Silex

SYSTEMS LIMITED

The Australian Solar Power Industry

Austrade Expo Presentation

Shanghai, China

5th July, 2010

Michael Goldsworthy – CEO

SilexSolar

SolarSystems

Silex Systems Ltd

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Some risk factors that could affect future results and commercial prospects include, but are not limited to, results from the uranium enrichment development program and the stable isotopes program, the demand for enriched materials including uranium, silicon, oxygen, carbon and others, the business risks associated with both Silex Solar's and Solar System's PV development, manufacturing and marketing activities, the outcomes of the Company's interests in the development of various semiconductor, photonics and alternative energy technologies, the time taken to develop various technologies, the development of competitive technologies, the potential for third party claims against the Company's ownership of Intellectual Property associated with its numerous technologies, the potential impact of government regulations or policies, and the outcomes of various commercialisation strategies undertaken by the Company. Accordingly, the inclusion of forward looking information in this presentation should not be regarded as a representation or warranty with respect to its accuracy or the accuracy of the underlying estimates or assumptions or that Silex will achieve or is likely to achieve any particular results.

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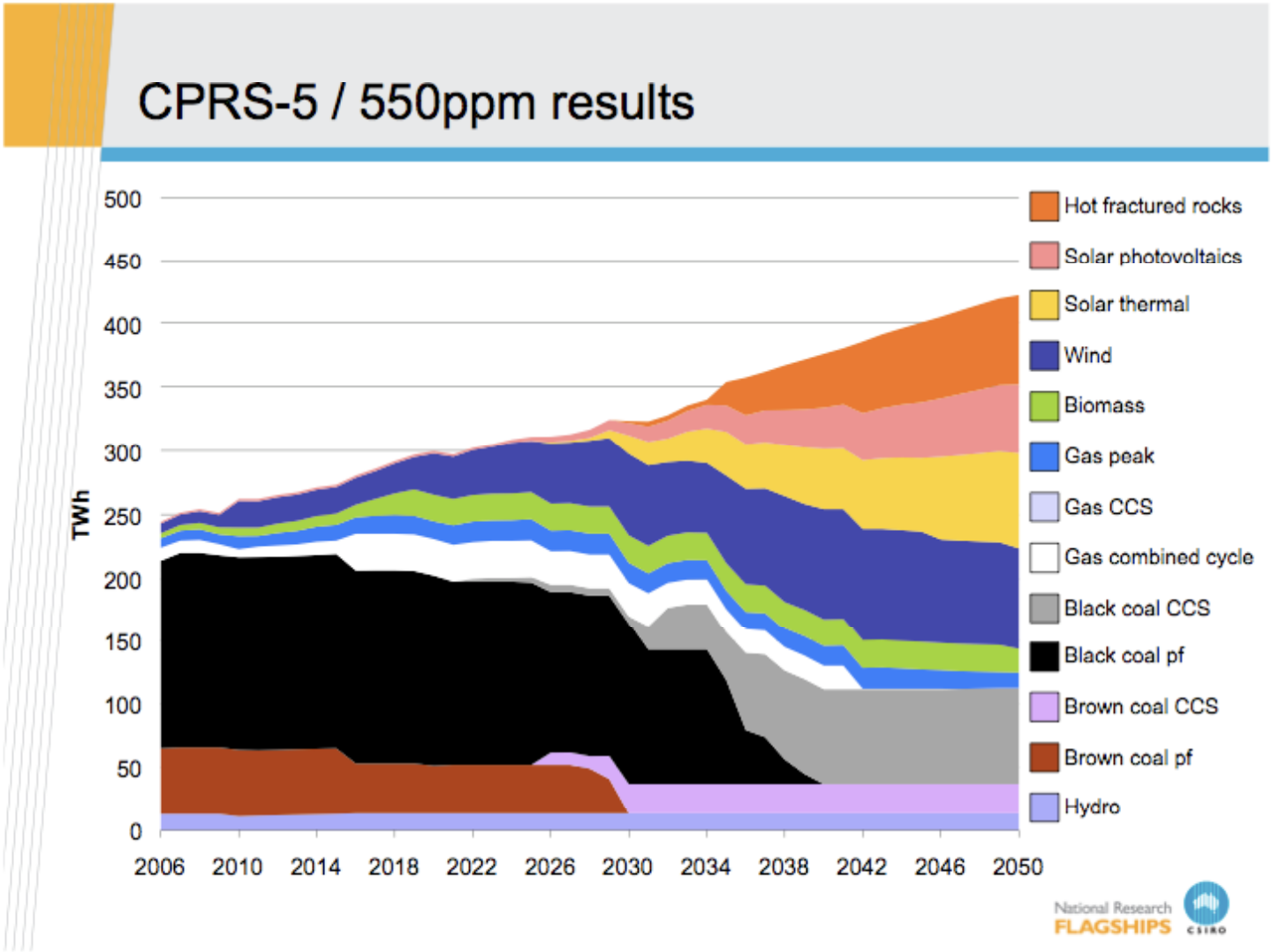
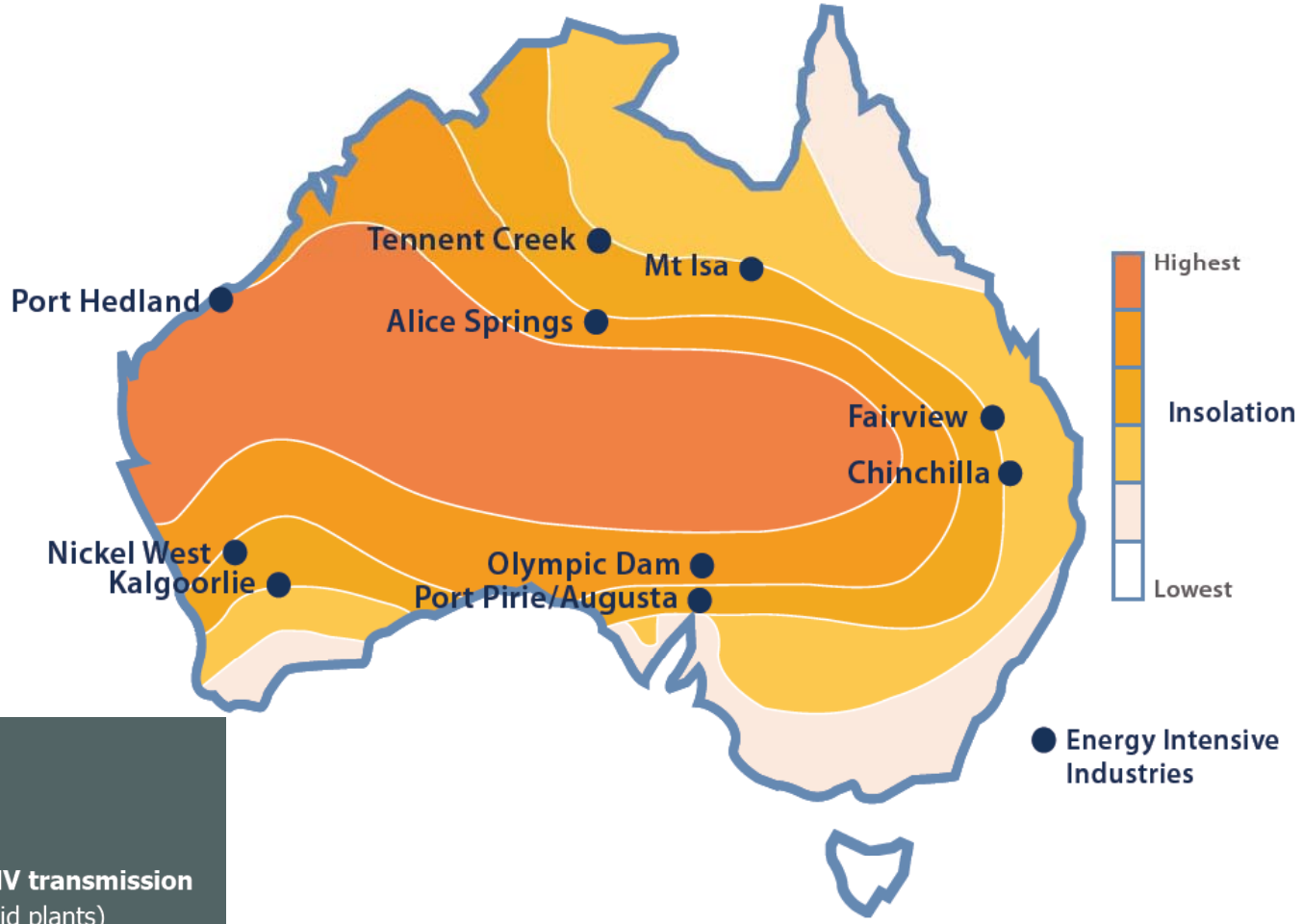
Part 1: Australia's Solar Resource & Opportunity

Solar Electricity Forecast to Play a Major Role in Australia's Future Energy Mix



Excellent Solar Resource in Australia

Solar Insolation Map of Australia



Climatic Factors
- High solar insolation
- Low probability of high-wind events

Infrastructure Factors - Access to HV transmission
- Access to gas infrastructure (for hybrid plants)

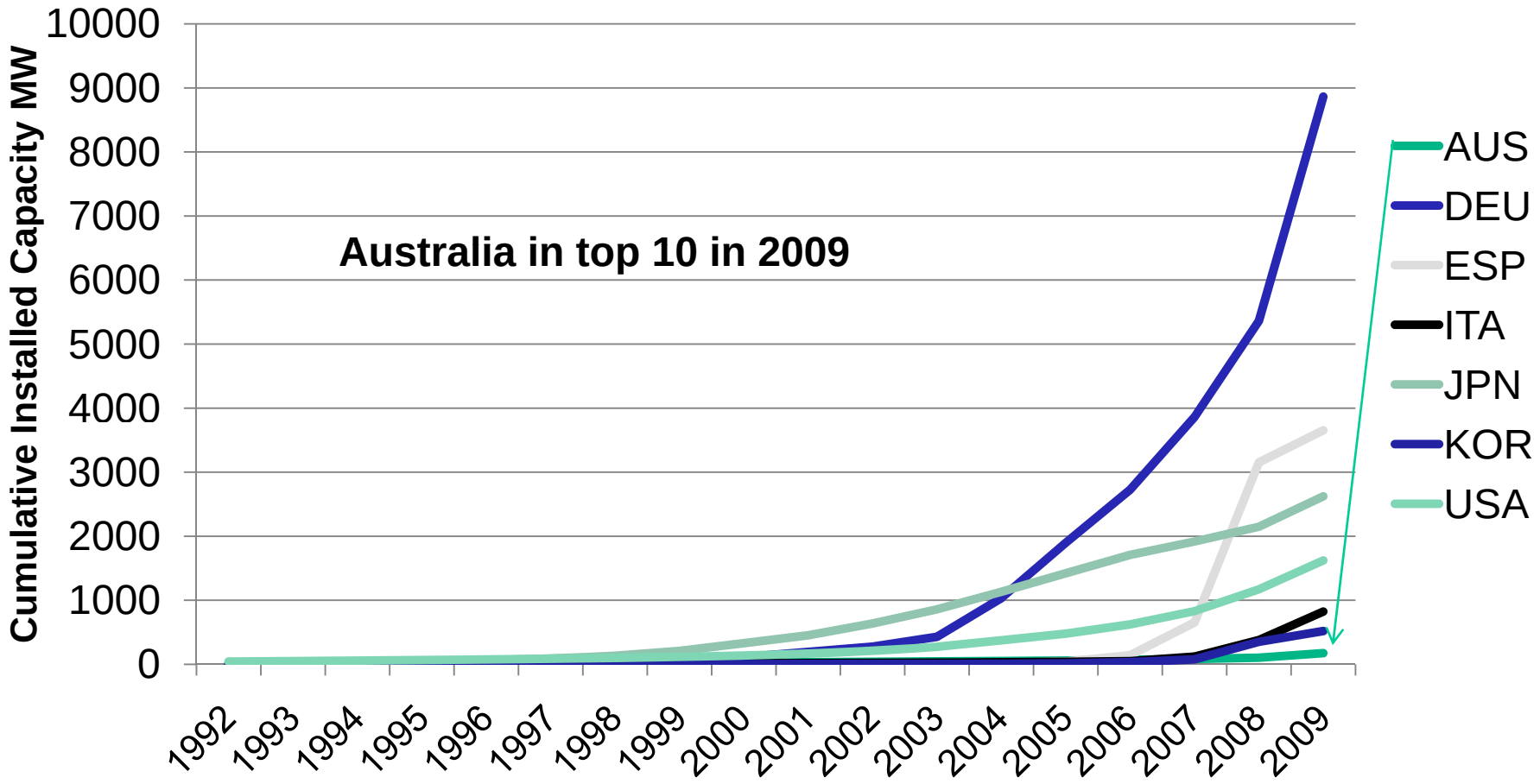
Other Factors - Flat, cheap land
- Proximity to load centres

Source: Drawn for ANZSES using data from the Australian Solar Radiation Data Handbook reproduced by the WWF

Australia's PV Market

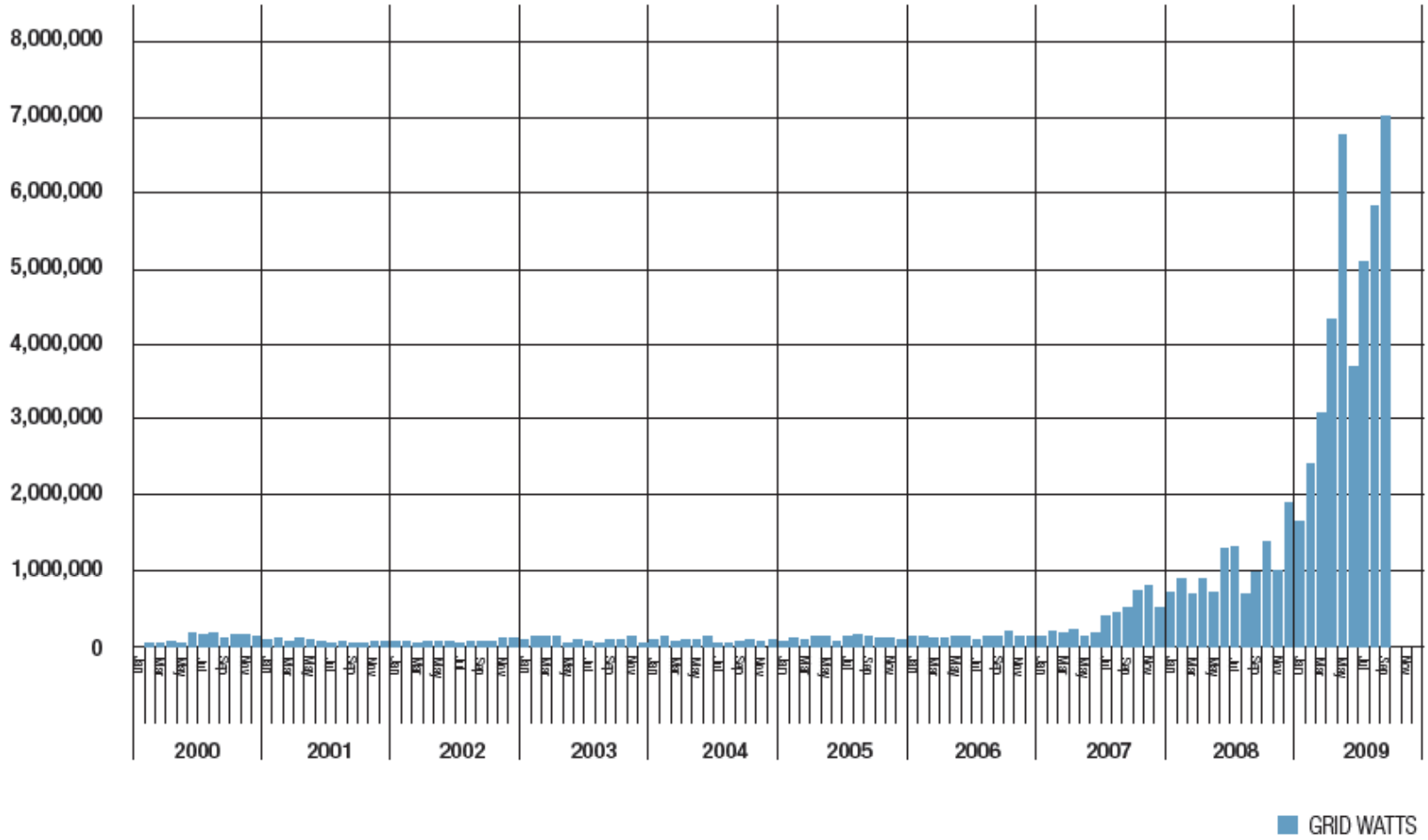
Leading International PV Markets

(PVPS, 2009, Photon International, 2009, 2010)



Strong Growth in the Australian Solar Market

Watts Installed by Month to September 2009



Source: Department of the Environment, Water, Heritage and the Arts Website.

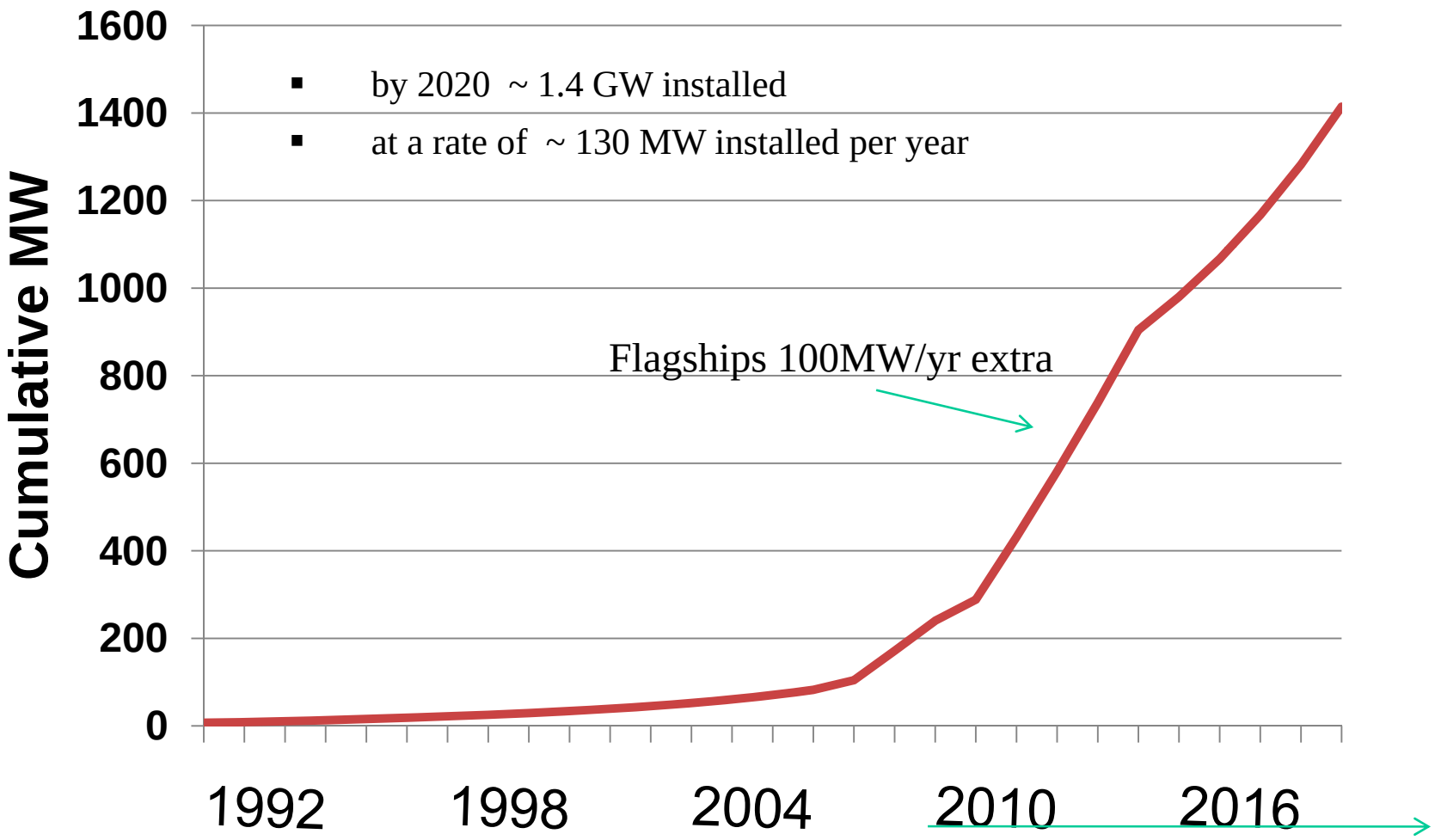
PV Power Installed in Australia Calendar Year 2009 in sub-markets.

(Source : 2009 Australian Photovoltaics Status Report – APVA)

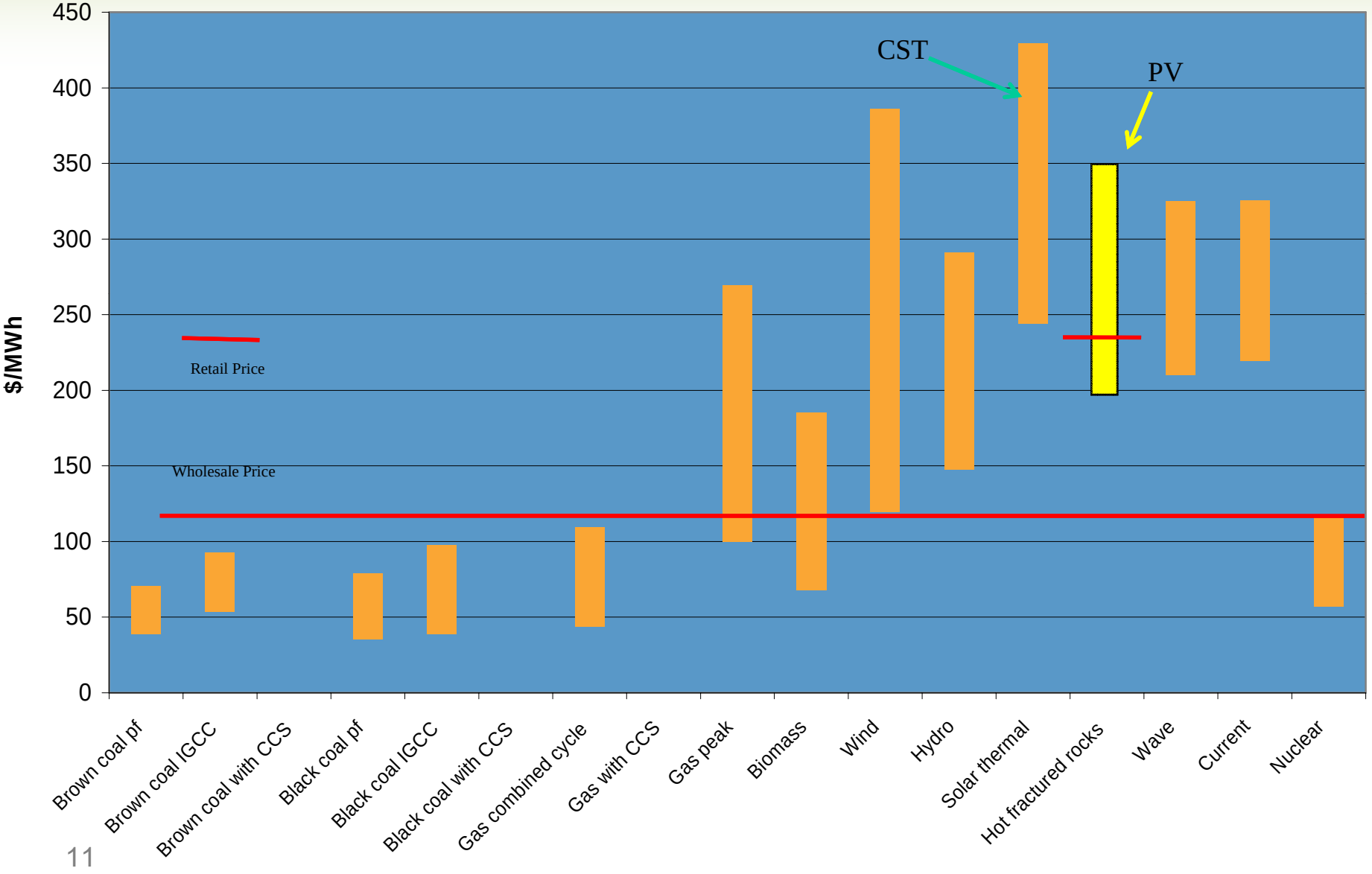
Sub-market/ application	off-grid domestic	off-grid non-domestic	grid-connected distributed	grid-connected centralized	Diesel grid	Total
PV power installed in 2009 (MW)	7.18	2.48	67.36	1.21	0.90	**79.13 MW**

Australian PV Market Projections

(Source : Aust PV Assoc forecast March 2010)

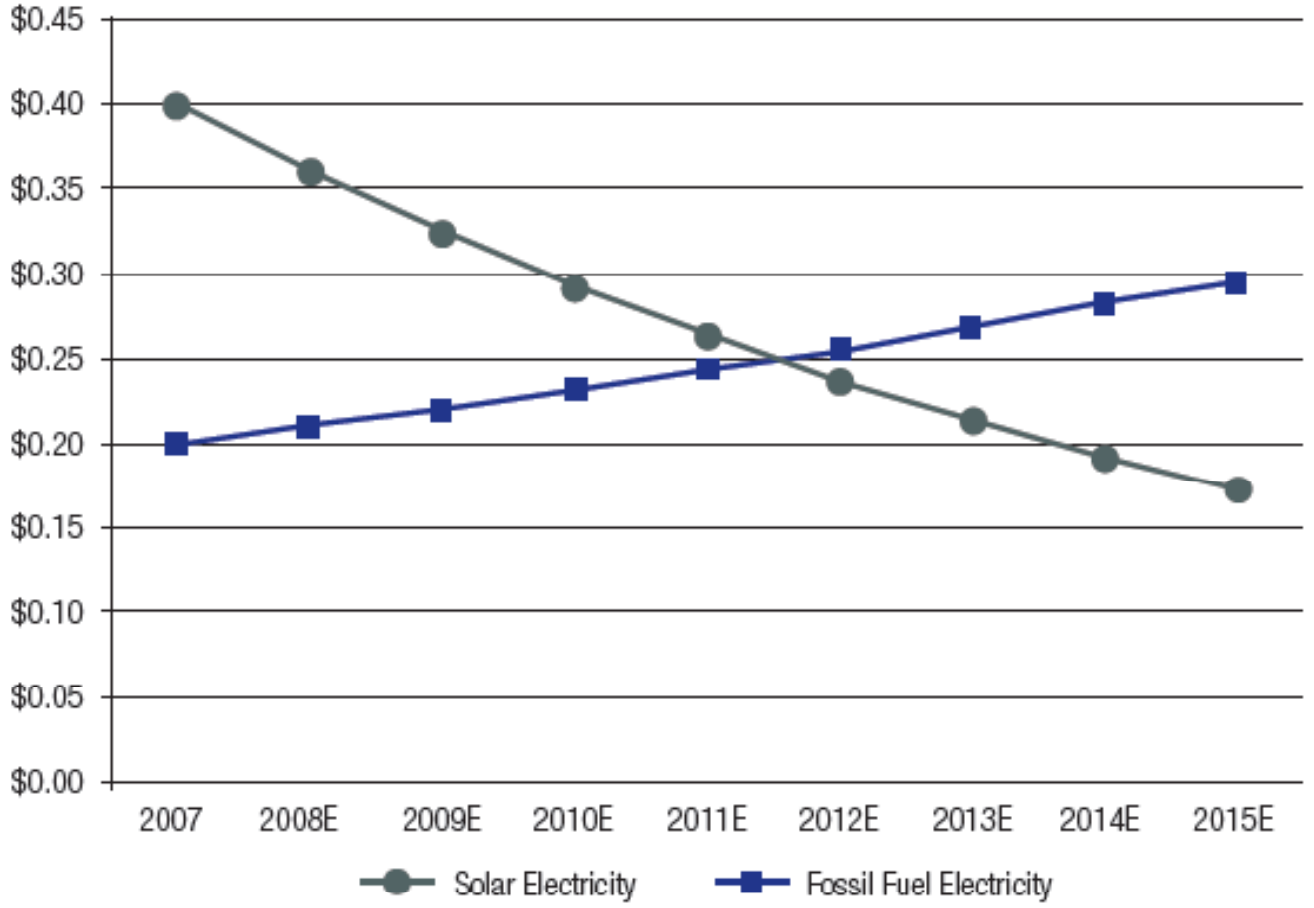


Levelised Cost of Electricity (LCOE) in Australia



Source: CSIRO; ACIL Tasman; EPRI & ASI Reviews

Solar Electricity Price vs Fossil Fuel Price (US$)



Source: Barclays Capital Research

A View on Australian Price Parity

- Parity to occur first in retail residential markets (<10kW) by 2015 - rising retail prices vs more efficient PV systems

- Commercial (<10MW) and Utility scale (>10MW) applications will challenge parity by 2020. (Carbon pricing vs falling solar costs).

Application	2010	2015	2020
Residential	$0.40/kWHr vs $0.20	$0.30/kWHr vs $0.30	$0.25/KWHr vs $0.35
Commercial	$0.35/kWHr vs $0.15	$0.25/kWHr vs $0.20	$0.20/kWHr vs $0.25
Utility	$0.25/kWHr vs $0.12	$0.20/kWHr vs $0.13	$0.15/kWHr vs $0.15

AUSTRALIAN SOLAR INSTITUTE

Australian Market Summary

Australian Market issues:

- Outstanding solar radiation resources
- Strong growth in 2009 - 80MW (forecast 130MW for 2010)
- Around 1.2% of the global PV market in 2009
- Retail value in excess of $1B in 2010 (est.)
- Market is predominantly Residential grid connected
- Driven by a mix of Gross and Net Feed In Tariffs *and*
- Renewable Energy Certificates (with 5 x multiplier for PV)
- ~2000 accredited installers +150 approved modules brands

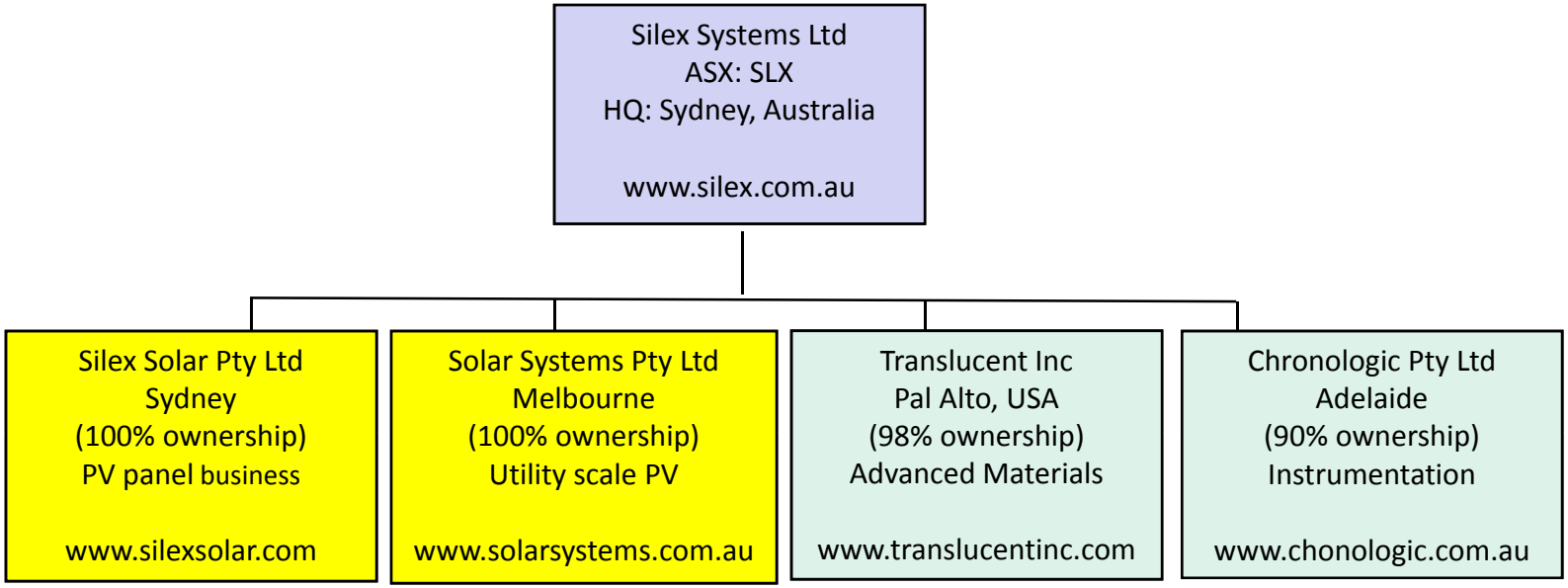
SolarBusinessServices
change your position in the renewable energy market

Part 2: Silex Systems Ltd
Solar PV Technologies

SilexSolar

Solar Systems

Silex Corporate Structure



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SILEX SOLAR PTY LTD

SYDNEY OLYMPIC PARK MANUFACTURING PLANT

(100% subsidiary of Silex Systems)

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- June 2009 - Silex Solar P/L acquired solar manufacturing facility at Sydney Olympic Park (SOP) from BP Solar
- History of plant dates back to beginnings of Solar Industry in the 1980's
- Restored cell and panel manufacturing facility – operational late 2009.
- Full production capacity ~ 50MW cells and ~12MW PV panels per year
- The only PV cell and panel manufacturing facility in Australia
- All other PV panels imported – mainly from Asia.

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- IEC product certification for first PV panels completed with TUV Rheinland (Japan) in February 2010.
- Commercial production commenced March 2010 at ~6 MW pa solar panels – currently uprating capacity to ~12MW pa panels
- Team of ~20 engineers/technicians and ~70 manufacturing staff
- Initial production - optimised conventional mono-silicon solar cells with ~17% conversion efficiency.
- Plan to achieve ~20+% cells by 2012 - aggressive R&D program.
- Selling into the Australian market – currently sold out
- Expansion of production capacity planned, initially to ~35MW panels by mid- 2011 (higher capacity later if demand grows).

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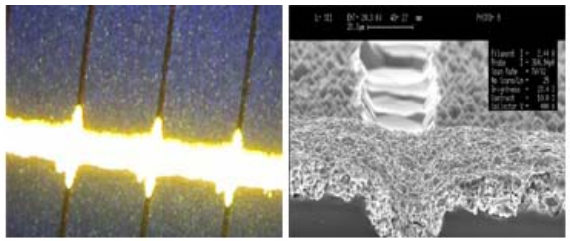
New PV Technology R&D Project Announced – May 2010:

- Australian Solar Institute Project (Total funding ~$20M)
- Collaborators – Suntech, Uni of NSW
- Plan to achieve ~20% cells with advanced laser processing – ready for production by 2012

- R&D Project may continue with aim to reach ~25+% cell efficiency using advanced designs and materials.
- Our mission is to be a world leader in mono-silicon solar cell technology in collaboration with Suntech and UNSW
- Silex Solar aims to access global markets (US, Europe, Asia) with leading-edge PV technology.

Technology Development Plan

Stage	Cell Technology Platform	Target Conversion Efficiency At Volume Production	Indicative Timeframe to Market
1	Optimised conventional mono-silicon processing	≈ 17+ %	Mid 2010
2	Advanced mono-silicon front contacts	≈ 18+ %	Late 2010
3	Laser enhanced mono-crystalline doped contacts	≈ 20+ %	2011
4	Advanced device and materials technology	≈ 25+ %	2012



Laser-induced semiconductor grids in enhanced screen-print process. (Reproduced with the kind permission of UNSW Faculty of Engineering)

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Solar Cell Process Lines in Operation

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Solar Cell AR Coating Line

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Solar Module Process Line (Laminator)

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End of the Line – a finished solar module

Solar Systems Pty Ltd

Concentrating PV (CPV) Solar Power Technology

(100% subsidiary of Silex Systems)

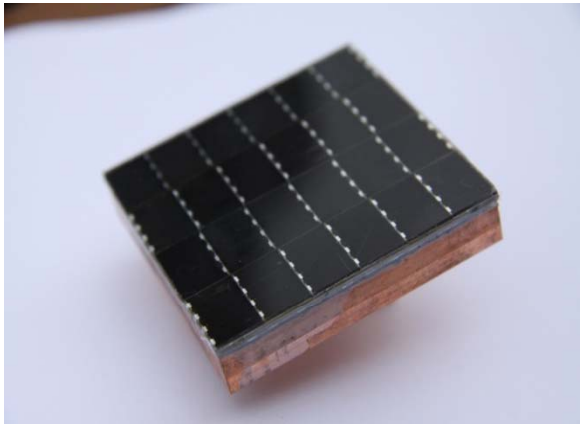
Solar Systems Background

- Solar Systems has been developing CPV technology for ~20 years in Melbourne, Australia
- CPV ideal for large utility-scale solar power station deployment (typically for projects of 50 MW to 100+MW each)
- Solar Systems CPV technology based on unique ‘Dense Array’ concept
- Extensive Patent portfolio to protect core technology
- Demonstration facility in Bridgewater, Victoria (~ 640kW by 2011)
- Automated module assembly plant (~500 MW p.a.) in Melbourne
- Solar Systems CPV technology has potential to be the lowest cost PV solar power producer in the world
- Potentially the most significant PV technology breakthrough in 20 years!

Solar Systems

Key Advantages of 'Dense Array' CPV Technology

- **Advantages of Dense Array Technology:**
  - Based on ultra-high efficiency triple junction cells
  - Low Upgrade Cost (now ~40% cells, future ~50%)
  - Low Maintenance Solution
  - Lower PV Cell Operating Temperature for Dense Array technology (active vs passive cooling):
    - Extends lifetime of cell
    - Higher reliability of module
    - Higher conversion efficiency
  - Flexibility
    - Dish CPV – first product range
    - Heliostat CPV – next generation product
  - Potentially lowest cost solar power technology (LCOE)



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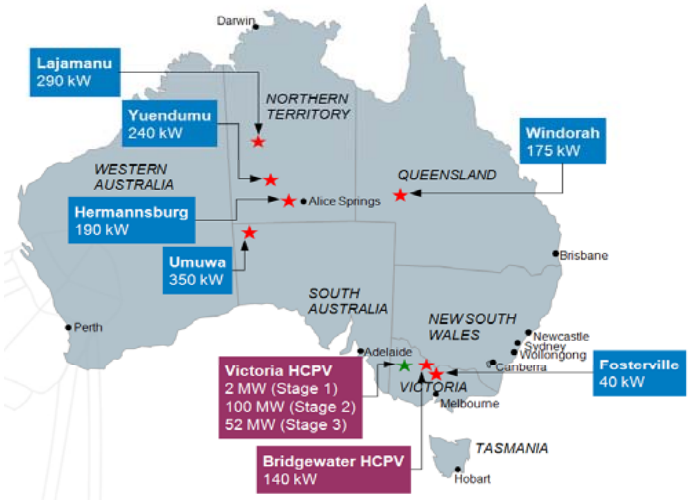
Solar Systems CPV Dish Technology – first product

15 Years Experience with CPV Installations

- **DISH CONCENTRATOR TECHNOLOGY:**
  - Original power plants based on Silicon Cells
  - 5 power plants installed in central Australia
  - 4 plants are diesel integrated
  - Triple Junction Cell introduced 2005 – double the efficiency
  - 1.2MW reliable, integrated, manageable power stations commissioned
  - Over 100 dish years of experience
  - Module operating data every minute of operation



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Mark V CPV Dish System Product

- **40kW(DC) CPV Dish System**
  - First Product – to market in 2011
  - Based on unique dense array receiver concept
  - High accuracy, dual axis, tracking system
  - High average output throughout the day
  - Designed to IEC Standards
  - Land requirement approx 6 acres per MW
  - Closed-cycle cooling (no water requirement)
  - Low O&M requirements
  - Designed for 25 years in-field power production

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Heliostat Design for CPV

'Next Generation for CPV Solar Systems'

- Proof of Concept completed 2008
- Utilizes core Dense Array module building block used in Dish systems
- Operational pilot system installed at Bridgewater test facility
- Current design 160kW(DC)
- Development suspended to concentrate on CPV Dish product release
- Solar Systems technology replaces 'Thermal Tower' with 'CPV Tower'
- Potential for further reduction in the cost of solar PV power

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KEY PRIORITIES OF SOLAR SYSTEMS BUSINESS

- **Commercial deployment of Solar Systems CPV Technology (ultra-high efficiency utility-scale PV power platform) to commence in 2011**
- **Silex completing final areas of improvement and validation:**
  - Module Reliability and Certification to be completed
  - Optimise system to produce lowest $/KWhrs and $/W installed
- **Business Areas**
  - Key supply chain agreements being put in place
  - Key business partners for global deployment
  - Initial market focus on USA, Australia, Asia, Mediterranean Rim
- **1st Project: 150MW power station (Mildura, Victoria) – world's largest**
  - Potentially $125m Government support ($75m Federal/ $50m Victorian)
  - 2MW pilot to commence in 2011.
- **Potential for lowest cost solar power!**

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Silex Systems Ltd

Developing World-Leading Renewable Energy Technology for the 21st Century.

ASX : SLX

WWW.SILEX.COM.AU

(Full presentation available on our website)

Silex Systems Limited

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