China Shenhua Energy Company Key Details From 2016 Interim Results Aptly Titled "Coal Supply-Side Reform"



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Overview

China Shenhua Energy Company (Shenhua) provides enormous detail on the status of the Chinese coal and electricity sectors, plus its expectations looking forward. Several key items we see as newsworthy are:

- Shenhua was profitable in the six months to June 2016 (1HCY2016), but the return on assets was just 2.6% (vs 3.1% in 1HCY2015). Total revenues were 13% yoy, and net profit was down 19% yoy.
- The coal price has been falling in the seaborne market, but also in domestic Chinese markets for the last five years. In the six months to June 2016 the domestic Chinese thermal coal price was again down 14.5% year-on-year.
- This collapsing fuel cost has meant the profitability of Chinese coal-fired power plants was at record highs in the six months to December 2015, notwithstanding collapsing utilisation rates.
- The 2015 result was a record high 70GW of new coal-fired power plant build.
- The Central China government has repeatedly taken action to curtail stranded-asset build by banning new coal fired power plants and cutting the price of coal fired electricity at the start of 2016. Coal fired power wholesale tariffs fell 11.2% yoy in the June 2016 half to Rmb301/kWh (US\$45/MWh).
- The stranded asset risk in China's coal fired power plants are a major financial risk, on top of the financial distress of much of the Chinese coal mining sector at a time the government is closing 500Mt of coal mine capacity and retrenching 1.2 million coal mine workers.
- Shenhua reports the average Chinese coal fired power plant operated for just 2,031 hours in 1HCY2016, a record low utilisation rate of just 46.4% (down from 49.4% in CY2015). Shenhua expects this to get worse in 2HCY2016 and this highlights the massive overcapacity dilemma of the Chinese economy.
- The Chinese government has mandated its successful energy and resource stateowned enterprises (SOE) become more internationally focused. Shenhua is following this mandate and is expanding in Mongolia (coal mining), the U.S. (gas development), Australia (via its Watermark coal mine proposal) and Indonesia (coal mining and 2.6GW of coal-fired power plant development). The 1HCY2016 report highlights that Indonesia is the priority, given massive overcapacity in coal, and Watermark is barely mentioned.
- Shenhua's coal exports rose +117% yoy in 1HCY2016, but remain immaterial at 1.3Mt or 0.7% of total coal volumes of 186Mt. Shenhua's EBIT cost of coal averaged just Rmb104 (-10.8% yoy) or US\$16/t (FOR). Given this, a current thermal coal price of US\$68/t looks very attractive for China to lift exports.

Coal-Fired Power Plant Utilisation Rates – Down to a Record Low 46.4%

Shenhua reports the average Chinese coal fired power plant operated for just 2,031 hours in 1HCY2016.¹

Annualising this gives 4,062 hours of operation against the maximum 8,760 hours pa (365 days * 24 hours), a record low utilisation rate of just 46.4% (down from 49.4% in CY2015).

Shenhua expects this to get worse in 2HCY2016, and this highlights the massive overcapacity dilemma of the Chinese economy. With electricity demand in China forecast by IEEFA to grow at just 1-3% pa over the rest of this decade, and a record new build of hydro, nuclear, wind and solar, coal-fired power demand is expected to continue falling at around the 2% rate seen over 1hCY2016.

China's efficiency of coal use continues to improve. Shenhua reports that in 1HCY2016 it used 314 grams per kilowatt hour (g/kWh) a decline of 4g or 1.2% yoy, consistent with the trend seen over the last decade. As such, Shenhua reports total Chinese coal consumption declined 4.6% yoy to 1,810Mt in 1HCY2016, a slightly lower rate than the 5.1% reported by the NRDC.

The Chinese government has repeatedly said it will use stricter enforcement of environmental, safety and energy efficiency standards as well as tougher credit controls to help fight against overcapacity in key industrial sectors.²

Zhang Shumin, China Guodian Corp's chief economist, said "Thermal power plants will face difficulties in operating in the next three to five year, even edging to bankruptcy, especially for the small plants and those that fail to meet environmental standards".³ The financial sector in China is seeing the brunt of this, with bad debts expected to rise dramatically⁴ (a government policy to maintain higher coal prices could help diminish this immediate impact).

Shenhua reports that it is constantly working to optimize its production structure to implement the government's coal supply side reform.

Shenhua Power Generation – Retrofitting Even New Capacity

Shenhua is also continuing a rapid retrofit upgrade strategy of all of its existing Chinese coal-fired power plant units to introduce "ultra-low emissions" technologies, not withstanding many of these plants have only been commissioned in the last five years.

¹ Shenhua 1HCY2016 report, page 11

http://www.hkexnews.hk/listedco/listconews/SEHK/2016/0828/LTN20160828039.pdf

² http://www.reuters.com/article/us-china-overcapacity-idUSKCN10O065

³ http://www.reuters.com/article/us-china-power-idUSKCN114103

⁴ https://www.ft.com/content/7fb04e0a-6b4c-11e6-a0b1-d87a9fea034f

After commissioning 6GW of new coal fired power capacity in 2015, Shenhua is not due to commission any new power plants in 2016.

It is telling that the government mandated a 11.2% decline in coal=fired power prices in 1HCY2016, but left Shenhua's wind (Rmb595/kWh) and hydro (Rmb252/kWh) tariffs flat, a deliberate policy to encourage further electricity sector diversification away from coal fired power to low emissions alternatives.

Coal's 2016 Price Rally - Unsustainable

The rally in the seaborne traded coal price has been dramatic, and some are now arguing this is the start of a normal cyclical recovery – supply has been curtailed and demand is re-emerging.

IEEFA would note that the facts don't support this. China's thermal coal imports surged 31% yoy in July 2016 to 9.3Mt (year to July 2016 is up 0.8% to 49.9Mt).⁵ This reflects the inevitable short=term outcome of a 9.7% yoy decline in coal production across China being twice the rate of decline in China's coal consumption.⁶ Imports are the balancing, high cost, marginal source of supply.

Like Shenhua and China Coal Energy Co., Yanzhou Coal Mining Co. reports its 2016 focus is on the "uninterrupted implementation of reform of the supply policy formulated by Chinese government."

Shenhua also reports supply curtailments of Indonesian exports at 175Mt or down 7.4% yoy and American coal exports down 30% yoy to 25Mt in 1HCY2016. Australian exports of 187Mt were also marginally lower in 1HCY2016.⁷ Russia was reported to run contrary to this trend with coal exports +3.1% yoy to 79Mt. So reduced supply from the major exports and reduced domestic production in China has meant a tighter demand / supply balance in the short term. IEEFA would view a supply response as inevitable given most coal exporters can produce at strongly positive cash margins.

Shenhua reports that Indian coal imports were down 8.2% yoy to 89Mt in the first five months of 2016, and South Korean coal imports were down 3.1% yoy to 66.1Mt while Japanese coal import demand was flat at 93.2Mt.

Shenhua Coal Production Costs – US\$16/t

Shenhua's EBIT cost of coal averaged just Rmb104 (-10.8% yoy) or US\$16/t free on rail (FOR). This is inclusive of Rmb20.6/t of depreciation, so the gross cash cost of production before transportation is Rm84/t (US\$13/t). Given that Shenhua owns its own coal rail and port infrastructure, exports can provide a high gross margin outlook for surplus thermal coal capacity.

- ⁶ https://www.bloomberg.com/gadfly/articles/2016-07-22/false-dawn-for-coal
- 7 Shenhua 1HCY2016 report, page 53

⁵ http://www.platts.com/latest-news/coal/london/chinese-july-thermal-coal-imports-jump-31-on-

^{26529468?}hootpostid=92165510502b7c804817ad42011537c0

Financially Robust

Unlike almost all other listed global coal companies (except the well capitalised Coal India Ltd), Shenhua remains profitable and financially robust. Shenhua's market value of equity at June 2016 was US\$41bn, making it by far the largest listed coal company by value. Shenhua is 73% owned by the Chinese SOE, Shenhua Group Corporation.

Net debt as at June 2016 was US\$6bn, down from US\$9bn at December 2015.

It is also significant that both China Coal Energy Co. and Yanzhou Coal Mining Co. also reported a return to profitability in 1HCY2016 on the back of significant cost reductions in their coal-mining operations before the benefit of the seaborne price recovery in mid-2016. In IEEFA's view, this will limit the scope of the price recovery given that China will likely ease supply constraints to stem rising imports.

International Expansion – Indonesia Rather Than Watermark

The Chinese government has mandated its successful energy and resource SOE to become more internationally focused.

Shenhua is following this mandate and started this decade with greenfield expansion projects in Mongolia (coal mining and rail infrastructure), the U.S. (gas development), Australia (via its Watermark coal mine proposal) and Indonesia (coal mining and 2.6GW of coal-fired power plant development).

Shenhua's 1HCY2016 report highlights that Indonesia is the priority given China's massive overcapacity in coal; it is no surprise given the declining demand profile in China and overcapacity that the proposed Watermark 10Mtpa thermal coal mine is barely mentioned. The NSW government's decision to pay BHP Billiton A\$220m to buy back the adjacent Caroona coal mine proposal in July 2016 on food and water security grounds will serve to leave this project in limbo without a mining licence eight years into the project.

In Indonesia, Shenhua is looking to push ahead with its Jawa-7 2,000MW and Sumsel-1 600MW domestic "clean" coal-fired power plant proposals, having already commissioned a 2Mtpa thermal coal mine. Shenhua stresses it will proceed with a strategy that avoids speculative investments.

In 2016, coal-mining capital investment by Shenhua has been cut to a bare minimum, with the Power sector (retrofitting) taking the majority of capex. With coal-to-chemicals strategy failing (gross margins were negative and sales were down 35% yoy in 1HCY2016), all capex in this segment has ceased.

In summary, the Chinese electricity is rapidly diversifying away from the excessive reliance on coal and the government of China is introducing a rapid series of polices to drive reform and reduce excessive capacity in heavy industry, with coal mining / power generation and steel two areas of immediate priority focus. IEEFA expects China's coal imports to continue to fall and China to emerge as possible opportunistic, net exporter of thermal coal on any sustained price rally (as is clearly evident this quarter).