



Photovoltaics and Tension Membrane

Who Is SKYShades?

- A leader in the Global tension membrane industry.
- Australian owned using Australian technology and Australian designers.
- Dominating the US “Shade” and Tension Membrane market.
- Expanding Globally including SE Asia, Central Asia, The Middle East and Europe.



What are Photovoltaics?

- Photovoltaics are the substrates used to transform solar energy into electrical energy.
- This “Clean” power can be used for personal, domestic and industrial purposes with NIL carbon emissions.



The Current Status

- Solid Crystalline Silicon PV Cells are readily available.
- Flexible Crystalline Silicon PV Cells are in development.
- Non crystalline PV cells present significant opportunities.



Problems with Crystalline Technology.

- Expensive due to the manufacturing process.
- Expensive due to competition for raw materials with the technology industry.
- It's physical structure limits and in some cases inhibits flexibility.
- Individual units are too expensive and heavy for large scale applications.



The Future of PV

- Fully flexible PV units.
- Using nanotechnology.
- Flexible and light weight allowing large scale roll outs.



Benefits

- Fully flexible.
- Fixed or printed onto membrane fabrics.
- Easy to transport and install.
- Printed rolls of solar cells would be lighter, more resilient and flexible than silicon PV



Problems

- Who would install nanotechnology based PV.
- Access to roof tops is required.
- Managed and installed by a fragmented group of roofing contractors.



Enter SKYShades

- SKYShades experts have installed over 500,000 m² of tension membrane structures in the last 10 years.
- Expect to manufacture and install 100,000 m² per year.
- All installations are within the World's Sunbelt region.



Commercialisation

- SKYShades would offer PV technology on all installations.
- Provide access to one of the World's largest roofing and shade groups.
- Single contractor for distribution and installation.



Benefits

- Provides an architecturally pleasing structure for PV incorporation.
- Single distributor and installer with global reach.
- If 50% of SKYShades structures included PV.
 - Provide 4.5 KWh to the grid.
 - Reduce carbon emissions by 4,500 tonnes pa
- Buildings can be designed to be smart and clean.



Summary

- SKYShades is looking to make this technology Australian.
- To be the first to market with this clean eco-friendly solution.

