

SOLAR INDUSTRIES INDIA LIMITED

INDUSTRY OVERVIEW

COMPANY OVERVIEW

FINANCIAL SNAPSHOT

DEFENCE BUSINESS

COAL BLOCK UPDATE

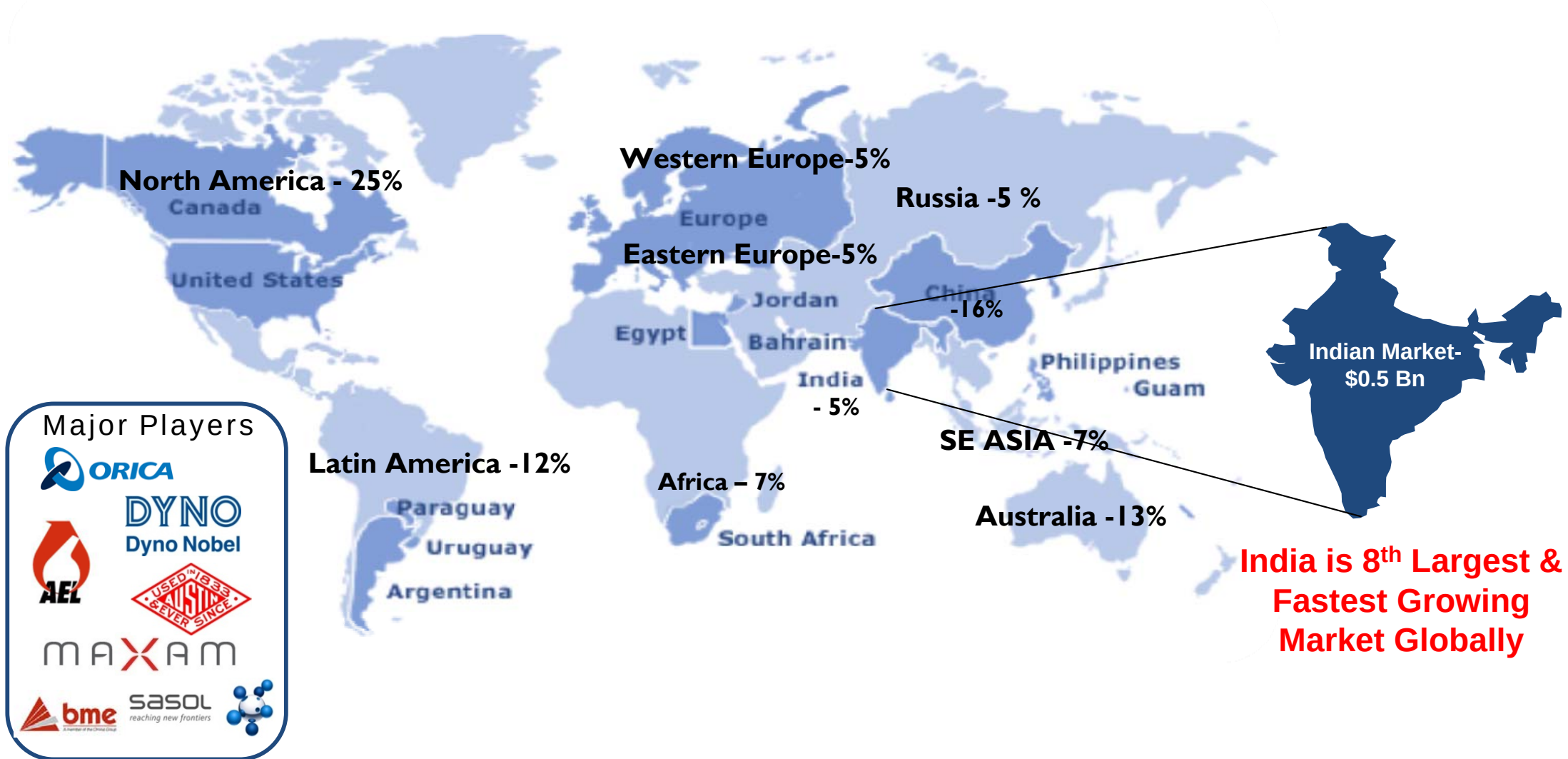
GROWTH STRATEGY

APPENDIX

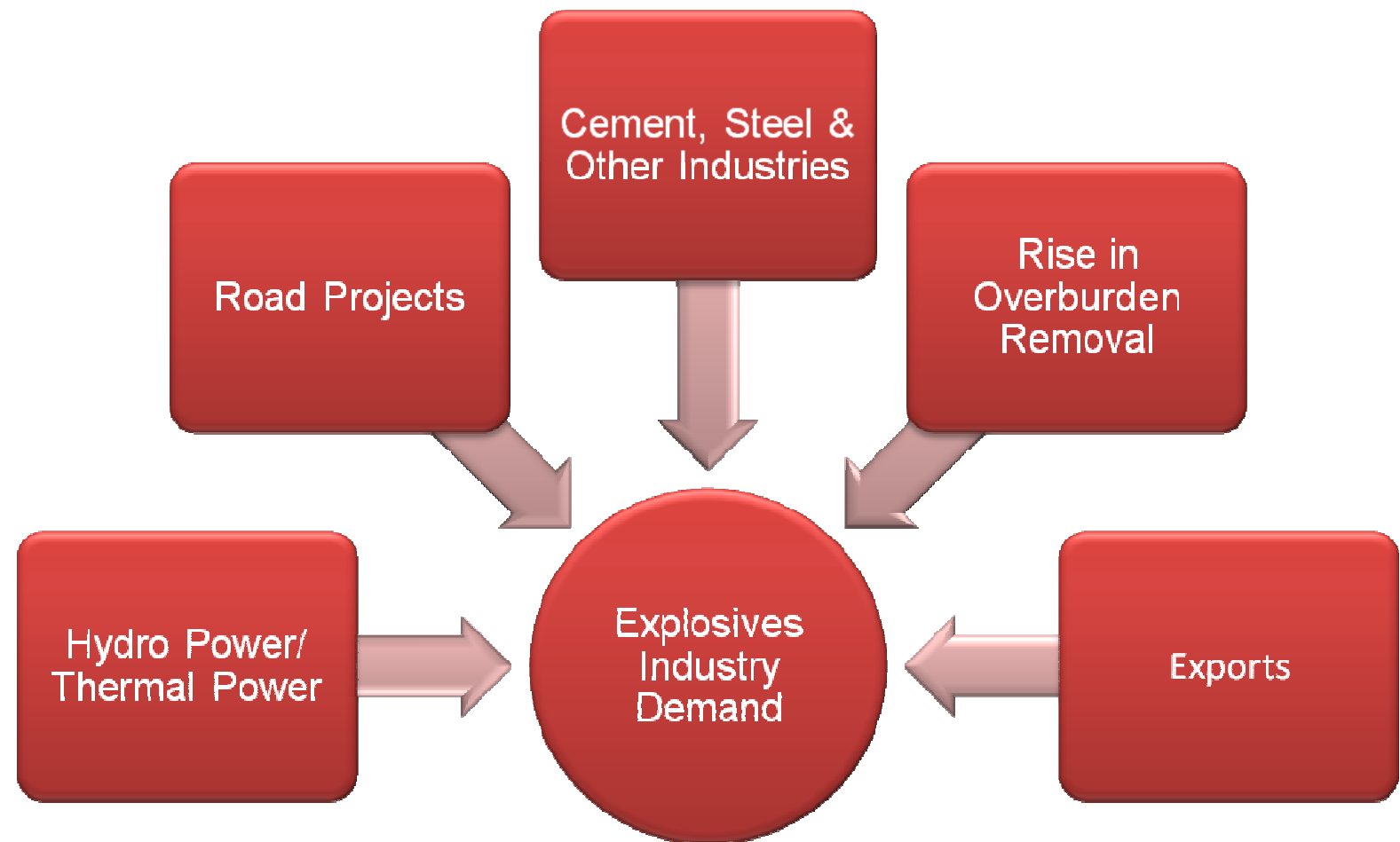
MARKET PERFORMANCE

KEY FINANCIAL PARAMETERS

World Explosives Market Opportunities - ~\$10 Bn



- ✓ *Indian Explosives Market is the 8th Largest in the World.*
- ✓ *Size of the Market Rs 2,750 Crs.*
- ✓ *Historical Growth 4-5 % pa (last 10 yrs)*
- ✓ *Future Growth expected 7-8% pa*
- ✓ *One of the fastest growing market*



Industry Demand Drivers

- The Main drivers for explosives demand – Mining and Infrastructure development
- Mining industry is the major consumer of explosives. It accounts of 90 % of total explosives .
- Coal industry consumes 70 % of total demand.

Major Power Producers- Plans

•The Central Electricity authority has estimated capacity addition requirement of more than 100,000 MW during 12th plan period which includes 75,000 MW of coal based and 14,000 MW of gas based capacity.

•As per Power Line January 2011 issue, the 12th plan target had been tentatively fixed at 9,204 MW of Hydro power.

Companies	Plans
Adani	Planning to increase capacity to 20,000MW
Tata	Targeting 25,000 MW by 2017
Reliance Power	30,000 MW in development phase
KSK Energies	2,000MW in progress in Chattisgarh
India Bulls	9,000 MW in 2017
Moser Baer	Planning 6,000 MW
Aditya Birla	Planning to enter power sector again
Jindal power	15,000 MW under development
LANCO	4,000 MW in operation, 5000 MW in development
Sterlite	5040 MW- 2 projects being developed in Jharsuguda
GVK Power	Planning 2000 MW in Jharkhand

Steel Production

- India's GDP growth at 9% will create demand for 113 million tons (MT) of steel by 2016-17. This will be an increase from 70 Million tons in 2010-11

The major drivers are

- SAIL (from 12.8 to 21.4 Mn.T in ph-I), RINL(from 2.9 to 6.3 Mn.T), NMDC to set up 3 Mill. Tons capacity, JSW to increase capacity by 4.4 MN.T, Jindal Steel & Power by 8.0 Mill. Tons
- SR Steels by 3.9 Mill. Tons, Tata Steel by 2.3 Mill. Tons, etc.

Cement Production

- Demand for cement is growing at 10% p.a. As per planning commission, Cement Demand will grow more than 2% compared to GDP. It is estimated that demand will reach 550Million Tons by 2020

Infrastructure

- At the terminal of 11th plan, the target for Private Coal mines was 119 Mill. Tons but they could achieve only about 47 Mill. Tons. This again due to want of Environmental Ministry's clearance. In the 12th plan the government has formed a group of ministers to reassess Environmental Clearance Policies and we are hopeful for clearance of many Coal blocks
- Roads – of the 33 Lac Km road 2 % is 4 lane ,36 % is 2 lane and 52% is single lane. During the 11th plan , NS-EW corridors and radial roads to towns and ports will be completed
- NHAI has awarded contracts for 7994 KM for Rs. 57,000 crores for 2011-12. This is in keeping with Ministry's dictum of 20 Km-a-day
- The investment in the infrastructure sector is expected to be 41 lac crore in the 12th plan period
- All the above will drive up demand for coal, iron ore, limestone and road metal substantially and consequently- explosives

Coal Industry

- Coal targets have taken a slight hit in 2010-11 and the projection given by Coal India for 2011-12 is also low. Against the target of 461 Mill. Tons, CIL produced 431.32 Mill. Tons. In 2010-11 & 432.53 Mill Tons. In 2011-12
- Originally the target for 2011-12 was fixed at 520 Mill. Tons and a mid term revision was pegged at 485 Mill. Tons and currently they have taken a target of 447 Mill. Tons. This is a temporary set back due to the rigidity of the Environment Ministry. It is hoped that the group of Ministers will resolve this problem and a production target of 7 - 8% y-o-y would only sustain a GDP growth of 9% plus
- As per the Chairman of CIL, the target production by terminal of 12th plan would be 615 MnT if projects are cleared. If not, it would be 557 MnT
- Out of 213 Coal blocks of Coal India, 36 has been cleared and rest are pending

LIMESTONE

1.00 Million Tonne Limestone requires 166 Tonne of Explosives

1.45 Million Tonne Limestone is required for 1 Million Tonne cement

Hence 240 Tonne of explosives is required for 1 Million Tonne cement

IRON ORE

1.00 Million Tonne Iron ore requires 200 Tonne of Explosives

1.70 Million Tonne Iron ore is required for 1 Million Tonne Steel

Hence 340 Tonne of explosives is required for 1 Million Tonne Steel

POWER

Per unit generation of power requires 0.74kgs of coal

1.00 Million Tonne Coal requires 1080 Tonne of Explosives

Per Mw power requires 799 Tonne of Explosives

- One of the very few sector needing Industrial License
- Clearance required from Home Ministry
- Clearance required from IB- regarding safety of location
- NoC required from District Magistrate
- NoC by District Magistrate after clearance by Police, PWD, Grampanchayat
- License also required from Chief Controller of Explosives, Gol
- For underground use permission required from DGMS

2. COMPANY OVERVIEW

Overview

- Founded in 1984, Solar Industries India Limited (SIIL), formerly known as Solar Explosives Limited
- The largest manufacturer of explosives and initiating systems in India
- Licensed capacity of 262,600 MT of explosives
- Domestic Market share of 25%
- Largest supplier of Explosives to Coal India Ltd.
- Exports to more than 20 countries, with about 71% market share in exports from India

TRANSFORMING INTO A DIVERSIFIED GLOBAL EXPLOSIVES MANUFACTURER

TRADER &
MANUFACTURER

1984 - 2000

- **Explosives and Cartridges** trader from 1984 - 1995
- 1996 – **started production** of explosives with license capacity of 6000 MT
- Started production of **Detonators** in the year 1998
- 2000 – started plants in **Waidhan** for production of **bulk explosives**

MANUFACTURER &
EXPORTER

2001 - 2005

- Imported first **Cartridge manufacturing** machine from USA in 2001
- Established another **bulk explosive unit** in Chandrapur with 7750 MT capacity
- Introduced **Cast boosters** and **PETN** in the Product portfolio
- **Started exporting** and slowly gained acceptance

GLOBAL EXPLOSIVES
MANUFACTURER

2006 - YTD

- Company goes **public in the year 2006**
- Expands **domestic** operations with presence across **16 locations**
- Starts **exporting to 23 foreign countries**
- Started manufacturing unit in **Zambia and Nigeria**
- Joint Venture in **Turkey** for producing bulk explosives

DIVERSIFIED PRODUCT RANGE CATERING TO THE ENTIRE MINING VALUE CHAIN



Bulk Explosives

- Licensed Capacity of **1,86,000 Metric Tones**, spread across 14 manufacturing facilities
- All facilities located within 50-60Kms of various mines.



Cartridge Explosives

- Solar's license capacity of **76,600 tons** makes it the largest cartridge manufacturing facility at single location in the world
- Demand for cartridge explosives to grow significantly as the growth in various mining & infrastructure projects.



Detonator

- With **140 Mn** of capacity of detonator production Solar, is well poised to cater to the demand rising from the Indian as well as overseas mining Industry



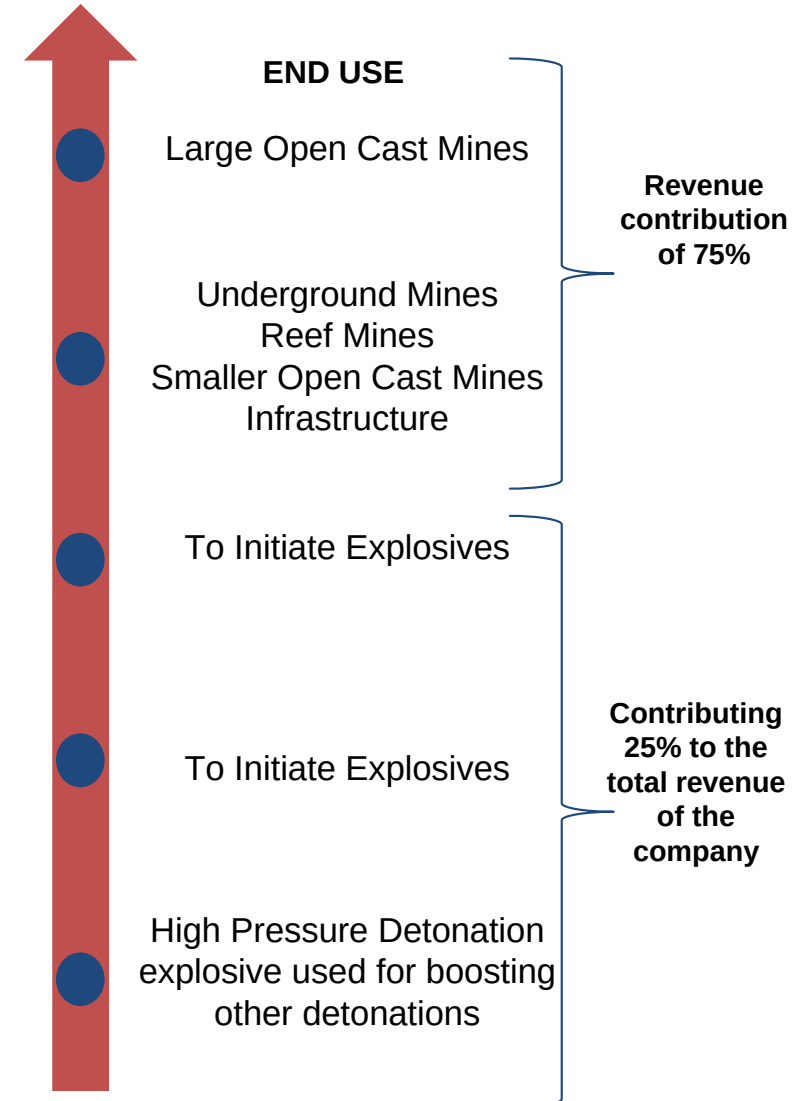
Detonating Fuse

- **75 Mn meters** of Detcord production facility is up and running for solar



Cast Booster

- **1500 MT** is Solar's licensed capacity to produce Cast Booster
- Cast booster used in bore holes and other high velocity and high pressure mining industry to gain momentum as and when deep underground mining technologies gets more prevalent in India



- SIIL's ISO 9001:2000 certified manufacturing facilities, spread across 16 locations in 8 states across India
- Company has set up manufacturing plants in Nigeria and Zambia. Construction in progress in Turkey to set up manufacturing facilities.
- Export to more than 20 countries

Domestic Facility

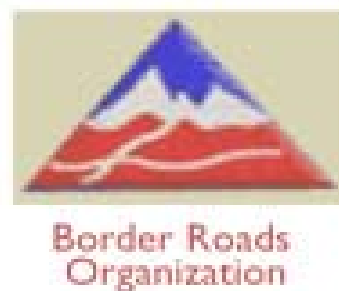
- Nagpur –I
- Nagpur-II
- Waidhan-I
- Waidhan-II
- Chandrapur
- Tadali
- Korba
- Ramgarh
- Jharsuguda
- Talcher
- Bhilwara
- Ramagundam
- Manendragarh
- Dhanbad
- Asansol
- Warur

Cartridge,
Detonators,
Detonating Fuse and
Cast Boosters

Bulk Explosives

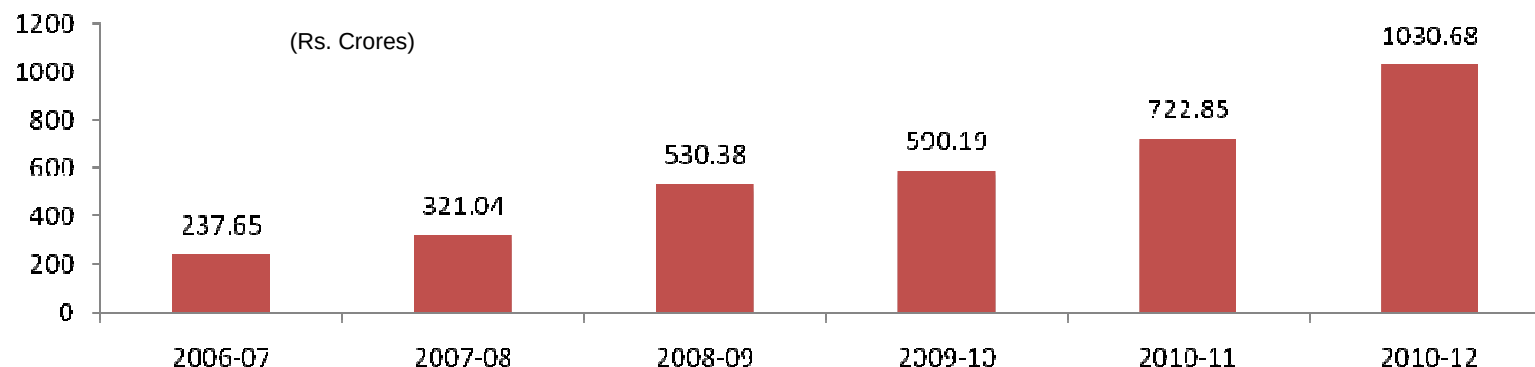
Overseas Facility

Tonnes	Current Capacity	Expansion	Expected Completion
Zambia			
Bulk Explosives	10,000	10,000	2HF13
Cartridge		5,000	2HF13
Nigeria			
Bulk Explosives	2,000		
Cartridge	5,000		
Turkey			
Bulk Explosives		2,500	1HF14
Cartridge		5,000	1HF14
Detonators		6 Mn no,	1HF14
ANFO		40,000 MT	1HF14



3. FINANCIAL SNAPSHOT

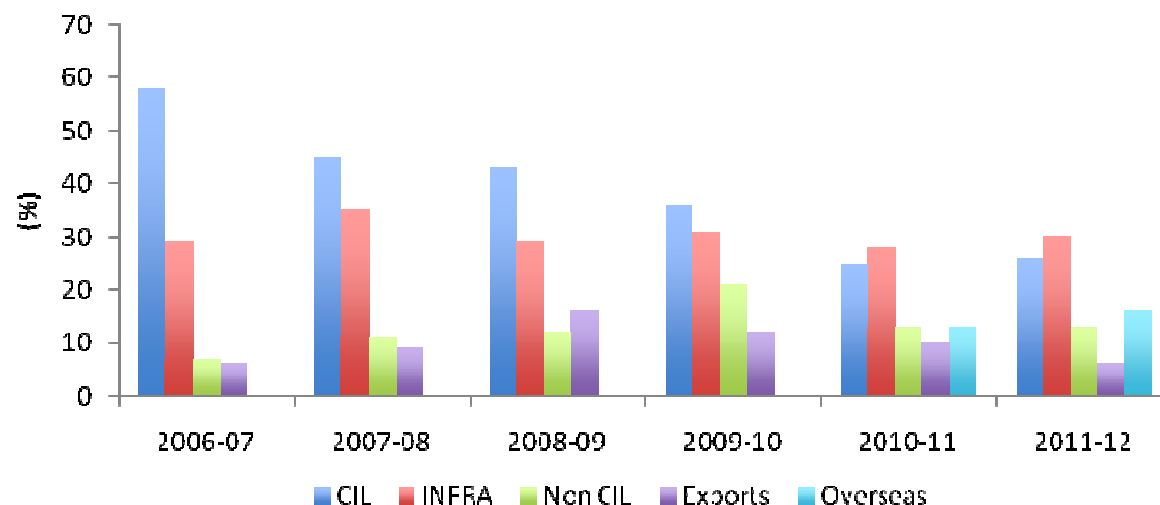
Sales



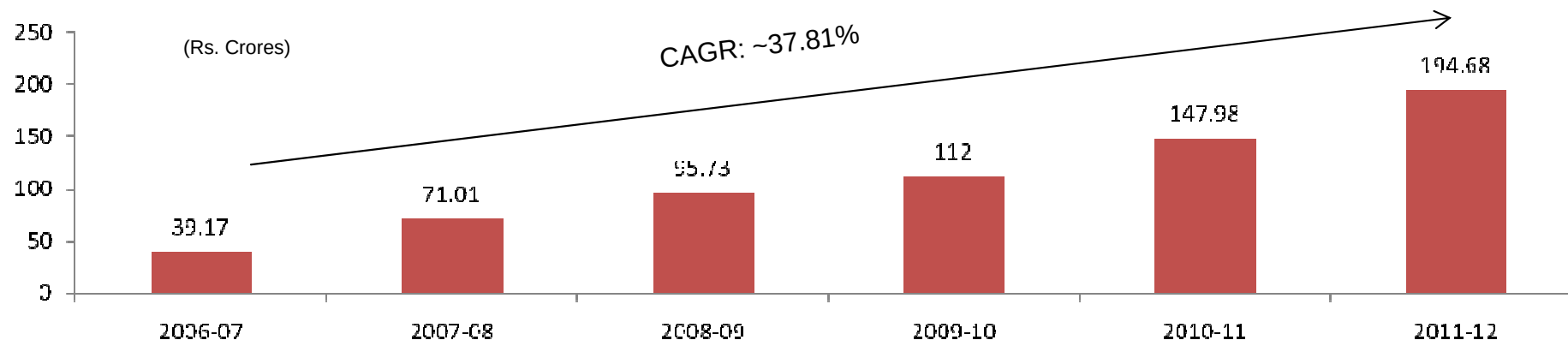
Sales Growth at CAGR of 34.10% from FY07 to FY12

- Dependence on Coal India going down, with increasing penetration of other alternative markets
- Infrastructure sector new growth segment
- Increase contribution from Overseas subsidiaries

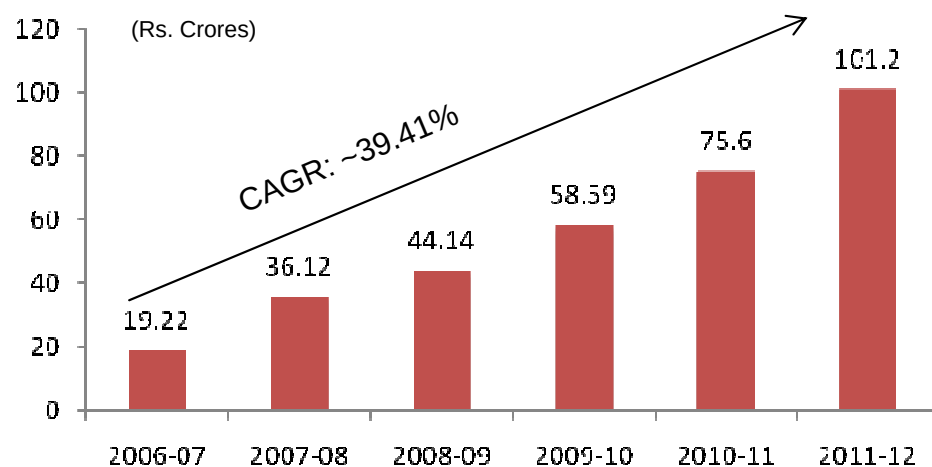
Sales Breakup



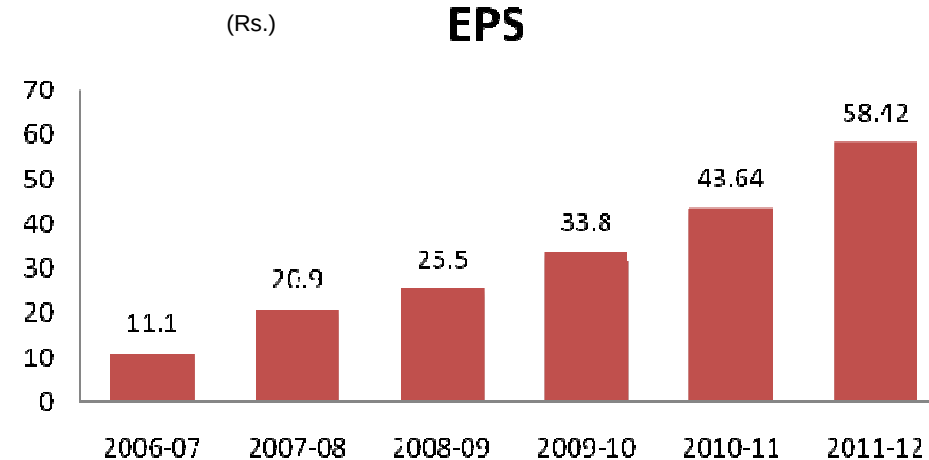
EBIDT



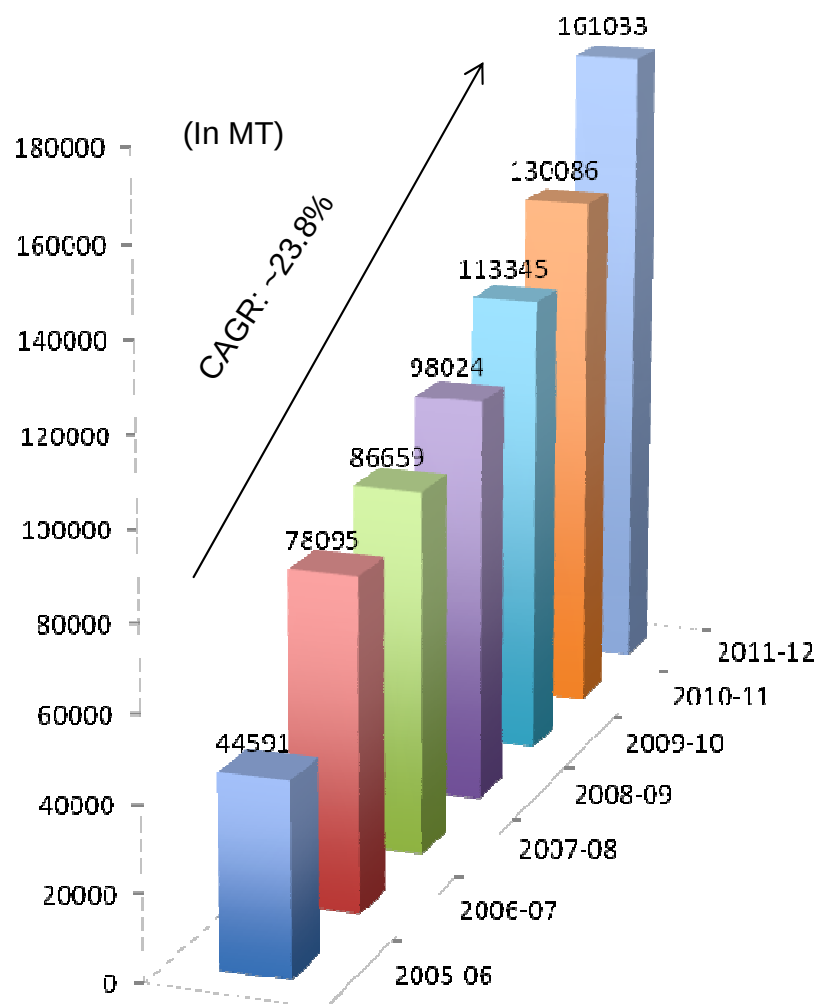
PAT



EPS

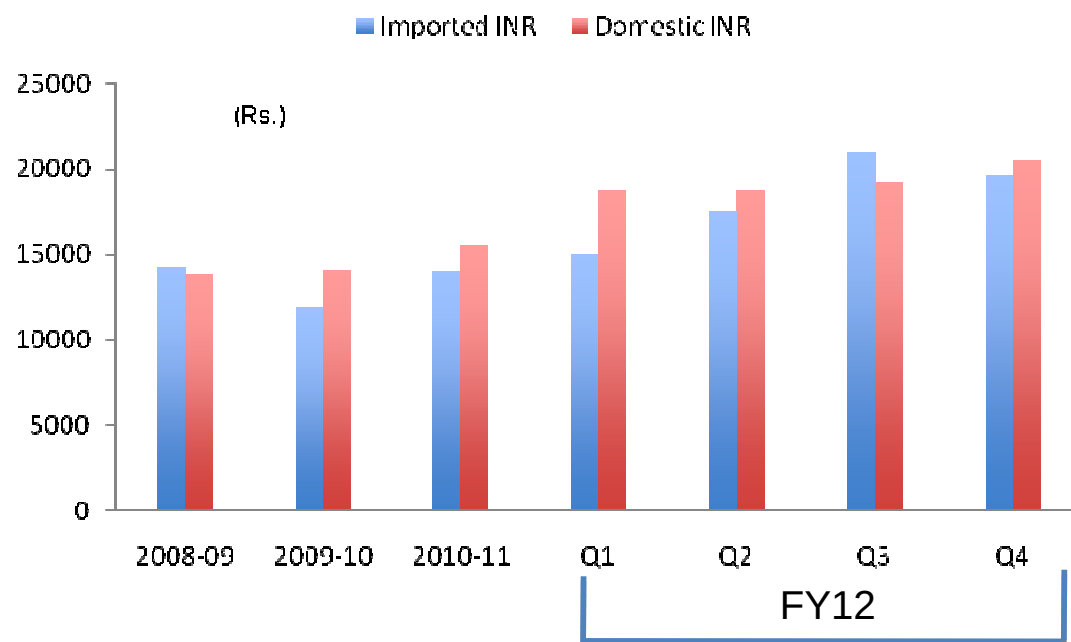


Volume Growth



Key Raw Material- Ammonium Nitrate

- 70% of the Total Raw Material Consumed
- Sourcing – RCF, Deepak Fertilizers, GNFC and Imports.
- There is price volatility and its possible to pass this on to the customer. The present price is USD 345\$ CFR Indian
- In trade, we import AN in Bulk, sale almost 50% high seas.
- Other Raw Materials like sodium nitrate, calcium nitrate, zinc nitrate, stypnic acid, Lead Azide, emulsion etc. are manufactured In-house.



4.DEFENCE BUSINESS

GoI Planned Defence Expenditure by 2015

\$ 80 Billion

- The Government has initiated massive revamp of security infrastructure of the country
- Government had earmarked USD 32.03 billion for defence in the 2010-11 budget
- Defence Ministry proposes to increase indigenous procurement from the current 30% to 70% level within next five years
- New policy for procurement enables both public and private industry in the country to design and develop required equipment/ weapon systems/ platforms in a faster timeframe

Why this Project?

- Composite Propellant is used for Pinaka & Akash Booster whereas fuel rich propellant is used in Akash sustainer
- There is a mismatch between demand and supply, has prompted DRDO/ BDL to search for private vendors

To meet the demand supply mismatch, Solar Group is keen to establish a propellant production facility to meet increasing demand of propellants and contribute to the national cause

Milestones Achieved

Obtained Industrial license of propellants & new generation explosives

First private sector company in India to receive HMX license which was earlier restricted to defence sector only

Obtained approval from Chief Controller of Explosives, GoI for construction of Propellant & Pyrotechnic manufacturing facility

Mega Project Status to Company for defense project from Ministry of Industry, Govt. of Maharashtra

Land Acquisition for Production Facility in process



Timelines

- Construction of Defence facility to start from August 2012.
- Expected completion by July, 2013
- Testing: 12 months
- Commercial Production by 2HFY15

Total Cost of Project: Rs.220 Crs.

5. COAL BLOCK UPDATE

Madanpur-North

Captive Coal Block

Acquired Navbharat Coalfields Ltd (NCL) in 2007. NCL owns 20% stake in Madanpur Coal block in Chhattisgarh

Total Coal Reserves	36 Mn Tonnes
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Minable Reserves	25 Mn Tonnes
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Coal Grade	E + Grade
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Current Status

- Madanpur Coal Block is currently classified as A type with more than 30% of forest area
- MOEF Clearance Awaited

Bhatgaon II & Bhatgaon II Ext.

Merchant sale Coal Block

JV with the Chhattisgarh Mineral Development Corporation in association with SMS Infrastructure. Solar owns 24.5% stake in the JV.

Total Coal Reserves	80Mn Tonnes
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Minable Reserves	58Mn Tonnes
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Coal Grade	D + Grade
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Current Status

- Mining plan approved by Ministry of Coal
- Mine closure plan approved
- Previous approval given by Ministry of Coal
- Revenue Land Acquisition Action u/s 9 is under progress
- R&R Plan has been approved
- Public hearing has been completed.
- Wild Life conservation plan is under processing
- Environmental clearance report has been submitted to Environmental Clearance board

6.GROWTH STRATEGY



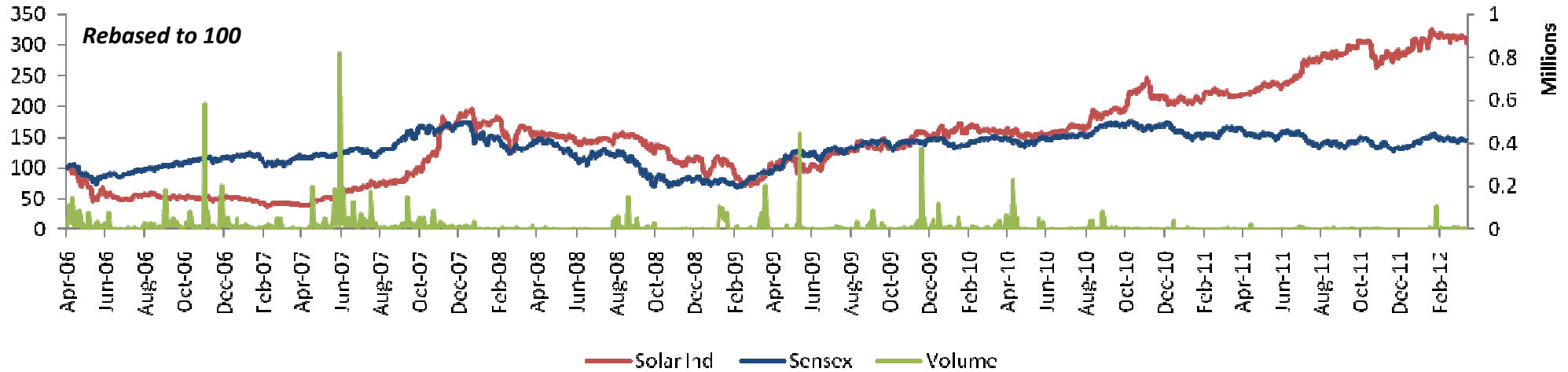
- Supply to the Private Sector Coal Mines
- Looking ahead to opening of the Defense Sector

- Increase share in infrastructure sector
- Increase Exports of accessories and explosives to existing and new markets
- Launch of Electronic Detonators and Dust Suppressant Chemicals



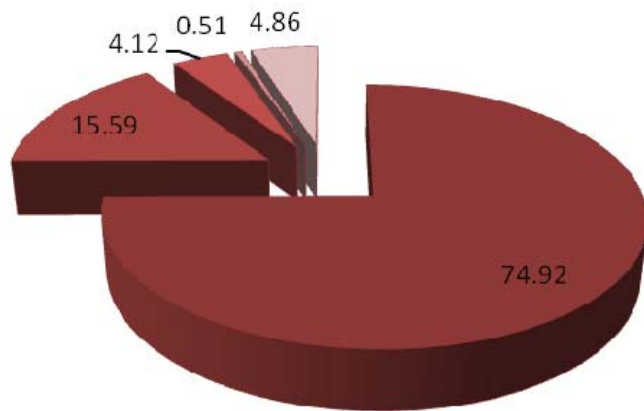
APPENDIX

SOLAR V/S SENSEX



SHAREHOLDING PATTERN

■ Promoters ■ Mutual Funds ■ Public/ Others ■ FII ■ Corporate



Strong & Consistent performance of the stock over the past few years, outperforming the SENSEX significantly

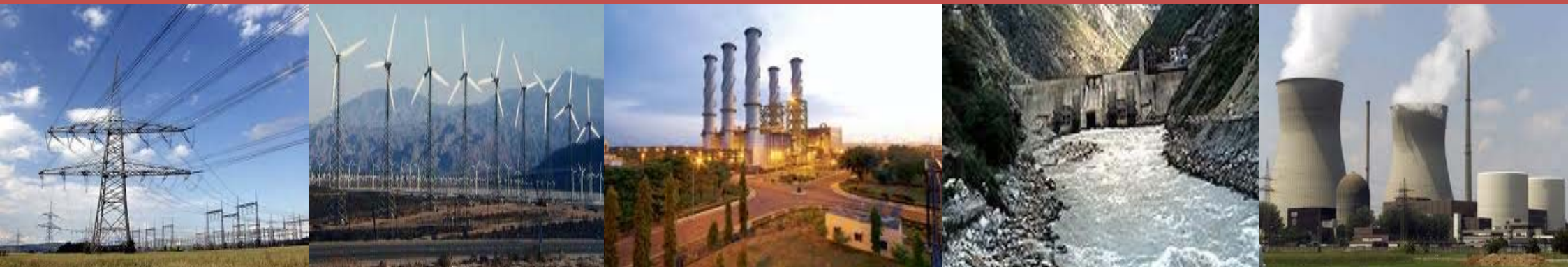
Continued support from Long term investors

Rs.in Crores

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>
Gross Income	237.65	321.04	530.38	590.19	723.83	1030.68
Excise Duty	31.53	40.09	42.59	32.78	43.41	64.12
Net Income	206.13	280.96	487.79	557.41	680.43	966.57
Material Consumed	129.01	156.03	299.27	327.77	372.43	560.78
Material Consumed %	62.59	55.54	61.35	58.80	54.73	58.02
Other Costs	47.39	65.61	118.78	143.64	185.62	235.75
Other Costs %	22.99	23.35	24.35	25.77	27.28	24.39
Other Income	9.44	11.69	25.99	25.99	25.60	24.65
Other Income %	-4.58	-4.16	-5.33	-4.66	-3.76	-2.55
EBIDTA	39.17	71.01	95.73	112.00	148.98	194.68
EBIDTA %	19.00	25.27	19.63	20.09	21.75	20.14
PAT	19.22	36.12	44.14	58.59	75.60	101.20
PAT %	9.32	12.86	9.05	10.51	11.11	10.47
EPS	11.10	20.90	25.50	33.80	43.64	58.42

Rs.in Crores

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>
Gross Block	102.32	115.41	144.57	151.33	241.14	346.07
Investment	0.36	4.99	4.41	10.44	7.96	8.62
Cash & Bank Balance	88.25	72.40	72.94	93.98	59.63	63.01
Total Assets	273.43	308.70	305.46	387.18	660.99	899.38
Net Worth	163.48	184.17	218.02	261.20	316.04	404.60
Loan Funds	92.29	111.37	71.74	107.68	138.67	283.26
Capital Employed	265.75	302.05	298.23	372.69	287.82	421.02
Return on Net Worth %	12	21	22	24	26	28
Return on Capital Employed %	13	23	30	31	42	51
Asset T/o Ratio	2.28	2.89	4.07	4.11	3.03	2.90
Debt Equity Ratio	0.56	0.60	0.33	0.41	0.44	0.70



SOLAR INDUSTRIES INDIA LIMITED

Thank You

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