ENERGY STAR Certified Products
Success of the Program and the Certification Process

SIM Building Energy Efficiency and Labeling Workshop at NIST

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For more than **20 years**, EPA's ENERGY STAR program has identified the most energy efficient products, buildings, plants, and new homes – all based on the latest government-backed standards and a rigorous third-party certification process.

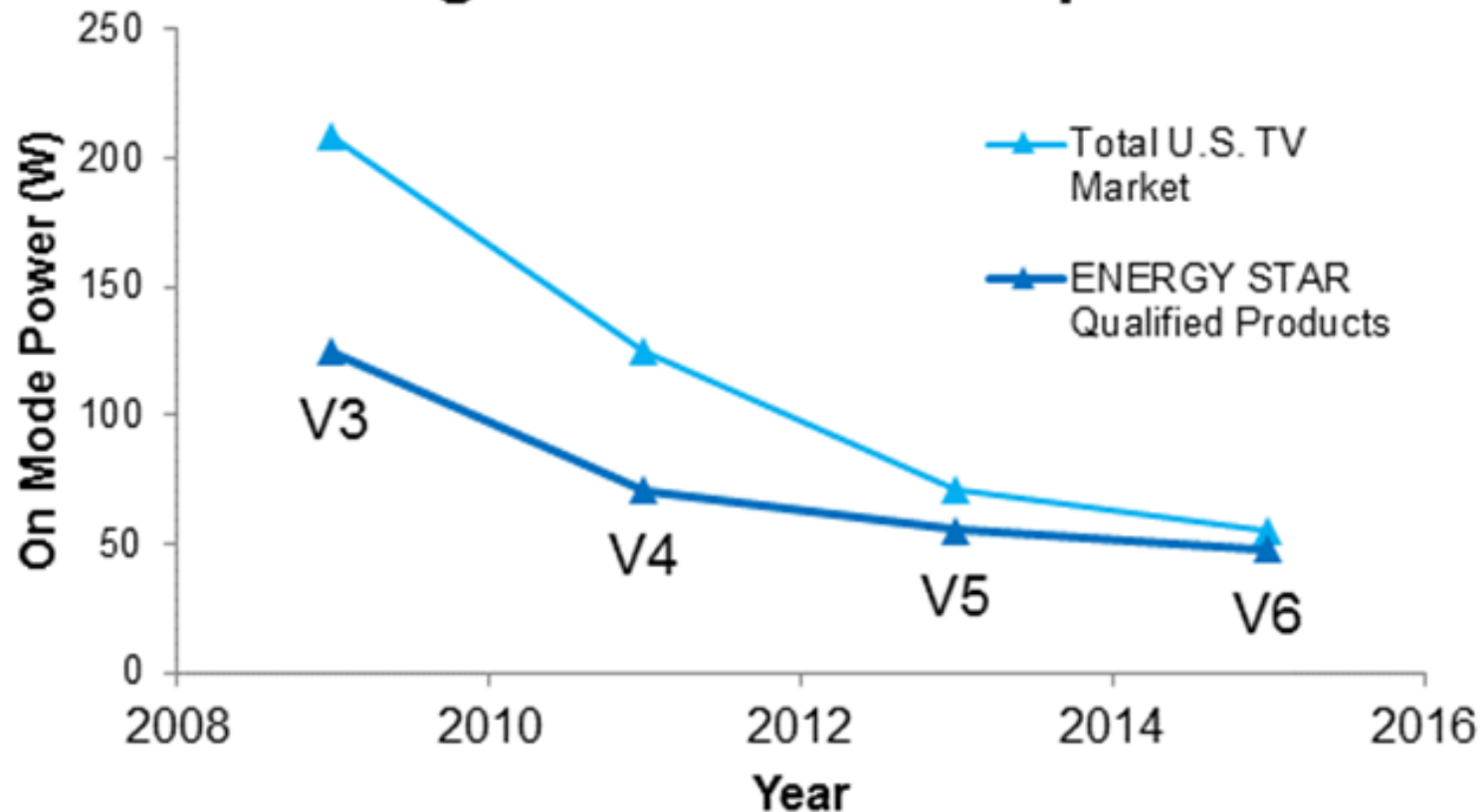Of the **87% of households** that recognize the ENERGY STAR label

75% recalled purchasing an ENERGY STAR-labeled product in the past year

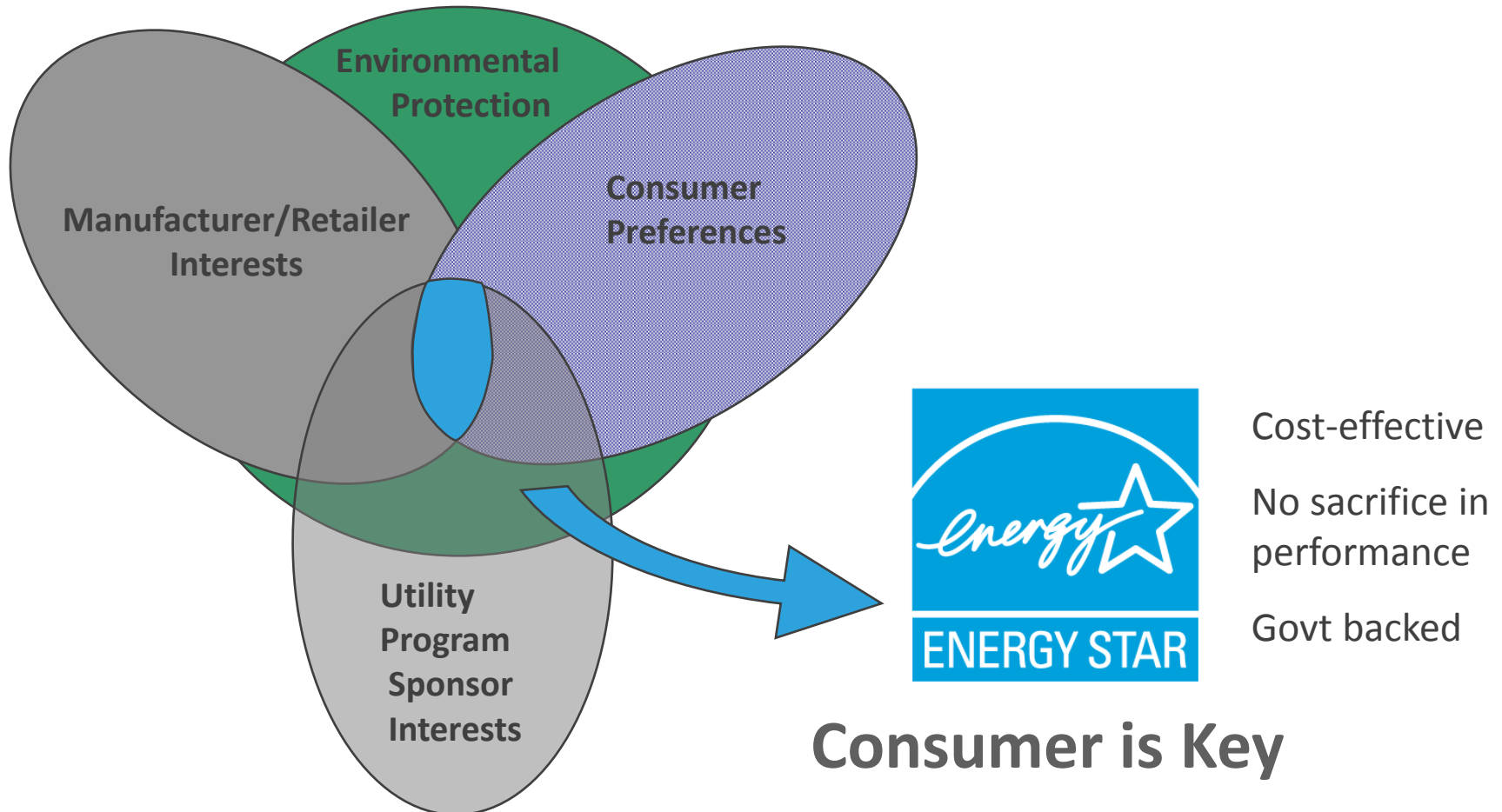73% said the label influenced at least one of their purchase decisions very much or somewhat

75% were likely to recommend ENERGY STAR-labeled products to a friend

30% were extremely likely to recommend ENERGY STAR

Source: National CEE Household Survey 2012

Changes in the TV Market & ENERGY STAR: Average Power Consumption

Builds Upon Intersection of Interests

Environmental Protection

Consumer Preferences

Manufacturer/Retailer Interests

Utility Program Sponsor Interests

Cost-effective

No sacrifice in performance

Govt backed

Consumer is Key

energy ENERGY STAR

EPA

Lighting
Residential lamps
Residential light fixtures

ENERGY STAR

Home Envelope
Roof products
Windows/Doors

Heating & Cooling
Central AC
Heat pumps
Boilers
Furnaces
Ceiling fans
Room AC
Ventilating fans
Water Heaters

Office Equipment
Computers
Monitors
Printers
Copiers
Multi-function Devices
Servers
Storage
UPS

Commercial Food Service
Dishwashers
Refrigerators
Freezers
Ice Machines
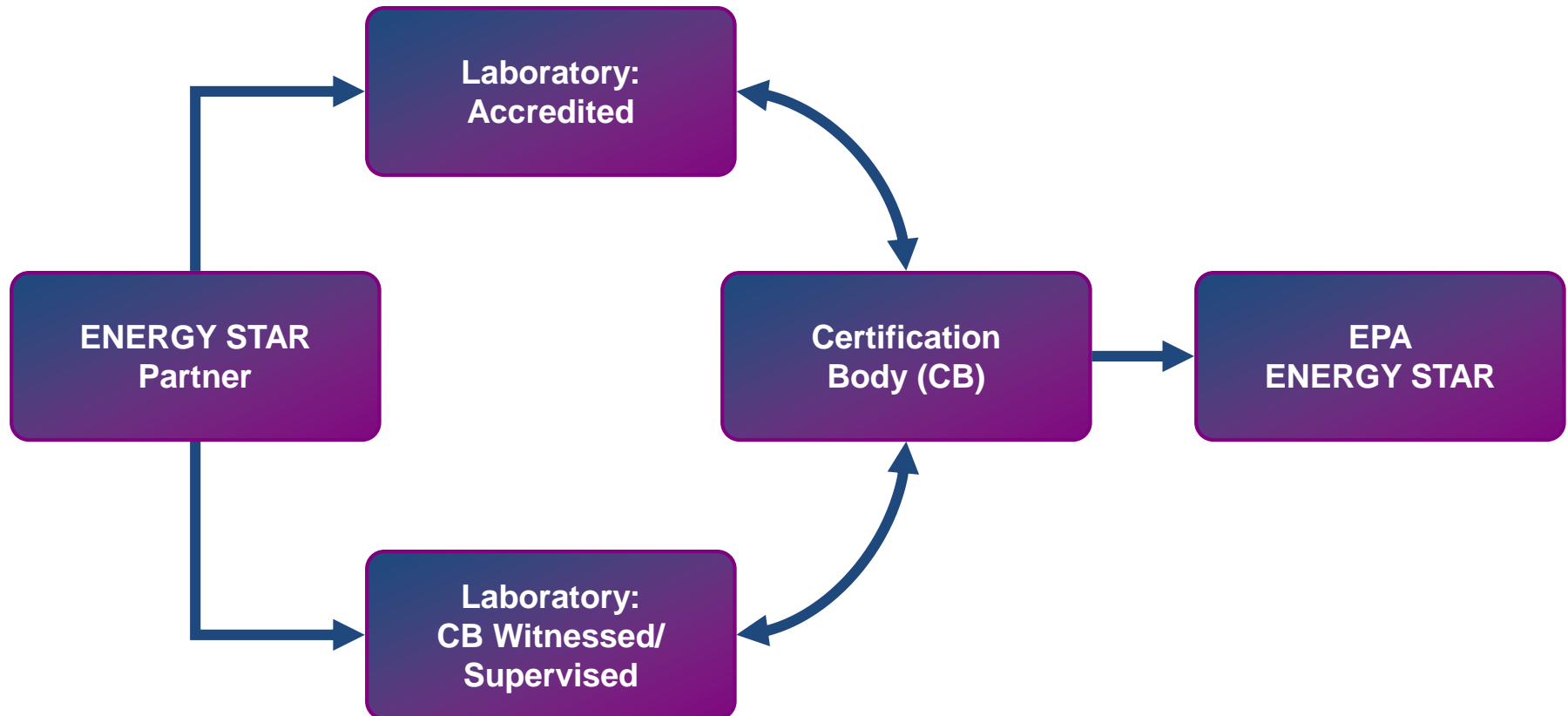Fryers
Steamers
Hot Cabinets
Griddles
Ovens
Vending machines

Appliances
Clothes washers
Dishwashers
Refrigerators
Dehumidifiers
Air cleaners
Water coolers

Home Electronics
Battery chargers
Cordless and IP phones
TV
Set Top boxes
Home audio

Product Certification Process

International Standards

INTERNATIONAL STANDARD **ISO/IEC 17011**

First edition
2004-09-01

Corrected version
2005-02-15

Conformity assessment — General requirements for accreditation bodies accrediting conformity assessment bodies

INTERNATIONAL STANDARD **ISO/IEC 17025**

Second edition
2005-05-15

ments for the competence libration laboratories

GUIDE 65

General re bodies ope certificatio

INTERNATIONAL STANDARD **ISO/IEC 17065**

First edition
2012-09-15

Conformity assessment — Requirements for bodies certifying products, processes and services

Évaluation de la conformité — Exigences pour les organismes certifiant les produits, les procédés et les services

EPA Recognition

- EPA accepts and reviews applications for recognition on an ongoing basis

- All ABs, CBs, and Labs require EPA recognition
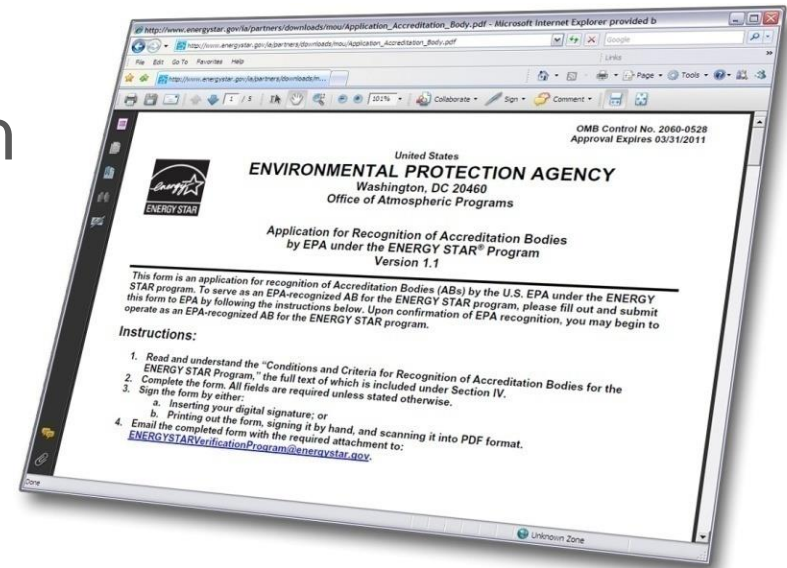
ENERGY STAR Recognized Bodies for Certification (September 2015)

Recognized Organizations

Type	Total
Accreditation Bodies	25
Certification Bodies	25
Laboratories (Accredited and W/SMTLs)	620
Accredited	292
SMTL	216
WMTL	112

Laboratories by Location

Country	Accredited Laboratories	SMTLs	WMTLs	Totals
Australia	1	0	0	1
Austria	0	1	0	1
Brazil	2	0	0	2
Canada	12	12	7	31
China	80	41	24	145
Denmark	0	0	1	1
Germany	8	4	4	16
Guatemala	1	0	1	2
Hong Kong	3	0	0	3
India	1	0	0	1
Italy	3	1	2	6
Japan	16	14	5	35
Malaysia	2	2	0	4
Mexico	0	9	1	10
Netherlands	2	1	1	4
New Zealand	0	2	0	2
Singapore	2	0	0	2
South Korea	17	13	4	34
Spain	2	0	0	2
Sweden	1	1	0	2
Taiwan	40	3	14	57
Turkey	0	4	0	4
United Kingdom	3	2	0	5
United States	96	106	48	250
Totals	**292**	**216**	**112**	**620**

ENERGY STAR. The simple choice for energy efficiency.

Verification Testing

➢ Verification testing ensures models meet ENERGY STAR requirements post-qualification

1 10% of representative models certified by each CB are selected for testing, with input from EPA and possibly other third parties.

2 Partner funds verification testing, which will be off-the-shelf third-party testing, or off-the-line first-party testing witnessed by a third party.

3 CB has units tested; shares results with EPA.

EPA
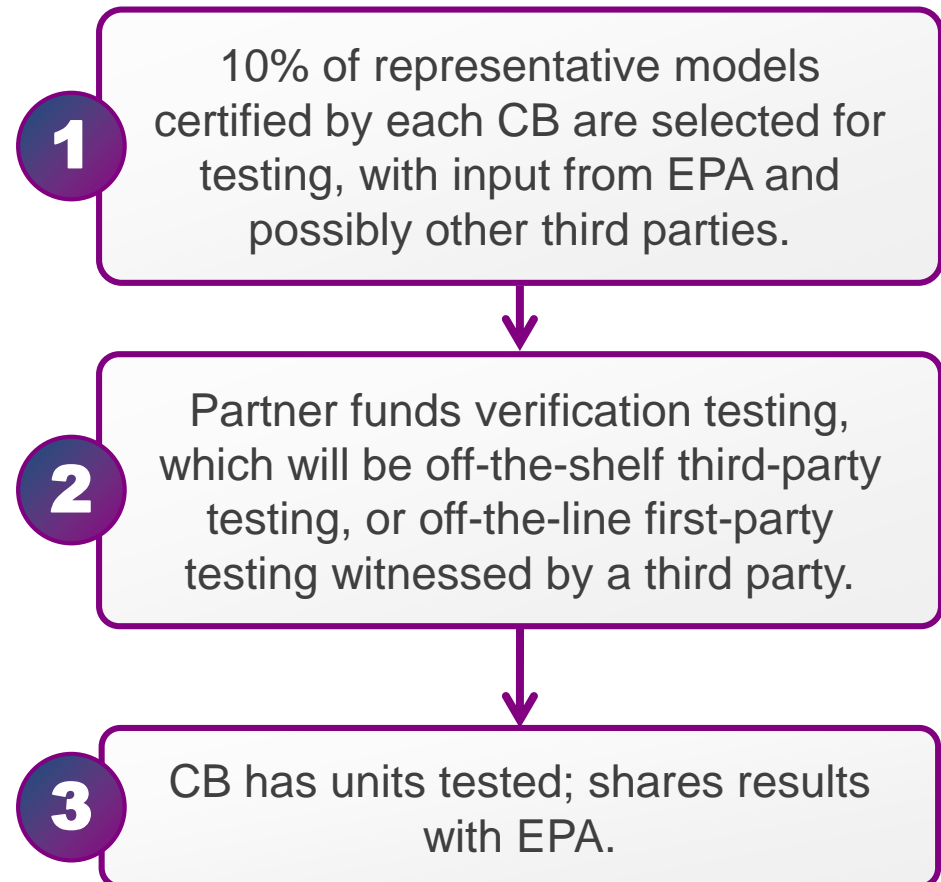
2014 Verification Testing

- 2,070 Products Tested

    - 116 Appliances

    - 422 Lighting and Fans

    - 377 HVAC

    - 510 Consumer Electronics/ Information Technology

    - 138 Commercial Food Service

    - 477 Home Building Supplies

    - 30 Other

2014 Verification Testing

- **58 unique disqualifications and 122 total products disqualified**

Product Category	Number of Unique Disqualifications	Total Number of Products Disqualified
Ceiling Fans	4	5
CFLs	11	33
Commercial Griddles	1	3
Commercial Refrigerators and Freezers	3	3
Computers	7	8
Furnaces	2	2
Geothermal Heat Pumps	1	3
Integral LED Lamps	3	7
Luminaires	14	30
Roof Products	2	2
Televisions	1	1
Ventilating Fans	7	23
Water Coolers	1	1
Windows, Doors, and Skylights	1	1

Possible New Product Categories, 2014-2015

- Clothes dryers
- Commercial coffee makers
- Hand dryers
- Large network equipment
- Lab-grade refrigerators
- Medical imaging

1. Finalize the test procedure
2. Finalize the spec
3. EPA-administered training for CBs
4. Open up the application for labs and CBs

Thanks!

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