

# China Coal-fired Power Monthly

## Coal prices stabilising amid NDRC measures

	Ticker	Rec	Mkt cap		Price	PT	Up/ dn (%)	P/E (x)		P/B (x)		ROE (%)	
			(US\$m)	Ccy				2017E	2018E	2017E	2018E	2017E	2018E
<b>China Resources Power</b>	836 HK	Buy	9,250	HKD	15.02	16.00	+7	14.2	8.7	1.0	1.0	7.2	11.5
<b>Huaneng Power</b>	902 HK	Buy	13,611	HKD	5.31	6.00	+13	29.4	9.4	0.9	0.8	2.9	8.5
<b>Datang Power</b>	991 HK	Buy	7,649	HKD	2.65	3.30	+25	12.0	7.0	0.7	0.7	6.3	9.8
<b>Huadian Power</b>	1071 HK	Hold	5,895	HKD	3.14	3.35	+7	45.1	8.0	0.6	0.6	1.7	7.9
<b>China Power</b>	2380 HK	Hold	2,762	HKD	2.22	2.80	+26	13.1	6.8	0.5	0.5	4.5	8.3

Source: Bloomberg, Company data, CSCI estimates (prices as of 20 November 2017)

- The NDRC has recently rolled out a series of measures to ensure stable coal supplies and prices to meet heating demand over the winter. Thus, the coal price will be refrained from rising further during the traditional peak season.
- Incentivised by the 3Q profitability improvement and coal price stabilisation, the coal-fired power sector has experienced two rounds of rebound during the last week of Oct to the first week of Nov.
- We reiterate our POSITIVE view on the coal-fired power sector, in light of the further profitability improvement driven by the potential of a second round of tariff hike to be announced in late Dec and becoming effective on 1 Jan 2018.

**Power consumption growth slowing down due to seasonal demand off.** In Oct, China's social power consumption reportedly has increased by 4.9% YoY but decreased by 3.5% MoM (vs. +7.1% YoY and -11.3% MoM in Sep). For 10M17, power consumption growth has slowed down to 6.8% YoY (vs. 7.0% of the 9M17). Though power consumption in the secondary industry recorded a mild growth (2.9% YoY and 6.7% MoM) in Oct, all of the other industries posted declining growth in the range of 15%-28% MoM amid cooler weather in the Fall. Nonetheless, **we expect power consumption growth will gather pace in November as China enters the winter season.**

**Hydro power generation growth remained solid.** With a recovery in the water inflow since July, hydro power posted four consecutive months of increase during Jul-Oct, gaining 16.9% YoY in Oct and 2.2% YoY for 10M17 (vs. 18.6% YoY in Sep and 0.3% for the 9M17). In contrast, the growth rates of other power sources have slowed down in Oct, among which coal-fired power has dropped 2.8% YoY (vs. -0.5% YoY in Sep) during the period whilst the 10M17 growth rate has slipped to 5.4% YoY from 6.3% YoY. **We anticipate coal-fired power will pick up gradually starting in November, when North China turns on the central heating powered by cogeneration.**

**The NDRC adopted strict administrative measures to prevent abnormal fluctuations in coal prices.** The NDRC has especially during the period from 27 Oct to 15 Nov warned coal producers, via public as well as internal channels, against price manipulation, since this is a rather sensitive period considering the annual signing of mid-/long-term coal supply contracts for 2018 will be held in late November. Under the government's pressure, the QHD5,500k coal price has gradually come down by RMB5/t and stabilised to RMB620/t. **Amid strict measures adopted by the government, we expect the coal price to fluctuate between RMB600/t and RMB630/t in the remainder months of 2017. (Please refer to page 2 for the details of the NDRC's policies.)**

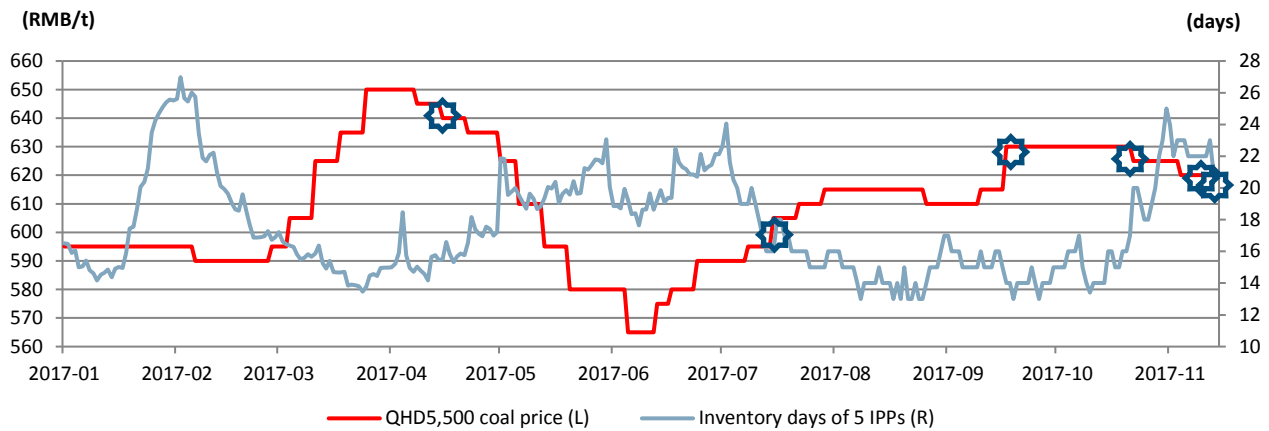
**Sector picks.** The power sector has declined by as much as 8% since October's social power consumption figure was released on 15 Nov, reflecting market's disappointment in the monthly power consumption leading up to announcement and concerns over a slowdown in economic growth during the 4Q. However, we believe this is only a temporary retreat in light of the potential gradual recovery in power consumption starting in November as well as the fundamental profitability improvement in the 2H. In stock picks, we will maintain our Buy rating on Huaneng Power (902.HK, TP: HKD6.00), China Resources Power (836.HK, TP: HKD16.00), and Datang Power (991.HK, TP: HKD3.30) given their relatively higher utilisation of coal-fired power assets than peers.

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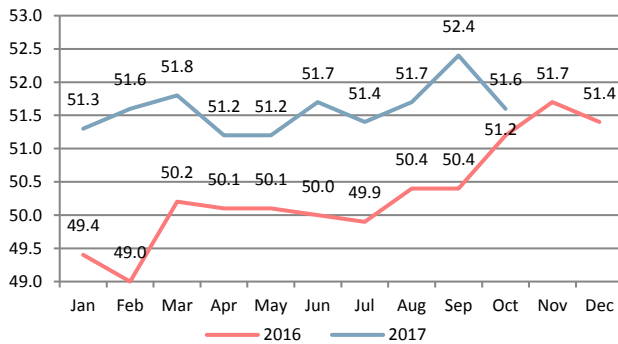
## Key policies driven coal price movement

Figure 1: QHD5,500 coal price vs. Inventory days of IPP

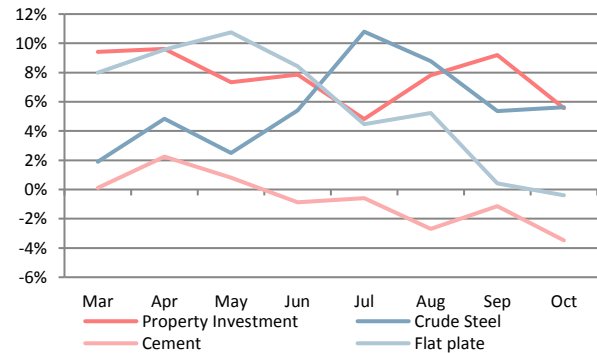


Source: Wind, CSCI Research

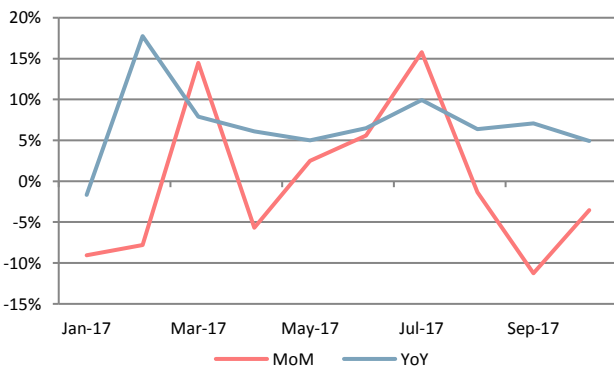
- During a monthly press conference on 15 November 2017, the NDRC outlined four measures to be adopted to ensure stable coal supplies and prices to meet heating demand over the winter, including: 1) To enhance the daily monitoring of the balance of coal supply and demand, 2) To raise the effective coal supply, 3) To meet the coal transportation demand in the key ports, and 4) To increase the utilisation of clean energy and lower the consumption of coal-fired power.
- On 14 November 2017, the NDRC handed out a circular of “urging the signing and fulfilment of mid-/long-term coal supply contracts for 2018”, in order to ensure coal price and supply stability at the coal trading conference held in Qinhangdao on 21-23 November 2017, where major coal producers will sign mid-/long-term contracts with power and steel companies for 2018.
- On 27 October 2017, the NDRC issued a notice to local authorities to conduct regular inspections to monitor activity related to coal trading and at coal ports, and to watch stock levels and price changes for signs of irregularities, including price manipulation, and also to warn coal producers not to abuse their dominant position in the market to sell coal at unfair prices, and to refrain from speculation, hoarding and bidding up prices as power producers stock up to meet heating demand over the winter.
- On 21 September 2017, the NDRC issued a circular to urge the release of advanced coal mine production, in order to guarantee safe supply of power and energy during the 19th Party Congress in October.
- On 19 July 2017, the State Administration of Coal Mine Safety (SACMS) issued the Notice of “Implementation Plan of Coal Mine Safety Inspection”, which stipulated that inspection of coal mines is to be conducted from July to October.
- On 14 April 2017, in an internal meeting hosted by the NDRC with IPPs and coal producers, coal producers expressed their willingness to lower the coal price. As a result, the thermal coal price started to drop post the meeting.
- On 23 March 2017, the Ministry of Environmental Protection (MEP) announced the “Action Plan against Air Pollution in Beijing-Tianjin-Hebei region and surrounding areas” (“the Action Plan”). According to the MEP, 5,600 environmental inspectors were sent to Beijing, Tianjin, and 26 cities (the “2+26 cities”) in the Beijing-Tianjin-Hebei region and nearby areas to check on implementation of pollution control targets and emission standards.

**Figure 2: PMI**


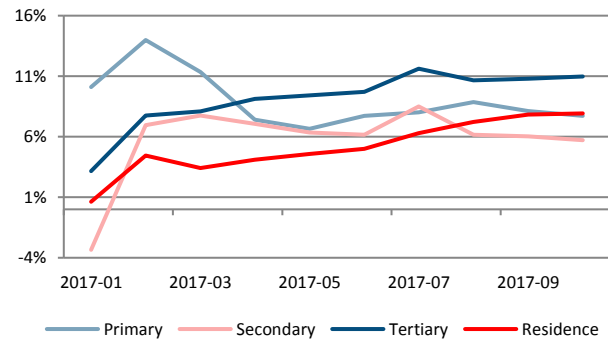
Source: NBS, CSCI Research

**Figure 3: Major industry production/investment**


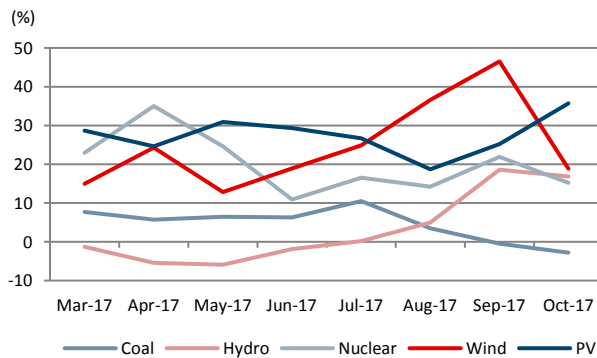
Source: NBS, CSCI Research

**Figure 4: Social power consumption growth**


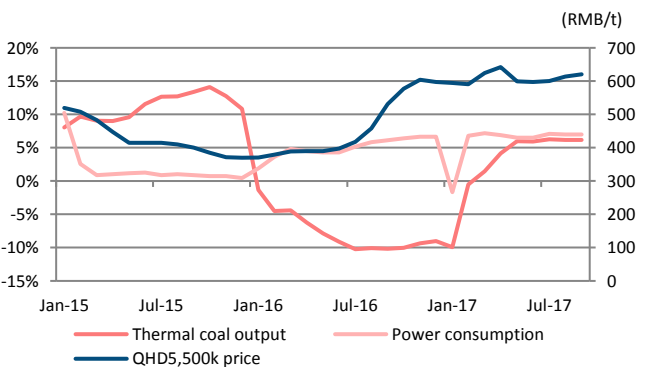
Source: NBS, CSCI Research

**Figure 5: Power consumption by industry (YoY %)**


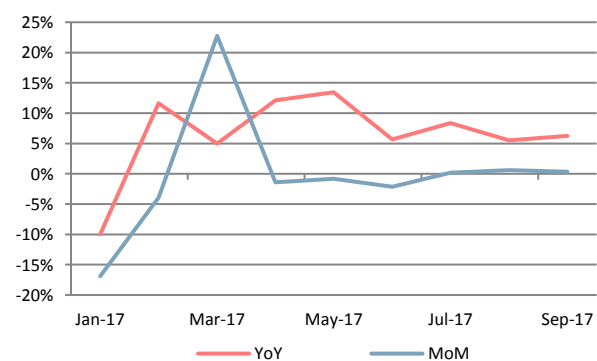
Source: NBS, CSCI Research

**Figure 6: Power generation growth**


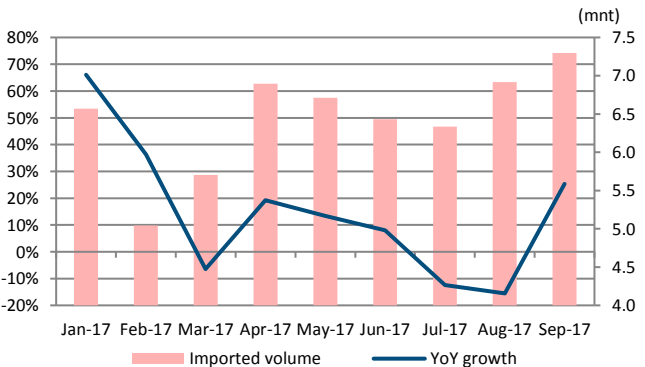
Source: NBS, CSCI Research

**Figure 7: Coal output, spot price vs. power consumption**


Source: NBS, CSCI Research

**Figure 8: China's domestic thermal coal output**


Source: Wind, CSCI Research

**Figure 9: China's imported thermal coal**


Source: Wind, CSCI Research

**Figure 10: Power supply and demand model, 2014-2020E**

	2014	2015	2016	2017F	2018F	2019F	2020F
<b>Total power consumption ('00 mn KWh)</b>	<b>55,223</b>	<b>55,485</b>	<b>59,180</b>	<b>62,566</b>	<b>63,875</b>	<b>65,027</b>	<b>66,108</b>
YoY growth %	3.8%	0.5%	6.7%	5.7%	2.1%	1.8%	1.7%
<b>Power generation ('00 mn KWh)</b>	<b>56,045</b>	<b>56,938</b>	<b>59,897</b>	<b>63,323</b>	<b>64,649</b>	<b>65,814</b>	<b>66,908</b>
Coal	39,510	38,539	39,058	41,040	40,606	40,022	39,349
Hydro	10,601	11,117	11,807	11,624	11,867	12,081	12,282
Gas	1,333	1,669	1,881	2,059	2,748	3,456	4,182
Nuclear	1,332	1,714	2,132	2,533	2,851	3,172	3,499
Wind	1,598	1,853	2,410	2,862	3,306	3,625	4,015
Solar	235	385	662	1,021	1,172	1,325	1,480
Others	1,436	1,661	1,947	2,184	2,099	2,133	2,101
<b>Power generation YoY growth %</b>							
Coal	-0.7%	-2.5%	1.3%	5.1%	-1.1%	-1.4%	-1.7%
Hydro	18.8%	4.9%	6.2%	-1.6%	2.1%	1.8%	1.7%
Gas	14.5%	25.2%	12.7%	9.4%	33.5%	25.8%	21.0%
Nuclear	19.5%	28.7%	24.4%	18.8%	12.6%	11.3%	10.3%
Wind	15.5%	16.0%	30.1%	18.8%	15.5%	9.7%	10.7%
Solar	180.8%	63.7%	71.9%	54.3%	14.8%	13.0%	11.8%
Others	15.0%	15.6%	17.2%	12.2%	-3.9%	1.6%	-1.5%
<b>% of total generation</b>							
Coal	70.5%	67.7%	65.2%	64.8%	62.8%	60.8%	58.8%
Hydro	18.9%	19.5%	19.7%	18.4%	18.4%	18.4%	18.4%
Gas	2.4%	2.9%	3.1%	3.3%	4.3%	5.3%	6.3%
Nuclear	2.4%	3.0%	3.6%	4.0%	4.4%	4.8%	5.2%
Wind	2.9%	3.3%	4.0%	4.5%	5.1%	5.5%	6.0%
Solar	0.4%	0.7%	1.1%	1.6%	1.8%	2.0%	2.2%
Others	2.6%	2.9%	3.3%	3.4%	3.2%	3.2%	3.1%
<b>Installation capacity ('0000 KW)</b>	<b>137,018</b>	<b>152,121</b>	<b>164,575</b>	<b>175,575</b>	<b>185,121</b>	<b>193,213</b>	<b>200,000</b>
Coal	83,233	89,506	94,259	99,561	103,922	107,366	110,000
Hydro	30,486	31,953	33,211	33,407	33,603	33,801	34,000
Gas	5,697	6,603	7,008	8,154	9,311	10,464	11,603
Nuclear	2,008	2,717	3,364	4,027	4,786	4,894	5,227
Wind	9,657	13,130	14,864	16,502	18,079	19,578	21,000
Solar	2,486	4,263	7,742	8,609	9,445	10,242	11,000
Others	3,452	3,949	4,127	5,316	5,975	6,868	7,170

Source: CEC, NBS, CSCI estimate

**Figure 11: Thermal coal supply & demand**

	2010	2011	2012	2013	2014	2015	2016	2017	2018F	2019F	2020F
<b>Capacity</b>						5,700	5,410	5,460	5,440	5,420	5,400
- cut							-290	-150	-120	-120	-120
+ add								200	100	100	100
<b>Utilisation rate %</b>						65%	62%	63%	63%	63%	64%
<b>Supply</b>											
Output	2,552	2,766	2,918	2,823	2,776	3,027	2,754	2,837	2,837	2,837	2,837
Import	119	137	181	192	166	108	124	124	124	124	124
<b>Total</b>	<b>2,671</b>	<b>2,903</b>	<b>3,099</b>	<b>3,015</b>	<b>2,941</b>	<b>3,135</b>	<b>2,878</b>	<b>2,961</b>	<b>2,961</b>	<b>2,961</b>	<b>2,961</b>
<b>Demand</b>											
China	2,543	2,839	2,978	2,985	2,913	3,126	3,101	3,192	3,206	3,210	3,208
Export	18	11	8	6	5	4	8	7	7	7	7
<b>Total</b>	<b>2,561</b>	<b>2,850</b>	<b>2,986</b>	<b>2,992</b>	<b>2,918</b>	<b>3,130</b>	<b>3,109</b>	<b>3,199</b>	<b>3,213</b>	<b>3,217</b>	<b>3,215</b>
<b>Bal (S-D)</b>	<b>110</b>	<b>54</b>	<b>113</b>	<b>23</b>	<b>23</b>	<b>5</b>	<b>-230</b>	<b>-238</b>	<b>-252</b>	<b>-256</b>	<b>-254</b>
<b>YoY Growth %</b>											
<b>Supply</b>											
Output		8%	5%	-3%	-2%	9%	-9%	3%	0%	0%	0%
Import		15%	32%	6%	-14%	-35%	15%	0%	0%	0%	0%
<b>Total</b>		<b>9%</b>	<b>7%</b>	<b>-3%</b>	<b>-2%</b>	<b>7%</b>	<b>-8%</b>	<b>3%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>Demand</b>											
China		12%	5%	0%	-2%	7%	-1%	3%	0%	0%	0%
Export		-38%	-28%	-20%	-22%	-12%	74%	-10%	0%	0%	0%
<b>Total</b>		<b>11%</b>	<b>5%</b>	<b>0%</b>	<b>-2%</b>	<b>7%</b>	<b>-1%</b>	<b>3%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

Source: NBS, Wind, CSCI Estimate



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<b>Buy</b>	12-month absolute total return: $\geq 10\%$
<b>Hold</b>	12-month absolute total return: $> -10\%$ but $< 10\%$
<b>Sell</b>	12-month absolute total return: $\leq -10\%$

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