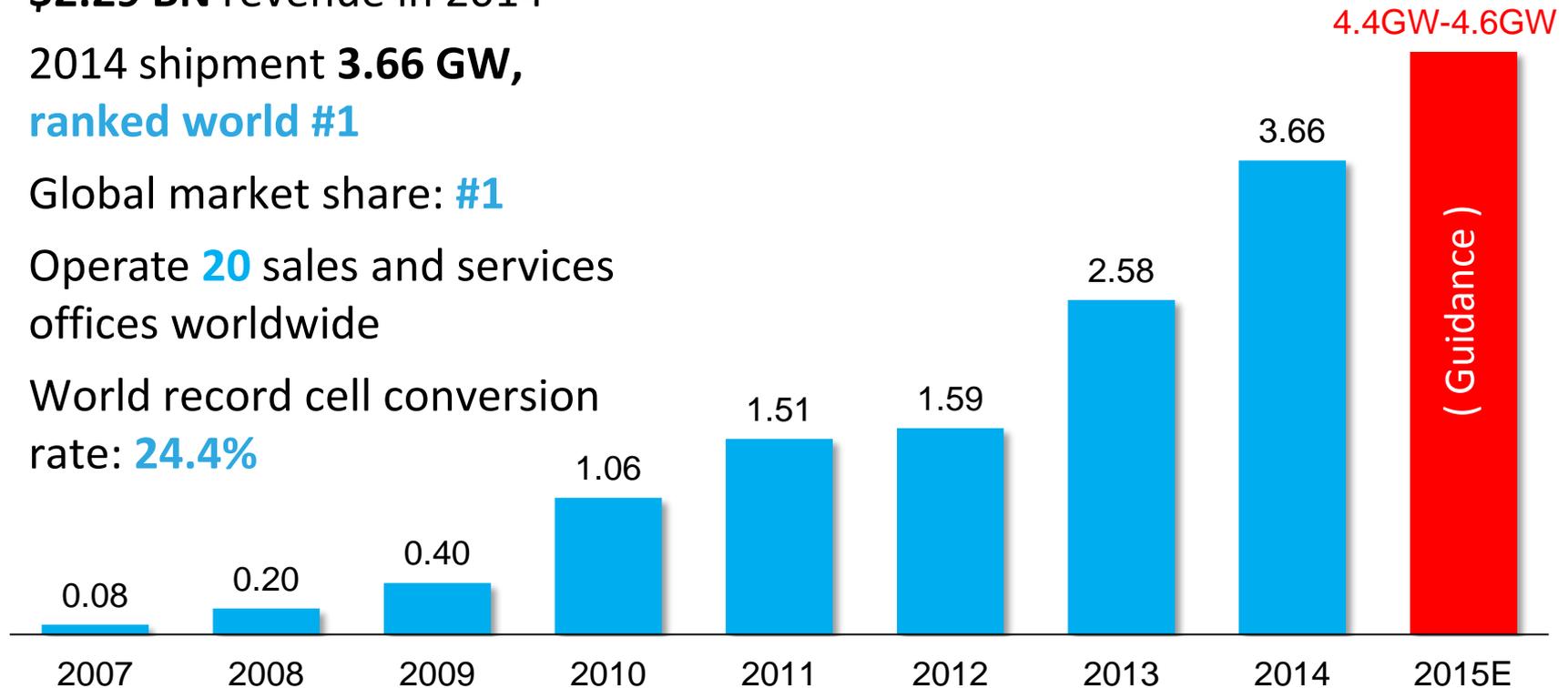

Module manufacturing for quality: Consistency, Reliability and Warranty

1. Trina Solar Quality Vision & Culture
2. Quality Process for Components,
Suppliers & Production Process
3. Certification & Extended Testing
4. Warranty: Reliability, Confidence & Support

Trina Solar; Overview

- Founded in **1997**
- Listed on the NYSE (**TSL**) 2006
- **\$2.29 BN** revenue in 2014
- 2014 shipment **3.66 GW**,
ranked world #1
- Global market share: **#1**
- Operate **20** sales and services
offices worldwide
- World record cell conversion
rate: **24.4%**



➤ **11 GW+** shipped since 2007

Trina Quality Vision:

Strive to be Quality Benchmark in Global PV Market



Quality Process for Components, Suppliers & Production:

Quality in Design:

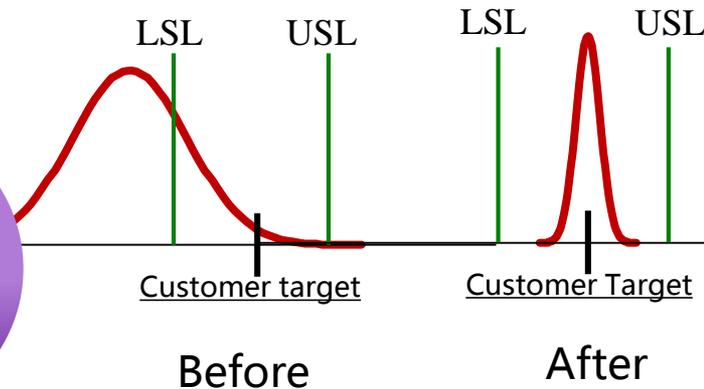
- Prevent, detect and correct reliability defects during design
- Partner with Material Suppliers
- Prototype testing

Supplier Qualification:

- Component & quality process must meet Trina requirements
- Reliability & financial strength
- Small Batch Trials

Quality In Design

Supplier Qualification:
Product & Capability



Quality in Material Control Inspection

Production Process Inspection & Control

Component quality inspection:

- Incoming inspection & tracking
- Sample testing
- Quality in production
- Non-conformities pulled, tracked and analyzed

Production Quality control:

- ISO 9001 & Six sigma
- Key process KPIV & KPOV control
- Statistical Process Control for change or abnormalities.
- Failure Mode & Effect Analysis



- Setup and operated fully aligned with IEC61215, IEC61730 & UL1703
- Long-term Strategic Partnership with TÜV Rheinland Group, Underwriters Laboratories Inc (UL) and China General Certification Centre (CGC)



- 1st UL CTDP PV lab in the world
- ISO-17025 certified by CNAS
- 100+ certifications to meet worldwide standard requirements
- Over 30 in-house tests, allows internal testing in accordance with IEC standards and those of internationally-trusted testing bodies.



<i>Wet Leakage</i>	<i>Damp Heat</i>	<i>Mechanical load</i>	<i>Highly Accelerated Stress</i>	<i>Humidity Freeze</i>	<i>Outdoor Exposure</i>
<i>UV Pre-condition</i>	<i>Impact Testing</i>	<i>Corrosive Atmosphere</i>	<i>Hot-spot Endurance</i>	<i>Insulation Test (Dry & Wet)</i>	<i>Thermal Cycling</i>

Warranty: Reliability, Confidence & Support

Reliability: quality management in design, component, process & testing

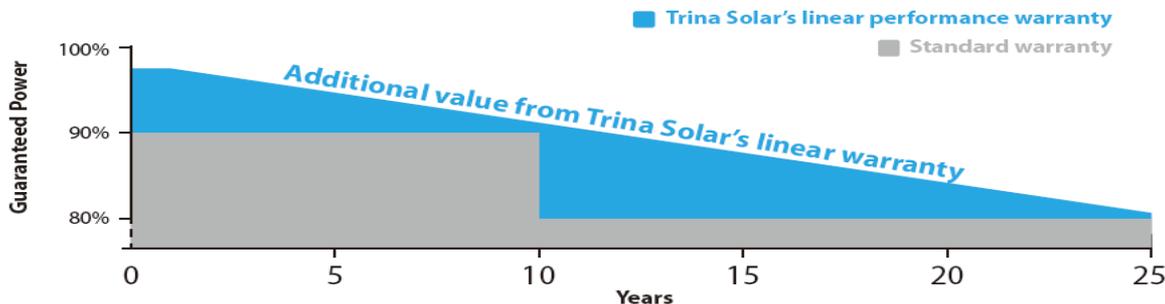
- Material & Electrical testing to increase panel durability & product life
- Consistent performance in the world's most unforgiving environments
- Tests components individually and together to maximize electrical output while minimizing degradation.

Confidence: Warranty Period

- Material defects and workmanship: 10 years
- Energy Production Guarantee: 25 Years
- Linear warranty replaces step

Support: Customer Quality Management

- Customer feedback & warranty support
- Factory Audit & Production Inspection
- Pre-sales support for special orders



CHINA

JAPAN

KOREA

U.S.A.

SWITZERLAND

GERMANY

ITALY

SPAIN

THANK YOU

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