



Upsolar – a Sound Solar Investment

PV solutions for 2013 and beyond

Q2 2013



Agenda



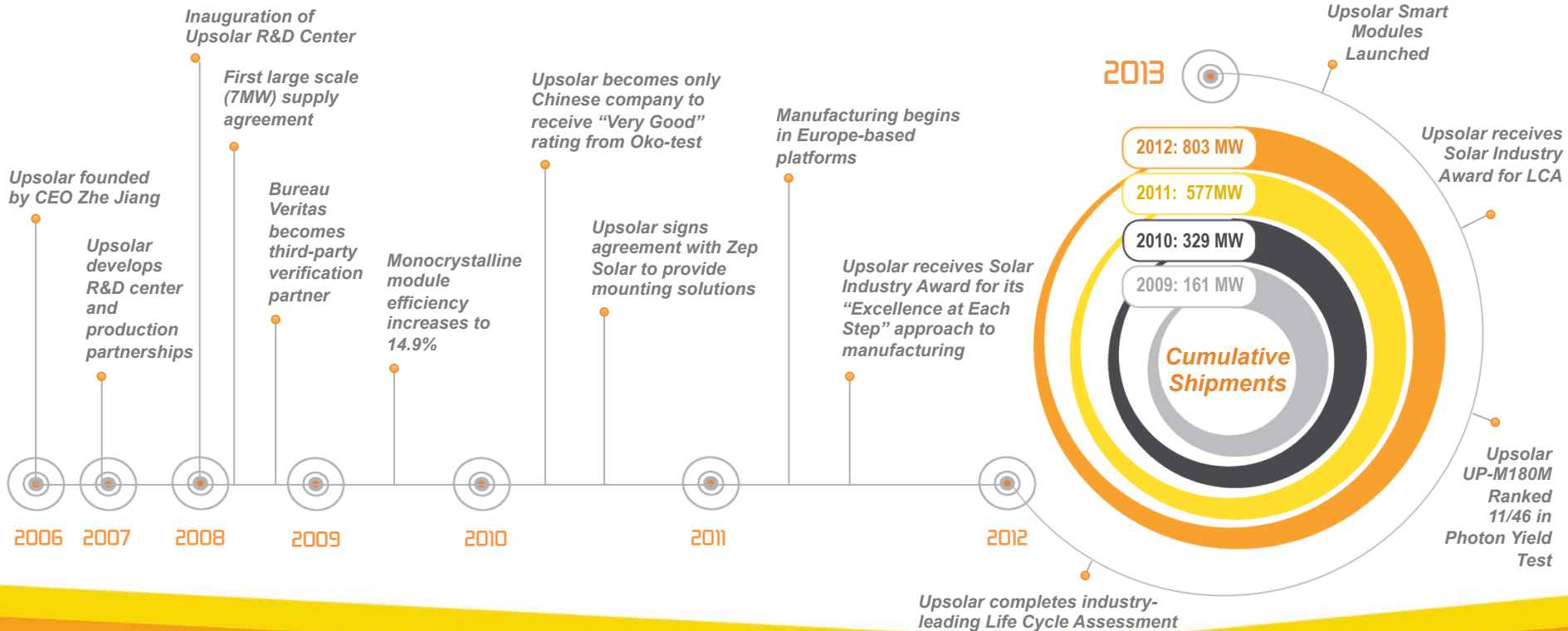
- About Upsolar
- Excellence at Each Step
- Our Products
- Our Partner Network
- Credentials



Company Snapshot

- Founded in 2006 by CEO Zhe Jiang
- In-house R&D, design, testing and supplier qualification
- Flexible manufacturing through qualified production partners
- Top-quality components
- Thorough QC protocol; component selection -> assembly
- 3rd party oversight/verification

Milestones and Growth



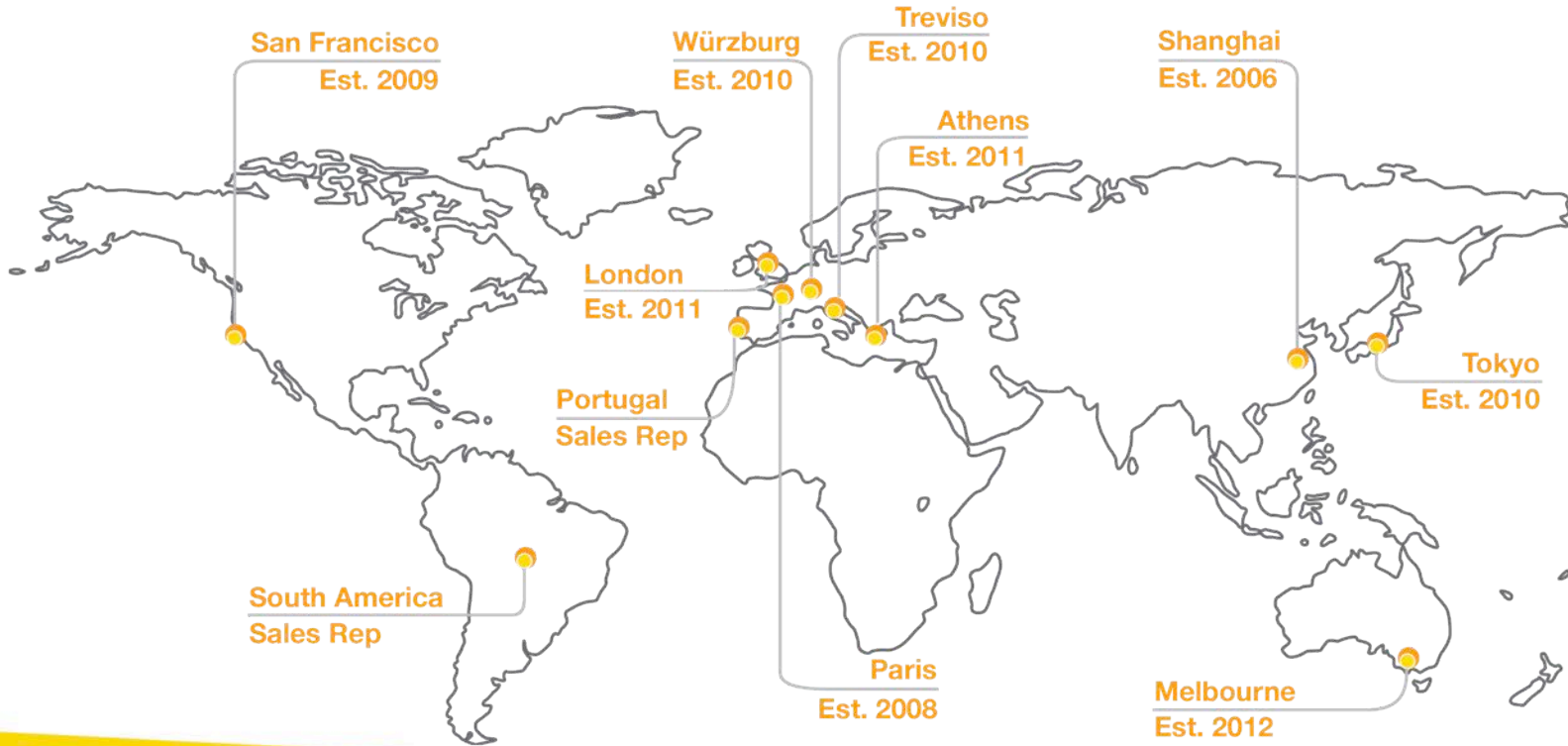
Shipment Review

Quarterly Shipment and Yearly Turnover from 2009-2012

Year	Q1	Q2	Q3	Q4	Shipment Total	Turnover (millions of USD)
2012	41.7	86.2	64.6	33.5	226.0	259
2011	71.4	58.1	64.1	54.9	248.5	285
2010	34.9	43.0	37.9	50.0	165.8	260
2009	11.3	18.9	31.5	32.6	94.3	109

**all shipment values expressed in MW*

Upsolar Global Teams



Excellence at Each Step



The Industry's Best Quality/Cost Ratio

Upsolar Research & Development Center



- Testing and qualification of components, materials and technology
- Testing and selection of best performing component combinations
- Regular offline QC testing of randomly sampled modules from manufacturing lines

Environmental Lab

Electrical Lab

Physiochemical Lab

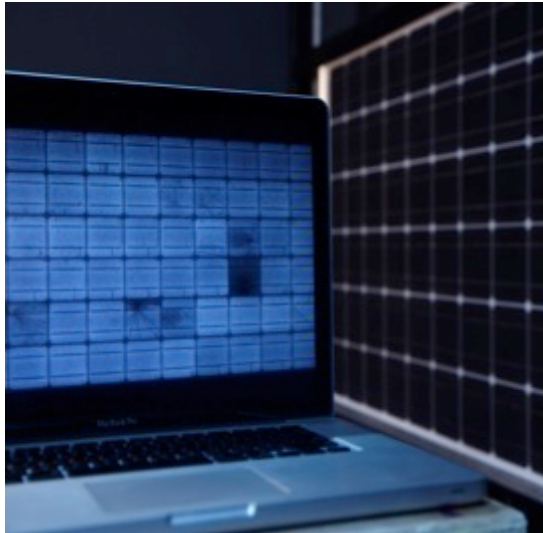
Flashing and Dark Lab

Fabricating Room

Cell/wafer Analysis



Supplier Qualification: Offline QC



- Quality control following any changes to specifications, equipment, assembly processes
- Thorough testing of components, assembly, final products
- In-field testing on rooftop of R&D Center
- Qualification process for all manufacturing platforms



Manufacturing Partner Qualification: Online QC

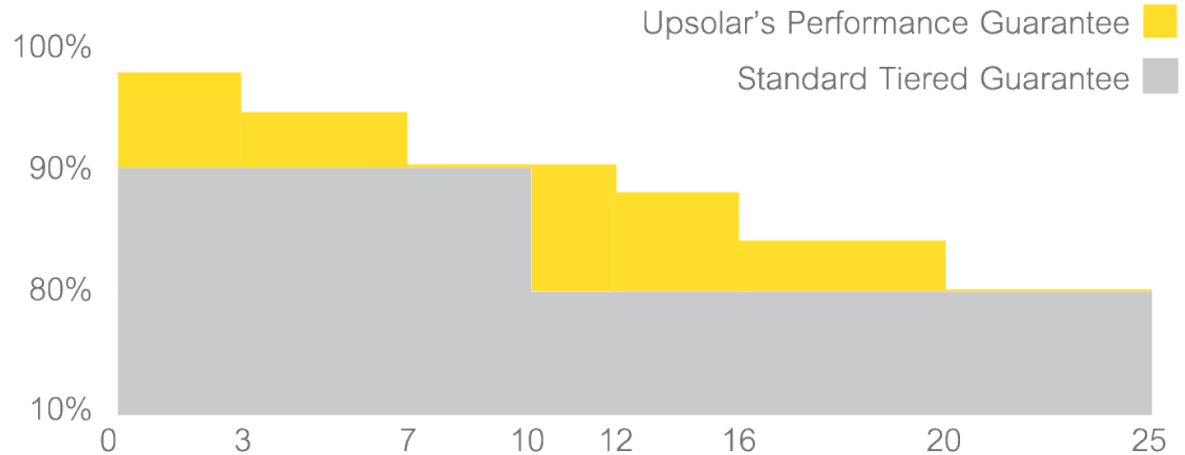


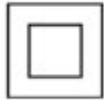
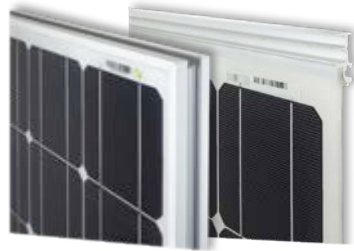
- QC reports for all shipments
- Production follow-up, continuous on-site presence
- Power output inspection: modules re-flashed with reference modules calibrated by TUV Rheinland Shanghai
- Appearance inspection, component conformity check, vigilant packing and loading processes
- QC online software to monitor each batch



25 Year Reinforced Module Warranty

- Reinforced Module Warranty features six trigger points at years 3, 7, 12, 16, 20 and 25
- Includes 10 year Product Guarantee





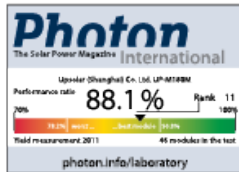
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Bloomberg
NEW ENERGY FINANCE





5" Monocrystalline PV Module – 72 cells – Black



- Power Output Range: 180-200Wp
- Module Efficiency: 14.1% - 15.7%
- High quality bill of materials
- Reinforced Module Warranty
- Easy to handle, modular
- Ideal for residential
- Aesthetic Advantage





5" Monocrystalline PV Module – 72 cells



- Power Output Range: 185-205Wp
- Module Efficiency: 14.5% - 16.1%
- High quality bill of materials
- Reinforced Module Warranty
- Easy to handle, modular
- Ideal for residential





6" Monocrystalline PV Module – 60 cells – Black



- Power Output Range: 235-255Wp
- Module Efficiency: 14.5% - 15.7%
- High quality bill of materials
- Reinforced Module Warranty
- High Efficiency
- Universal Design (residential, commercial)
- Aesthetic Advantage



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6" Monocrystalline PV Module – 60 cells



- Power Output Range: 240-260Wp
- Module Efficiency: 14.8% - 16.0%
- High quality bill of materials
- Reinforced Module Warranty
- High Efficiency
- Universal Design (residential, commercial, ground-mounted)



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100000 10000

BUREAU VERITAS
Certification





6" Monocrystalline PV Module – 72 cells



- Power Output Range: 285-305Wp
- Module Efficiency: 14.7% - 15.7%
- High quality bill of materials
- Reinforced Module Warranty
- Reinforced Structure (thicker glass, stronger frame)
- Ideal for ground-mounted systems



UL 1703





6" Polycrystalline PV Module – 60 cells – Black



- Power Output Range: 225-245Wp
- Module Efficiency: 13.8% - 15.1%
- High quality bill of materials
- Reinforced Module Warranty
- Universal Design (residential, commercial)
- Aesthetic Advantage
- Best seller for its performance/price ratio





6" Polycrystalline PV Module – 60 cells



- Power Output Range: 230-250Wp
- Module Efficiency: 14.1% - 15.4%
- High quality bill of materials
- Reinforced Module Warranty
- Universal Design (residential, commercial, ground-mounted)
- Best seller for its performance/price ratio



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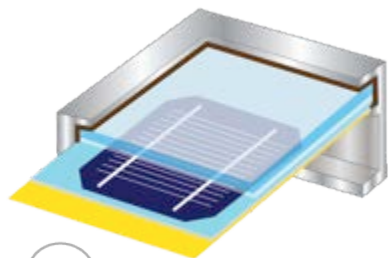
6" Polycrystalline PV Module – 72 cells



- Power Output Range: 280-300Wp
- Module Efficiency: 14.4% - 15.5%
- High quality bill of materials
- Reinforced Module Warranty
- Reinforced structure(thicker glass, stronger frame)
- Ideal for ground-mounted systems



Innovation through Partnerships



Quality Components



Module-level electronics

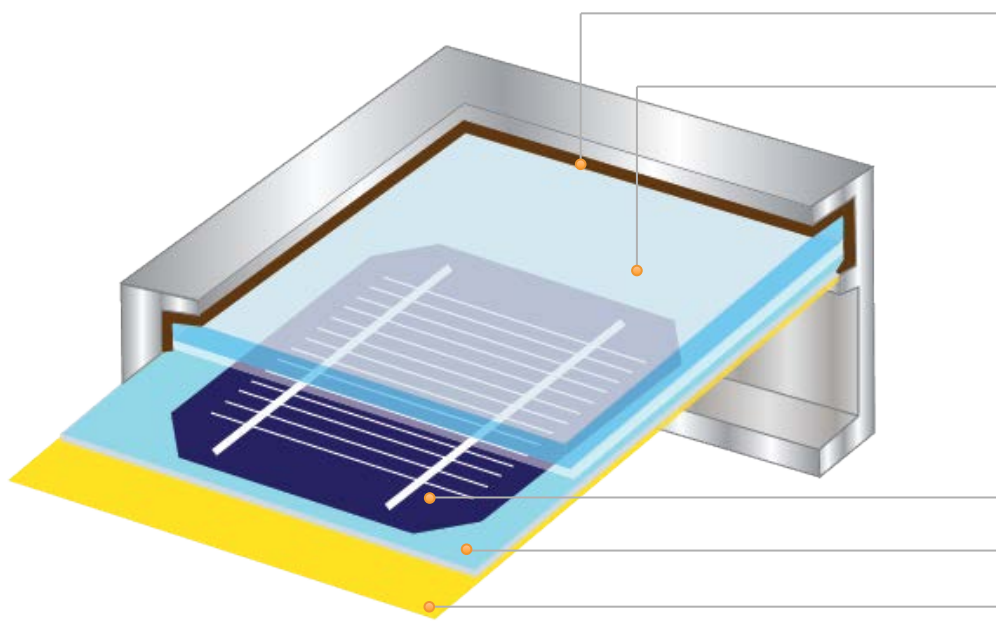


Mounting Solutions



Project Development
Financial Services
O&M Services

Module Components



Silicon Gel – Dow Corning, Tonsan

Glass – CSG Group, Pilkington

J-Box/Cables/Connectors – Huber Suhner, MC

Cells – CSUN, MOTECH, JA Solar

EVA – Bridgestone, Sanvic

Backsheet – Keiwa, Krempel



Rooftop Mounting Solutions

*In partnership
with*



- For residential, commercial applications
- Quick installation
- Lower parts count
- Enhanced aesthetics

*In partnership
with*



ZepSolar





Smart Module Solutions

In partnership
with **Tigo**[®]
energy



- Higher Yield
- Enhanced design flexibility
- Ease of installation
- Better monitoring and diagnostics capabilities
- Improved safety through arc fault and fire protection

In partnership
with **solar**edge



Global Project References

*Rooftop Installation
Pravisdomini, Italy*



*Rooftop Installation
Slovenia*



*Solar Carport
Vendres, France*



*Groundmount
Igoumenitsa, Greece*



*Commercial Rooftop
Trier, Germany*





Thank you for your attention!

