Reliability is Foundation for Realizing Lower LCOE

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LONGi Is the Largest Wafer and Module Manufacturer and the Most Bankable Solar Module Brand

24.5 GW
Module shipment in 2020

58+ GW
Wafer shipment in 2020

$400M
R&D investment in 2020

PV ModuleTech Bankability Ratings Quarterly | Q3’21 Release
Reliability is Foundation for Realizing Lower LCOE

All innovative technologies need to demonstrate solid reliability before HVM implementation.
LONGi Takes Comprehensive Approach on Reliability

Full Lifecycle Management

1. Module design and material selection
   - With reliability mindset
2. Process optimization and reliability test
   - Industry leading technical standards
3. Module production
   - Comprehensive quality management system and ongoing reliability monitoring
4. Real life field performance
   - Third-party and partner validation
5. Digital product experience
   - Informational and intelligent value-added services
6. Professional after-sale protection
   - Reliable company guarantees reliable performance

Industry leading standard
Fulfill customer's demand
Realize customer benefits
Major Technological Innovations in PV Industry

- **Monocrystalline**
  - RCz
  - DW Cutting
  - Wafer Improve

- **PERC**
  - High Efficiency
  - Low Degradation

- **Bifacial PERC**
  - Significant Energy Yield Increase to Lower LCOE

- **Half-cut**
  - Increasing of Efficiency and Power

- **M6 Standard Wafer**
  - Global Best Sell, Full Sense Replacement of M2 Module

- **M10 Standard Wafer**
  - Design for Ultra-large Station, Increasing Module Efficiency by Smart Soldering

Market Share of Monocrystalline-Si Modules:
- 2015: 18%
- 2016: 23%
- 2017: 27%
- 2018: 56%
- 2019: 68%
- 2020: 90%
Reliability Risks with Oversized Modules

- Oversized modules (width >1.2m) yield >40% higher deformation under the same load
- Risks for microcrack and glass breakage increase significantly; module reliability is compromised
- Using the same 2+2mm glass construction, module size/power cannot continue to increase without compromising reliability
Value Proposition of High Efficiency Technology

01. Higher module efficiency reducing BOS and O&M costs

02. Energy yield increased

03. Highly reliable product design and manufacturing processes providing better power degradation warranty
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