

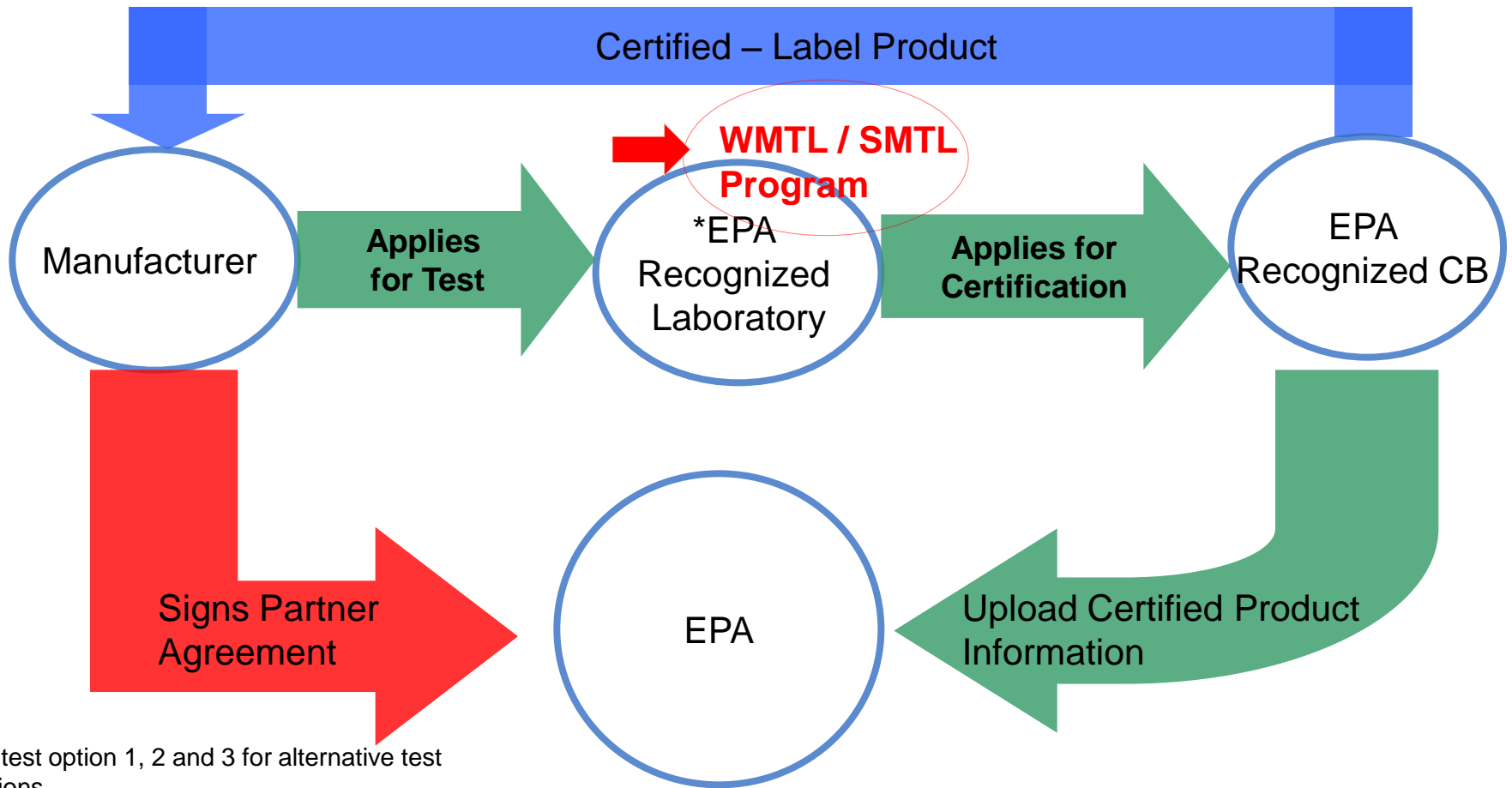
# Energy Efficiency Testing – Data Center Storage

Certification Body – Lessons Learned



# ENERGY STAR Process

## Basic Process



*Witnessed Manufacturer's Testing Laboratory (WMTL) - A manufacturer's laboratory being used to test specified products of which the manufacturer has production responsibility. The CB witnesses all tests done by a manufacturer's laboratory which uses its own test equipment.*

## **Basic Steps:**

- Manufacturer applies to the **CB** to become a WMTL
- The CB evaluates suitability of laboratory to ISO/IEC 17025 cl. 5.2-5.8 prior to witnessing testing
- The CB will report recognized WMTL to EPA for registration purposes
- Upon successful evaluation of the WMTL all subsequent test shall be witnessed by the CB

## What does the CB review for certification?

- Test Laboratory EPA recognized (Third party, WMTL, SMTL or 1<sup>st</sup> Party)
- Test report/Test Data – Correct conclusions, results and test methods
- Measurement and Testing Instrument list with calibration dates
- Declaration about difference of construction – Family Models (as applicable)
- Photo documentation, catalog or picture of the product
- User manual / Instructions comply with ENERGY STAR specification and program requirements
- Valid ENERGY STAR Partner ID
- **ENERGY STAR® Certification submission form is complete and accurate**
- ENERGY STAR® Certification Body Agreement

# ENERGY STAR Process



## XML Submission Sheet

	A	B	C	D	E	F	
2							ES_0_120
3	ENERGY STAR Manufacturing Partner	Manufacturing Partner's EPA issued Organization ID	Partner Contact Name For This Model	Type of Transaction	Reason for Transaction	Date of Transaction Type	ENERGY S
4	Text;Min Length: 1; Ma	Integer;	Text;Min Length: 1; Ma	Enum Data;Initial Certification; Mo	Enum Data;Initial Certification:	Date;	Text;Min L
5	Required	Required	Required	Required	Required	Required	Required
6	The ENERGY STAR Manufacturing Partner is the organization that has signed an ENERGY STAR Partnership Agreement and labels the model. This organization is typically the brand	THIS EPA-issued ID IS the number assigned to the ENERGY STAR Manufacturing Partner. This ID can be located via the certification body's My ENERGY STAR Account (MESA) and searching	Provide the ENERGY STAR Manufacturing Partner contact responsible for this certified model.	include the type of transaction associated with the certified model. Only the options included in the Enum list may be provided. Initial certification must only be used if the model has never been submitted and does not have an ENERGY STAR Model Identifier. Registration	include the reason for Transaction associated with the Type of Transaction. Only the reasons included in the Enum list may be provided. If "other" is provided, list further details in the notes field. The certification body will		Generate ENERGY_ string of c bodies in : ENERGY_
7	Partner xyz	112xxxx	Joe Example	Modification	Modification: Changed Model Name/Number		


	W	X	Y	Z	AA	AB	AC
ted	Date CB Notified Partner of Model Qualification	Certification Body Contact Name for This Model	Laboratory EPA issued Organization ID	Laboratory Contact for This Model	To What Major Markets is This Model Sold	Notes	
	Date;	Text;Min Length: 1; Ma	Integer;	Text;Max Length: 200;	Enum Data;Australia; Ne	Text;Max Len	
1	Required	Required	Optional	Optional	Requ.	Optional	
	The date the certification body notifies the manufacturer that the model is certified as ENERGY STAR.	The name of the primary certification body contact responsible for any questions concerning the certification of the model.	THIS EPA-issued ID IS the number assigned to the EPA-recognized laboratory that tested the model. This ID can be located via the certification body's My ENERGY STAR Account (MESA) and	The name of the primary laboratory contact responsible for any questions concerning the testing of the model. This information is required for each laboratory indicated.	Separate values with semicolons or use "All Markets".		
	3/18/2014	Martin Glagla	1120350	Uwe Meyer	Australia; New Zealand	TESTING	

# ENERGY STAR Process



## XML Submission Sheet

IF	IG	IH	II	IJ
Stream Num of PSUs in Largest Device Count Configuration	Stream Num Redundant PSUs Largest Device Count Config	Stream TDR File Name Largest Device Count Configuration	Stream Largest Dev Count Config Hot Band Wrkld Test (IOPS/W)	Stream Largest Dev Count Config Random Read Wrkld Test (IOPS/W)
Integer;	Integer;	Text;Min Length: 0; M	Decimal;Dec Places:	Decimal;Dec Places: Dec
Opt. Required if Workload Optimization Type is Streaming. Indicate the total number of PSUs contained in the largest device count	Opt. Required if Workload Optimization Type is Streaming. Indicate the total number of redundant PSUs contained in the	Opt. Required if Workload Optimization Type is Streaming. Indicate the SNIA Emerald generated TDR Template File Name for the	Opt. Required if Workload Optimization Type is Streaming. Indicate the hot band measurement for the largest storage device	Opt. Required if Workload Optimization Type is Streaming. Indicate the random read measurement for the largest storage device
4		4 xyz Storage stream	14.69	10.86



**The SNIA Emerald Test Data Report**  
Disclosure for storage systems and products

**Notes for preparing this Emerald Test Data Report**  
Please ensure that the report reflects well on the vendor company and its product.

**NOTICE:** This document is published and made accessible by SNIA for non-commercial use only and subject to restrictions stated in the Terms of Use contained herein.

**Product Description**

Company: xyz  
Address:

# Thank You!



.....Questions?

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