

# Operational Review

## Power



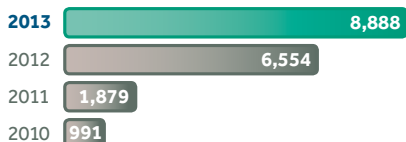
### Key achievements

- Record sales of 8,888 million units, up 35.8% from the previous year
- Strong cost performance, lower cost of generation

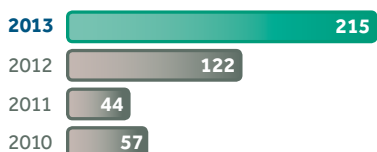
### Strategic priorities

- Enhance power sales and transmission strategy
- Stabilisation of the fourth unit at Sterlite Energy Limited & improved Plant Load Factor
- Improve coal sourcing
- Complete 1,980MW Talwandi Sabo power project

### Production (mu)



### EBITDA (US\$m)



### Map index

- 1 Talwandi Sabo project, Punjab
- 2 Jharsuguda power plants
- 3 MALCO power plant



## CASE STUDY

## Power

A number of efficiency improvements implemented at Sterlite Energy Limited ('SEL') during the financial year have improved reliability and availability, and decreased the use of auxiliary power.

Major modifications to the ash handling plant such as the installation of newly designed pipe systems have increased volumes and reduced the risk of erosion related failures. Reliability and availability of key equipment such as coal mills have been improved by the installation of leak proof hot air gates and an automatic greasing system combined with the replacement of undersized oil coolers.

The modifications to the ash handling plants also contributed to decreasing the use of auxiliary power by reducing the air pressure needed for ash conveyors. Related operational initiatives resulted in halving the number of pumps and fans required.

## Operations

Power sales were 8,888 million units during FY 2012–13, compared with 6,554 million units during the previous year. This increase was primarily due to higher power generation and sales from three units of the Jharsuguda 2,400MW power plant.

The plant load factor ('PLF') of the three operating units in the year was 47%. Overall the station delivered an effective PLF of 40% taking into account all four units. The fourth unit was commissioned on 31 March 2013. PLF was lower than capacity as distribution limits were imposed after the grid failures in August 2012 and there were also power transmission bottlenecks.

The PLF trend accelerated in Q4 FY 2012–13 and was at 58% for three units and 44% for the station as a whole. The increase in PLF was driven by the commissioning of the new shared 1,000MW Raipur-Wardha transmission line in January 2013, and partial easing of the transmission restrictions.

## Unit costs

Average power generation costs in FY 2012–13 were US cents 4.0 per unit compared with US cents 5.5 per unit in FY 2011–12,

## Production performance

	FY 2012–13	FY 2011–12	% change
Power Sales (MU)	8,888	6,554	35.6%
MALCO and Wind Energy	1,358	916	48.3%
SEL	7,530	5,638	33.6%

## Unit costs

	FY 2012–13	FY 2011–12	% change
Sales realisation (US cents/kwh)	6.6	7.5	(12.0)%
Sales realisation (US cents/kwh)	4.0	5.5	(27.3)%

## Financial performance

(In US\$ millions, except as stated)	FY 2012–13	FY 2011–12	% change
Revenue	576.1	458.3	25.7%
EBITDA	215.0	122.0	76.2%
EBITDA margin (%)	37.3%	26.6%	–
Depreciation and amortisation	94.1	81.7	15.2%
Operating profit/(loss)	120.9	40.3	200.0%
Share in group operating profit (%)	4.8	1.7	–
Capital expenditure	702.9	862.4	(18.5)%
Sustaining	1.7	0.5	–
Project	701.2	861.9	(18.6)%

primarily driven by reduced e-auction coal cost and higher usage of linkage coal, plant stabilisation and rupee depreciation translating to lower costs in US dollar terms. Average power sales prices were lower in FY 2012–13 at 6.6 US cents per unit compared with 7.5 US cents per unit in FY 2011–12.

## Financial performance

EBITDA in FY 2012–13 was US\$215.0 million, higher than the EBITDA of US\$122.0 million delivered in FY 2011–12. EBITDA rose primarily due to higher volumes and lower generation costs, partially offset by a fall in power tariffs.

## Projects

## Talwandi Sabo IPP

Work at the Talwandi Sabo power project is progressing well and the first unit is expected to be synchronised in Q2 FY2014 and each subsequent unit at four monthly intervals.

## Outlook

We expect 60–70% PLF for all four units at Sterlite Energy Limited in the near future with further easing of transmission constraints.



Above: Turbine generator, Talwandi Sabo project.

Opposite: Switchyard, Talwandi Sabo project.