade-offs accomplish the same thing.

12. What impact would a minimum SHGC have on product availability, consumer expectations, and the veracity of the ENERGY STAR label in the window market?
    a. Though a higher SHGC is beneficial in colder climates, a minimum could potentially limit grille options as any grilles have a large impact on the SHGC of a window.

13. Should EPA consider moving IECC Zone 5 out of the ENERGY STAR Northern climate zone and into the North-Central climate zone?
    a. Yes, based on the rationale outlined in the discussion guide.

14. What impact would changing climate zone boundaries have on consumers and partners?
    a. Lower barrier to entry for energy star for homes built in IECC Zone 5 and a larger selection of options for consumers.

15. What characteristics are most common among ENERGY STAR certified windows sold in IECC Zone 5?
    a. Argon fill, very low emissivity coatings, and possibly 4th surface LoE coatings.

16. Should EPA consider including full-lite sliding patio doors in the ENERGY STAR Windows specification?
    a. Doors should be kept separate from windows. While they do share some similar components, doors tend to be made of stronger materials (i.e. metal) and have wider stiles & rails due to their high frequency of use and durability required for foot traffic. Because of these differences, they tend to have higher U-factors.

17. What impact would this potential change have on consumers and partners?
    a. Could potentially limit patio door product options for consumers
    b. Adds needless complexity

18. Should EPA consider sunsetting the ENERGY STAR specification for swinging doors if the analysis does not reveal significant cost-effective energy savings for consumers?
    a. We are in favor of eliminating criteria for swinging doors as long as sliding doors maintain current criteria.

19. Should EPA sunset just part the criteria if additional cost-effective energy savings are only possible for some products, such as glass-only doors?
    a. No comment.

20. Should EPA consider including skylights in the ENERGY STAR Windows specification?
    a. No comment.

21. What significant technical and market differences between windows and skylights should EPA consider in its analysis?
    a. No comment.

22. Should EPA consider sunsetting the ENERGY STAR specification for skylights if the analysis does not reveal significant cost-effective energy savings for consumers?
    a. No comment.
23. What is the market penetration of products with dynamic glazing or integrated shading systems for residential applications? Do stakeholders expect the market for such products to expand in the next few years?
   a. These products do exist but are not a major part of our products. These items tend to be fairly niche still with the exception of blinds between the glass; however that option is not typically selected for energy efficiency.

24. How should the process for certifying and listing dynamic and/or integrated products be revised to better evaluate the performance and availability of such products?
   a. We do not believe these products should be addressed at this time because of their small market share.

25. What share of residential WDS are sold in places where high-altitude and/or impact-resistant products are necessary?
   a. High altitude and impact-resistant product constitutes approximately 20% of all clad wood windows sold by our company.

26. Should EPA reconsider allowances for high altitude and/or impact resistance in a potential revised specification, and why or why not?
   a. Yes. By design, it is more challenging to hit energy star criteria with high altitude and/or impact resistant products.

27. Should EPA consider extending the effective date beyond the typical 9 to 12 months after release of a final specification?
   a. Yes.

28. How would an extended implementation schedule make it easier to meet a potential revised specification?
   a. Manufacturers need additional time to redesign, proto-type, test, tool up and ramp up production on potentially multiple product lines in the same one year time frame. 9-12 months is simply not enough time to essentially develop and market multiple new products.

Sincerely,

Phil Weber
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Windsor Windows & Doors