

Solar Panel –

**Manufacturing Plant, Detailed Project Report,
Profile, Business Plan, Industry Trends, Market
Research, Survey, Manufacturing Process,
Machinery, Raw Materials, Feasibility Study,
Investment Opportunities, Cost and Revenue**

Introduction

A solar panel is a collection of solar cells. Lots of small solar cells spread over a large area can work together to provide enough power to be useful. The more light that hits a cell the more electricity it produces,



so spacecraft are usually designed with solar panels that can always be pointed at the Sun even as the rest of the body of the spacecraft moves around, much as a tank turret can be aimed independently of where the tank is going.



Solar panel refers either to a photovoltaic module, a solar thermal energy panel, or to a set of solar photovoltaic (PV) modules electrically connected and mounted on a supporting structure.



A PV module is a packaged, connected assembly of solar cells. Solar panels can be used as a component of a larger photovoltaic system to generate and supply electricity in commercial and residential applications.

Uses

Assemblies of photovoltaic cells are used to make solar modules which generate electrical power from sunlight, as distinguished from a "solar thermal module" or "solar hot water panel." The electrical energy generated from solar modules, colloquially referred to as solar power, is an example of solar energy.

The PV MARKET has been on an upward trend for years now. The market is expected to continue to grow until 2050. The demand far outstrips supply and there is a huge gap to be filled. In India, there is about 1.4 GW of module manufacturing capacity and this is expected to increase in the future since the solar PV segment is one part of the entire value chain where the barriers to entry is relatively low. Thus, as an entrepreneur, solar module production offers an exciting opportunity to you.

Few Indian Major Players are as under

- **Central Electronics Ltd.**
- **Environ Energy-Tech Services Ltd.**
- **Epic Energy Ltd.**
- **Euro Multivision Ltd.**
- **H B L Power Systems Ltd.**
- **Helios Photo Voltaic Ltd.**
- **I T I Ltd.**
- **Indosolar Ltd.**

- **J S W Green Energy Ltd.**
- **Jupiter Solar Power Ltd.**
- **N E P C India Ltd.**
- **P L G Power Ltd.**
- **Pentafour Solec Technology Ltd.**
- **Photon Energy Systems Ltd.**
- **Rajasthan Electronics & Instruments Ltd.**
- **Reliance Industries Ltd.**
- **Renewable Energy Systems Ltd.**

- **Res Photovoltaics Ltd.**
- **Shurjo Energy Pvt. Ltd.**
- **Surana Ventures Ltd.**
- **Tata Power Solar Systems Ltd.**
- **Titan Energy Systems Ltd.**
- **Udhaya Semiconductors Ltd.**
- **Ujaas Energy Ltd.**
- **Usha (India) Ltd.**
- **Websol Energy System Ltd.**
- **X L Energy Ltd.**

PROJECT AT A GLANCE

PROJECT AT A GLANCE				(Rs. in lacs)			
COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	55.00	55.00	Capital	0.00	112.61	112.61
Buildings	0.00	96.20	96.20	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	109.00	109.00	Other Type Share Capital	0.00	0.00	0.00
Motor Vehicles	0.00	8.00	8.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	31.00	31.00	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	20.00	20.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	337.84	337.84
Preliminary & Pre-operative Exp	0.00	3.00	3.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	87.00	87.00	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	41.25	41.25				
TOTAL	0.00	450.45	450.45	TOTAL	0.00	450.45	450.45

PROJECT AT A GLANCE

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/ Book Value
	EPS	CEPS				Per Share	Per Share				
	Rs	Rs	Rs	Rs	Rs	%	Rs	%	Rs	No.of Times	%
1-2	4.72	8.39	14.72	24.00	0.00	100.00	4.72	0.00	4.72	1.00	0.00
2-3	7.69	10.90	22.40	18.00	0.00	100.00	7.69	0.00	7.69	1.00	0.00
3-4	10.59	13.42	33.00	12.00	0.00	100.00	10.59	0.00	10.59	1.00	0.00
4-5	13.37	15.86	46.37	6.00	0.00	100.00	13.37	0.00	13.37	1.00	0.00
5-6	16.00	18.19	62.38	0.00	0.00	100.00	16.00	0.00	16.00	1.00	0.00



PROJECT AT A GLANCE

Year	D. S. C. R.			Debt / - Deposits Debt	Equity as- Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individual	Cumulative	Overall					GPM	PBT	PAT	Net Contribution	P/V Ratio		
	(Number of times)			(Number of times)	%	%	%	%	%	%	%			
Initial				3.00	3.00									
1-2	1.26	1.26		1.63	1.63	2.97		9.62%	4.24%	3.00%	448.88	25.36%	2.76	1.00
2-3	1.57	1.41		0.80	0.80	1.82		10.95%	6.37%	4.19%	523.19	25.34%	2.97	1.17
3-4	1.94	1.57	1.93	0.36	0.36	1.15		11.83%	7.87%	5.06%	597.92	25.34%	3.01	1.39
4-5	2.37	1.74		0.13	0.13	0.76		12.41%	8.92%	5.67%	672.65	25.34%	2.93	1.63
5-6	2.89	1.93		0.00	0.00	0.52		12.78%	9.66%	6.11%	747.38	25.33%	2.79	2.25



PROJECT AT A GLANCE

BEP

BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	58.58%
Total BEP (% of Installed Capacity)	61.87%

IRR, PAYBACK and FACR

Internal Rate of Return .. (In %age)	25.16%
Payback Period of the Project is (In Years)	2 Years 4 Months
Fixed Assets Coverage Ratio (No. of times)	11.873



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- *We use authentic & reliable sources to ensure business precision*



Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
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- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*



Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
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- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

Sectors We Cover *Cont...*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
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- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

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- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

Sectors We Cover *Cont...*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha
(Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

Sectors We Cover *Cont...*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

Sectors We Cover *Cont...*

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- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

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- *Township & Residential Complex*
- *Textiles And Readymade Garments*
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Niir Project Consultancy Services

106-E, Kamla Nagar, New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886

Mobile: +91-9811043595

Fax: +91-11-23841561

Website : www.entrepreneurindia.co

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