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Dyesol Limited
Annual General Meeting
30 November 2012

AGM Program 2012



- Welcome – Mr Richard Caldwell
- 2012 Performance Review
- Capital & Corporate Structure
- Products and Partners
- Strategy Update
- Outlook
- Technology Highlights – Dr Hans Desilvestro
- Resolutions
- Refreshments and Meet & Greet
- Facility Tour





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2012 Performance Review

30 November 2012

2012 Performance Review



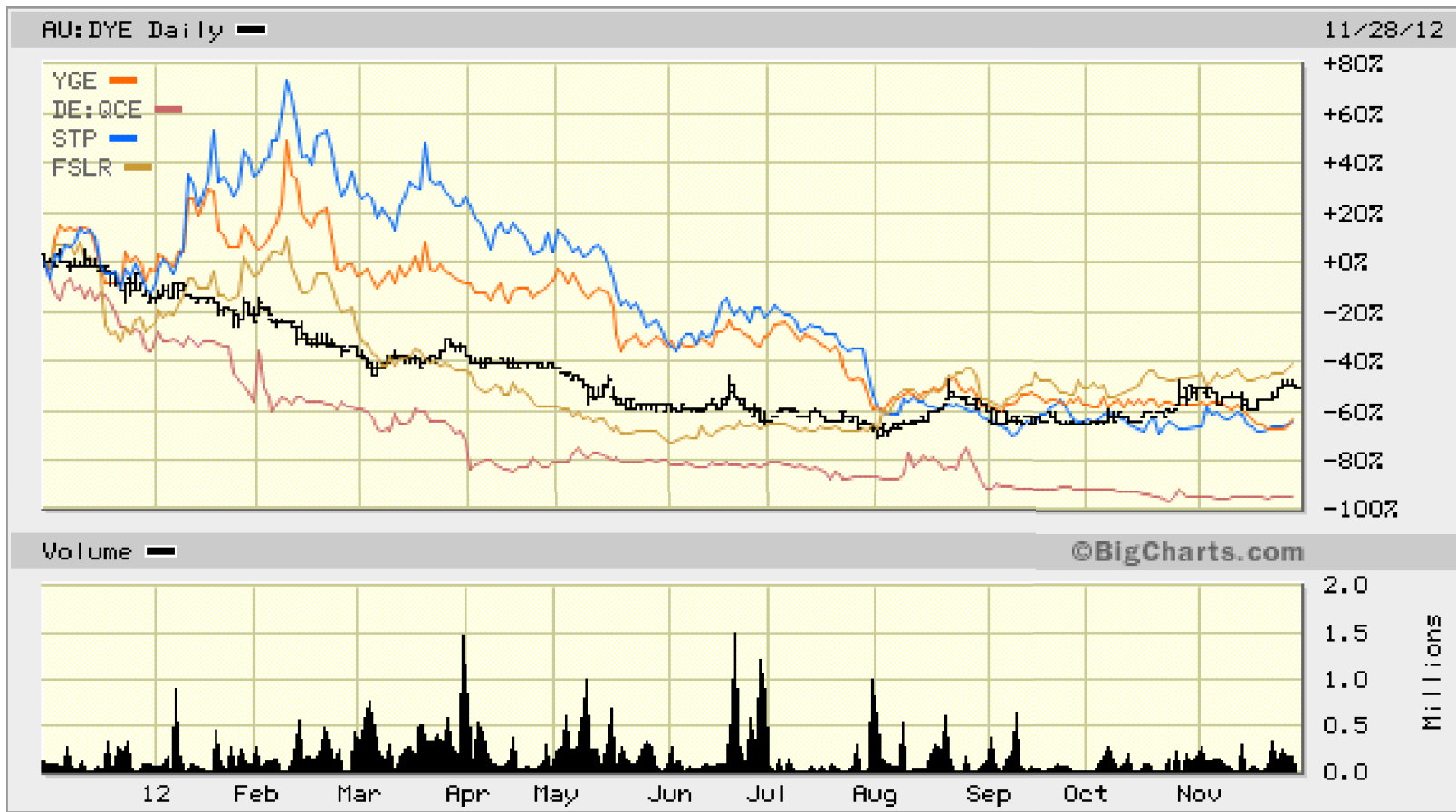
- Achieves Industrial Strip-Cell Efficiencies of 7.5-9%
- Initiates research programmes for improved glass sealing and solid-state devices
- Graetzel wins 2012 Albert Einstein Award and Swisselectric Research Award
- Tata-Dyesol PV Accelerator closes technology gap and advances towards grid-parity product
- Dyesol-Timo JV enters product demonstration in Seoul government buildings & positions for full-scale commercialisation
- DyeTec expands and enters material performance validation and testing phase
- Dyesol ceases Structured Equity Line of Credit, Raises \$5 million & Receives \$2.9 million R&D Tax Rebate
- Monthly cash burn reduced from \$900k to \$700k
- Dyesol builds strong government ties with ARENA and hosts visit from Australian Prime Minister
- Engaged in advanced discussions for potential strategic investment



Share Price FY 2012



Dyesol +/- % compared to First Solar, Suntech, Q-Cells, Yingli





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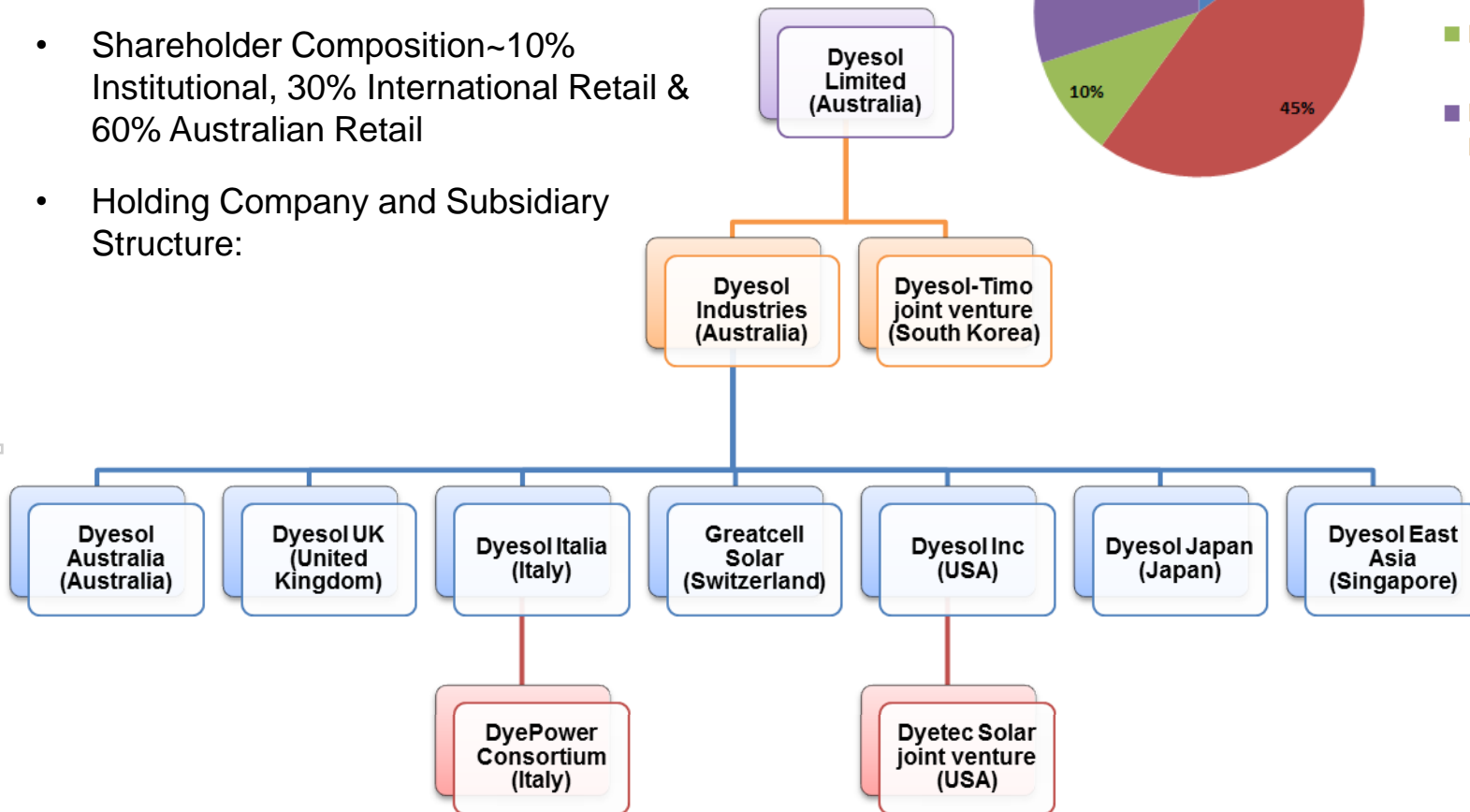
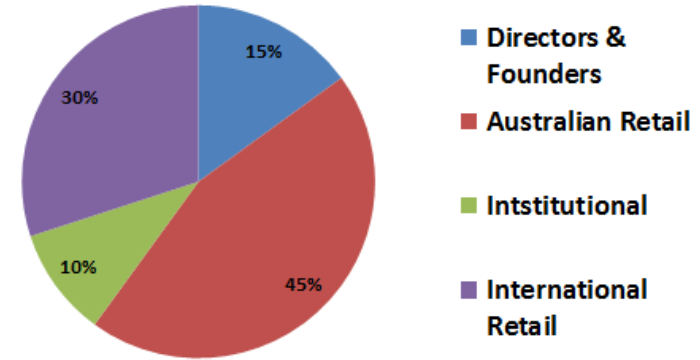
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Capital & Corporate Structure

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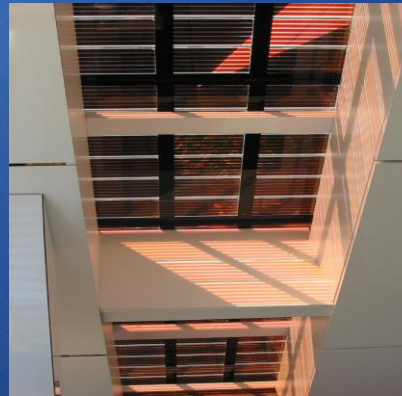
Capital & Corporate Structure

- 196 million shares on issue @ \$0.155
= Market Capitalisation ~ A\$30 million
- ASX:DYE, German 3rd Market:D5I & OTCQX:DYSOY
- Shareholder Composition~10% Institutional, 30% International Retail & 60% Australian Retail
- Holding Company and Subsidiary Structure:





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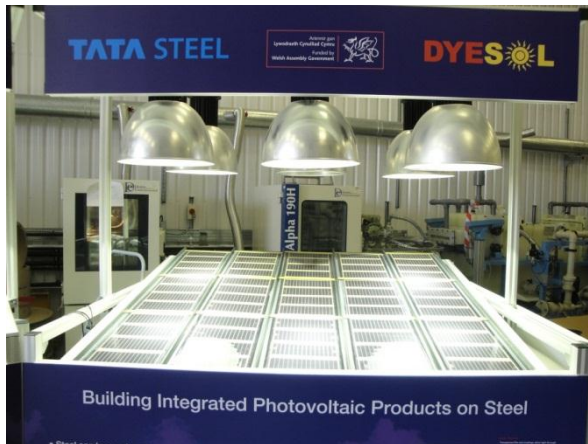
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Products & Partners
30 November 2012

Products & Partners

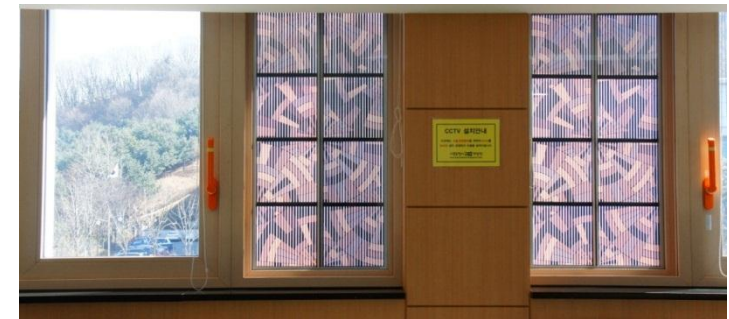


- 1) Tata Steel Roofing & Dyesol DSC
- 2) Pilkington Glass & Dyesol DSC – Dyetec Solar joint venture
- 3) Timo Technologies & Dyesol DSC - Dyesol-Timo joint venture

TATA STEEL



PILKINGTON



- DSC technology remains a preferred technology of Tata Steel for achieving long term grid parity
- Tata Group structure being reviewed to identify the best financing options for major project roll-out – outlook optimistic
- Proof of concept demonstrators continue to reinforce DSC positioning for steel BIPV
- Focus is on achieving technology readiness for exploitation



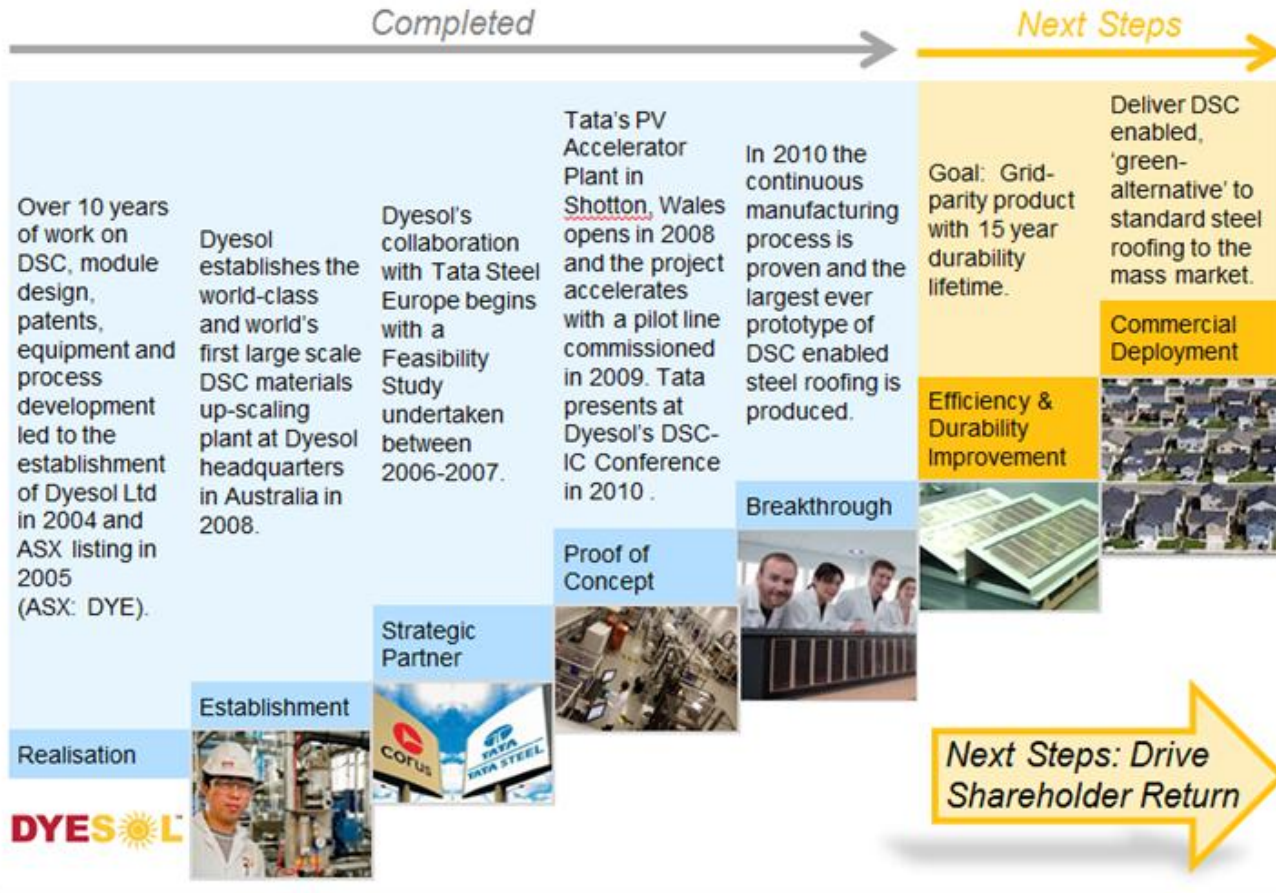
Tata Steel & Dyesol DSC



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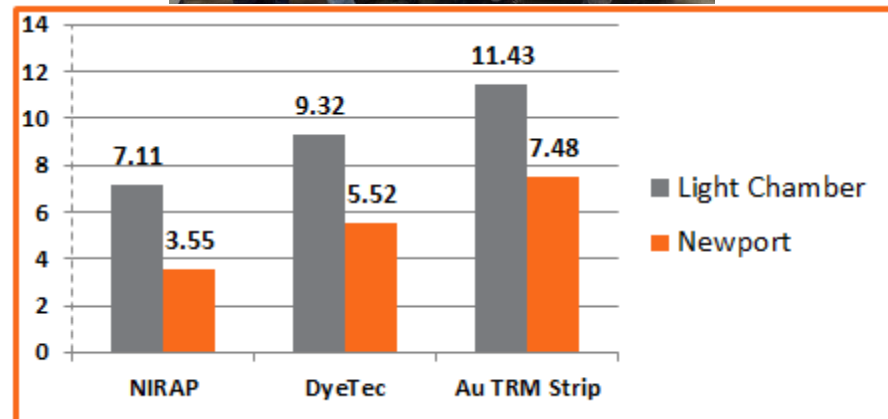
Dye Solar Cell Enabled Steel Roofing Commercialisation Project



Pilkington Glass & DSC



- Successfully completed proof of concept stage delivering 300mm x 300mm repeating units
- Breakthroughs on glass flatness allows achievement of stretch goal: scaling to Neptune 8 (1.2m x 600mm)
- Demonstrated excellent 1/3rd performance from legacy material sets in production or factory environment
- 1H CY2013 seeking access to US state and federal funding opportunities
- Next milestone: Material evaluation and validation



Pilkington Glass & DSC



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Dye Solar Cell Enabled Glass Façade Commercialisation Project - USA



Next Steps: Drive Shareholder Return

Dyesol – Timo JV



2013+

Intermediate product

2012

Next generation **DSC windows installed** at Human Resource Centre of Seoul, Korea

2010 – 2011

Process development, product testing & evaluation

2009

Pilot Production Plant opens in Korea

2008

Dyesol + Timo Technologies (South Korea) = Dyesol-Timo Joint Venture



Dyesol-Timo JV



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Dye Solar Cell Enabled Glass Tile Commercialisation Project – South Korea

Completed

Next Steps

Over 10 years of work on DSC, module design, patents, equipment and process development led to the establishment of Dyesol Ltd in 2004 and ASX listing in 2005 (ASX: DYE).

Dyesol establishes the world-class and world's first large scale DSC materials up-scaling plant at Dyesol headquarters in Australia in 2008.

In 2008, Dyesol and Timo Technology establish a joint venture, Dyesol-Timo, based in South Korea with the goal of producing DSC enabled consumer and glass based on Dyesol Tile Technology.

In 2009, Dyesol delivers a full DSC equipment set to Dyesol-Timo and work at the Tile pilot production plant commences with work ongoing in 2010-11.

2012 – Large installation of DSC enabled windows at showcase project in South Korea based on Dyesol Tile technology. Beautiful photos of DSC windows released.

Goal: Improve product performance and durability.

Deliver DSC enabled glass tiles for use in various applications in the mass market.

Commercial Deployment

Efficiency & Durability Improvement



Showcase



Equipped



Joint Venture



Establishment



Realisation



Next Steps: Drive Shareholder Return



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Strategy Update
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Strategy Update



- Capital “light” model maintained, i.e. outsourcing of risk & alignment with partners
- Increased attention to mitigate partner risk by cultivation of parallel relationships, particularly in Asia
- New drive to address intermediate product opportunities, e.g. street lighting, bus shelters, advertising hoardings etc. to “seed” the market
- Further opportunities to reduce project costs as next rounds of government funding secured
- Focus on Core IP improvement to increase efficiency, increase life and lower cost
- Strive to Grid Parity Energy Solutions Accelerated
- Sources of cheaper and non-recourse funding improving

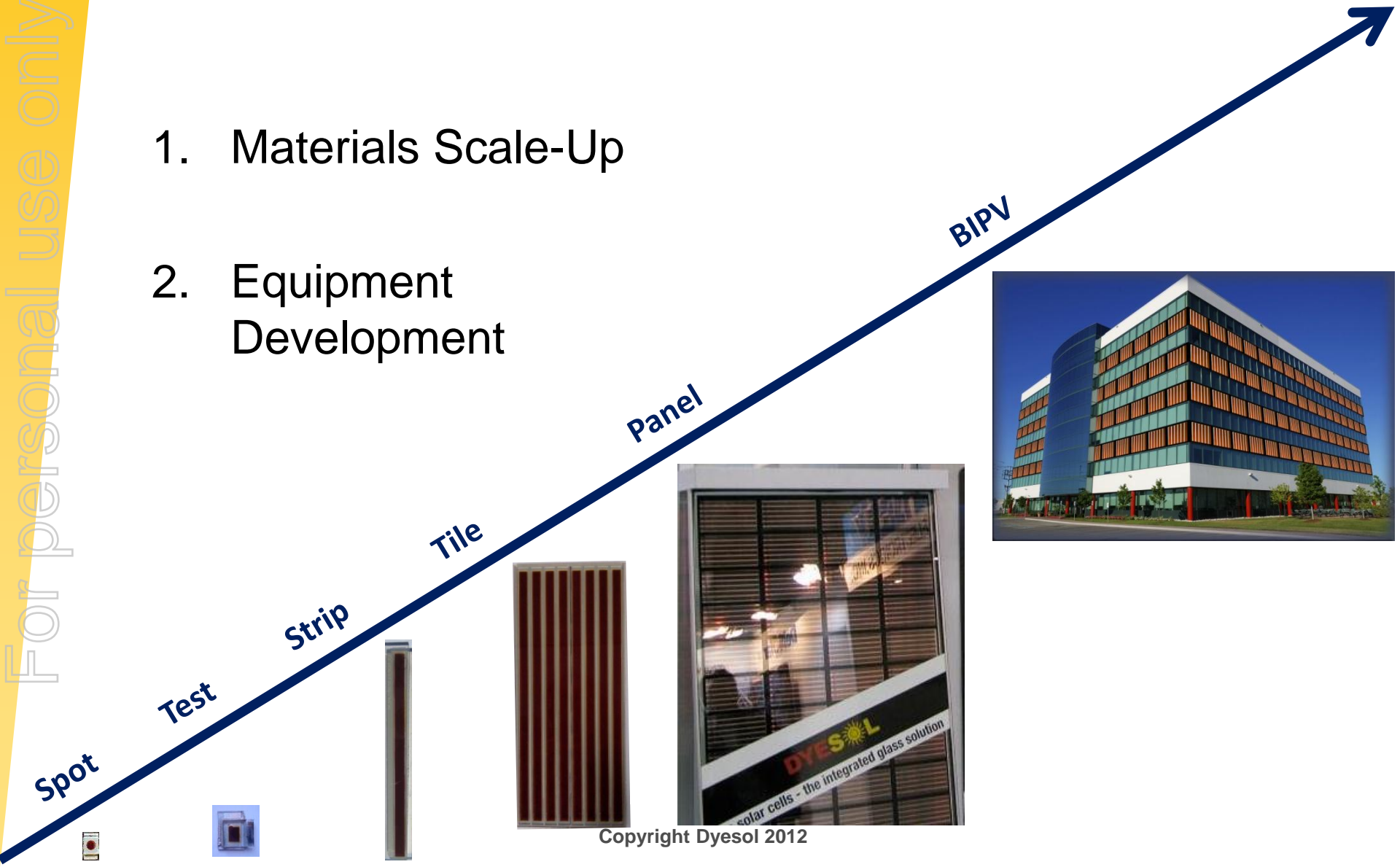


From Spot Cells to Solar Cities



1. Materials Scale-Up
2. Equipment Development

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Spot

Test

Strip

Tile

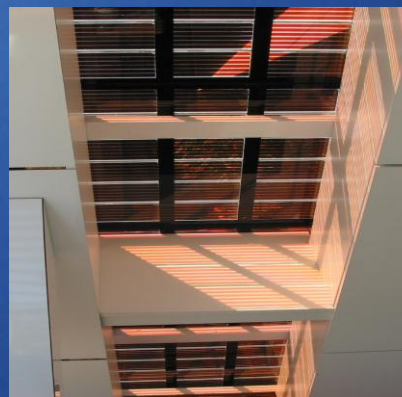
Panel

BIPV





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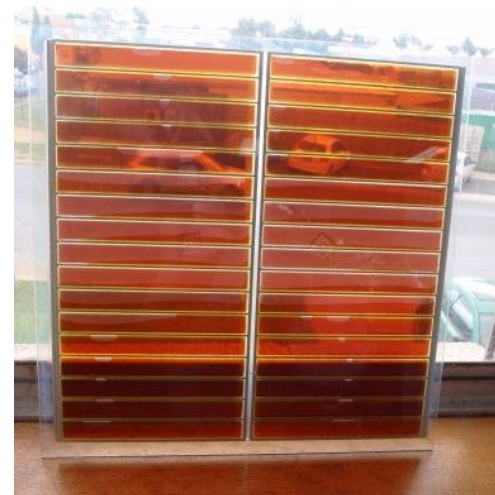
Outlook

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Outlook: 2013 & beyond



- Positive rationalisation of solar industry gives cause for further optimism
- Solar volumes in US and Japan at record levels
- Sustainable technical performance improvements being achieved
- BIPV status as the preferred energy solution confirmed, e.g. Desertec falling over
- BIPV Glass 200 million/ BIPV Steel Roofing and Facades 500 million Metres Squared by 2016



Key Milestones for 2013

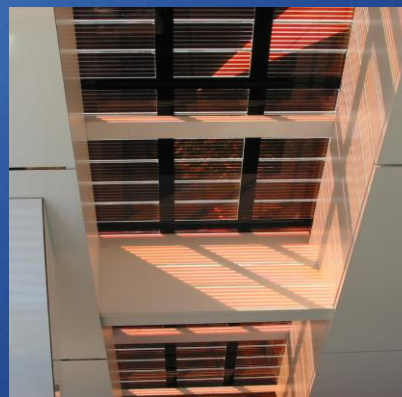


- Further upgrades to product performance & durability driven by aggressive materials improvement program
- Increased balance sheet strength
- Restoration of shareholder value through product differentiation and achievement of industrial goals
- Finalising partner action plans for global industrialisation





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Tech Highlights

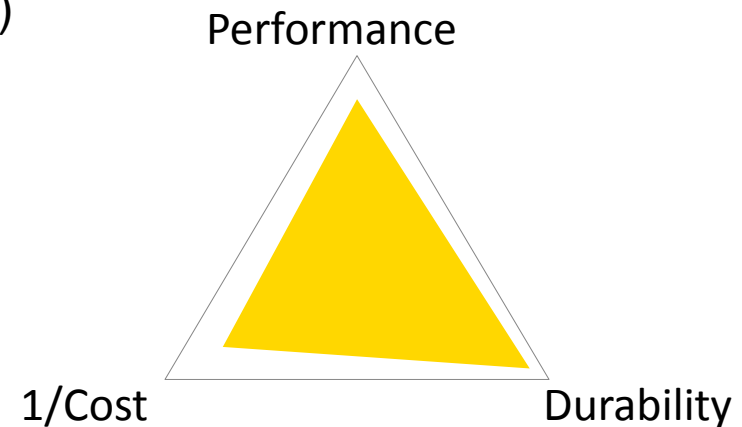
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**Dr Damion Milliken (R&D Manager) &
Dr Hans Desilvestro (Chief Scientist)**

Dyesol R&D Focus



- Dyesol to be at the forefront of industrial DSC R&D
 - In-house know-how of entire integrated system
 - Harvesting of best discreet 3rd party developments
 - Rigorous internal Technology Road Map
- Collaboration with key global research laboratories
 - EPFL (Prof Michael Grätzel on Dyesol Advisory Board)
 - EU FP7 programs with other world leading experts
 - Collaborations (e.g., Merck, NIMS, NTU)
- Knowledge Management
- LCOE – the “Golden Triangle”



Key Technical Development Activities



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Technical Area	Entities & Partners	Focus
Dye	Dyesol Australia, NIMS, FP7	<ul style="list-style-type: none"> • Performance & stability enhancement • Scale-up
Titania	Dyesol Australia, Dyesol UK, FP7	<ul style="list-style-type: none"> • Performance enhancement & cost reduction • Scale-up
Electrolyte	Dyesol Australia, Merck, FP7	<ul style="list-style-type: none"> • Durability enhancement • Strategic supplier relationship
Seals	Dyesol Australia, Dyesol UK	<ul style="list-style-type: none"> • Stability enhancement • Process development for mass-manufacture
Conductors	Dyesol UK, SEFAR, FP7	<ul style="list-style-type: none"> • Performance enhancement & cost reduction • Scale-up
Solid State DSC	Dyesol Australia, Dyesol UK, Greatcell, NTU, FP7	<ul style="list-style-type: none"> • Performance & stability assessment • Device design and process scale-up

Towards Higher Performance

Achievements in 2011/12 FY

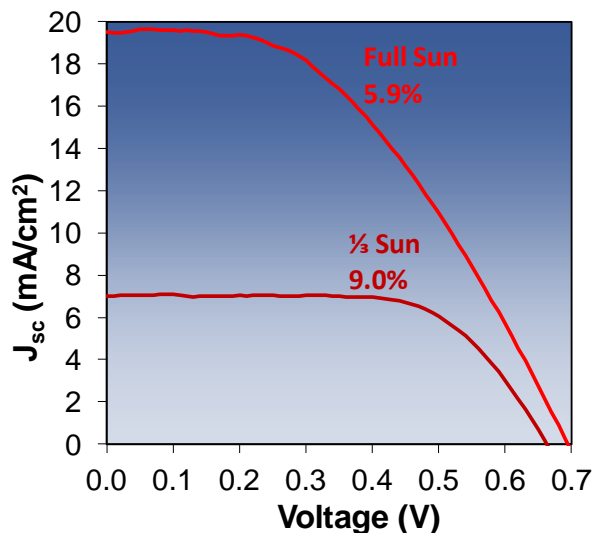
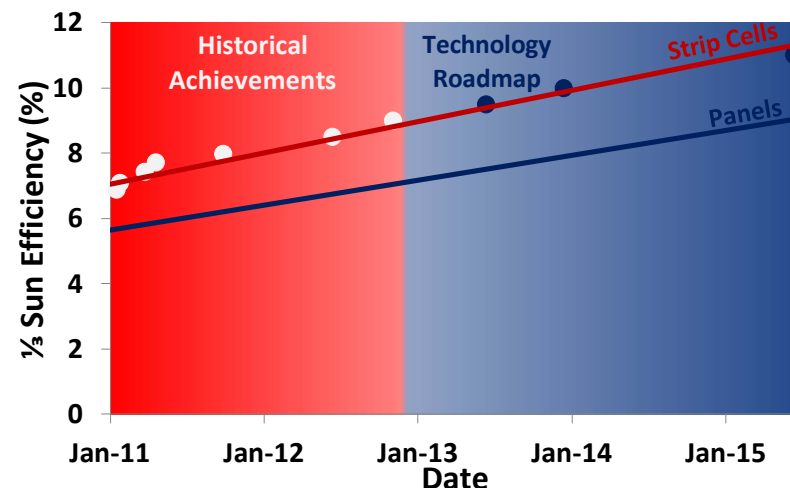


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Technology Road Map

- Details progression of device performance
- Contributing technical elements aligned with commercial product requirements
- Closely monitored and regularly reviewed
- Guiding document for Company development

TRM: Performance of Industrial Devices



Strip cells

- Industrially meaningful device
- In-house reaching 9% @ 1/3 Sun
- Externally certified to 7.5% @ 1/3 Sun
- Basis for TRM evaluation

Novel black dye (HIS-2) in collaboration with NIMS

Dye	J_{sc} (mA·cm ⁻²)	V_{oc} (V)	FF (%)	η (%)
Black Dye	21.3	0.69	72	10.5
HIS-2	23.1	0.68	71	11.1

Towards Higher Durability

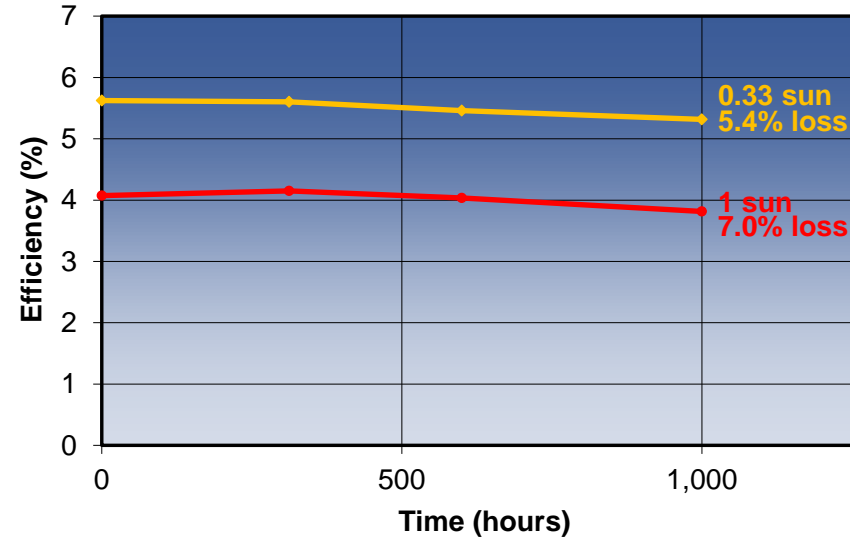
Achievements in 2011/12 FY



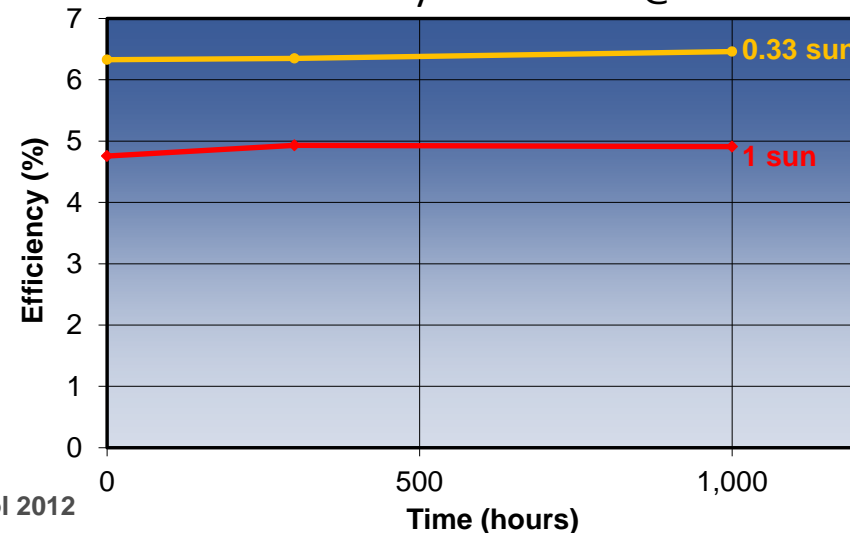
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- Stability improvements mainly realised through novel electrolytes
- Dyesol's core materials – titania, dye, electrolyte, catalyst – exceed IEC 61646 requirements for 85 °C stability
- Outstanding 85 °C stability, with EPFL organic dye Y123 – performance increasing over 1,000 h at 85 °C

Core Material Stability: Glass Cells @ 85 °C



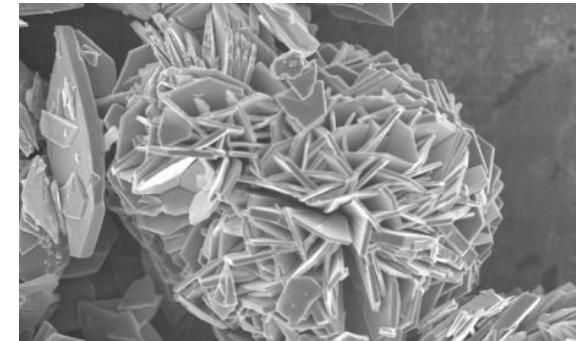
Y123 Stability: Glass Cells @ 85 °C



Dye

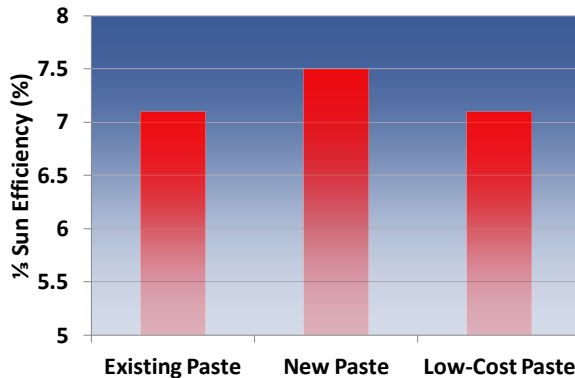


- N3/N719/Z907
 - kg quantities
 - High purity
- C106 in progress

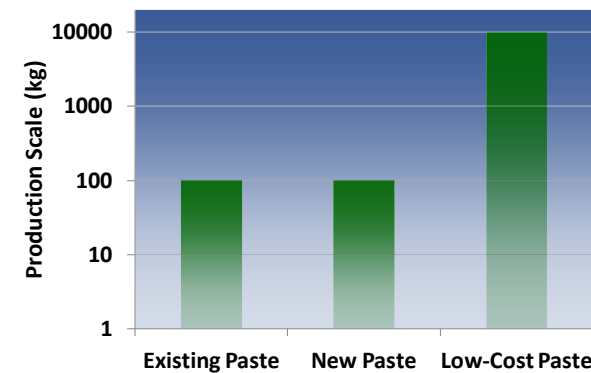


High Crystallinity

Titania

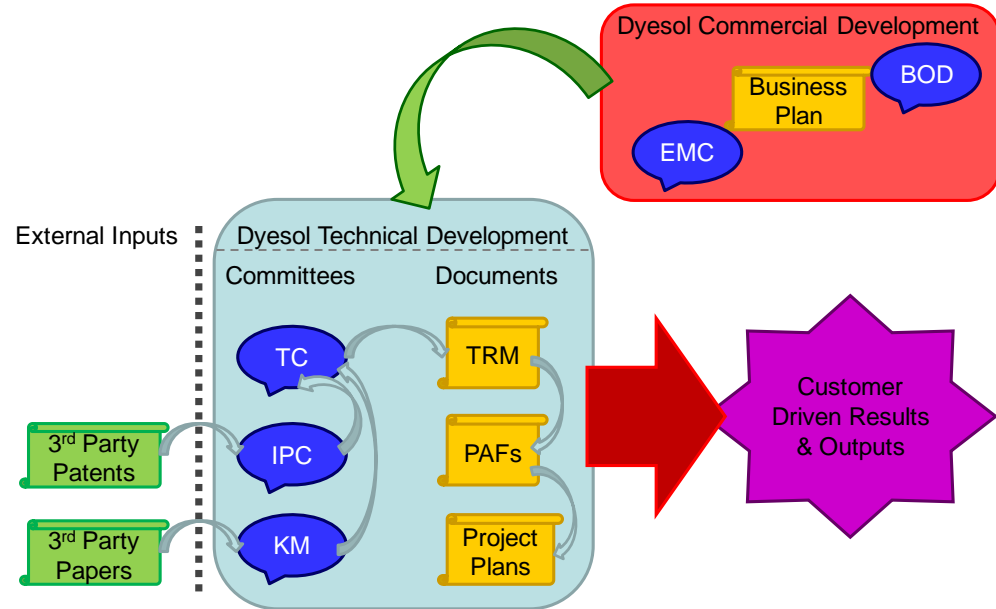


- Higher performance pastes
- Lower cost pastes



IP Capture & Generation

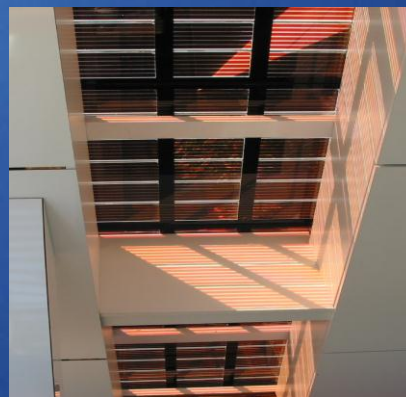
- **More effective in-house capture of IP**
 - IP Committee
 - Knowledge Management
 - Technology Committee + 5 Sub-Committees
 - Regular teleconferences involving global technical and IP specialists and business managers



- **Patents registered or granted**
 - 5 patent families: DSC panel design; miniaturised DSC (for sensors); electrical contacts; TiO₂ surface modification for enhanced performance; substrate processing to achieve reliable sealing
 - in US, JP, KR, SG, (EP), GB, Ireland, FR, IT, Germany, Sweden, Switzerland
- **Significant IP generation in non-registrable know-how and trade secrets as commercialisation draws nearer**



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Resolutions
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FY2012 Resolutions



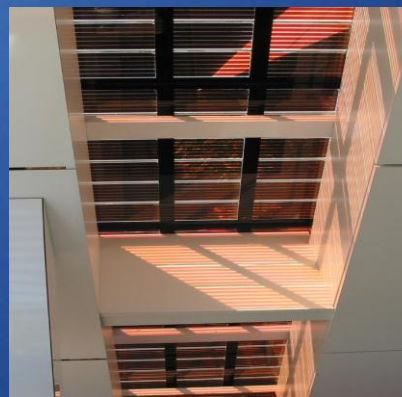
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Summary of Proxies

AGM 30 Nov 2012

Resolution	In Favour	Against	Discretionary
1: Remuneration Report	22,928,725	4,564,643	4,753,539
2: Elect Mr Neal Director	31,076,934	23,509,935	4,525,989
3: Elect Mrs Tulloch Director	29,125,256	26,026,936	4,270,989
4: Ratify Prev. Share Issue	49,584,545	1,551,373	4,827,258
5: Ratify Prev. Share Issues	52,279,210	1,837,310	4,710,994
6: Approve 10% Placement Facility	47,369,826	3,150,498	5,078,815
7: Appoint Grant Thornton Auditors	32,965,081	20,839,637	4,703,994



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Dyesol Limited AGM Concluded – 30 Nov 2012

Refreshment Break and Meet & Greet

Facility Tour