Report

Technology and Market Potential Update

SEPTEMBER 2010

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Technology and Market Potential Update

BluGlass Ltd
September 2010

Summary of Findings

Recent Company Developments – BluGlass has made significant progress since June 2010: it secured a finance facility to enable it to draw down its grant payments; it successfully commissioned the 5th generation Remote Plasma Chemical Vapour Deposition (RPCVD) tool; and, most significantly, it signed an agreement for SPP Process Technology Systems (SPTS) to become a cornerstone investor and establish a joint venture to commercialise the RPCVD equipment, leaving the potential for BluGlass to form separate strategic partnerships for LED and PV device manufacture.

SPTS Overview – SPTS is a rapidly growing semiconductor process equipment company wholly owned by Sumitomo Precision Products (SPP). It has a strong tier-1 and tier-2 global customer base including LED manufacturers and extensive technical and manufacturing capabilities. SPTS is now seeking complementary leading edge technologies that will increase its product range to its existing customer base. The BluGlass technology fits this description.

Implications of Developments – The commissioning of the new tool provides a more reliable and flexible platform to enable the acceleration of other technology milestones and with every step along the commercialisation plan, the technology risk decreases.

The SPTS agreement is a step change for the company. Using the expertise and development experience developed over many years, BluGlass now has access to the resources of one of the world's leading suppliers of equipment to the target market for the RPCVD tool. The fact that a leading technology player has backed the company appears to provide support for both the technology and market potential.

In the longer term, the company may have the opportunity to exit some or all of its IP through a trade sale to one of its strategic partners.

Updated Risk Profile – the technology, distribution, capability and key person risks have all now been reduced following the recent developments.

Updated Valuation Triggers – BluGlass has now completed two of the key valuation triggers identified in June 2010: the commissioning of the tool and the forming of a strategic partnership with a global player. The two key valuation triggers that may occur in the next 12-18 months are: forming additional strategic partnerships for LED and/or PV device businesses and the proving of commercial material quality and device performance through the SPTS JV. Either of these events will again greatly reduce the risks of BluGlass successfully commercialising the RPCVD technology through equipment and device products and has the potential to significantly increase its market value. The Joint Venture remains in a position to emerge as a key CVD equipment manufacturer comparable to Aixtron (NASDAQ: AIXG), a pure play CVD company, which has a current market capitalisation of over US$3 billion.

The BluGlass technology has the potential to be a major player in the rapidly growing LED and PV markets globally. The developments announced by the Company in the last three months have significantly increased the likelihood of this potential becoming a reality.

JUNE 2010 REPORT SUMMARY - Summary of Technology and Market Potential Review

Significant Advantages – BluGlass' Remote Plasma Chemical Vapour Deposition (RPCVD) equipment technology has significant potential advantages over competing technologies for both the manufacture of Light Emitting Diodes (LEDs) and high efficiency photovoltaic (PV) cells for use in Concentrating PV applications (utility scale solar).

Cheaper and Environmentally Friendly - The process is forecast to be more environmentally friendly and reduces costs for customers in both LED and CPV markets.

World Leading Solar Efficiency - In addition, the technology has the potential to produce the world's most efficient solar cell with solar conversion efficiencies of over 50% and one that is more durable than many of its less efficient competitors.

LED Supply Constraints - The LED market is forecast to grow at over 30% per year until 2014 and is served by two equipment suppliers that are struggling to meet the market demand.

CPV Technologies Emerging - The CPV market is also forecast to grow very quickly over the next ten years and there is no clear technology winners yet emerging. When proven, the RPCVD technology could be one of the key technologies underpinning both the LED and CPV industry growth.

Strategic Options – The company has a number of partnership options to help accelerate product commercialisation and to reduce the time to market.

Key Valuation Triggers – The key valuation triggers that may occur in the next 12-18 months are: the first orders for equipment, the announcement of a cornerstone investor or joint venture partner to accelerate commercialisation, the proving of commercial material quality and device performance. Any one of these events will greatly reduce the risks of BluGlass successfully commercialising the RPCVD technology and has the potential to significantly increase its market value. BluGlass is in a position to emerge as a key CVD equipment manufacturer comparable to Aixtron (NASDAQ: AIXG), a pure play CVD company, which has a current market capitalisation of over US$3 billion.

Company Developments since June 2010

Since Australian CleanTech published its technology and market research report on BluGlass in June 2010, the Company has achieved three important milestones which have materially changed the risk profile of the company. These company developments are detailed below.

June 2010 - Matched Funding for Climate Ready Grant

In late June 2010, BluGlass secured a $1.5m equipment sales and lease back facility from the Commonwealth Bank of Australia. This funding will be used to partially match the A$4.96m Climate Ready Grant that the company secured from the Australian Government in October 2009. The leaseback arrangement runs to June 2012, at which time the ownership of the assets will revert to the Company.

'The CBA funding arrangement' is a very low cost and effective use of capital that helps the Company unlock grant funding commitments up to the same value for the High Efficiency Solar Cell project'

Giles Bourne, CEO, BluGlass

July 2010 - Commissioning of New Generation Tool/Reactor

In July 2010, BluGlass successfully commissioned its fifth generation RPCVD tool. This tool encompasses key performance criteria from previous tools and provides a more reliable and flexible platform that will enable future technology milestones to be achieved. In particular, the new tool will provide optimal process control that the Company will use to deliver high quality single crystal material.

'Through this joint venture, SPTS and BluGlass intend to bring the RPCVD technology to market on field-proven production platforms, offering significant competitive advantages for customers in the rapidly expanding high brightness LED industry'

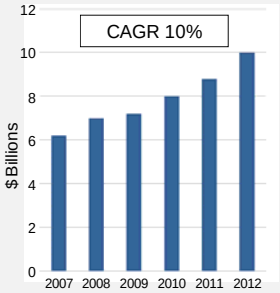
Dr William Johnson, CEO, SPTS

August 2010 - Cornerstone Investment by SPTS

In August 2010, BluGlass received a cornerstone investment from SPP Process Technology Systems (SPTS), a wholly owned subsidiary of Sumitomo Precision Products. This investment had a number of separate aspects:

- An investment of A$5.2 million into BluGlass for a subscription of ordinary shares at $0.11 per share to give SPTS a total shareholding of 19.9%. Part of this investment requires shareholder approval which will be sought at the AGM on 1 November 2010.
- SPTS will also have rights to participate in future issues of securities and the SPTS CEO, Dr William Johnson, will be nominated for the board at the Company's AGM.
- BluGlass and SPTS will establish a Joint Venture Company to complete the development and commercialisation of RPCVD equipment.
  - BluGlass will exclusively licence its RPCVD technology to the JV and will retain a 51% stake in the JV.
  - The JV will be co-funded by both parties
  - The JV will manage the equipment development process although will not initially have any direct resources and will contract back to SPTS and BluGlass. SPTS will initially send three plasma and equipment experts to work at the Silverwater facility.
  - The JV milestones are to develop:
    - Complete product demonstration by developing a single crystal Gallium Nitride (GaN) with properties equivalent to existing MOCVD products.
    - Develop a demonstration system at an SPTS facility utilising larger substrates and lower temperatures producing single crystal GaN and Indium Gallium Nitride (InGaN).

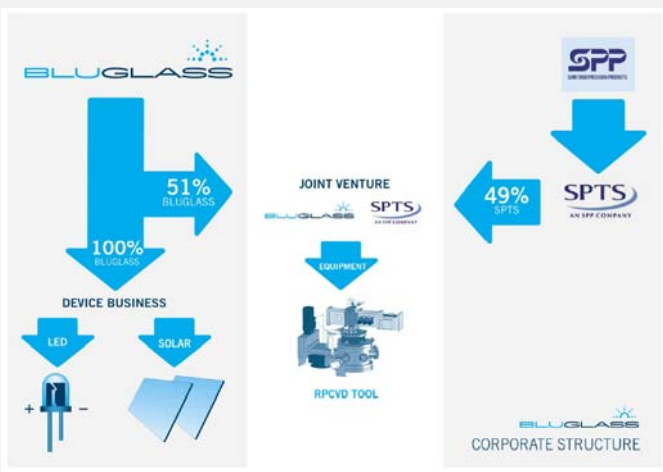
Multi-junction (MJ) InGaN solar cells are expected to be over 50% efficient, and could be over 70% efficient, compared to 35%-37% efficiency for current commercial MJ cells.



WW LED forecast: ISuppli, Jan 09

BluGlass retains 100% ownership of the downstream device business opportunities that could use the RPCVD technology.

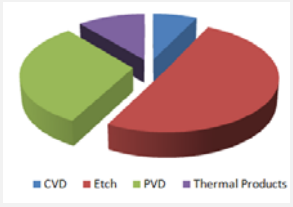
This will continue to develop and utilise the Company's device IP concerned with layer composition, bandgap tuning and device structure. The tuneable bandgap will be the core breakthrough allowing high efficiency solar cells. This 'tuned' material could also lead to higher brightness LEDs with greater Indium content.



The high-brightness LED market will see greater than 50 percent growth in 2010, to reach $8.2 billion in revenues. The report states that a major ramp-up in LED adoption for backlights for LCD TVs and monitors is driving this growth. It also forecasts that the growth should continue to average 30.6% a year through to 2014, creating a $20.2 billion opportunity for the packaged semiconductor devices (see chart above left).

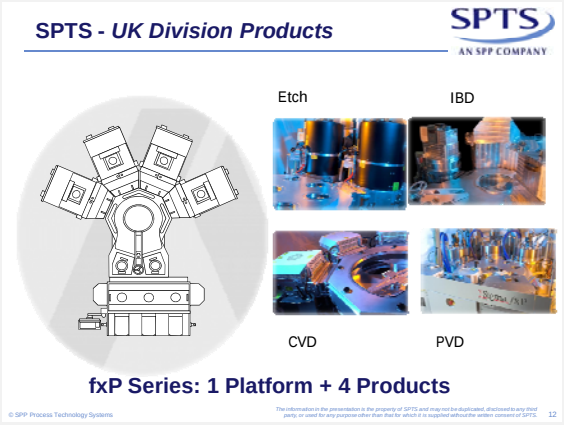
Strategies Unlimited

SPTS Overview



SPP Process Technology Systems (SPTS), a rapidly growing semiconductor process equipment company wholly owned by Sumitomo Precision Products (SPP) Co., Ltd (TYO:6355), a US$500 million revenue company listed on the Tokyo Stock Exchange.

SPTS is a leading provider of plasma based etch and deposition process equipment, including Metal-Organic Chemical Vapour Deposition (MOCVD). It has a strong tier-1 and tier-2 global customer base including LED manufacturers and extensive technical and manufacturing capabilities with two production facilities in Newport, Wales and San Jose, CA, USA.



SPTS was formed in 2009, following the merger of Surface Technology Systems and Aviza Technology. It has over 25 years experience in advanced process technologies which it supplies to the world's leading semiconductor device manufacturers and research institutions. It has a network of international offices and agents with 400 staff in over 35 worldwide locations.

The successful integration of the businesses has been demonstrated through a tripling of revenue in 1H10. Having bedded down this transaction, SPTS is now seeking complementary leading edge technologies that will increase its product range to its existing customer base. The BluGlass technology fits this description.

SPTS' development and manufacturing expertise combined with its global distribution network provides a route to market for BluGlass that was previously unclear. The partnership presents the best opportunity for the RPCVD technology to be commercialised and supported quickly and globally.

'SPTS' existing plasma deposition equipment manufacturing expertise and capabilities, along with its substantial customer base, are enormously complementary and synergistic to BluGlass' commercial goals'

Giles Bourne, CEO, BluGlass

'SPTS was formed by the merger of two long-time members of the semiconductor community; I've watched them over a number of years and they have always possessed great technology. It is now very exciting to see the new company turn their agile technology leadership into rapid growth. SPTS is led by a new management that has a clear vision of combining production readiness with leading-edge processes. These are the classic qualities of a leader in fast growing emerging markets.'

Dan Hutcheson, CEO of VLSI Research

Implications of Recent Developments

The sourcing of funding from the CBA and the successful commissioning of the 5th generation RPCVD tool were both solid developments in the Company's commercialisation plan. In particular, the commissioning of the tool provides a more reliable and flexible platform to enable the acceleration of other technology milestones.

With every step along the commercialisation plan, the technology risk decreases. It is planned for this version of the tool to be able to produce single crystal Gallium Nitride (GaN) with properties equivalent to existing MOCVD products.

The investment by and joint venture with SPTS is however a step change for the company. Using the expertise and development experience developed over many years, BluGlass now has access to the resources of one of the world's leading suppliers of equipment to the target market for the RPCVD tool. SPTS is however only a medium sized company and appears to be flexible and adaptable, which will be important for successful dealings with smaller partners such as BluGlass.

In addition, the fact that a leading technology player has backed the company appears to provide support for both the technology and market potential. This provides enhanced credibility for BluGlass and its shareholders.

BluGlass has retained the options for further strategic relationships at the device level. This could potentially be with a device manufacturer of LED or PV products and might involve the purchase of RPCVD equipment from the SPTS JV.

In the longer term, the company may have the opportunity to exit some or all of its IP through a trade sale to one of its strategic partners.

BluGlass' likelihood of successfully and profitably commercialising its technology has been significantly improved through the SPTS partnership.

'To build credibility in both the industry and investment markets, BluGlass needs to secure some key strategic relationships with major industry players. These relationships may also provide additional finance and skills to help accelerate the commercialisation of both the LED and solar applications of the company's platform technology.

Australian CleanTech
June 2010

Implementation Risk Update

In its previous report, Australian CleanTech highlighted a number of residual risks for the Company. The impacts of recent developments on these risks are provided below.

- **Technology Risk – Reduced** through the commissioning of the latest tool and access to SPTS development expertise.
- **Distribution Risk – Significantly Reduced** through the SPTS JV which provides access to global distribution chains.
- **Raw Material Supply Risk – Unchanged**.
- **Capability Risk – Significantly Reduced** through the SPTS resources.
- **Key Person Risk – Reduced** through access to additional skilled resources at SPTS.

Key Valuation Triggers Update

In its previous report, Australian CleanTech provided a number of specific 'Valuation Triggers' that will have the effect of significantly changing the company's risk profile and increase its likelihood of achieving its strategic goals. These have been updated in the table below.

Valuation Trigger	Detail	Consequence	Possible Timing
Commercial Milestones			
Strategic Investor(s) into BluGlass	This could be a cornerstone investor in BluGlass or a joint venture partner for one segment of the business. SPTS invested in BluGlass and established equipment manufacture JV.	This has provided a capital injection, market credibility and additional required skillsets. It will also accelerate the commercialisation process and bring forward sales and cash flows.	COMPLETED AUG-10
JVs for LEDs & PV Device Business	Secure joint venture partner to utilise and monetise BluGlass' device level IP for both LEDs and PV cells	This will create additional future revenue streams for the company by separately valuing the device level IP.	Medium Term
Technology Milestones			
Commission new generation tool/reactor	Commissioning of a fifth generation tool that encompasses key performance criteria from previous tools.	Provides a more reliable and flexible platform to enable the acceleration of other technology milestones.	COMPLETED JUL-10
Demonstrate single crystal	Demonstrate single crystal GaN and InGaN on newly commissioned tool. This is the first major milestone of the SPTS JV	This will provide confidence that the newly commissioned tool is operating effectively and will build a platform for further technology milestones	Short Term
Production of Commercial Quality Material	Producing repeatable high quality crystalline material with minimal defects. Achieving device quality doped material layers.	Should demonstrate to potential customers and partners that the technology is 'device ready'. It should effectively prove that the technology works.	Short Term
Device Performance	Demonstration of a single junction Indium-rich PV cell with high efficiency.	This should demonstrate that the device is working effectively and that it is possible to introduce Indium as required into the material. This may secure significant global coverage of a new way to do solar cells for CPV applications.	Medium Term
Production of Quality Layers	Demonstrations of a three junction cell including an Indium-rich layer.	This may trigger the start of large scale sales into the CPV sector.	Medium Term
Scalability of Equipment	Demonstrations of the potential and added advantages of using the RPCVD technology for larger diameter substrates with higher yield and reduced waste.	This should fully demonstrate the potential of the equipment to the LED sector and may provide a trigger for large scale sales into that sector.	Medium Term

We still believe that each of these 'Valuation Triggers' once successfully met, will drive a significant increase in the value of the RPCVD technology and hence for the company. BluGlass could emerge with a similar business model to Aixtron: also a university spin-off that commercialised a disruptive technology to grow a company with 2010 forecast revenues of over €650 million. In addition, BluGlass may have significant additional upside through the development of device partnerships that will utilise its device IP.