



ENERGY STAR® Products Enhanced Testing and Verification

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June 24, 2010

Background and Purpose



- Through over 15 years of shared effort, EPA and partners have built something of real value – the ENERGY STAR brand.
- Maintaining the value of this brand requires ensuring products labeled with the ENERGY STAR deliver on their promise to the consumer.

Historic Approach to ENERGY STAR Qualification and Testing



- EPA enters into Partnership Agreements with product manufacturers and issues program identity guidelines
- Manufacturing Partners submit test data to EPA to qualify their products within a designated timeframe; Lab accreditations required for certain product categories
- EPA reviews test data and adds products to list of qualified products
- EPA verifies energy performance through its compliance audit program

Why Enhanced Testing?



- Increased scrutiny of voluntary programs
 - Proliferation of green standards – national, international, media, retail
 - Inspector General Reports at EPA and DOE
 - Government Accountability Office ENERGY STAR Investigation
- New Partnership Agreement
 - “Verification of compliance with program requirements will be increased and efforts will be enhanced to identify and address product performance issues.”
 - “Verification of ENERGY STAR Qualifying Products will be enhanced in two ways:
 - All products will be required to be tested in an accredited laboratory and qualifying product information be submitted to the government before the product can be qualified as ENERGY STAR
 - Enhanced ‘off-the-shelf’ product testing will be instituted across the full suite of ENERGY STAR covered product categories through a combination of EPA/DOE testing, manufacturer funded/EPA-DOE administered testing, or other third party testing.”

Key Elements of Enhanced Testing Requirements



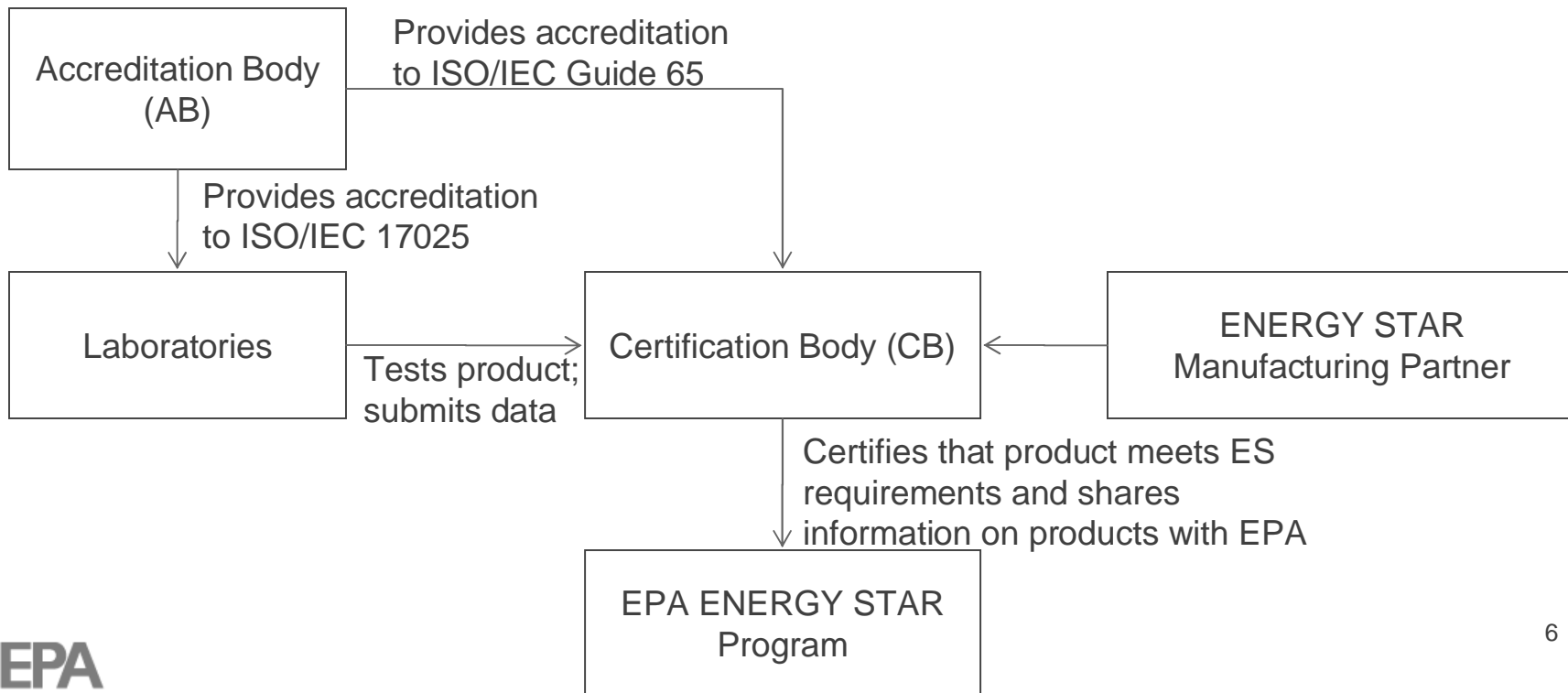
- Testing and reporting prior to qualification
 - Ensure that EPA has testing information on all products prior to labeling
 - Require test data from recognized labs that is representative of the product in the marketplace
- Continued testing after qualification
 - Verify that products continue to meet the ENERGY STAR requirements regardless of changes in the production process
 - Provide consumers with confidence that ENERGY STAR products are delivering the savings they expect

ENERGY STAR Enhanced Testing and Verification Overview



New Requirements for all ENERGY STAR Products
Scope: All ENERGY STAR Product Categories

- Third-party certification
- Testing conducted in EPA-recognized labs



Accreditation Bodies (AB)



- Key Responsibilities:
 - Attest to the technical competence of laboratories to perform tests as outlined in the ENERGY STAR Laboratory Accreditation Requirements.
 - Assure the list of specific test procedures is included within the scope of accreditation for the laboratory.
 - Conduct onsite assessments of each laboratory per the ILAC MRA and ISO/IEC 17011 requirements.
 - ABs must operate accreditation program in accordance with ISO/IEC 17011 and must maintain status as a signatory to ILAC MRA (International Laboratory Accreditation Forum Mutual Recognition Arrangement).
 - Publish current list of accredited laboratories on Web site.

EPA-recognized Labs



- Maintain accreditation to ISO/IEC 17025, which includes:
 - Have a policy that sets out quality objectives, commitments and operational procedures;
 - Employ experienced personnel and physical plant facilities to conduct the tests;
 - Maintain arrangements to ensure the freedom of laboratory management and personnel from any undue internal or external commercial, financial or other pressures and influences that may adversely affect the quality of their work.

EPA-recognized Labs (cont.)



- Key Responsibilities:
 - Have recorded in its Scope of Accreditation its specific competence to carry out the test methods as outlined in the ENERGY STAR program.
 - Agree to participate in relevant and available inter-laboratory comparison testing when EPA/DOE deems it necessary.
 - Submit documentation demonstrating impartiality if an in-house lab.
 - Also considering option for in-house labs that are covered by a CB's accreditation
 - Labs would need to meet the same criteria, but CB rather than AB would have oversight of the lab.

Witnessed Manufacturer Testing Labs (WMTL) and Supervised Manufacturer Testing Labs (SMTL)



- A certification body may accept test data from a non-accredited in-house lab if the CB runs an SMTL or WMTL program
- WMTL: personnel from the CB witness the entire test
- SMTL: as the CB gains experience and trust with the manufacturer, supervision shifts from witnessing tests to examining the quality process, reviewing data, and conducting annual audits

Certification Bodies (CB)



- Key Responsibilities:
 - Maintain accreditation to ISO/IEC Guide 65
 - Provide EPA with third party written certification for each model intended for ENERGY STAR qualification by reviewing test results.
 - Maintain product design specifications for the products it certifies, and conduct random inspections at the manufacturing location.
 - Have in place a verification testing procedure that fulfills EPA requirements.
 - Have in place a challenge testing procedure that meets EPA requirements.
 - Oversee competency of in-house labs through supervised or witnessed testing program (optional)

Certification Bodies (cont)



- Manufacturers will have to use **one** CB for **both** qualification and verification testing
- If an entity, such as CRRC, is well equipped for verification but not qualification, it may be possible for them to team up with another organization to provide qualification under one “certification program”
- In most cases EPA anticipates a market of CBs available in a given product category

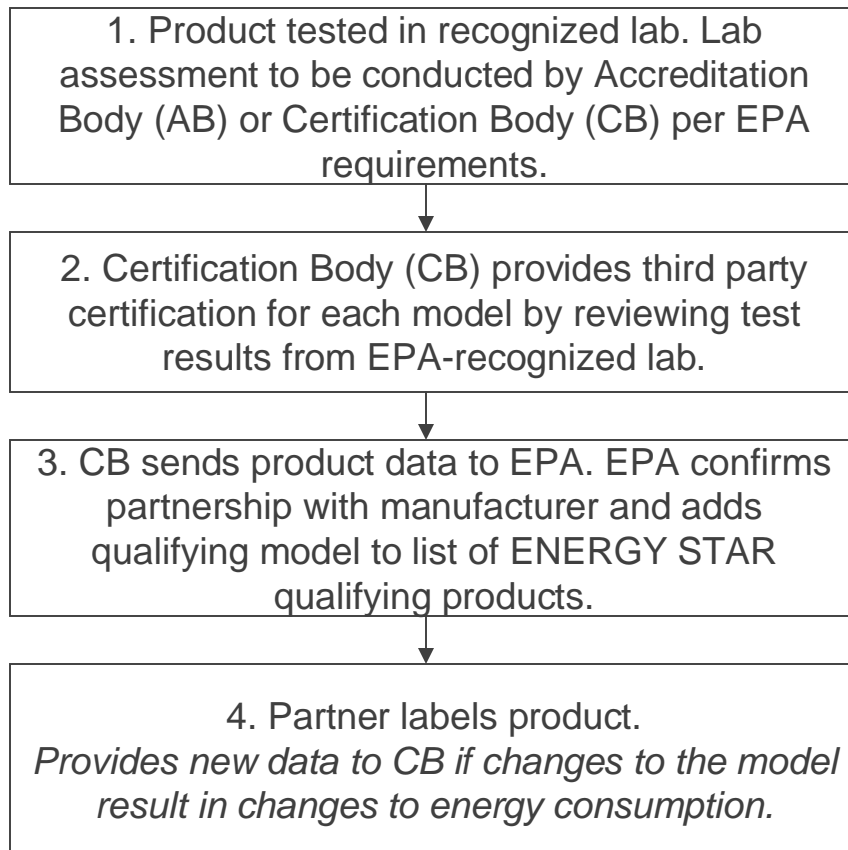
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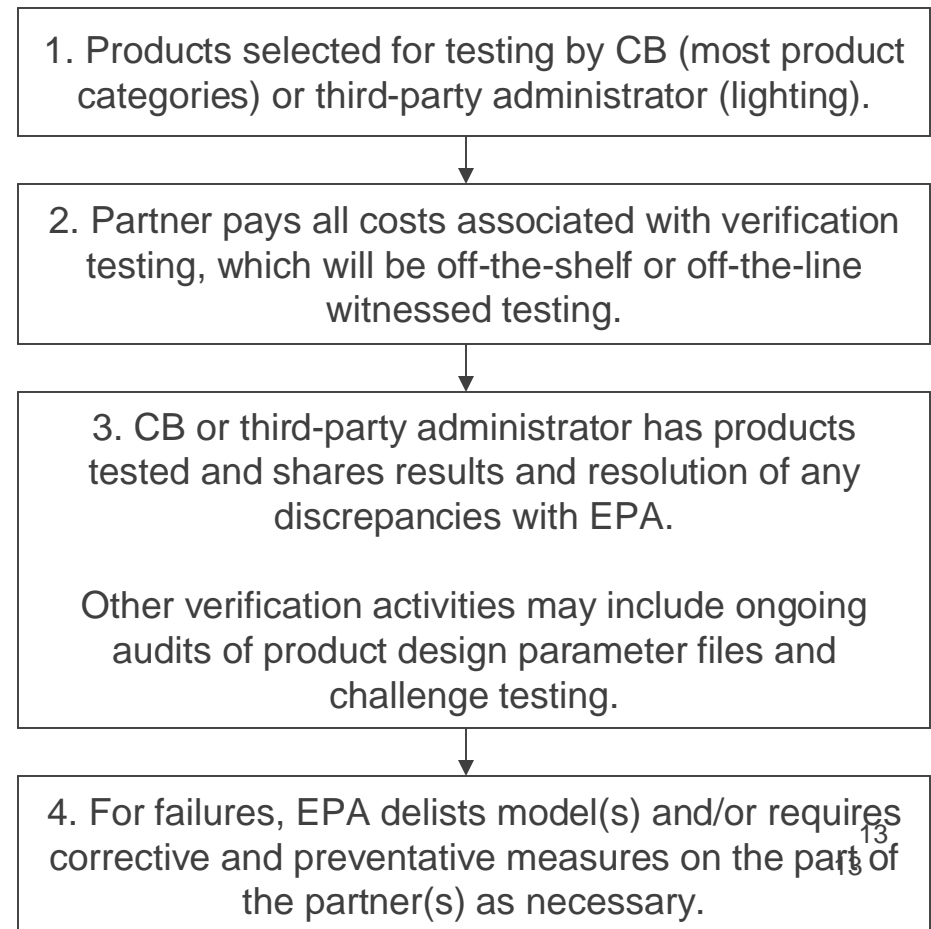
New Requirements for all ENERGY STAR Products

Scope: All ENERGY STAR Product Categories

Qualification



Verification



Verification Testing



- CBs to administer testing; decentralized process.
- EPA-recognized, third-party laboratories test products.
 - Option for limited use of in-house laboratory, if testing witnessed by qualified personnel from an EPA-recognized CB.
- 10-30 percent of all ENERGY STAR models tested each year; CBs may cap the number of models from one manufacturer tested in a given year.
- Off-the-shelf testing where possible.
 - Combination of random and pre-selected models.
- Challenge testing and product design parameter file audit requirements.

Timeline



- Stakeholder feedback is encouraged within tight timeframe

Key Milestones

May 3:	Draft AB requirements
May 17:	Draft Lab requirements
June 4:	Draft Qualification and Verification requirements
June 25:	Submit your feedback on the Draft and Verification Criteria to ENERGYSTARVerificationProgram@energystar.gov
July:	Finalize all requirements; begin accepting AB and CB applications
July-Dec:	Recognize ABs, CBs, and labs
Sept:	Finalize Partner Commitments and resign all agreements
Dec 31:	Require qualification in recognized labs for all new ES products; phase-in retesting requirements for existing products.

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