

Capital Raising for Green Rock Energy

Green Rock Energy (ASX: GRK) could drill its first geothermal well for the UWA Geothermal Project in early 2011 following an agreement with The University of Western Australia. The project is at UWA's Crawley Campus in metropolitan Perth.

The agreement includes an Offtake Agreement for UWA to pay Green Rock the value of the electricity replaced by the direct use of geothermal energy over the 20-year life of the project.

The agreement also enables Green Rock to acquire UWA's 50 per cent interest in the Geothermal Energy Permit GEP1 covering 143 square kilometres of Perth's north west inner metropolitan area and offer it to other parties to invest in the UWA Project and follow-on projects such as the QEII Medical Centre and Stirling City Centre.

Although UWA will pass on its interest in the Permit, it will remain on the title of GEP1. Green Rock said it is in discussions with possible partners who see potential for using the geothermal resource under Perth to cool and heat commercial buildings and replace electricity from the grid.

Stockbroker and corporate advisor Cygnet Capital is to lead a placement of 70 million shares to raise \$1.05 million at 1.5 cents per share for Green Rock. Cygnet will also underwrite a non-renounceable rights issue on a one-for-three basis at 1.5 cents per share to raise another \$1.6 million.

Cygnet will receive 25 million options exercisable at 2 cents per share and expiring on 30 June 2013, and 6 per cent of all capital it raises.

CBD Completes First Project

CBD Energy (ASX: CBD) will receive \$12.3 million in revenue over the next 20 years with the completion of its wind energy project on Chatham Islands, 800 kilometres east of New Zealand.

The build, own and operate project cost \$2.9 million and comprises two wind turbines integrated with the electricity grid and a diesel generation plant. The wind energy reduces the amount of diesel power required on the islands.

After 20 years CBD ownership will be transferred to the Chatham Islands Enterprise Trust.

Chatham Islands is CBD's first project to be completed. Other projects are in Australia and China.



Unlisted Companies

Manufacturing Vision for Spark Solar

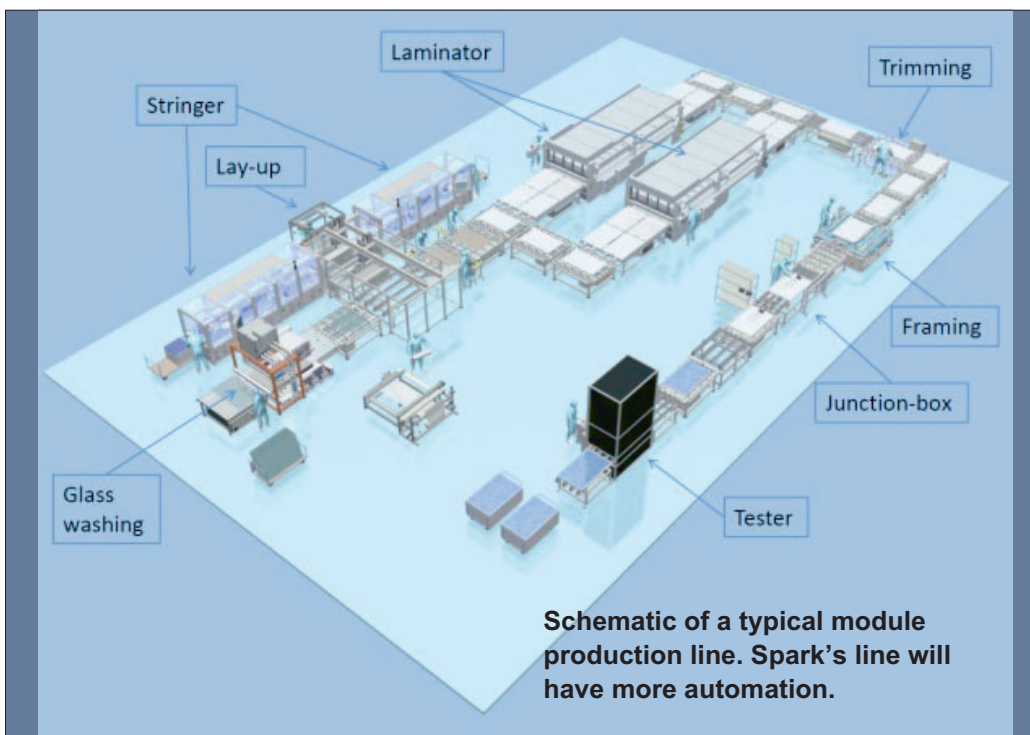
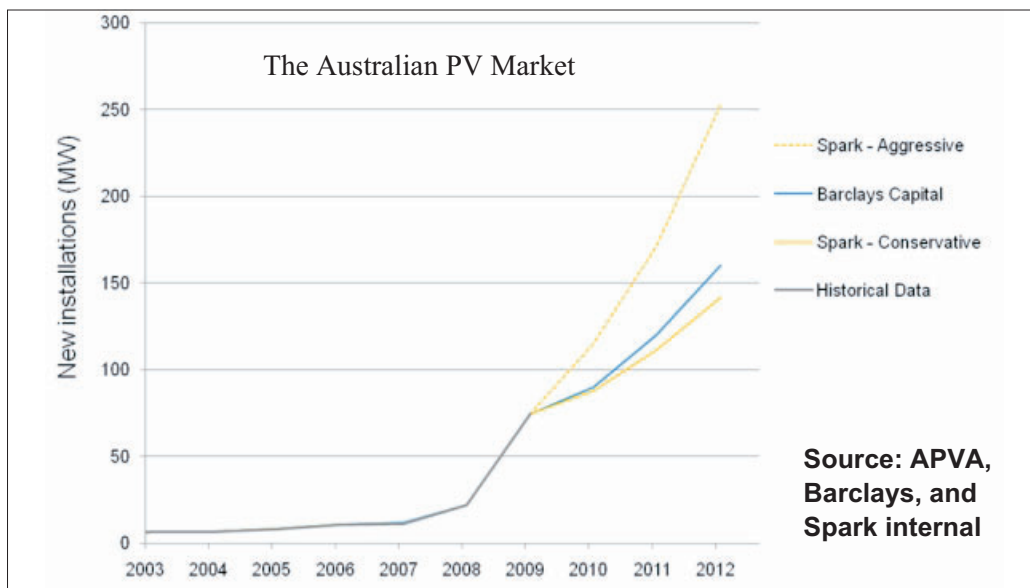
Despite some issues, many believe that solar photovoltaic (PV) energy has a bright future in Australia, particularly on the demand side. The State based feed-in-tariffs are popular and already there is a shortage of solar panels and inverters. The Renewable Energy Target should add to demand.

One industry participant who is very positive about the PV market is Dr Michelle McCann, the interim chief executive and technology director of Spark Solar Australia. With the industry's strong demand and fast growth now met mostly by imports, Dr McCann believes there is an opportunity for a local supplier. Spark Solar has been working towards becoming an Australian manufacturer since its formation in 2007.

The company's original plan (Eco Investor Mar 2009) was to raise \$60 million to build a high-tech solar cell manufacturing facility. But the large amount it sought combined with the global financial crisis meant Spark Solar has had to scale back its ambitions, or at least adopt a step-by-step approach.

The company is now raising a more achievable \$7.5 million to set up a high-tech solar panel assembly plant in Australia. The plan is to rent a factory and import state of the art assembly equipment to build solar modules or panels. Dr McCann said it will not be a simple screwdriver operation but somewhere in between assembly and sophisticated manufacturing.

Spark has some intellectual property in the design and assembly of the modules, and the panels will suit the high ultraviolet and high temperatures in Australia.



They will be cheaper than imported European and Japanese panels, and only marginally more expensive than Chinese panels.

The initial annual output will be 25,000 modules, equivalent to 6 megawatts or enough to power 1,300 households. Production can be increased to 30 MW without further equipment purchases.

At a later date and when the time is right, Dr McCann says the company could again look at moving up the value chain to manufacturing solar cells. This would fulfil its original plan and improve profitability.

Meanwhile, step one is to raise the capital. If successful it can finalize a supply agreement with one of three possible solar cell suppliers, select a factory and set up production. Dr McCann said Spark has also identified a

chief executive, a senior energy industry executive who will commence when the capital raising is complete.

Production and sales could be within seven months of installing the production equipment.

Spark has off-take arrangements for the planned production volume in the first years, and the plant is expected to become profitable in the first full year of operation. Spark says its projections are modest and it can win a 9 to 10 per cent share of the market in its first years.

For investors, it says it could return the full investment amount in not much more than three years of operation.

Spark's project has Major Project Facilitation status from the federal government, which means it is seen as significant to Australia.

At present Australia has only two local solar panel manufacturers, the listed Silex Systems in Sydney and the privately owned Australian Solar Manufacturing in Victoria. If successful Spark would be the third.

The \$7.5 million equity raising is aimed at sophisticated investors. \$4.9 million of the capital would be used for the production lines and capital expenditure, and \$2.3 million for operational expenditure, leaving \$0.26 million for contingencies. Another \$0.45 million of debt funding would be for working capital.

Although it is still a small base, the Australian PV market is growing strongly. 22 MW of generation capacity was installed in 2008 and 75 MW installed in 2009.

Another advantage is that labour would be less than 5 per cent of total costs and Australia has a lot of solar expertise that could be drawn upon.