

Reliance Power Limited

Corporate Presentation

June 2012



Contents

1. Company Overview
2. Unique strengths
3. Financial Performance
4. Performance of Operating plants
5. Projects under implementation

Bird's eye view of Rosa plant

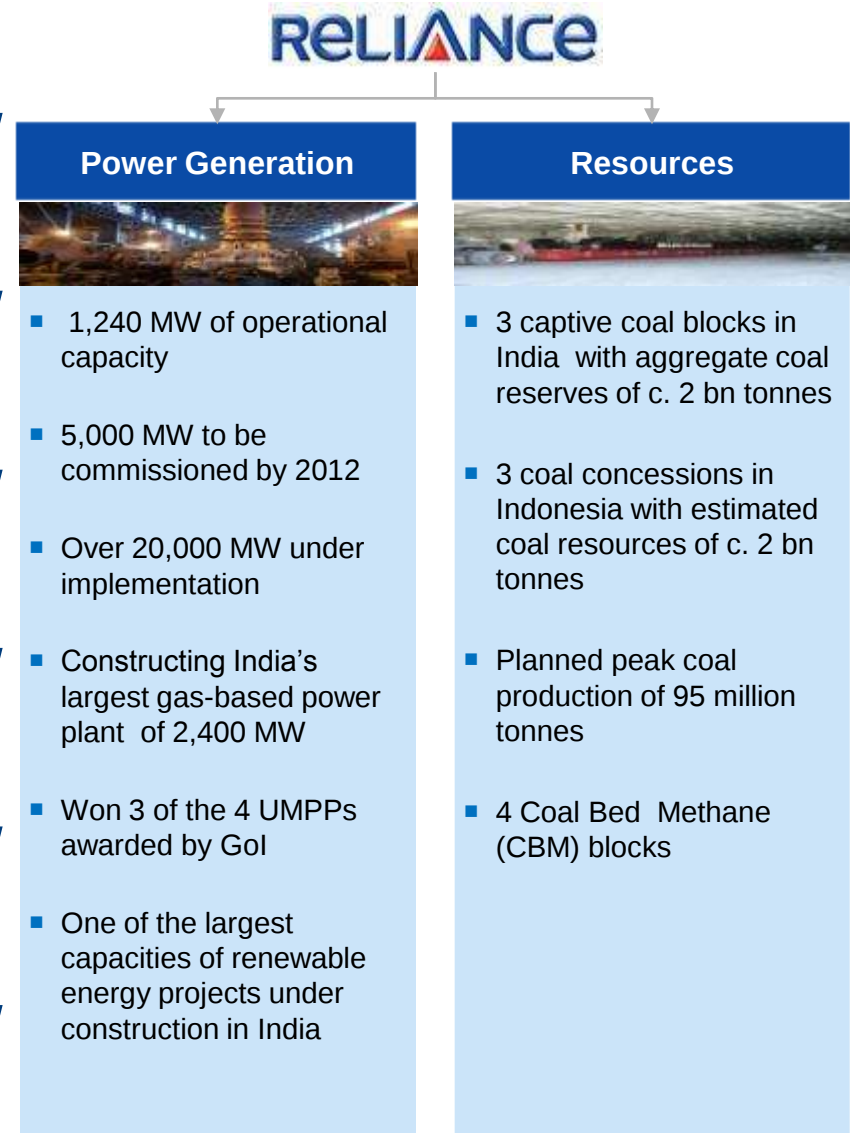


Section 1

Company Overview

Reliance Power: A Snapshot

- 
One of India's leading power development company
- 
Largest portfolio of power projects under construction and development in the private sector
- 
Largest coal reserves amongst private power generation companies
- 
Portfolio well diversified by fuel, fuel-source , geography and offtake
- 
Focus on environmentally friendly technologies
- 
Reliance Group's brand, experience and position in the Indian Power Sector



Section 2

Unique strengths

Reliance Power: Key Strengths

Diversified generation portfolio

Secured Fuel Supply

Focus on Long Term Power Purchase Agreements

Low cost of generation

Creating new benchmarks

Reliance Power: Key Strengths

Diversified generation portfolio

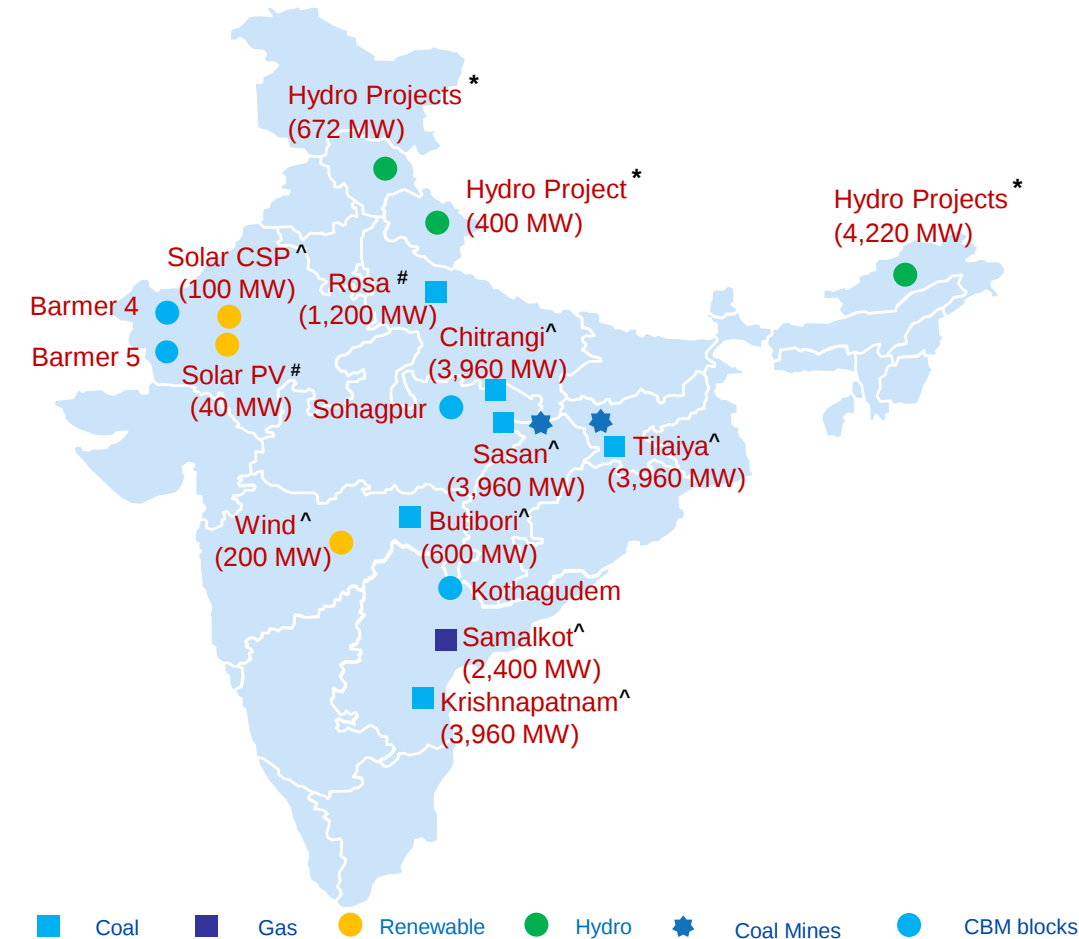
Secured Fuel Supply

Focus on Long Term Power Purchase Agreements

Low cost of generation

Creating new benchmarks

Reliance Power: Projects Portfolio



Operating Projects; ^ Projects Under Construction; * Projects Under Development

Power – Operation

Project	No.	Capacity (MW)
Coal based	1	1,200
Solar	1	40

Power – Implementation

Project	No.	Capacity (MW)
Coal based	5	16,440
Gas based	1	2,400
Solar	1	100
Wind	1	200

Power –Development

Project	No	Capacity (MW)
Hydroelectric	12	5,292
Coal based	1	~5,000

Resources

Asset	No	Resources
Coal blocks-India	3	~ 2 bn tonnes
Coal mine-Indonesia	3	~2 bn tonnes
CBM blocks	4	193.92 BCM

Generation portfolio is well diversified by fuel type, offtake and location

Reliance Power: Key Strengths

Diversified generation portfolio

Secured Fuel Supply

Focus on Long Term Power Purchase Agreements

Low cost of generation

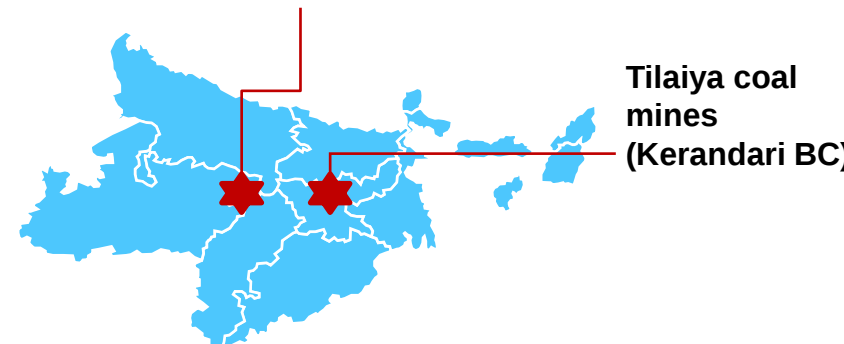
Creating new benchmarks

Secured Fuel Supply – Domestic coal

Projects	Sasan	Tilaiya
Coal block	Moher, Moher-Amlori extn, Chhatrasal	Kerandari BC
Location	Singrauli, Madhya Pradesh	Hazaribagh, Jharkhand
Resources (Million tonnes)	707	1,229
Peak Production (Million tonnes per annum, MTPA)	25	40

~2 bn tonnes of coal reserves within a range of 450 km

Sasan coal mines
(Moher, Moher Amlori Ext. and Chhatrasal)



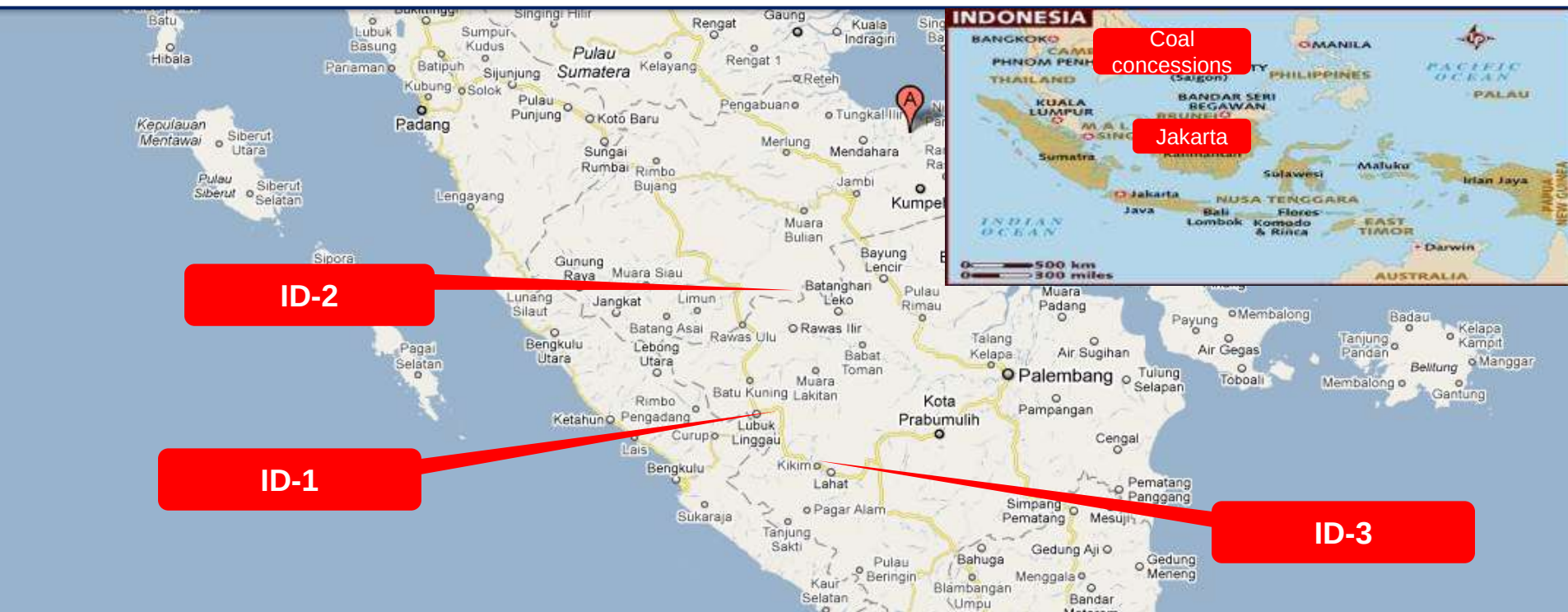
Tilaiya coal mines
(Kerandari BC)

65 million tonnes of annual production can support 16,500 MW

Can support a capacity of 16,500 MW; production to start next quarter

Secured Fuel Supply – Imported coal (Indonesia)

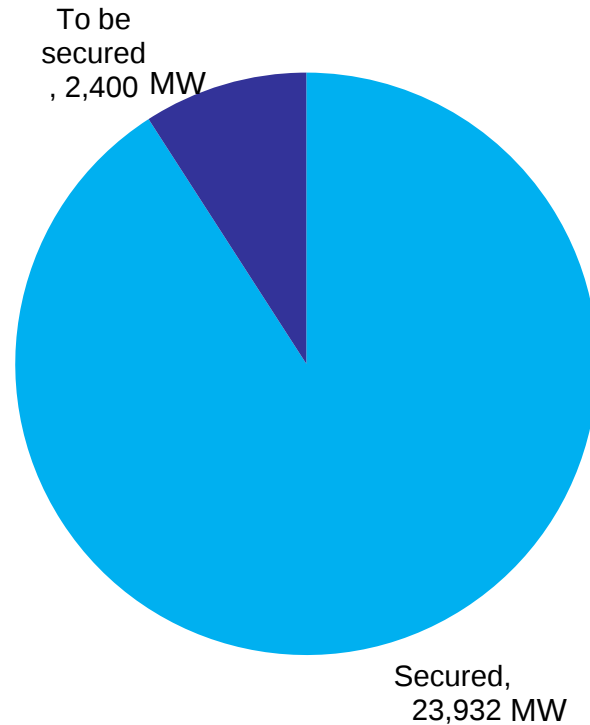
~2 bn tonnes of coal resources in South Sumatra, Indonesia



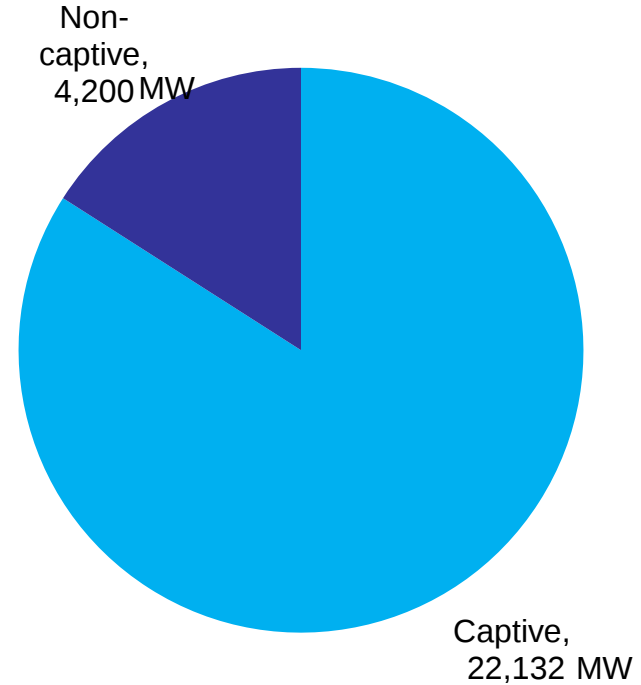
Annual production target of 30 million tonnes

Can support a capacity of 8,000 MW; production to start in FY12-13

Fuel Security - Portfolio



Fuel secure for all projects other than Samalkot



Captive fuel for all projects other than Rosa, Butibori, Samalkot

Fuel secured for 91% capacity, captive fuel for 84% capacity

Reliance Power: Key Strengths

Diversified generation portfolio

Secured Fuel Supply

Focus on Long Term Power Purchase Agreements

Low cost of generation

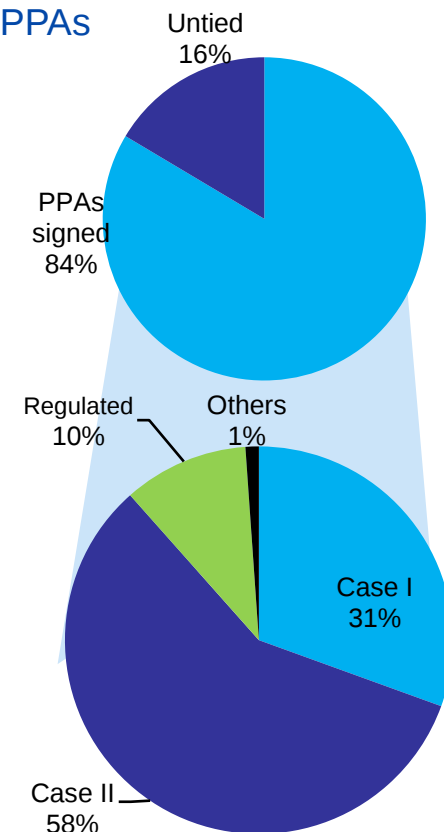
Creating new benchmarks

Focus on Long-Term Power Purchase Agreements (PPAs)

84% of generation capacity Under Operation and Construction is tied-up through PPAs

Project	Capacity (MW)
PPAs signed	13,720
Untied Capacity	2,700

Off Take Arrangement by type (MW)			
Case 1	Case 2	Regulated	Others
4,207	7,920	1,440	153



Long-term PPAs to provide secured revenue and cash flow streams

Reliance Power: Key Strengths

Diversified generation portfolio

Secured Fuel Supply

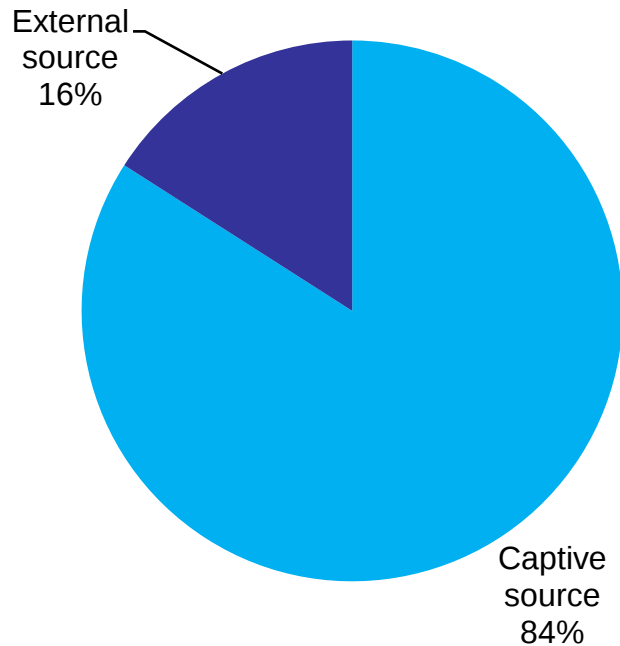
Focus on Long Term Power Purchase Agreements

Low cost of generation

Creating new benchmarks

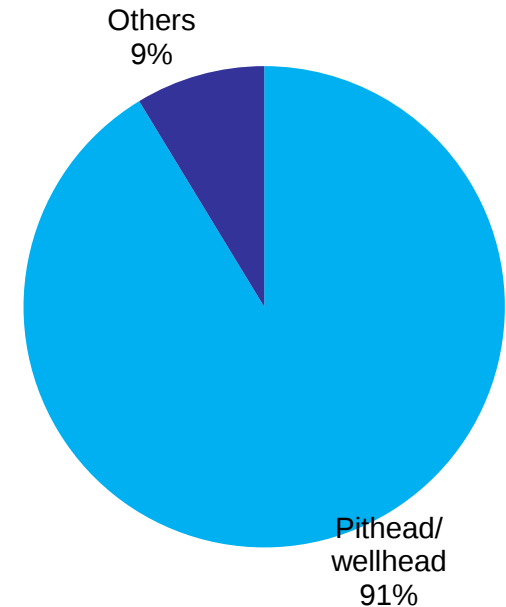
Low Cost of Generation

Low dependence on external sources



No dependence on external sources other than for Rosa, Butibori & Samalkot

Majority capacity located at pit-head/well-head



All projects other than Rosa & Butibori located at pithead/ well head

Captive and pit-head/well-head source ensure control over costs

Low Cost of Generation

Standardized equipment / processes

High repeatability

Efficient operations

Low operations and maintenance cost

Standardized equipment lead to high efficiency & lower operating costs

Low Cost of Generation

Innovative financing

Dollar debt for equipment imports – matching \$ liabilities with \$ funding

Focus on Exim-banks - \$12 bn from Chinese banks, \$5 bn from US bank

Meet exposure norms of domestic banks

Lowest funding cost

Innovative financing to lower interest costs

Low Cost of Generation

Captive Fuel Sources

Pithead / Wellhead Project Locations

Standardization of equipment

Strategic tie-ups with equipment vendors

Access to ECB Funding

- Low fuel cost

- Low fuel transportation cost

- Low O&M expense

- Low lifecycle cost

- Low financing cost, diversification of funding sources

Low cost of generation

Low cost of generation to act as a significant competitive advantage

Reliance Power: Key Strengths

Diversified generation portfolio

Secured Fuel Supply

Focus on Long Term Power Purchase Agreements

Low cost of generation

Creating new benchmarks

Benchmarks in Power plant development

Rosa I: 600 MW

- Commissioned 3 months ahead of schedule

Rosa II: 600 MW

- Commissioned 4 months ahead of schedule

Solar PV: 40 MW

- Constructed in record time of 129 days

Samalkot: 2,400 MW

- Gas turbines ready for commissioning in just 15 months

Butibori: 600 MW

- Project to be synchronized in just 22 months

Sasan: 3,960 MW

- Hydro test completed in record time of 10.5 months

Constantly implementing projects ahead of schedule

Benchmarks in Coal mine development

	Reliance Approach	Standard Mining Approach in India
Planning	Adopting global norms	Conservative norms
Technology	Innovative and globally advanced technology	Domestically tried and tested technology
Size of equipment	Largest eqpt. Dragline : 61 m ³ Shovel : 42 m ³ Dumper : 240 ton	Smaller eqpt. (majority) Dragline : 24 m ³ Shovel : 10 m ³ Dumper : 85 ton
CAPEX Decision	Driven by life-cycle analysis	Driven by initial capex minimization
Ramp-up period	Peak capacity in 5/7* years	Peak capacity in 10-20 yrs
Coal mine efficiency to be in line with global standards		

Use of efficient technology to earn Carbon Credits

CERs – Sasan, Krishnapatnam and Tilaiya UMPPs

- World's largest Power projects registered under Clean Development Mechanism (CDM) – 11,880 MW
- All UMPPs registered
- One of the world's largest emission reduction companies
- Reduction of 5.6 million tons CO₂/annum
- Eligible for 56 million Certified Emission Reduction (CERs) over 10 years

Available CERs for Sale Per Year

Coal based portfolio	5.6 million
Gas based portfolio	5.8 million
Renewable energy	0.7 million
Total	12.1 million

CERs – Other Projects

Samalkot Project	■ Host country clearance obtained and global stakeholder consultation process underway
Renewable energy	■ Initial documentation work in progress

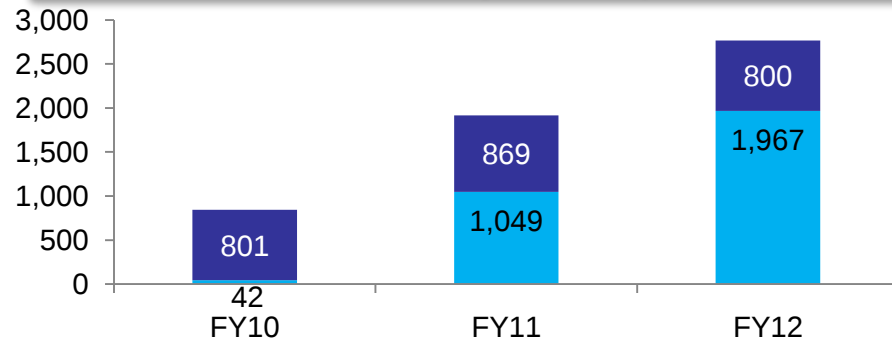
Attractive Revenue Stream From Carbon Credits

Section 3

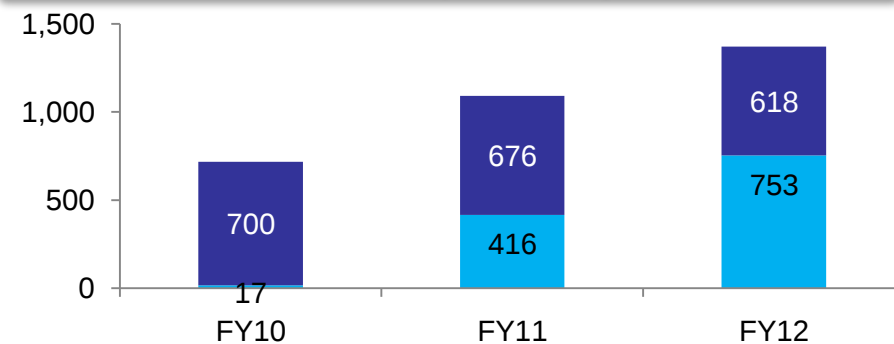
Financial Performance

Robust Financial Performance

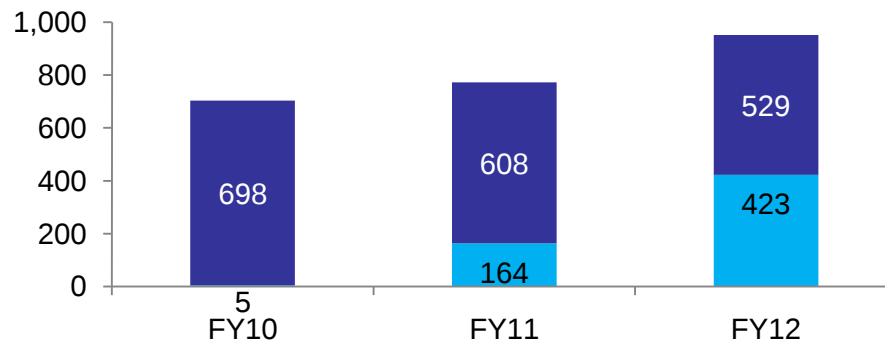
Revenue (Rs crore)



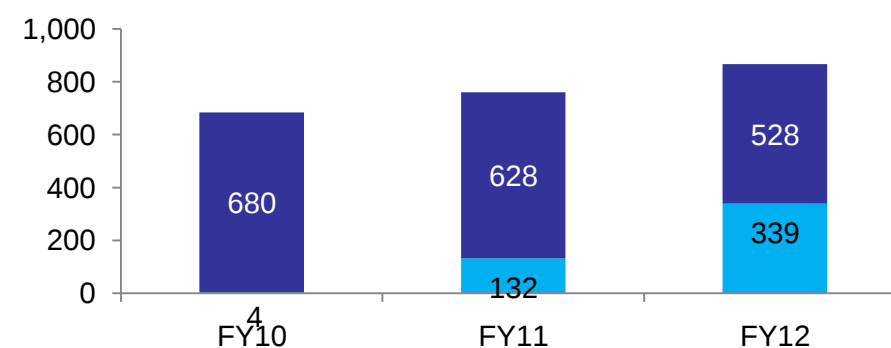
EBITDA (Rs crore)



PBT (Rs crore)



PAT (Rs crore)



Contribution from generating assets
 Others

Continuous improvement in financials of generating assets

Section 4

Performance of Operating plants

Performance of Operating Plants

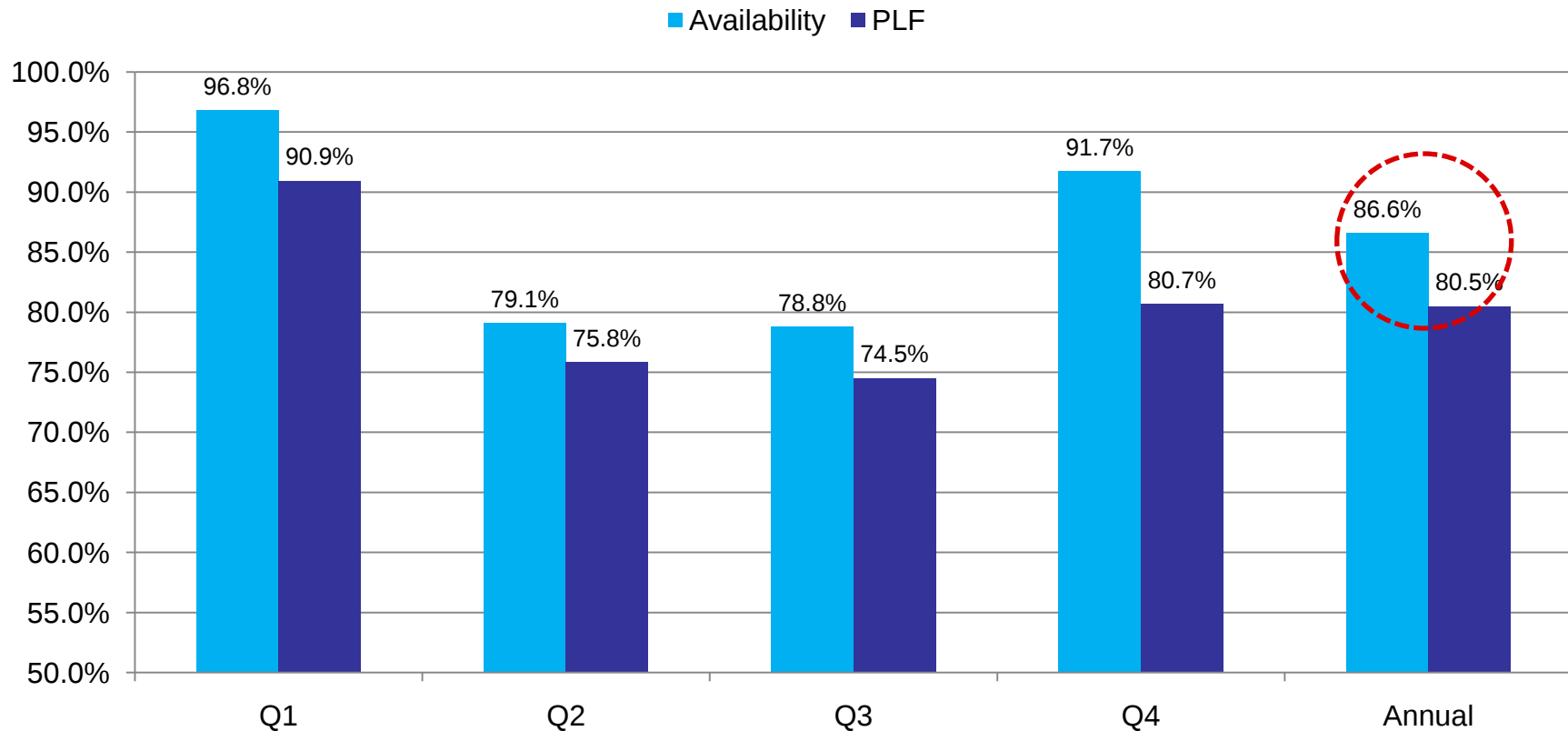


Rosa – 1,200 MW



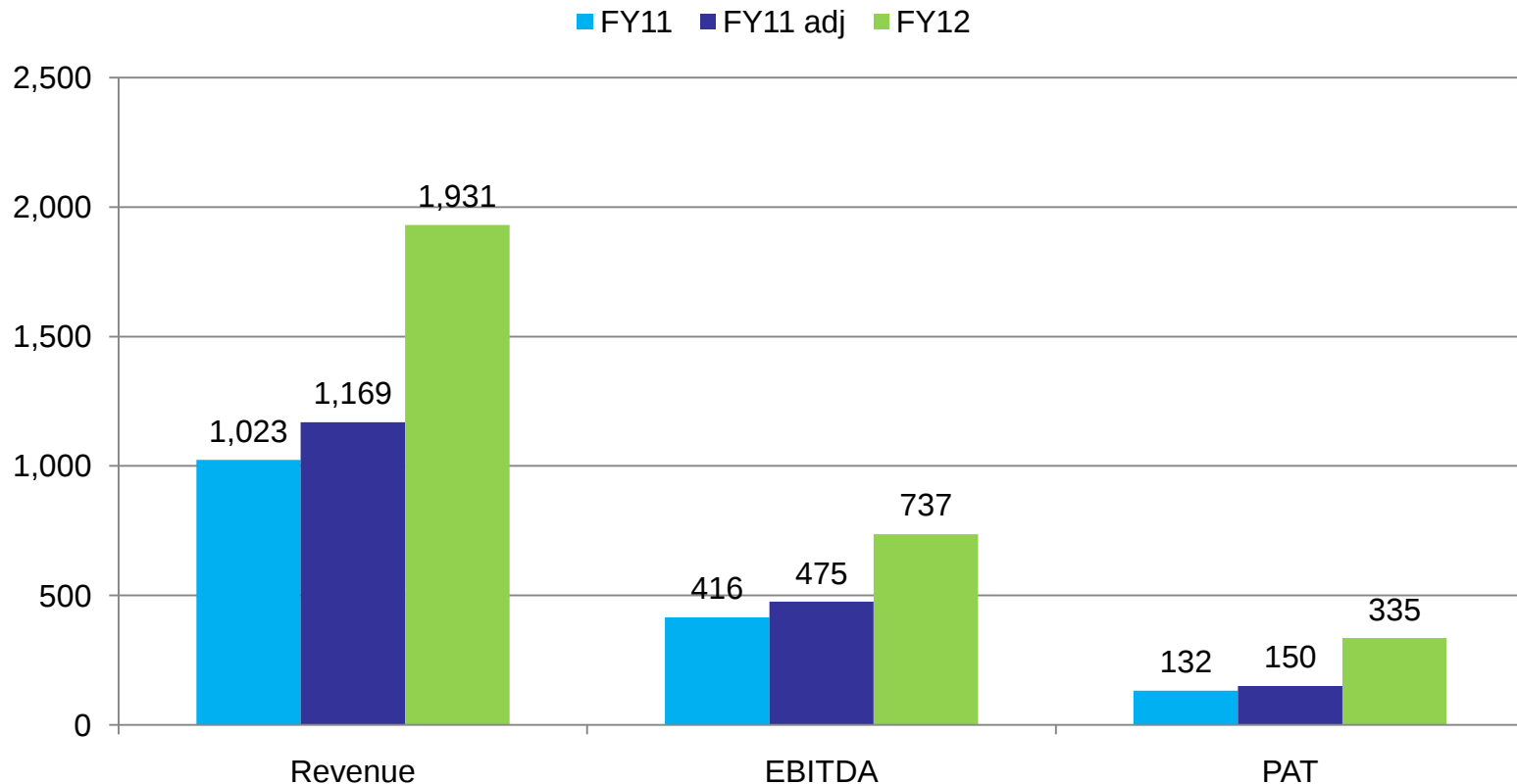
Solar PV – 40 MW

600 MW ROSA I, UP: Operating Performance



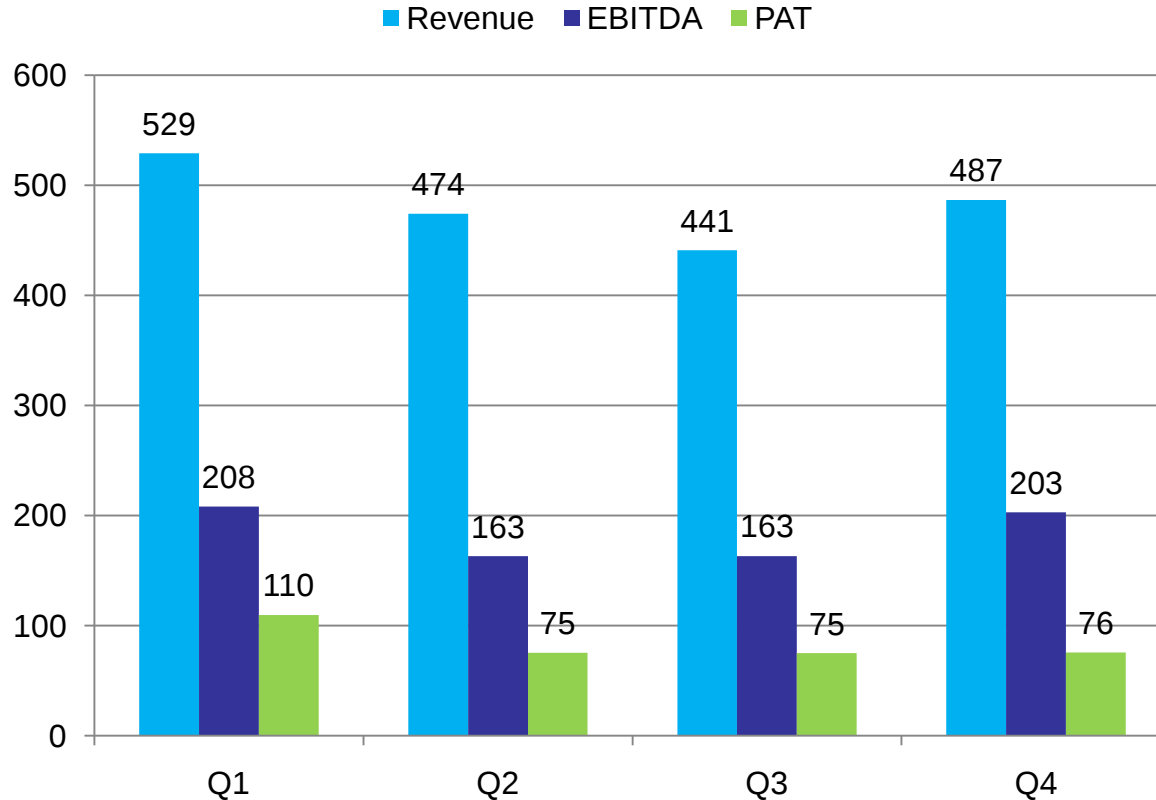
Plant Availability of 87% and PLF of 80%

600 MW ROSA I, UP: Financial Performance



123% growth in profit in FY12 over FY11 (adjusted for days of operation)

600 MW ROSA I, UP: Financial Performance



FY 2011-12

Revenue: Rs 1,931 cr

EBITDA: Rs 737 cr

PAT: Rs 335 cr

Strong financial performance with annual profit of Rs 335 crore

40 MW Solar PV, Rajasthan

Constructed India's largest Solar PV Plant in just 129 days

To provide power to 75,000 households in Mumbai

Debt (\$113 mn) entirely funded by US-Exim & ADB



Achieved COD in March 2012 – in just 129 days

Section 5

Projects under implementation

Progress of projects under construction

Butibori: 600 MW

Sasan UMPP: 3,960 MW

Samalkot: 2,400 MW

Renewables: 300 MW

Progress of projects under construction

Butibori: 600 MW

Sasan UMPP: 3,960 MW

Samalkot: 2,400 MW

Renewables: 300 MW

600 MW Butibori, Maharashtra: Highlights

- Steam blowing completed for Unit 1

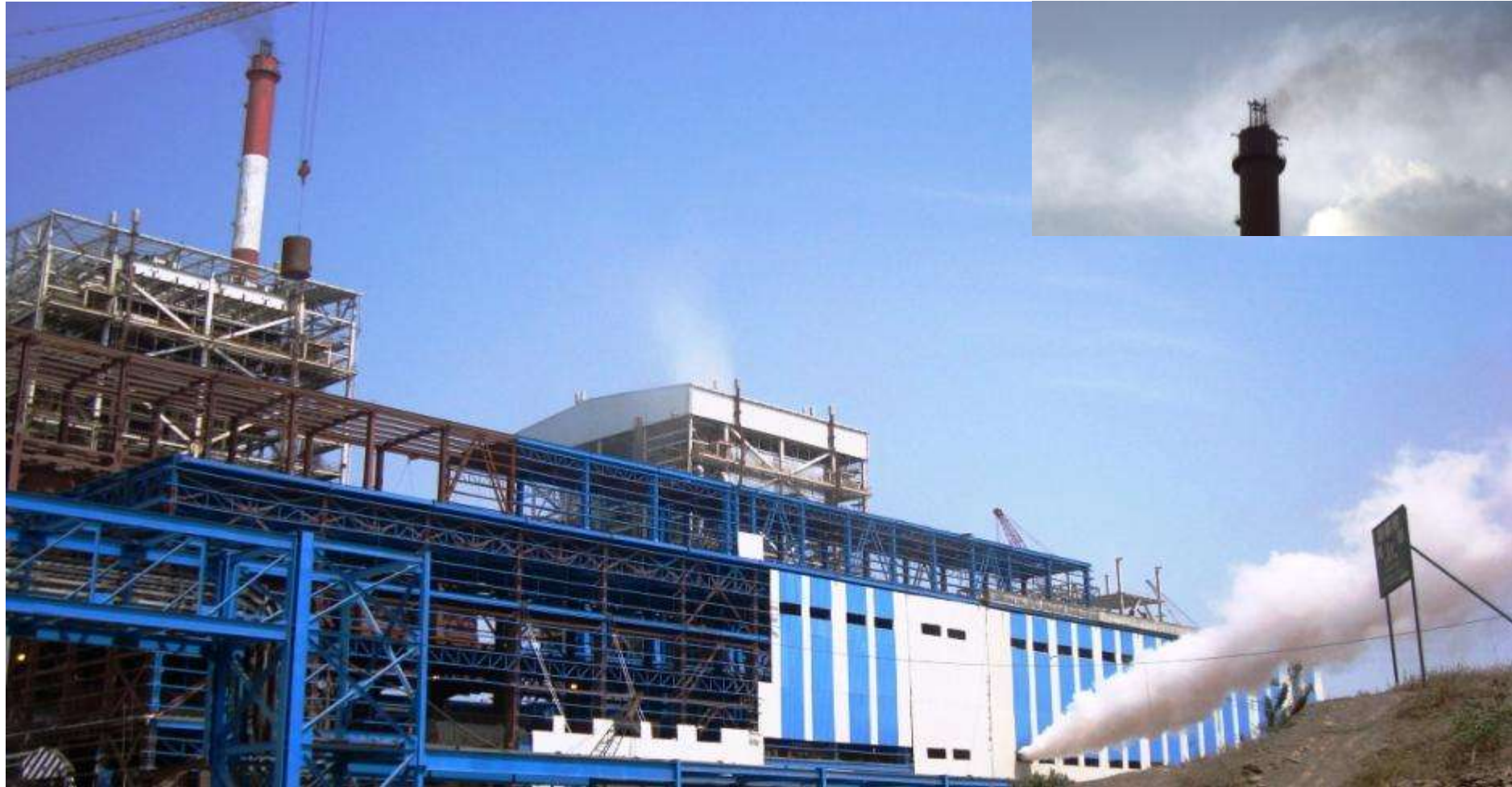
- Boiler hydro test completed for Unit 2

- All auxillaries Raw Water,DM Water, Compressed Air, Oil Systems commissioned

- Start Up power & Evacuation system ready

Project to be synchronized in June 2012

600 MW Butibori, Maharashtra : Construction Update



Steam blowing - Unit 1

600 MW Butibori, Maharashtra : Construction Update



Oil firing – Unit 1

600 MW Butibori, Maharashtra : Construction Update



TG Area

Progress of projects under construction

Butibori: 600 MW

Sasan UMPP: 3,960 MW

Samalkot: 2,400 MW

Renewables: 300 MW

3,960 MW Sasan UMPP, MP: Highlights

- 
- Boiler hydro test completed for first unit in record time

- 
- Boiler erection in progress in all six units

- 
- Pressure parts erection in 3 units
 - Structure erection in next 3 units

- 
- First unit TG & ancillaries erection in progress;
 - Second unit TG deck casting completed

Hydro test completed for first unit

3,960 MW Sasan UMPP, MP: Construction Update

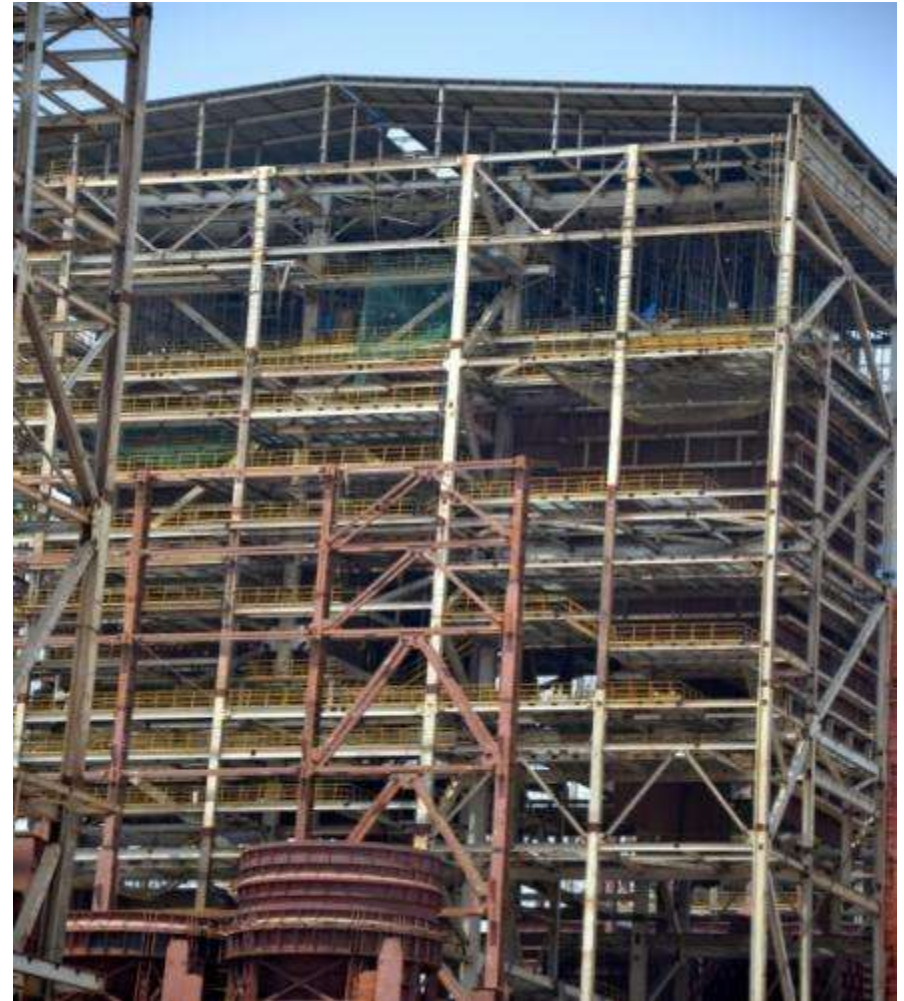


3,960 MW Sasan UMPP, MP: Construction Update



Boiler pressure parts and PHB erection progress for Unit 1 to 3

3,960 MW Sasan UMPP, MP: Construction Update



Boiler pressure parts erection progress

3,960 MW Sasan UMPP, MP: Construction Update

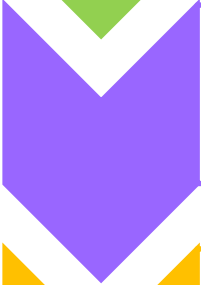


HP-IP and LP turbine erection in progress for first unit

Sasan UMPP, MP: Mine Highlights

- 
- Large sized equipment commissioned and put to use

- 
- Three 42 m³ rope shovels in operation
 - Assembly of 2 more rope shovels in progress

- 
- Twelve 240 tonne Dumpers in operation
 - Mine Auxiliary Equipment (Cranes, Trucks) in Operation

- 
- Four large size Dozers and five Graders in operation
 - Two Drills in operation

Large sized equipment deployed, coal production start next quarter

Sasan Mines, MP: Mining Equipment



Dumpers in operation

Sasan Mines, MP: Mining Equipment



Rope shovel in operation

Sasan Mines, MP: Infrastructure construction



CHP crusher house civil work in progress

Progress of projects under construction

Butibori: 600 MW

Sasan UMPP: 3,960 MW

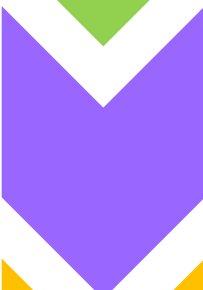
Samalkot: 2,400 MW

Renewables: 300 MW

2,400 MW Samalkot, AP: Highlights

- 
- Two gas turbines already synchronized
 - Two more gas turbines tested at Full Speed No load (FSNL)

- 
- Connectivity for start up power obtained

- 
- Consent for Operation received from AP state pollution control board

- 
- Construction for combined cycle in progress. Expected to be completed by the end of the year

2,400 MW Samalkot, AP: Construction Update



2,400 MW Samalkot, AP: Construction Update



Block#3

2,400 MW Samalkot, AP: Construction Update



Gas Insulated Switchyard and Transmission Towers

2,400 MW Samalkot, AP: Construction Update



IDCT – Cooling towers

Progress of projects under construction

Butibori: 600 MW

Sasan UMPP: 3,960 MW

Samalkot: 2,400 MW

Renewables: 300 MW

100 MW Solar CSP, Rajasthan: Status Update

Land

- Entire land (340 hectare) under possession

PPA

- Signed with NRVN at a levelized tariff of Rs 11.97/unit

EPC

- Signed with R-Infra
- AREVA to provide Solar Field technology supply

Contracts

- All major contracts awarded

Transmission

- To share switchyard and transmission facilities with 40 MW Solar PV plant

On track to be commissioned by May 2013

100 MW Solar CSP, Rajasthan: Construction Update



Area grading

100 MW Solar CSP, Rajasthan: Construction Update



General Civil Works

200 MW Vashpet Wind, Maharashtra: Status Update

PPA

- PPA signed with R-Infra, regulated tariff of Rs 5.67/unit

EPC Contract

- Signed with Global Wind Power Limited (GWPL)

Land Acquisition

- Land acquisition in progress – 55 acres acquired
- Completed for 37.5 MW

Construction Activities

- 10 MW erected and are in testing phase
- Foundation work: Completed (10 MW) , WIP (10 MW)

Financing

- USD 25mn is sanctioned as an ECB facility from Axis Bank
- In discussion with other bankers for balance funding

45MW to be commissioned by Sep 2012

200 MW Vashpet, Maharashtra: Construction Update



WTG Erection in progress – Rotor Hub, Nacelle & Tower Erection

200 MW Vashpet, Maharashtra: Construction Update



Rotor Hub erection in progress



Erected turbine

Progress of projects under development

Chitrangi Power Project: 3,960 MW

Tilaiya UMPP & Coal Mines: 3,960 MW

Hydro Projects: 5,292 MW

Indonesian Coal

3,960 MW Chitrangi, MP: Highlights

Land

- Entire govt. land under possession
- Entire private land awarded, mutation and diversion completed

Water

- CWC clearance for water from Gopad received

Construction

- Site leveling completed
- Main plant civil work ready to commence

Coal

- From captive coal mines

Construction to commence shortly

3,960 MW Tilaiya UMPP, Jharkhand: Highlights

Land

- Private land (186 acres): Ownership Transferred
- Forest land (1220 acres): Stage II Forest Clearance expected shortly
- Govt. land (167 acres): Final approval expected shortly

R&R

- R&R survey complete for Power Plant area
- R&R plan submitted to district administration

CSR

- Medical camps, Hand pump installation, Blanket distribution taken up
- NGOs identified and SHGs being formed for livelihood generation

Financing

- Escrow Assessment study completed
- Letter of Intent submitted to US EXIM for project financing; discussion with other overseas & domestic banks in progress

Progress being made on all aspects of project development

Tilaiya Coal Mines, Jharkhand: Highlights

Land

- Application for Section 4 notification under approval at State revenue dept.
- Forest Diversion proposal under approval at State Forest Department

R&R

- Socio-economic survey completed
- R&R colony land finalized, land document collection in progress

EC & FC

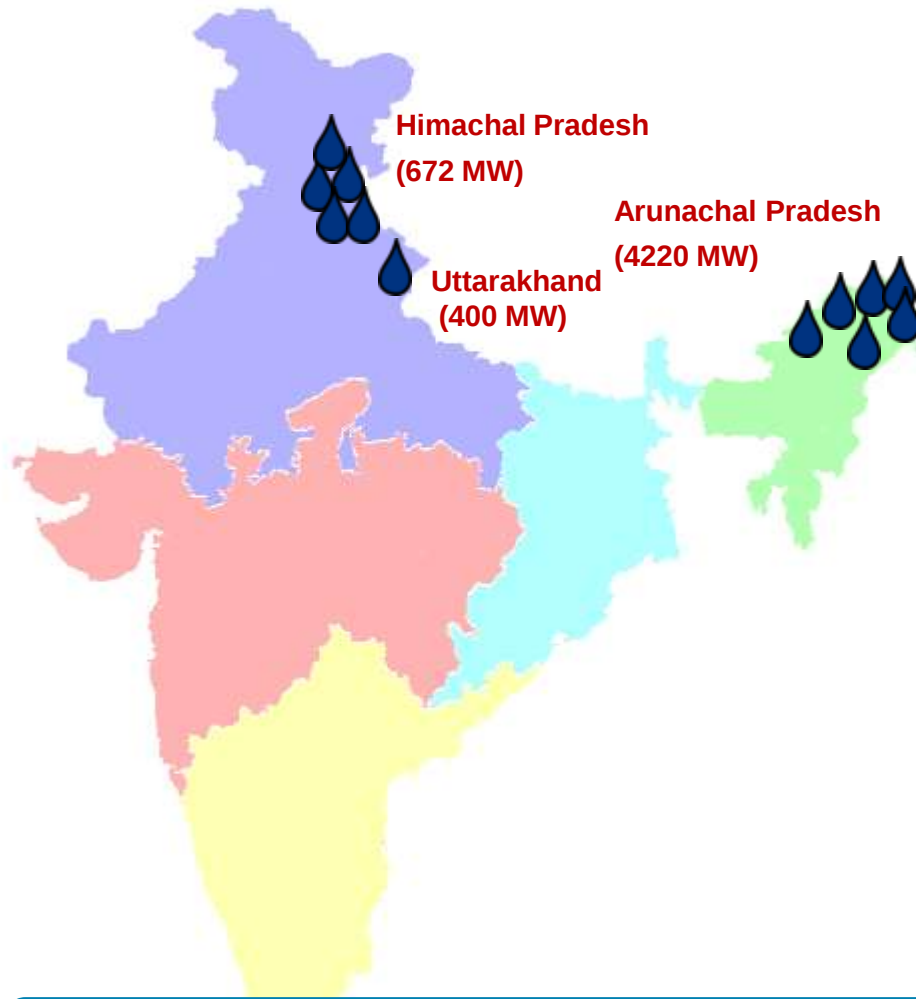
- EIA/EMP completed ; public hearing completed
- Stage-I Forest Clearance being processed for recommendation by State Govt.

Coal Mining

- MoU signed with RWE, Germany for mine planning and design
- Detailed project report received from RWE
- NIT issued for major equipments; Discussions with OEMs in progress

Progress made on land acquisition and mine planning

5,292 MW Hydro Portfolio



Project	Location	Capacity (MW)
Tato II	Arunachal Pradesh	700
Siyom	Arunachal Pradesh	1,000
Kalai II	Arunachal Pradesh	1,200
Urthing Sobla	Uttarakhand	400
Emini	Arunachal Pradesh	500
Amulin	Arunachal Pradesh	420
Mihundon	Arunachal Pradesh	400
Purthi	Himachal Pradesh	300
Teling	Himachal Pradesh	94
Shangling	Himachal Pradesh	44
Sumte Kothang	Himachal Pradesh	130
Lara Sumta	Himachal Pradesh	104
		5,292

Development activities in progress for each project

Indonesian Coal: Highlights

51,000 m of drilling completed in all 3 concessions

JORC Resources and Reserves certified by Marston, USA

All major clearances obtained

Detailed mine plan for commencement of mining prepared

Coal production to start in end of FY12-13

Indonesian Coal: Transportation infrastructure



Detailed bathymetric survey of Musi, Lalan & Lilin rivers completed

Feasibility study for transportation of coal using barges along Musi River completed by reputed European consultant



Findings indicate feasibility of using barges of upto 4,000 DWT

Discussions held and preliminary proposals obtained from barge operators

Initial coal transportation infrastructure can transport up to 7.5 MTPA

Thank You
