

China Gas Distributors

Scenario analysis on COVID-19's impact

Commercial and Industrial (C&I) users have been resuming operation from 10 Feb. Migration inflow of major cities had read significant YoY decline, however, according to our macro team's observation. We established a scenario analysis framework to estimate NCP's impact to China gas distributors from 1) exposures in Hubei, 2) C&I gas sales outside Hubei, 3) compensation from additional residential gas usage, and 4) potential delay for residential gas connection. We believe gas distributors' impact from Hubei exposures is mild (0.5-1.2%), while C&I gas volume decline due to operation disruption will be more significant (base case: 3.9-4.8%). Overall, we expect net profit impact would be limited at (FY20E 1.5-7.1%). Sector earnings performance would be resilient, and **we prefer CGH (384 HK, BUY, TP: HK\$38.0) for less C&I exposures with relatively less impact.**

- **Gas sales impact from Hubei will be mild.** CGH/CRG (1193 HK, NR) have 36/16 city gas projects with ~6%/7% of annual retail gas sales in Hubei respectively, while ENN (2688 HK, NR) has no exposures. Our scenario analysis indicates CGH/CRG may suffer only 1.0-1.2% gas volume impact at most from Hubei, which will have very limited impact on bottom line.
- **C&I gas volume impact likely higher outside Hubei.** As we expect it will take time for C&I users operation to resume normal, we think C&I volume impact outside Hubei worth more attention. We assume C&I gas users will take 4/7/16 weeks (from 10 Feb) to resume normal in different scenarios, we estimate gas distributors to suffer 4.5-13.7% C&I gas volume decline, translating to ~3-10% total gas volume decline. ENN may suffer relatively higher impact than CGH and CRG due to higher C&I gas sales mix.
- **Residential gas sales may have slight compensation.** We expect city residents to consume more gas at home since dining outside is highly discouraged. We assume average residential gas usage to increase 6%/3%/1% in different scenarios, which will bring about 1.7-0.2% total gas volume growth to partial compensate C&I volume loss.
- **Stimulus policies to bring additional impact.** Zhejiang and Hubei government had released stimulus policies, cutting gas price by 10% for 3/6 months respectively to support economy and SMEs. We expect those measures to be extended to more provinces, but we see upstream oil majors to share the costs (i.e. cutting city-gate price accordingly). We estimate a wider scope price cut will have additional 1-2.5% impact on gas distributors' net profit.
- **Limited impact for residential connection at current stage.** We have not yet factored in impact for residential connection at current stage. 1Q is usually low season and connection pace can be ramped in the following quarters. However, if residential connection cannot resume in 2Q20, we expect gas distributor to suffer 5-10% cut on annual connection target, translating to potential 1-4% earnings decline depending on connection revenue mix.
- **Overall: gas distributors are still resilient.** We expect gas distributors' earning to be subject to 1.5-3.4% impact (base case) from COVID-19 caused disruption. In the worst case, we estimate earnings downside of only 3.1-7.1%, with largest impact on ENN. **We prefer CGH for less C&I exposures and less earnings impact.**

OUTPERFORM

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Figure 1: Major gas distributors' exposures in Hubei and potential impacts estimates

Major gas distributors' exposure in Hubei Province

Company Ticker		Residential customer number	Total residential customer number	as % to total residential accounts	C&I customer number	Total C&I customer number	as % to total C&I accounts
		(mn HH)	(mn HH)				
CGH	384 HK	2.19	26.1	8.4%	18,097	215,022	8.4%
ENN	2688 HK	nil	nil	n/a	nil	nil	n/a
CRG	1193 H	1.47	35.88	4.1%	n/a	277,329	n/a

Hubei Impact model

Month	Impact days	Utilization rate	Remark	C&I gas volume loss due to 2019 n-Cov		
				Worst	Base	Best
Jan	10	50%	Reduce usage due to CNY holiday	90%	90%	90%
Feb	28	70%	Low usage during work resume period	90%	90%	90%
Mar	31	100%		85%	75%	50%
Apr	30	100%		65%	35%	15%
May	31	100%		45%	0%	0%
Jun	30	100%		25%	0%	0%
Annualized impact ->				-24.5%	-15.3%	-11.5%
Impact days ->				89.4	55.9	42.1

Gas volume exposures and assumptions

Gas volume exposures and assumptions					Overall impact to gas sales volume		
Company Ticker		Gas sales as% to toal gas sales	C&I %	Overall C&I gas volume impact in Hubei	Worst	Base	Best
CGH	384 HK	6.0%	65%	3.9%	-1.0%	-0.6%	-0.5%
ENN	2688 HK	nil	nil	n/a	nil	nil	nil
CRG	1193 H	7.0%	70%	4.9%	-1.2%	-0.8%	-0.6%

Source: CMBIS estimates

Figure 2: Major gas distributors' exposures outside Hubei and potential impacts estimates

Non-Hubei C&I gas volume Impact model

				Gas sales loss from C&I Users		
Week	Period	Day count		Worst	Base	Best
	31-Jan	9-Feb	10	80.0%	80.0%	80.0%
1	10-Feb	16-Feb	7	75.0%	67.5%	60.0%
2	17-Feb	23-Feb	7	70.0%	55.0%	40.0%
3	24-Feb	1-Mar	7	65.0%	42.5%	20.0%
4	2-Mar	8-Mar	7	60.0%	30.0%	0.0%
5	9-Mar	15-Mar	7	55.0%	17.5%	0.0%
6	16-Mar	22-Mar	7	50.0%	5.0%	0.0%
7	23-Mar	29-Mar	7	45.0%	0.0%	0.0%
8	30-Mar	5-Apr	7	40.0%	0.0%	0.0%
9	6-Apr	12-Apr	7	35.0%	0.0%	0.0%
10	13-Apr	19-Apr	7	30.0%	0.0%	0.0%
11	20-Apr	26-Apr	7	25.0%	0.0%	0.0%
12	27-Apr	3-May	7	20.0%	0.0%	0.0%
13	4-May	10-May	7	15.0%	0.0%	0.0%
14	11-May	17-May	7	10.0%	0.0%	0.0%
15	18-May	24-May	7	5.0%	0.0%	0.0%
16	25-May	31-May	7	0.0%	0.0%	0.0%
Recovery parameter				5.0%	12.5%	20.0%
Impact rate ->				-13.7%	-6.4%	-4.5%
Impact days ->				50.0	23.2	16.4

C&I gas sales volume mix & adjustments for proportions in Hubei

Company	Ticker	C&I Gas volume as % to total	Hubei gas sales %	Non-Hubei C&I gas sales %
CGH	384 HK	65.0%	6.0%	61.1%
ENN	2688 HK	75.0%	0.0%	75.0%
CRG	1193 HK	70.0%	7.0%	65.1%

Source: CMBIS estimates

Overall gas volume decline

Worst	Base	Best
-8.4%	-3.9%	-2.7%
-10.3%	-4.8%	-3.4%
-8.9%	-4.1%	-2.9%

Figure 3: Compensation from residential gas usage

Company	Ticker	Residential gas consumption%	Average city residents' gas consumption (cbm/yr)	Assumptions: residential gas usage growth			Overall gas volume impact		
				Worst	Base	Best	Worst	Base	Best
CGH	384 HK	28.0%	125.7	6%	3%	1%	1.7%	0.8%	0.3%
ENN	2688 HK	16.6%	156.0	6%	3%	1%	1.0%	0.5%	0.2%
CRG	1193 HK	22.7%	156.0	6%	3%	1%	1.4%	0.7%	0.2%

Source: CMBIS estimates

Figure 4: Our scenario analysis summary

Assumptions		Worst Case	Base Case	Best Case
1	C&I gas consumption impact in Hubei	Gas consumption to recovery in full in late-Jun	Gas consumption to recovery in full in early-May	Gas consumption to recovery in full in early-May with high utilization ratio
2	C&I gas consumption outside Hubei	Gas consumption to recovery in full in late May	Gas consumption to recovery in full in late Mar	Gas consumption to recovery in full in early Mar
3	Increasing residential gas consumption to compensate gas sales loss due to the n-Cov virus impact	Average residential gas use increase 6%	Average residential gas use increase 3%	Average residential gas use increase 1%
Overall gas sale volume impact				
CGH	384 HK	-7.6%	-3.6%	-2.9%
	Gas volume impact from Hubei	-1.0%	-0.6%	-0.5%
	Non-Hubei C&I gas volume impact	-8.4%	-3.9%	-2.7%
	Compensation from residential gas usage	1.7%	0.8%	0.3%
ENN	2688 HK	-9.3%	-4.3%	-3.2%
	Gas volume impact from Hubei	Nil	Nil	Nil
	Non-Hubei C&I gas volume impact	-10.3%	-4.8%	-3.4%
	Compensation from residential gas usage	1.0%	0.5%	0.2%
CRG	1193 HK	-8.8%	-4.2%	-3.3%
	Gas volume impact from Hubei	-1.2%	-0.8%	-0.6%
	Non-Hubei C&I gas volume impact	-8.9%	-4.1%	-2.9%
	Compensation from residential gas usage	1.4%	0.7%	0.2%
Net profit impact NCP disruption				
CGH	384 HK	-3.1%	-1.5%	-0.5%
ENN	2688 HK	-7.1%	-3.4%	-1.7%
CRG	1193 HK	-6.3%	-3.1%	-1.6%

Source: CMBIS estimates

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