

Environmental, Social and Governance

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DBS Group Research . Equity

20 Jan 2020

Hunting for ESG gold

- Strong growth of ESG-based investment funds with increasing global adoption of ESG integration
- Social factors are gaining importance in companies' long-term development, particularly product quality and safety
- Revise up target price of China Communications Services and ENN Energy due to potential ESG upside; China Petroleum & Chem (Sinopec) also has improving ESG practices
- Top notch ESG players include AAC Technologies, Anhui Conch Cement, China Merchants Bank, China Vanke, Guangzhou Automobile, Haier Electronics Group, Ping An Insurance and Swire Properties

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Stock picks

Company Name	Price HK\$	Target Price HK\$	Recom	Mkt Cap US\$m	PE 20F x
AAC Technologies Hdq. (2018 HK)	64.60	100.00	BUY	10,050	19.1
Anhui Conch Cement 'H' (914 HK)	57.55	^55.00	^BUY	40,332	8.4
Chin.Comms.Svs.'H' (552 HK)	5.50	7.80	BUY	4,904	10.0
China Merchants Bank 'H' (3968 HK)	40.95	45.30	BUY	139,407	8.9
China Ptl.& Chm. 'H' (386 HK)	4.69	6.00	BUY	73,096	8.5
China Vanke 'H' (2202 HK)	32.50	35.40	BUY	48,944	6.5
ENN Energy Holdings (2688 HK)	90.80	108.00	BUY	13,155	14.4
Guangzhou Automobile 'H' (2238 HK)	9.96	^9.2	^BUY	16,056	8.7
Haier Electronics Gp. (1169 HK)	25.00	26.56	BUY	9,029	13.4
Ping An Insurance 'H' (2318 HK)	96.50	115.00	BUY	230,851	9.8
Swire Properties (1972 HK)	26.90	29.25	BUY	20,258	20.7

Source: Thomson Reuters, DBS Bank (Hong Kong) Limited ("DBS HK")

^under review



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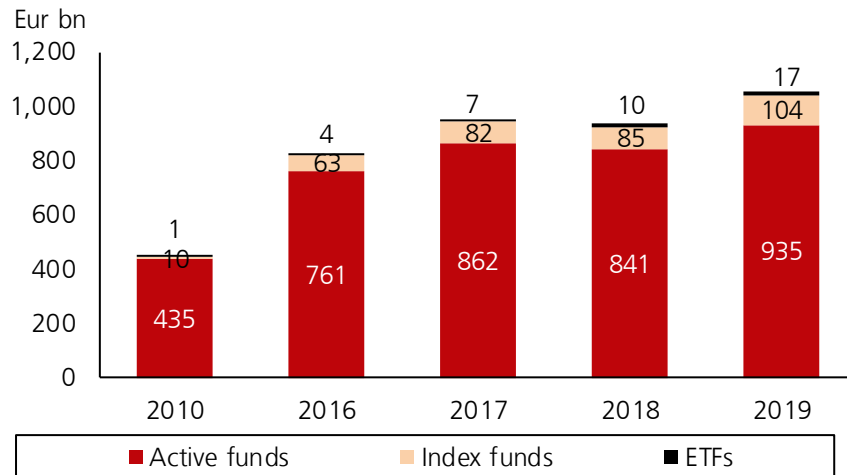
Environmental, Social and Governance

Why does sustainability analysis matter?

Growing trend in ESG investing. The emergence of global trends such as climate change, environmental requirements, social movements and government regulations have prompted investors to consider the financial implications of these factors into their investments and incorporate sustainability or ESG (environmental, social and governance) factors into investment analysis and processes.

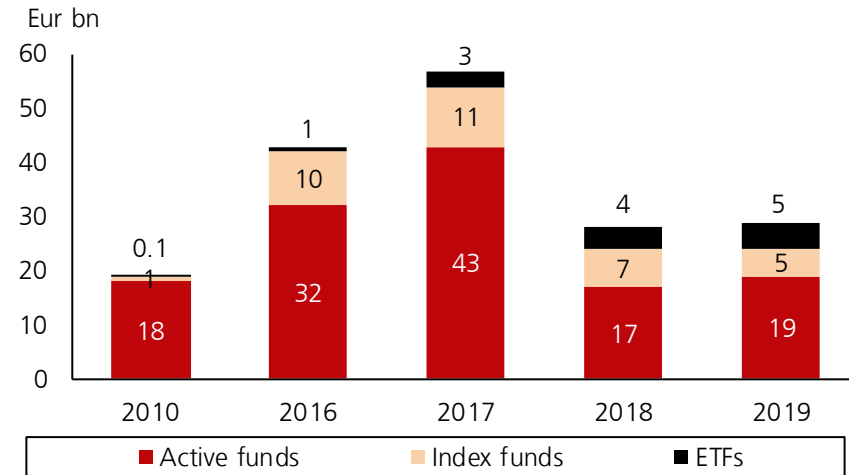
The size of ESG investment funds is also increasing with assets under management (AUM) reaching US\$31trn in 2018 representing >30% of global management assets. Assets under ESG funds have also reached record highs in Europe. In fact, assets managed in ESG mandates by the 500 largest asset managers in the world increased 23.3% in 2018, in contrast to their overall AUM which were down 3% y-o-y, according to the latest Global 500 research from the Thinking Ahead Institute.

Assets in European ESG funds (by fund type)



Source: Morningstar data from 1 Jan 2010 to 30 Jun 2019

Inflows into European ESG funds (by fund type)



Source: Morningstar data from 1 Jan 2010 to 30 Jun 2019

What is sustainability or ESG analysis? Why does it matter?

While there are no official definitions of sustainability investment or ESG, sustainability investment is generally believed to be a broader term synonymous with ESG and refers to investment in assets that deliver long term competitive returns and positive social impact, according to the Pensions Policy Institute. The Global Sustainable Investment Alliance (GSIA) defines sustainable investing as an investment approach that considers ESG factors in portfolio selection and management.

Sustainability analysis looks at both risks and opportunities through environmental, social, governance issues as well as business models/developments that are material for a company. Sustainability or ESG issues may unleash a crisis resulting in fundamental shifts in a company's management, culture, financial strength and valuation. Companies that are well prepared for ESG shocks can better mitigate its downside risk. Companies with improving ESG profiles also lead to gains for investors and corporate performance.

The table below shows empirical studies that prove the positive relationship between ESG and corporate performance.

While sustainability analysis does not replace the traditional fundamental analysis, it provides another angle in company analysis and stock picks.

Empirical studies showing a positive link between ESG and corporate performance

"Corporate governance and equity prices" by Gompers, Ishii, Metrick (2001)

"Does the stock market fully value intangibles? Employee satisfaction and equity prices" by Alex Edmans (2011)

"Corporate sustainability: First evidence on Materiality" by Khan, Serafeim, Yoon (2015)

"Coordinated engagements" by Dimson, Karakas, Li (2019)

"The eco-efficiency premium puzzle" by Derwall, Bauer, Guenster, Koedijk (2005)

"ESG and financial performance: Aggregated evidence from more than 2000 empirical studies" by Friede, Busch and Bassen (2015)

Source: DBS HK

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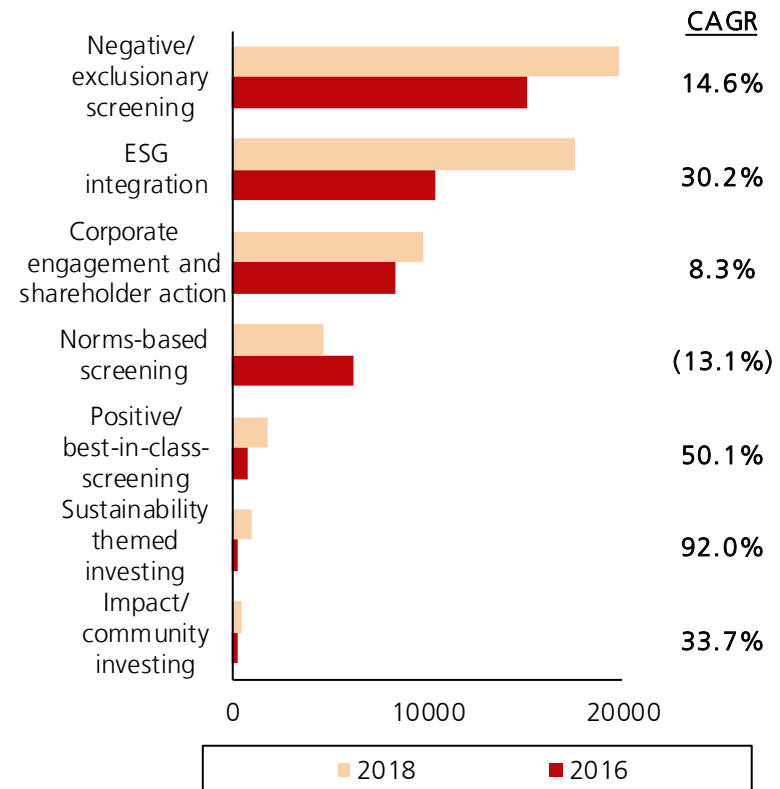
Increasing adoption of ESG integration. The commonly used strategies for sustainability investment include:

- Negative screening: Exclusion of certain sectors;
- Positive screening: Selection of certain sectors;
- Norms-based screening: Screening of investments based on certain international norms;
- ESG integration: Inclusion of ESG factors into financial analysis;
- Sustainability themed investing: Investment in specific themes related to sustainability;
- Impact investing: Investments aimed at having ESG impact;
- Corporate engagement and shareholder action: The use of shareholder power to influence corporate behavior.

Data from the Global Sustainable Investment Review 2018 showed that investment funds adopting ESG integration for sustainability investments have increased substantially at a compound annual growth rate (CAGR) of >30% in 2016 and 2018.

What are the barriers of ESG integration? Despite the increasing adoption of ESG integration, it is still at the early stages and faces several barriers. According to reports by the CFA Institute and Principle for Responsible Investment, the major barriers to ESG integration include lack of comparable historical ESG data, a limited understanding of ESG issues and cultural issues.

Global growth of sustainable investing strategies



Source: Global Sustainable Investment Review 2018

Our findings

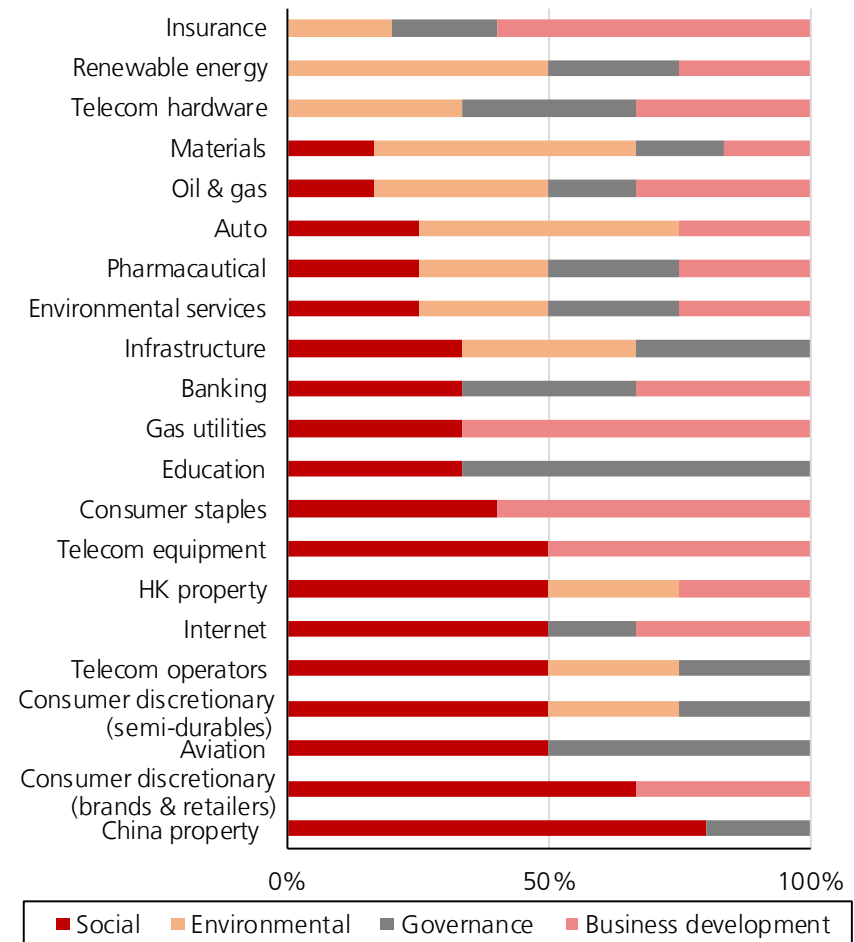
Identifying key factors in our covered sectors. In this report, we have identified the key sustainability factors for 21 sub-sectors under our coverage. These factors could lead to material financial impact on the sectors, either directly or indirectly. The sustainability factors are categorised into four pillars - environmental, social, governance and business development, and are listed in the Appendix.

“S” factor gaining importance. While corporate governance used to be considered the most impactful ESG factor, going forward we believe that there will be increased investor attention on social factors.

Our analysts feel that the social pillar covers most of the key sustainability factors for the sub-sectors under our coverage. In particular, “product quality & safety” (S) is one of the key sustainability factors for the 12 sub-sectors under our coverage.

The changes in ESG trends have also prompted our analysts to believe in the increasing importance of “legal compliance” (G) as it is a key factor in eight sub-sectors under our coverage. Our analysts also believe that “product / service sustainability” (B) and “R&D / innovation management” (B) are material factors affecting P/L.

High materiality factors of various sectors



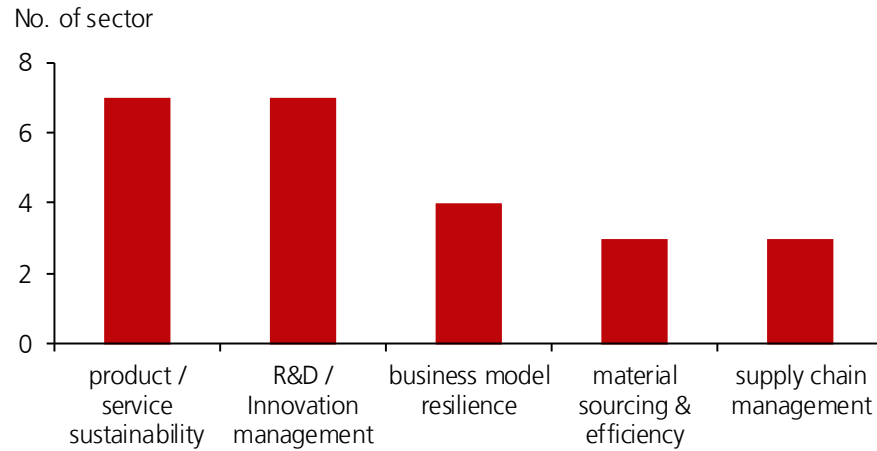
Source: DBS HK

Environmental, Social and Governance
High materiality social factors of various sectors

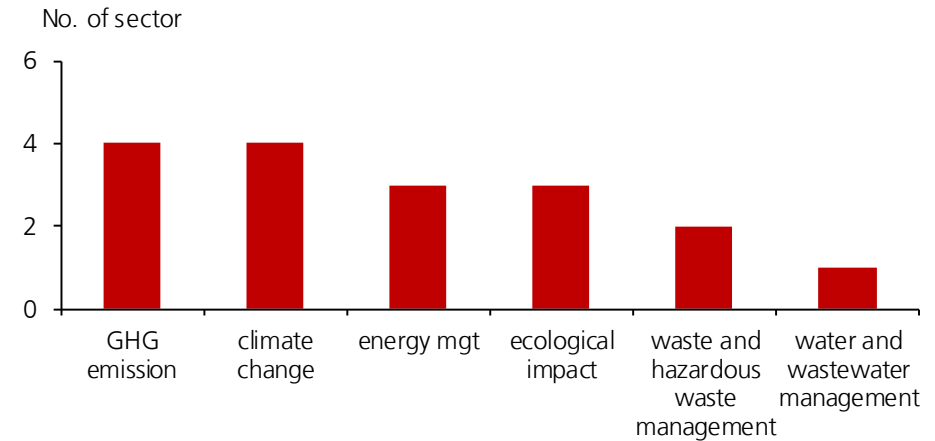
Sector	Product quality & safety	Employees' health & safety	Employee relationship & diversity	Access to product / service & affordability	Selling practices & product labelling	Customer engagement
Auto	x					
Aviation			x			
Banking				x		
China property	x	x	x		x	
Consumer discretionary (brands & retailers)	x		x			
Consumer discretionary (semi-durables)	x	x				
Consumer staples	x			x		
Education	x					
Environmental services		x				
Gas utilities				x		
HK property	x					x
Infrastructure	x					
Internet	x		x		x	
Materials		x				
Oil & gas		x				
Pharmaceutical	x	x				
Telecom equipment					x	x
Telecom hardware	x		x			
Telecom operators	x			x		

Source: DBS HK

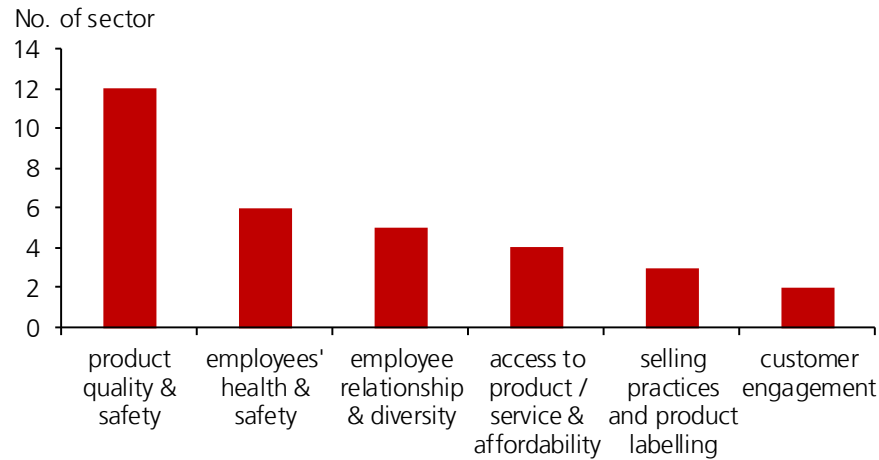
High materiality factors in business development pillar



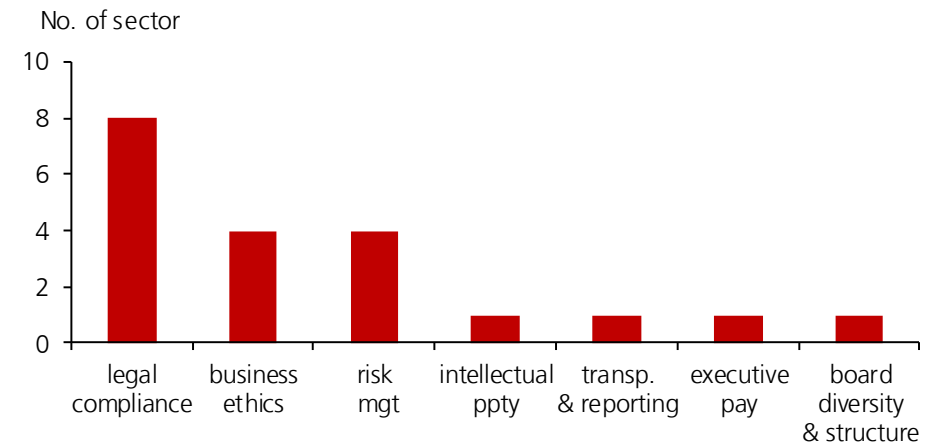
High materiality factors in environmental pillar



High materiality factors in social pillar



High materiality factors in governance pillar



Source: DBS HK

Environmental, Social and Governance

15 ESG-based stock picks. We highlight the following 15 stocks within our coverage after taking a qualitative/quantitative approach in ESG integration and categorise them into three major ESG-based ideas.

1) **ESG upside:** We see upside for share price of these stocks as they make gradual improvements in ESG practices.

Stocks with ESG upside

[China Communications Services](#)
(552 HK)

China Communications Services is planning for state-owned enterprise (SOE) reform in 2020. We expect the reform to introduce strategic shareholders in the private sector and employee options with financial targets. This will help increase business opportunities with strategic shareholders (B), improve corporate governance (G) and employee engagement (S) in the company. This could allow the company to enjoy higher valuation multiple of 15x FY20 price-to-earnings (PE) vs its historical average of 12x. Our new target price is set at HK\$7.80.

[China Petroleum & Chem \(Sinopec\)](#)
(386 HK)

Sinopec's ESG journey entails notably more capital spending, to enhance its supply of cleaner fuels like natural gas and LNG, develop greener refined petroleum and petrochemical products like higher specification vehicle fuel and biodegradable plastics, and optimise processes to slash pollutant emissions. Consequently, we have revised our capex estimates up by 5-10%, which translates into lower free cash flows. This is largely counteracted, however, by an application of a lower weighted cost of capital (-0.5% absolute), as we now view the business as more sustainable with a more favourable risk profile.

[ENN Energy](#)
(2688 HK)

ENN's business diversity into integrated energy (IE) is a good strategy for sustainability development which is positive for long term turnover growth. It is because IE can help customers to improve their energy efficiency, reduce their total energy bills and reduce pollution emissions.

Although investors currently are not too happy about its corporate governance, we believe ENN's new ESG initiatives (such as incorporating ESG into management's key performance indicators (KPIs), setting ESG targets) will help win investors' confidence and re-rate the stock. Thus, we have lowered the discount rate by 0.4ppt to 8.1% to give a new target price of HK\$108.00.

Source: DBS HK

Environmental, Social and Governance

2) **Top notch ESG players:** These stocks are among those with the best ESG practices within their sectors

Stocks with best ESG practices within their sectors

[AAC Technologies \(2018 HK\)](#) As the world's leading smartphone component supplier, AAC has innovation capabilities to meet customers' evolving demands for sustainable growth. AAC has consistently reinvested significant resources (7-11% of total revenue) in research & development (R&D) and has a proven track record of tapping into new businesses.

[Anhui Conch Cement \(914 HK\)](#) Anhui Conch Cement's sustainable development goals should enhance its profitability and enable it to continue outperforming its peers. Supported by an apparently low risk ESG profile (no significant risk on social and governance and low risk in environment), our target valuation of 9x FY20F PE, in line with its historical range and higher than peers' average of 8x, is reasonable.

[China Merchants Bank \(3968 HK\)](#) CMB has integrated its developments with social responsibility based on the concept of "taking root in the society, given back to the society". CMB now offers the most green finance and small medium enterprise (SME) loans among joint-stock banks to support the development of an eco-friendly, low carbon and recyclable economy and help small and micro businesses obtain loans more easily.

[China Vanke \(2202 HK\)](#) China Vanke Co's pioneering efforts in housing industrialisation should mitigate ever-rising construction labour costs. It has also initiated several innovative schemes and processes to improve efficiency and optimise risk management. Its new businesses will likely become growth drivers in the mid-term. Vanke deserves a higher valuation (in terms of PE) given its improved ESG profile.

[Guangzhou Automobile Group \(2238 HK\)](#) To support a low carbon automobile strategy, Guangzhou Automobile Group is embarking on a mega hub to develop smart electric cars in Guangzhou, riding on green car initiatives in the Greater Bay Area (GBA). Under the Guangzhou Automobile 2025 Development Plan, the goal is to produce one million units of new energy vehicles (EVs) by 2025, via an extensive value-chain support (such as battery technology, charging network and recycling).

[Haier Electronics Group \(1169 HK\)](#) As Haier Electronics stresses high importance on its product quality and safety, we believe it should continue to sustain long-term attraction to consumers. A dedicated focus to protect workers' health and safety also reduces operational risks. Its ongoing go-green practice should help reduce cost of pollution control. Overall, we see a teens multiple is warranted in the longer term.

Source: DBS HK

Stocks with best ESG practices within their sectors (con't)

[Ping An Insurance
\(2318 HK\)](#)

Ping An Insurance operates within a well-established corporate governance structure and has a leading comprehensive risk management system.

Since 2017, Ping An has included further ESG-related duties in its Group Executive Committee. The six core topics the company plans to address include; 1) poverty alleviation, 2) embracing technological changes, 3) financial services to the real economy, 4) healthcare challenges, 5) climate change risk and, 6) responsible investment

We believe that Ping An deserves to trade at a premium valuation compared to its peers, considering its efforts in addressing various ESG related issues.

[Swire Properties
\(1972 HK\)](#)

Swire Properties has a comprehensive strategy to achieve sustainability goals. The quality of the company's investment property portfolio should continue to improve as it implements this strategy to attract tenants and drive rental income growth. A higher stock valuation is warranted in the long term.

Source: DBS HK

Environmental, Social and Governance

3) **Solid fundamentals and ESG:** These stocks are our sector top picks which also have solid ESG practices

Stocks with solid fundamentals and ESG practices

[Air China](#)
(753 HK)

Constantly improving its fuel efficiency is not only critical for Air China to improve on greenhouse gas emissions but also to maintain profitability as fuel costs make up the largest portion of its operating costs. We reckon that a 1% improvement in fuel efficiency could lead to a 3% increase in net profit. Ensuring that it maintains a good safety record is also important in retaining customer confidence and protecting its brand value.

[BeiGene](#)
(6160 HK)

As the company is commercialising its key products in the next 12 months, we estimate capital expenditure (capex) to increase by 0.5% in ensuring that its manufacturing facilities meet government regulations on environmental protection.

We are confident about the company's overall ESG performance because the company is listed on the NASDAQ (BGNE US) where investors pay more attention on ESG scores. The risks of its share price dropping due to ESG factors are low.

[China Mengniu](#)
(2319 HK)

Rising focus on product quality and safety would result in a sustainable cash flow generation. We expect improving cash flow employment would translate to a higher PE multiple in the long run.

[China Yuhua Education](#)
(6169 HK)

China Yuhua Education pays good attention to student safety and teaching quality to ensure long-term attractiveness to parents. Its fully compliance with government regulation on schools ensures its long-term sustainability. When applying their ESG experience to newly acquired schools, they help to improve the revenue generation capability of new schools in the long term. We reckon that can help increase turnover growth by 1% p.a. in the long run. Overall, we see a higher-than-peers multiple of 18x is reasonable for the company.

Source: DBS HK



STOCK PROFILES

Environmental, Social and Governance

AAC Technologies (2018 HK)

BUY

Last Traded Price (14 Jan 2020):HK\$64.60

Price Target 12-mth:HK\$100.00 (54.8% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMBm)	2018A	2019F	2020F	2021F
Turnover	18,131	18,590	23,174	29,365
EBITDA	6,278	4,913	6,757	9,306
Pre-tax Profit	4,310	2,656	4,163	6,290
Net Profit	3,796	2,339	3,666	5,539
Net Profit Gth (Pre-ex) (%)	(28.7)	(38.4)	56.7	51.1
EPS (RMB)	3.11	1.92	3.00	4.53
EPS (HK\$)	3.51	2.16	3.39	5.12
EPS Gth (%)	(28.5)	(38.4)	56.7	51.1
Diluted EPS (HK\$)	3.51	2.16	3.39	5.12
DPS (HK\$)	1.41	0.87	1.36	2.05
BV Per Share (HK\$)	17.51	19.35	20.89	23.26
PE (X)	18.4	29.9	19.1	12.6
P/Cash Flow (X)	10.9	15.4	12.9	9.4
P/Free CF (X)	25.3	76.0	41.5	24.7
EV/EBITDA (X)	11.4	14.5	10.6	7.7
Net Div Yield (%)	2.2	1.3	2.1	3.2
P/Book Value (X)	3.7	3.3	3.1	2.8
Net Debt/Equity (X)	0.1	0.1	0.1	0.1
ROAE(%)	20.8	11.7	16.9	23.2

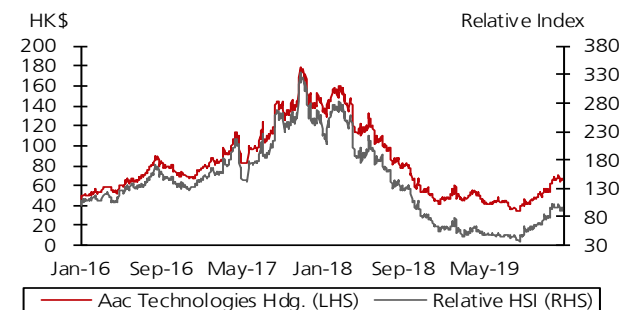
Earnings Rev (%)		Nil	Nil	Nil
Consensus EPS (RMB)		1.92	2.62	3.00
Other Broker Recs:		B: 15	S: 6	H: 15

Bloomberg ESG Disclosure Score (2018)^ 47.1
 - Environmental / Social / Governance 41.9 / 43.9 / 62.5




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The world's leading smartphone component supplier, with its high ESG score and innovation capabilities for sustainable growth. AAC is the world's leading smartphone component supplier, with c.30% share in acoustics and haptics markets. AAC's Refinitiv ESG score stands at 47.1, at the high range of peers, thanks to its strong waste management (E), talent retention (S), and a diversified board structure with separation of the Chairman and Chief Executive Officer positions (G). Meanwhile, AAC has innovation capabilities to meet customers' changing demands for sustainable growth. It has consistently reinvested significant resources (7-11% of revenue) in R&D and has a proven track record in tapping into new businesses. We expect a breakthrough in its optics yield rate in FY20F, which will drive its optics revenue CAGR of 79% over FY19-21F, with segmental GPM to jump from 5% in FY19F to 40%/50% in FY20/21F. We expect its optics gross profit contribution to increase from 1% in FY19F to 15%/20% in FY20/21F. We reiterate our BUY rating on AAC with a target price of HK\$100.

Price Relative






Environmental factors

Factor	Comments
<p>Wastewater Management</p> 	<p>AAC has a water efficiency policy, while >60% of peers do not have such a policy. Meanwhile, the company’s wastewater management work strictly complies with applicable laws and regulations. The amount of wastewater discharged remained lower than the discharged permitted, taking up around 60% of the permitted amount in 2018. In 2018, it has carried out a research on wastewater reuse at the Changzhou factory site and commissioned external environmental consultant to design wastewater treatment plans, aiming to realise the target of zero industrial wastewater discharge in the long run.</p>
<p>Waste & Hazardous Materials Management</p> 	<p>The company has an environmental material sourcing policy, while >50% of peers do not have such a policy. Meanwhile, the company has hazardous waste management control procedures, and ensure straight compliance with the relevant laws and regulations. The amount of hazardous waste discharged remained lower than the discharged permitted, taking up around 60% of the permitted amount. It has commissioned an environmental research institute in 2016 to conduct research on sludge reduction and will implement a sludge drying construction project with reference to the research project. The project is expected to commence in 2019.</p>
<p>Expenditure on environmental protection</p> 	<p>AAC’s environmental score by Refinitiv has stabilised at 47.1 during 2016-2018, which is at the high range of peers. Through improvement of the environmental protection facilities, the company have reduced expenditure on sewage discharge, thus resulting in a 7.9% y-o-y decline in expenditure on environmental protection in 2018.</p>

Source: DBS HK



Social factors

Factor	Comments
<p>Employee Engagement, Diversity & Inclusion</p> 	<p>AAC’s social score by Refinitiv has stabilised at 43.9 during 2016-2018, which is at the high range of peers. Smartphone component suppliers rely on their talents, especially research and development teams, for technology capability development. AAC has 4,000 senior research engineers and technicians, which is c.10% of its workforce. It has adopted the “Share Award Scheme” since 2016, for the purpose of aligning interests of the company and employees to attract new talents as well as motivate and retain existing talents. In order to drive innovation and enhance the company’s technology competitiveness, patent inventors receive bonuses as encouragement. The average monthly turnover rate for non-manufacturing employees was low at 4% in 2018.</p>
<p>Product quality & safety</p> 	<p>Low rate of new products / new businesses will negatively impact hardware companies’ margins and may lead to order delays or cancellations. Hardware defects, safety-related defects may lead to product recalls as well as reputational risks. AAC has established a quality management system to maintain high standards of product quality. The company is taking quality management system to another level through automation and big data management. While AAC’s new businesses such as its optics business, especially proprietary wafer-level glass lenses (WLG, glass lenses manufactured by semiconductor wafer processes), currently have low yield rates, it optimises its yield rate and product quality & safety through small projects initially, before going onto larger projects.</p>
<p>Intellectual properties</p> 	<p>AAC has formulated IP Business Management Practice to strengthen the company’s IP management, to avoid any loss to the company, customers and suppliers due to IP disputes, while encouraging introduction of new technologies. IP Department was established under the CEO office in 2018 which is responsible for formulating the strategies and regulations for the development of IP protection and enforcement framework, reviewing the company’s IP management system, organising IP training programmes, etc.</p>

Source: DBS HK

Environmental, Social and Governance

Governance factors

Factor	Comments
Board structure 	AAC's governance score by Refinitiv has improved from 57.1 in 2016 to 62.5 in 2018, which is at the high range of peers. Nine of the 11 directors are independent. The board of directors has a lead independent director structure with independent committees overseeing management and key issues such as audit & risk, nomination, and remuneration. Directors have a range of skills, backgrounds, and experience. Besides, AAC has separated Chairman and Chief Executive Officer positions. A board led by an independent Chairman could ensure that the Chief Executive Officer runs the company in conjunction with the mandate of the company and the will of the shareholders.
Transparency & reporting 	The company has regular meetings with stakeholders, with separate ESG reports in accordance with its GRI guidance and external auditors. However, in its financial reports, it has separate acoustics, MEMS component and optics segment disclosures, but has a combined haptics and RF mechanical segment disclosure, as its haptics business previously had only Apple as its single customer – which had a non-disclosure agreement with AAC. However, the company may have separate haptics and RF mechanical segment disclosures, as Apple is no longer the only customer in view of the growing Android customers for its haptics business.

Source: DBS HK

Business development factors

Factor	Comments
R&D / innovation 	As smartphone components have a short product cycle, suppliers' ability to develop innovative products to meet customers' changing demands is critical for their sustainable growth. AAC is committed to this area. The company has consistently reinvested significant resources (7-11% of revenue) in R&D to build broad sustainable technology roadmaps. It owns and operates 15 research and development centres worldwide. AAC has been acquiring best-selling mobile phone vendors as clients in different mobile phone generations, from Motorola, Nokia, Apple to China's smartphone vendors. The company has also proven its ability to tap into new segments, expanding from dynamics components (i.e. speakers and receivers), MEMS microphones, haptics & RF mechanical, to optics. In 2018, the company successfully obtained 925 new patents and has a total of 3,366 patents. The company filed 2,284 additional patent applications during the year.

Source: DBS HK

Environmental, Social and Governance

Air China (0753 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$8.02

Price Target 12-mth: HK\$10.00 (24.7% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Turnover	140.883	151.191	162.623	173.019
EBITDA	27.222	32.583	36.290	38.947
Pre-tax Profit	9.977	12.435	16.134	18.296
Net Profit	7.351	8.438	11.042	12.455
Net Pft (Pre Ex) (core profit)	7.351	8.438	11.042	12.455
Net Profit Gth (Pre-ex) (%)	1.5	14.8	30.9	12.8
EPS (RMB)	0.51	0.58	0.76	0.86
EPS (HK\$)	0.57	0.66	0.86	0.97
EPS Gth (%)	1.5	14.8	30.9	12.8
Diluted EPS (HK\$)	0.57	0.66	0.86	0.97
DPS (HK\$)	0.12	0.17	0.20	0.20
BV Per Share (HK\$)	7.25	7.78	8.47	9.24
PE (X)	14.1	12.2	9.4	8.3
P/Cash Flow (X)	3.6	4.1	3.6	3.4
P/Free CF (X)	8.6	46.0	11.1	9.9
EV/EBITDA (X)	7.3	6.1	5.3	4.8
Net Div Yield (%)	1.5	2.1	2.5	2.5
P/Book Value (X)	1.1	1.0	0.9	0.9
Net Debt/Equity (X)	0.9	0.8	0.7	0.6
ROAE (%)	8.2	8.7	10.6	10.9
Earnings Rev (%):		Nil	Nil	Nil
Consensus EPS (RMB)		0.55	0.72	0.82
Other Broker Recs:		B:19	S:1	H:4

Bloomberg ESG Disclosure Score (2018)^ 38
 - Environmental / Social / Governance 32 / 28 / 63

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

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The national flag carrier of China. A member of Star Alliance, Air China is China's national flag carrier and has consistently been its most profitable carrier as well. It is headquartered in Beijing, with hubs in Chengdu, Shanghai and Shenzhen and operates over 700 aircraft. The company recognizes that fulfilling its social responsibilities is an inherent requirement for it to achieve sustainable development and has been publishing a Corporate Social Responsibility Report for the last eleven years.

In addition to shareholder returns, Air China is also increasingly focused on accountability to other stakeholders including its customers, employees, the environment and the community.

Price Relative








Environmental factors

Factor	Comments
<p>Greenhouse gas emissions</p> 	<p>Air China has been consistently improving the fuel efficiency of its fleet year after year by phasing out its older aircraft and introducing newer, more fuel-efficient aircraft into its fleet. Other measures to improve fuel conservation include route network optimisation, and the implementation of other fuel conservation measures, such as aircraft weight reduction and using technology to further refine the management of fuel consumption.</p>
<p>Renewable energy</p> 	<p>The company has invested substantially and increased its adoption of new energy vehicles to improve the vehicle pollution of its ground and support vehicles. Investments include self-built charging infrastructure and replacing fuel vehicles with electric vehicles.</p>
<p>Waste management</p> 	<p>Hazardous waste material generated during aircraft maintenance are disposed by qualified hazardous waste disposal units in accordance with the relevant provisions while the company has also established a system and adopted advanced equipment, technologies and process to reduce hazardous waste material.</p>


Source: DBS HK

Social factors

Factor	Comments
<p>Safety and punctuality</p>  <p>Strong</p>	<p>The company has an exemplary safety record with no fatal accidents since 2002 and continues to work vigorously to improve on all its safety indicators, including Safety Risk Index, Flight Control Risk Index, and Fleet Technical Risk.</p> <p>Air China achieved a punctuality rate of 80.36% in 2018, which was 0.23ppt higher than the industry average.</p>
<p>Employee rights and interests</p>  <p>Good</p>	<p>Air China strictly abides by China’s Labor Contract Law and other relevant regulations, and upholds an open and fair talent diversity strategy, opposing discrimination, insisting on the principle of same pay for same work, avoiding child labor and forced labor, advocating democratic management, and protecting the rights and freedom of the staff.</p>
<p>Customer engagement</p>  <p>Good</p>	<p>Air China has a comprehensive passenger complaint responding mechanism to ensure complaints are resolved promptly and satisfactorily, and the overall service satisfaction of passengers reached 90.6 points in 2018, improving by 2.6 points year-on-year.</p>
<p>Product and service quality</p>  <p>Good</p>	<p>The company is highly focused on improving its products and services including the upgrading of its ground lounges, the establishment of global service support centers, improving transit counter service and also its mobile and official website experience. Air China has also been seeking to improve the quality of its food and aircraft entertainment systems, in addition to the constant introduction of new aircraft into its fleet.</p>
<p>Community involvement</p>  <p>Good</p>	<p>The company has established a social responsibility work leading group, responsible for social responsibility strategy formulation and planning approval as well as guiding the implementation of social responsibility work. The company is actively involved in numerous social causes including under-privileged children, poverty alleviation, and the disabled.</p>



Source: DBS HK

Governance factors

Factor	Comments
Risk management 	Air China has a robust governance structure with 4 of its 8 board members being independent directors and special committees including the 1) Audit and Risk Control Committee, 2) Nomination and Remuneration Committee, Strategy and Investment Committee, and Aviation Safety Committee each reporting to the Board of Directors.

Source: DBS HK

Business development factors

Factor	Comments
Route and network development 	In 2008, the Air China Group (including Air China, Shenzhen Airlines, Air Macau, Beijing Airlines, Dalian Airlines and Air China Inner Mongolia) newly launched or adjusted 155 domestic and international routes, and operated a total of 754 passenger routes, including 138 international routes and 27 regional routes – reaching 42 countries and regions and 184 cities, of which 66 were international cities.
Brand value 	In 2018, Air China’s brand was selected as one of the “World 500 Most Influential Brands” release by the World Brand Lab with a brand value of RMB145bn and was the only Chinese airline to make the list, and was also among the lists of “BrandZ Top 50 Chinese Global Brand Builders”.

Source: DBS HK

Environmental, Social and Governance

Anhui Conch Cement (914 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$57.55

Price Target 12-mth: HK\$55.00 (4.4% downside) (under review)

Analyst

Duncan CHAN +852 36684178; duncanchan@dbs.com

Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Turnover	128,403	151,030	152,053	162,389
EBITDA	45,112	46,410	49,176	52,173
Pre-tax Profit	39,675	40,597	43,012	45,916
Net Profit	29,858	30,552	32,370	33,512
Net Pft (Pre Ex) (core profit)	29,858	30,552	32,370	33,512
Net Profit Gth (Pre-ex) (%)	87.8	2.3	6.0	3.5
EPS (RMB)	5.63	5.77	6.11	6.32
EPS (HK\$)	6.37	6.51	6.90	7.14
Core EPS (HK\$)	6.37	6.51	6.90	7.14
Core EPS (RMB)	5.63	5.77	6.11	6.32
EPS Gth (%)	87.8	2.3	6.0	3.5
Core EPS Gth (%)	87.8	2.3	6.0	3.5
Diluted EPS (HK\$)	6.37	6.51	6.90	7.14
DPS (HK\$)	1.91	1.95	2.07	2.86
BV Per Share (HK\$)	23.98	28.54	33.37	37.65
PE (X)	9.1	8.9	8.4	8.1
Core PE (X)	9.1	8.9	8.4	8.1
P/Cash Flow (X)	7.6	6.6	7.0	6.9
P/Free CF (X)	8.7	8.7	9.4	8.4
EV/EBITDA (X)	5.5	4.9	4.2	3.6
Net Div Yield (%)	3.3	3.4	3.6	5.0
P/Book Value (X)	2.4	2.0	1.7	1.5
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	29.6	24.8	22.3	20.1
Earnings Rev (%):		Nil	Nil	Nil
Consensus EPS (RMB)		6.19	6.03	5.90
Other Broker Recs:		B:24	S:0	H:6

Bloombera ESG Disclosure Score (2018)^ 41
 - Environmental / Social / Governance 37 / 44 / 48

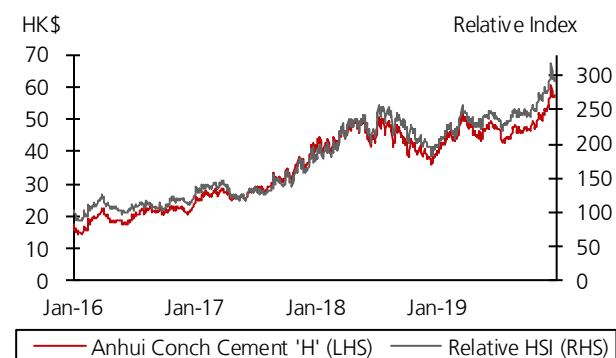
Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
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Leading cement product manufacturer in China. Conch Cement ("Conch") is China's second largest cement producer. It has placed great importance on environmental protection. To ensure compliance with social responsibility objectives and sustainability goals, Conch has embarked on green and low-carbon development initiatives and strengthened its operating management. Conch plays a leading role in business development, internal management and efficiency.

The ESG Risk for global building materials sector is basically related to environmental risk and governance issues, according to S&P Global report. Specifically for Conch, based on our analysis framework, we have summarised below the critical factors highlighted as core issues for operations and those for stakeholders.

Price Relative



Environmental factors

Factor	Comments
<p>Energy management</p>  <p>Strong</p>	<p>Conch is evaluating technological innovations to reduce emissions and increase energy consumption efficiency. Direct energy and indirect energy: It has made meaningful progress in energy conservation. The clinker production lines are all equipped with residual heat power generation system, reducing coal consumption and carbon dioxide emissions accordingly. In 2018, the amount of generated electricity from the self-operated residual heat power generators had saved 2.98mn tonnes of standard coals, as compared with the same scale of fire-generated power plants, and reducing emission of CO₂ during the period.</p>
<p>Greenhouse gas emission</p>  <p>Good</p>	<p>Conch has adopted GREEN Management to reduce greenhouse gas and air pollution emissions. The unit CO₂ equivalent emissions calculated in accordance with the Guidelines on Greenhous Gas Emissions Accounting for the Cement Industry was below industry average. Conch’s increasing expenditure towards environmental protection will have an immaterial impact on the company’s balance sheet, given its extremely low gearing level.</p>
<p>Water & wastewater management</p>  <p>Improving</p>	<p>Conch has attached great importance on the protection of water resources and advocates water conservation and recycling, and rainfall and sewage separation systems have been implemented for all plants. For example, Suzhou Conch uses recycled wastewater with advanced treatment to ensure that water is recycled to be used in residual heat power generation and cooling systems, and there is no sewage discharged into the urban sewage pipe network.</p>
<p>Waste & hazardous materials management</p>  <p>Improving</p>	<p>Conch has used cement kilns to digest industrial wastes using advanced waste gasification treatment technology in the waste incineration treatment method to convert the waste into combustible gas, and then transmits the gas into the decomposition furnace of the new dry process cement kiln system, and burn it as part of the fuel.</p>

Source: DBS HK



Social factors

Factor	Comments
Product quality & safety	To ensure fair competition in the market and protect consumers, Conch has relentlessly combated any manufacturing or sale of counterfeit products, or infringement of trademarks. We do not expect social factors to pose any significant risk on Conch.
Employee health & safety	Conch uses the most advanced equipment to excavate open pit mines, regularly sprinkle water for mine roads, and install spray devices at discharge ports prone to dust, thereby achieving control of dust at the source and reducing the damage to the health of workers. Moreover, since Conch has actively taken a number of management measures, it has achieved that all subordinate entities have “zero work-related death: and minor injuries be reduced by more than 20%” during the period.
Employee engagement, diversity & inclusion	Conch adheres to the principle of equal employment and regularly carries out campus recruitment drives to optimise its personnel structure. To meet the needs of international development strategy, Conch promotes localised employment and boosts local economic development.







Source: DBS HK

Governance factors

Factor	Comments
Business ethics 	Conch has promoted business ethics and reinforces workplace integrity, and anti-corruption campaigns is essential for people-oriented development strategy of state-owned enterprises. Based on the company’s current practice, the Disciplinary Committee at superior levels received reporting and whistle-blowing on a monthly basis; while integrity trainings, on-site audits, reported case inspection and management meeting were regularly conducted. Thus, we do not expect governance factors to pose any significant risk on Conch.
Competitive behaviour 	Conch produces a wide range of cement products that meet demands of various customers. “CONCH” has been recognised as a Well-known Trademark by the Trademark Office of the PRC and has earned a solid reputation; conforming to American Standards is important for exports to the US and other countries.

Source: DBS HK

Business development factors

Factor	Comments
Product / service sustainability 	Conch manufactures and distributes a wide range of cement products including 52.5-grade cement, 42.5-grade cement and 32.5R-grade cement and special high-end cement such as cement for nuclear power generation and nonmagnetic cement, that fits buildings requiring minimum geomagnetic and electromagnetic interference.
Business model resilience 	Conch’s business model combines group-based management and regional operations. In the long term, we expect tightened regulations on environmental protection to shake out small -scale competitors, increase industry consolidation pace, and benefit the industry leaders such as Conch.
Supply chain management 	Conch is expanding its sourcing channels and is undertaking procurement by way of open tenders and vigorously advocates sincere cooperation with suppliers to achieve a win-win situation which of mutual benefit to all.
Materials sourcing & efficiency 	Conch has established a three-level material supply management system, with focus on unified purchases and distributions to take advantage of scale procurement and ensure stable supply of raw materials at economical prices.

Source: DBS HK

Environmental, Social and Governance

BeiGene (6160 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$99.45

Price Target 12-mth: HK\$144.0 (44.8% upside)

Analyst

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Forecasts and Valuation

FY Dec (US\$ m)	2018A	2019F	2020F	2021F
Turnover	198	434	398	793
EBITDA	(695)	(734)	(994)	(766)
Pre-tax Profit	(690)	(761)	(1,027)	(790)
Net Profit	(674)	(743)	(1,003)	(772)
Net Pft (Pre Ex) (core profit)	(676)	(743)	(1,003)	(772)
Net Profit Gth (Pre-ex) (%)	(625.8)	(9.9)	(35.1)	23.1
EPS (US\$)	(0.93)	(1.03)	(1.09)	(0.84)
EPS (HK\$)	(7.27)	(8.02)	(8.45)	(6.50)
Core EPS (HK\$)	(7.29)	(8.02)	(8.45)	(6.50)
Core EPS (US\$)	(0.94)	(1.03)	(1.09)	(0.84)
EPS Gth (%)	(445.4)	(10.3)	(5.4)	23.1
Core EPS Gth (%)	(447.0)	(9.9)	(5.4)	23.1
Diluted EPS (HK\$)	(7.27)	(8.02)	(8.45)	(6.50)
DPS (HK\$)	0.00	0.00	0.00	0.00
BV Per Share (HK\$)	18.77	10.89	23.02	16.52
PE (X)	nm	nm	nm	nm
Core PE (X)	nm	nm	nm	nm
P/Cash Flow (X)	nm	nm	nm	nm
P/Free CF (X)	nm	nm	nm	nm
EV/EBITDA (X)	nm	nm	nm	nm
Net Div Yield (%)	0.0	0.0	0.0	0.0
P/Book Value (X)	5.3	9.1	4.3	6.0
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	(55.9)	(54.1)	(53.6)	(32.9)

Earnings Rev (%): Nil

Consensus EPS (US\$) (0.94) (1.52) (0.75)

Other Broker Recs: B:13 S:1 H:0

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"), Thomson Reuters

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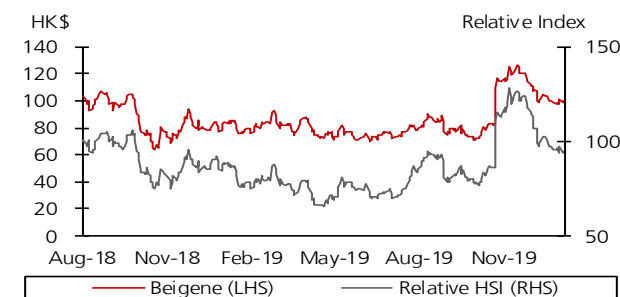
An innovation-driven Chinese anti-cancer drug producer.

Established in 2010, BeiGene is an innovative drug company focusing on the discovery, development and commercialisation of anti-tumour drugs. With R&D and manufacturing sites in China, it aims to serve cancer patients on a global basis. The company was listed on NASDAQ in 2016 and HK in 2018.




BeiGene performed well in our ESG evaluation. Its energy/resources conservation and waste management are better compared to its peers. The company managed to ensure its product safety by following Good Manufacturing Practices (GMP) and the most updated quality control standards. The company paid great attention to anti-corruption and bribery issues by establishing a Compliance Committee and offering the relevant training to its employees.

Detailed descriptions of the material issues relevant to stakeholders regarding environmental, social, governance and business development aspects of the company are listed below.

Price Relative



Environmental factors

Factor	Comments
Water saving 	In 2018, BeiGene’s water consumption per employees was at the low-end among its biotech peers (Junshi 1877 HK, Cstone 2616 HK, Innovent 1801 HK). All these companies focused on innovative R&D for drugs without engaging in mass manufacturing by 2018. In 2020, we are expecting 0.2% higher capital expenditure (capex) channelled towards maintaining efficient water savings as the drugs previously under R&D are launched and mass manufactured.
Waste management 	In 2018, BeiGene’s hazardous waste per employees is at the low-end among its biotech peers (Junshi 1877 HK, Cstone 2616 HK, Innovent 1801 HK). In 2020, we are expecting a 0.2% higher capex channelled towards maintaining efficient waste management as the drugs previously under R&D are launched and mass manufactured.
Greenhouse gas (GHG) emission control 	In 2018, BeiGene’s GHG per employees was at the low-end among its biotech peers (Junshi 1877 HK, Cstone 2616 HK, Innovent 1801 HK). In 2020, we are expecting a 0.2% higher capex channelled towards maintaining efficient GHG control as the drugs previously under R&D are launched and mass manufactured.

Source: DBS HK

Social factors

Factor	Comments
Product quality and safety	BeiGene’s production site is in strict compliance with requirements of the US Food and Drug Administration (FDA), China’s Drug Administration, and European regulations, such as Good Manufacturing Practice (GMP), and International Council for Harmonisation (ICH) Q10 Drug Quality Control System which is the most recently updated guideline for drug quality control.
Access to products	BeiGene’s drugs are making their presence felt. The company provides drugs to low-income patients who are suffering from multiple myeloma at a discounted price or for free (e.g. REVLIMID).
Employee welfare	According to an internet survey (https://m.jobui.com/), BeiGene’s average employee salary is RMB14,000 per month, 31% higher than other pharmaceuticals in Beijing. However, 89% of the survey respondents complained about working too much overtime in the company. If the employees’ overtime hours are replaced by hiring more employers (most of which should be pre-clinical R&D staff), we estimate that the company’s R&D cost will increase by 5-10% to maintain the existing R&D productivity.

Strong



Strong

Improving

Source: DBS HK



Environmental, Social and Governance

Governance factors

Factor	Comments
Corruption and bribery 	The company is not under any allegations of corruption and bribery to doctors. BeiGene primarily promotes its products to doctors at academic conferences or seminars in China and the US, and doctors are convinced by superior clinical efficacies of the drugs through attending these conferences. The company sent its staff to attend major oncology and haematology meetings worldwide and in China in 2018 and 2019, for example ASCO, CSCO, ESMO, ASH, etc. The company has established a Compliance Committee and offers training to its employees to ensure everyone abides by external anti-bribery laws in China and the US as well as internal compliance regulations.
Legal compliance 	In clinical trials, the most sensitive area is Chinese patients' genetic information. The acquisition and export of this information would require the approval of the Human Genetic Resources Administration which is under the purview of the Ministry of Science and Technology. BeiGene has obtained the necessary approvals for its major products that are under clinical trials.

Source: DBS HK

Business development factors

Factor	Comments
R&D / Innovation 	The company is primarily focusing on the R&D for innovative oncology drugs. Good R&D results in good clinical data, which could boost the company's valuation by increasing the net present value of its clinical assets in the pipeline. BeiGene serves as a good example in this respect, as its two in-house developed proprietary drugs, PD-1 and BTK, are perceived as potentially best-in-class. The company's share price has risen c.19% in 2019 and we expect more positive clinical data to provide a further boost.
Business model resilience 	Pharmaceutical R&D is a high-risk activity, as only less than 10% of drugs that undergo phase 1 clinical trials will eventually be launched, based on track record. Therefore, the management is actively seeking alternative business opportunities globally to derisk its product pipeline. In October 2019, the company announced its collaboration with Amgen (AMGN US), one of the largest biotech companies globally, with whom BeiGene will co-develop 23 drugs, and significantly strengthen its pipeline. Apart from Amgen, BeiGene is also collaborating with other US-listed companies such as Zymework (ZYME US) and Seattle Genetics (SGEN US). Prior to the launch of its own PD-1 and BTK drugs in China, the company was already selling three drugs for Celgene (CELG US), which provided training for its sales team in China.

Source: DBS HK

Environmental, Social and Governance

China Communications Services (552 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$5.50

Price Target 12-mth: HK\$7.80 (41.8% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMBm)	2018A	2019F	2020F	2021F
Turnover	106,177	117,524	132,879	150,293
EBITDA	4,106	4,635	4,871	5,267
Pre-tax Profit	3,425	3,675	3,977	4,428
Net Profit	2,901	3,095	3,350	3,730
Net Profit Gth (Pre-ex) (%)	6.9	6.7	8.2	11.4
EPS (RMB)	0.42	0.45	0.48	0.54
EPS (HK\$)	0.47	0.51	0.55	0.61
EPS Gth (%)	6.9	6.7	8.2	11.4
Diluted EPS (HK\$)	0.47	0.51	0.55	0.61
DPS (HK\$)	0.17	0.18	0.20	0.22
BV Per Share (HK\$)	5.29	5.62	5.99	6.40
PE (X)	11.6	10.9	10.0	9.0
P/Cash Flow (X)	7.9	7.2	6.9	6.4
P/Free CF (X)	9.5	9.9	9.6	8.9
EV/EBITDA (X)	4.0	3.0	2.4	1.7
Net Div Yield (%)	3.1	3.3	3.6	4.0
P/Book Value (X)	1.0	1.0	0.9	0.9
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	9.6	9.3	9.4	9.8

Earnings Rev (%):

Nil

Nil

Nil

Consensus EPS (RMB)

0.45

0.50

0.59

Other Broker Recs:

B: 12

S: 3

H: 1

Bloomberg ESG Disclosure Score (2018)^

24.8

- Environmental / Social / Governance

16.3 / 22.8 / 46.4

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),

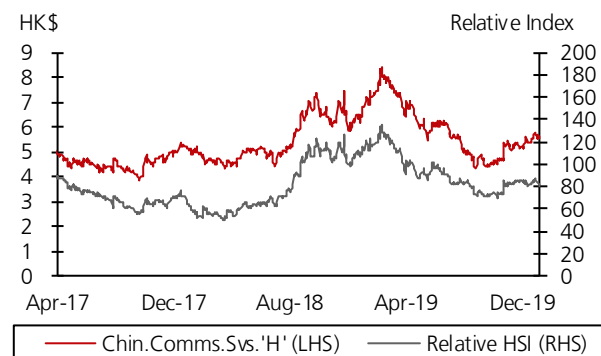
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Leading telecom infrastructure service provider. CCS is a leading telecom infrastructure service provider in China. Its business growth is mainly driven by operators' network build-outs as well as expansion into non-operator markets. CCS is likely to undergo a SOE reform exercise in 2020. We expect the reform to introduce strategic shareholders into the private sector and issue employee options with financial targets. This will help increase business opportunities with strategic shareholders (B), improve the corporate governance (G) and employee engagement (S) of the company. We expect the company to enjoy higher valuation multiple of 15x FY20 PE vs its historical average of 12x and raised our TP from HK\$6.30 to HK\$7.80.

Based on global sustainable development goals, degree of stakeholder attention and importance to CCS's business, we have identified several factors to respond to the material issues relevant to stakeholders.

Price Relative



Environmental, Social and Governance

Environmental factors

Factor	Comments
Energy management	CCS actively facilitates energy saving and emission reduction for its customers and other sectors in the society to accomplish energy saving. The online energy consumption monitoring system independently developed by its Chongqing subsidiary has been assisting the government to monitor energy consumption by key energy consuming units in real time, helping them conserve energy and reduce emission, exploit energy-saving potential, and improve energy efficiency.



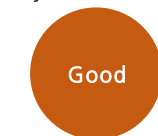
Source: DBS HK

Social factors

Factor	Comments
Customer engagement	CCS has strong engagement with its major customers who are also the major shareholders of the company. It has frequent communications with customers on the updated business requirement.





Product quality & safety	CCS is always committed to providing high quality, efficient and keeping information safe for customers and contributing to the improvement of national communications infrastructure and protection of effective communications networks.
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Source: DBS HK

Social factors (con't)

Factor	Comments
Privacy and data security 	CCS's internal information security is strictly controlled, and it would enter into data protection agreements at customers' requirements. It also signs relevant agreements with employees depending on actual needs and comply with it strictly, and no leakage of private information of customers or employees has occurred. In 2018, the company conducted a new technology and business evaluation for newly launched businesses and major existing businesses. Those technologies and products that do not pass the evaluation will not be offered to customers, which significantly enhanced the company's risk management and control capabilities on network security.
Employee relations & diversity 	It upholds the philosophy of "Dignity within the Company and Respect to Employees" and shows sincere and enhanced care about its employees. In 2018, the company consistently improved the production and living environment for its employees, and set up the "Four Small Facilities" such as the "Small Canteens, Small Activity Rooms, Small Restrooms and Small Shower Rooms" in timely manner and the utilisation rate of these has increased.

Source: DBS HK



Governance factors

Factor	Comments
Risk management 	The company has adopted new strategies for its overseas expansion to reduce the business risk. Rather than focusing on business volume and revenue, the company now focuses more on the cash flow and return of the business which has significantly reduced the risk of bad debt.

Source: DBS HK



Environmental, Social and Governance

Governance factors (con't)

Factor	Comments
Board diversity & structure 	We believe the SOE reform will introduce new strategic shareholders. The new shareholders may have rights to appoint directors into the board. This will enhance the board diversity and improve the corporate governance of the company.
Executive pay 	We expect SOE reform to adopt employee share incentive scheme that will align executive pay with company performance. This will improve shareholders' value as executives' interests are aligned with shareholders.

Source: DBS HK

Business development factors

Factor	Comments
R&D/ innovation management 	The company actively responded to the call of the government of "mass entrepreneurship and innovation", and for employees who are ambitious in setting up their own businesses, it treated them with favourable policies, thus releasing a large group of innovative and entrepreneurial talents for social development. The introduction of new strategic shareholders through SOE reform may also provide new innovative business opportunities.
Product / service sustainability 	The company has strong presence in the telecommunications construction services market which takes on the capex spending of telecom operators. It has also been expanding to maintenance service market to capture the opex of telecom operators. This also extends its product lifecycle from construction to maintenance of the telecom infrastructure.

Source: DBS HK

Environmental, Social and Governance

China Mengniu (2319 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$32.50

Price Target 12-mth: HK\$33.10 (1.8% upside) (under review)

Analyst

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Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Turnover	68,977	79,175	83,616	92,642
EBITDA	5,333	7,246	7,533	9,179
Pre-tax Profit	3,853	8,230	5,595	6,745
Net Profit	3,043	6,475	4,404	5,261
Net Pft (Pre Ex) (core profit)	2,999	3,903	4,404	5,261
Net Profit Gth (Pre-ex) (%)	48.6	112.8	(32.0)	19.5
EPS (RMB)	0.77	1.66	1.13	1.35
EPS (HK\$)	0.88	1.87	1.27	1.52
Core EPS (HK\$)	0.86	1.13	1.27	1.52
Core EPS (RMB)	0.76	1.00	1.13	1.35
EPS Gth (%)	47.4	113.8	(32.0)	19.5
Core EPS Gth (%)	45.2	30.8	12.8	19.5
Diluted EPS (HK\$)	0.88	1.87	1.27	1.52
DPS (HK\$)	0.20	0.44	0.30	0.36
BV Per Share (HK\$)	7.25	8.95	9.79	11.01
PE (X)	37.2	17.4	25.6	21.4
Core PE (X)	37.8	28.9	25.6	21.4
P/Cash Flow (X)	17.8	31.9	21.0	13.9
P/Free CF (X)	39.0	nm	nm	31.3
EV/EBITDA (X)	23.5	N/A	N/A	N/A
Net Div Yield (%)	0.6	1.3	0.9	1.1
P/Book Value (X)	4.5	3.6	3.3	3.0
Net Debt/Equity (X)	0.2	CASH	CASH	CASH
ROAE (%)	12.7	23.0	13.6	14.6
Earnings Rev (%)		Nil	Nil	Nil
Consensus EPS (RMB)		1.22	1.18	1.40
Other Broker Recs:		B:25	S:1	H:6

Bloomberg ESG Disclosure Score (2018)[^] 42
 - Environmental / Social / Governance 42 / 28 / 57

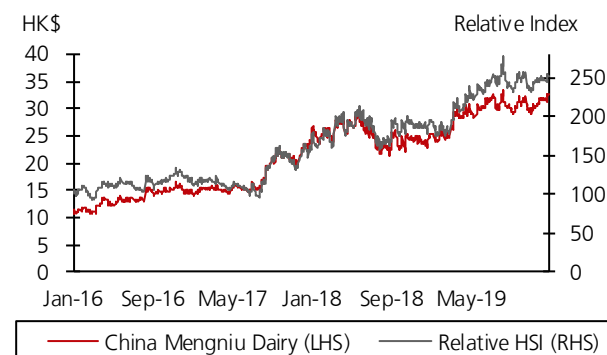
Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

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Leading dairy product manufacturers in China. As one of the leading dairy product manufacturers in China, China Mengniu provides a diversified portfolio of dairy products including UHT milk, milk beverages, yogurt, ice-cream, milk formula and other products (plant-based protein beverages, and cheeses). To ensure a long-term sustainable development strategy, Mengniu has established a three-level sustainable development management system to oversee strategic planning and decision making, supervision and management and implementation of sustainable development.

Based on global sustainable development goals, degree of stakeholder attentions and importance to Mengniu's business, we have identified several factors to respond to the material issues relevant to stakeholders.

Price Relative








Environmental factors

Factor	Comments
Practice in energy conservation and emission reduction 	Mengniu actively promotes ranchers to carry out energy conservation and emission reduction projects. This includes the roll out of solar water heaters to heat cleaning water, solar street lights in plants, low-temperature cleaning fluid projects to develop and test liquid products, the use of clean energy to reduce carbon emissions, and the promotion of use of energy-saving lamps.
Wastage management 	Mengniu actively promotes the management of faecal pollution to be recycled into organic fertilizer, compound fertilizer, animal breeding, and aquaculture feed.
Biodiversity and ecological conservation 	Mengniu adheres the concept of green and low-carbon sustainable development, based on the Environmental Protection Law of the PRC, whilst formulating their own environmental management systems. To protect biodiversity, the location of ranches is strictly selected in accordance with ecological planning which are government -approved non-forestry land to prevent the shrinkage of forest area, species reduction and invasion of alien species.





Source: DBS HK

Social factors

Factor	Comments
<p>Product quality and safety</p> 	<p>Mengniu is complied with international standards and upgraded food safety management according to the ISO9001, FSSC22000, HACCP and other systems. In addition, it has established a three-level quality and safety management structure to form a quality and safety management system covering the entire industry chain.</p>
<p>Access and affordability</p> 	<p>Mengniu strives to be consumer-oriented and adapting towards consumption upgraded and innovation. That said, communication and product accessibility is achieved through expansion of sales channels.</p>
<p>Workers' health and safety</p> 	<p>Mengniu Group Workers Union strictly follows the Union Work Procedures and conducts Worker Congress every year.</p>
<p>Customer engagement</p> 	<p>Mengniu conducts a "customer voice" survey on a quarterly basis around the service system of "center-serving regions, regions-serving clients, and client-serving end customers".</p>
<p>Local communities</p> 	<p>Mengniu's first overseas liquid milk factory in Indonesia was put into production in Nov'18, and is expected to provide more than 1,000 jobs in the local area over the next five years.</p>

Source: DBS HK

Business model & innovation factors

Factor	Comments
R&D/ innovation management	Through collaboration between Mengniu and Alibaba Cloud, Mengniu has set up data standards to ensure R&D driven innovation and constant focus on meeting consumer demand
	
Product / service sustainability	Mengniu leverages on its consumer insight system to collect consumer data, such as customers information, and behaviour patterns, this helps play a large role in product designing.
	
Business model resilience	Mengniu has developed a regulatory framework and business model to promote the utilisation of waste, drive upstream and downstream of the industrial chain and consumers to practice the circular economy.
	
Supply chain management	Mengniu adopts a Grass-to Glass Traceability system and controls every point of the milk production with a strict testing system to ensure all incoming milk is 100% tested. The Company has built a comprehensive information management platform for quality assurance, achieving digitalisation, visualisation, precision and efficiency of quality management.
	

Source: DBS HK

Governance factors

Factor	Comments
Risk management	China Mengniu has set up a risk management framework comprising Risk Control Committee, Risk Management Department and commissioner of each business division through the compliance under the risk management framework under COSO (Committee of Sponsoring Organisation of the Treadway Commission).



Source: DBS HK

Environmental, Social and Governance

China Merchants Bank (3968 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$40.95

Price Target 12-mth: HK\$45.30 (10.6% upside)

Analyst

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Forecasts and Valuation (H Shares)

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Pre-prov. Profit	166,025	177,791	192,261	210,479
Pre-prov. Profit Gth (%)	11	7	8	9
Pretax Profit	106,497	117,985	132,909	152,830
Net Profit	78,901	90,074	103,002	118,690
EPS (RMB)	3.13	3.57	4.08	4.71
EPS (HK\$)	3.61	4.04	4.62	5.32
EPS Gth (%)	12	14	14	15
PE (X)	11.3	10.1	8.9	7.7
DPS (HK\$)	1.08	1.21	1.39	1.60
Div Yield (%)	2.6	3.0	3.4	3.9
BV Per Share (HK\$)	23.15	26.08	29.93	34.33
P/Book Value (x)	1.8	1.6	1.4	1.2
ROAE (%)	16.6	16.6	16.5	16.6
ROAE (ex-exceptional)	16.6	16.6	16.5	16.6
ROA (%)	1.21	1.28	1.34	1.43

Earnings Rev (%)	Nil	Nil	Nil
Consensus EPS (RMB)	3.61	4.07	4.62
Other Broker Recs:	B:21	S:2	H:8

Bloomberg ESG Disclosure Score (2018)^ 42
 - Environmental / Social / Governance 42 / 28 / 57

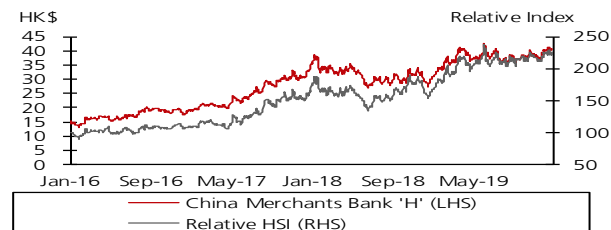
Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

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A leading retail bank in China. As a leading retail bank in China, CMB has adapted to the change in customers' needs by changing its business strategies to provide better financial services. Since 2018, the bank has shifted its focus from "capital light" to "operation light" to better serve customers in the digital age and further beef up its fintech operations. Faced with the challenges and opportunities presented by the new normal in terms of economic and social developments, CMB has integrated its developments with the social responsible concept of "Taking root in the society, given back to the society". CMB now offers the highest green finance and SME loans among Joint-Stock banks to support the development of an eco-friendly, low carbon and recyclable economy for the former and to help small and micro businesses obtain loans more easily.

CMB has directed more capital to eco-friendly areas, supporting the development of environmental protection initiatives. We have identified several factors to respond to the material issues relevant to stakeholders.

Price Relative





Environmental factors

Factor	Comments
Energy management 	To save energy and reduce emissions, CMB’s datacenters aim to fully use natural cold sources and use the latest smart technologies to improve energy efficiency year after year. CMB has renovated its Head Office, R&D center, remote banks and other self-owned properties to make them more energy-efficient and eco-friendly.

Source: DBS HK

Social factors

Factor	Comments
Access to product / service and affordability 	In 2018, CMB had the second highest portion of loans supporting SMEs and micro business within our China banking coverage, at 9% of total outstanding loans, higher than the average 5% of our covered banks. CMB also continues to facilitate the growth of China’s economy, growing the total number of county sub-branches to 98, accounting for 5.4% of its total outlets. We give the bank a high social score based on its support to the real economy.
Privacy and data security 	CMB places heavy emphasis on customer privacy and promotes its data security management system and innovates its ways of identifying risks to protect customers’ privacy.

Source: DBS HK

Environmental, Social and Governance

Social factors (con't)

Factor	Comments
Workers' health and safety	CMB provides annual free physical check-ups, and organises health seminars and various cultural and sports activities to advocate a healthy lifestyle and help employees cultivate a positive attitude. In 2018, holiday coverage in CMB reached 74.98% in 2018, up 1% from 2017.
Customer engagement	CMB has actively seized opportunities in the Internet finance era and used IT technology to develop service channels including online, remote and mobile banking. This has greatly reduced customers' travel costs between outlets and queuing time while delivering a great service experience to them.

Improving

Good

Source: DBS HK

Governance factors

Factor	Comments
Risk management	CMB has good credit risk control and compliance operations, which creates more value to customers and provides sustained and stable returns to shareholders. CMB's NIM and loan quality has been improving amid various fluctuations in the business cycle.
Information disclosure	CMB had been disclosing information more actively, and making the disclosed information more transparent

Strong

Good

Source: DBS HK

Business development factors

Factor	Comments
R&D/ innovation management	CMB has fully seized opportunities arising from fintech, using it as the core driving force for business transformation.
Product / service sustainability	In 2018, CMB had the highest portion of loans supporting green financing within Joint-stock banks, accounting for 4% of total outstanding loans vs Joint-stock banks' average of 2%. CMB has completed its two-year "Going Cardless" project, to be the first Chinese bank realising "cardless operations" in all outlets. All retail banking operations at its counters, interactive video kiosks, ATMs and other services available in outlet halls can be completed without using cards.
Business model resilience	CMB expedites its fintech strategy to realise full connectivity, digitalisation and smart operations, which has eventually led to a better customer experience.



Source: DBS HK

Environmental, Social and Governance

China Petroleum & Chem (Sinopec) (386 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$4.69

Price Target 12-mth: HK\$6.00 (27.9% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Turnover	2,891,179	3,027,855	3,116,208	3,224,987
EBITDA	214,015	206,974	219,874	225,808
Pre-tax Profit	99,110	89,522	93,240	90,604
Net Profit	61,618	56,544	58,900	57,231
Net Profit Gth (Pre-ex) (%)	20.2	(8.2)	4.2	(2.8)
EPS (RMB)	0.51	0.47	0.49	0.47
EPS (HK\$)	0.57	0.53	0.55	0.53
EPS Gth (%)	20.2	(8.2)	4.2	(2.8)
Diluted EPS (HK\$)	0.57	0.53	0.55	0.53
DPS (HK\$)	0.47	0.41	0.43	0.40
BV Per Share (HK\$)	6.69	6.81	6.93	7.07
PE (X)	8.2	8.9	8.5	8.8
P/Cash Flow (X)	2.9	3.1	2.7	2.7
P/Free CF (X)	6.1	17.1	15.5	18.6
EV/EBITDA (X)	2.8	3.1	3.1	3.1
Net Div Yield (%)	10.1	8.7	9.1	8.4
P/Book Value (X)	0.7	0.7	0.7	0.7
Net Debt/Equity (X)	CASH	CASH	CASH	0.0
ROAE(%)	8.5	7.8	8.0	7.6

Earnings Rev (%)	Nil	Nil	Nil
Consensus EPS (RMB)	0.48	0.51	0.51
Other Broker Recs:	B:15	S:0	H:5

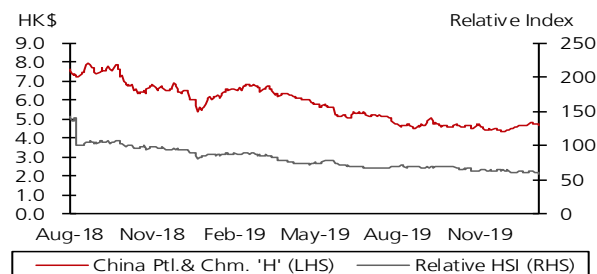
Bloombera ESG Disclosure Score (2018)[^]
 - Environmental / Social / Governance 42.1 / 59.4 / 57.1

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"), Thomson Reuters





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Strong commitment to enhancing ESG practices. As the largest petroleum refiner in not only China, but also the world, the wide spectrum of Sinopec's operations has a profound bearing on China's environmental and social development. On this front, we note that Sinopec has demonstrated solid progress over the past few years, and expect further improvements in its ESG practices. The company recently devised a 'Green and Low-carbon Development Strategy' in 2018, which contains ambitious targets in boosting clean energy (predominantly natural gas + LNG) supply, augmenting energy and water conservation, slashing the discharge and emission of pollutants, and developing more greener products like biodegradable plastics. On a relative scale, while Sinopec's ESG performance falls short of the other global supermajors, we believe the company is ahead of its peers in China, and is an admirable role model for the other smaller domestic independent players. As part of our ESG integration exercise, we moderated Sinopec's free cash flow generation, as we now anticipate higher capital spending on the back of its ESG initiatives, but the overall impact to our target price is largely mitigated by a lower discount rate assumption, as we now view the business as more sustainable with a more favourable risk profile.

Price Relative






Environmental factors

Factor	Comments
<p>Energy conservation and emission reduction</p>  <p>Strong</p>	<p>Sinopec places great emphasis on energy conservation and emission reduction. On this front, the company has taken a multitude of measures to minimise its carbon footprint, by maximising carbon capture in its operations, enhancing methane recovery and augment gas flaring reduction. On a relative basis, its GHG emission/O&G produced of 0.07 (m tonnes CO2-equivalent/mmboe), and GHG emission/refinery throughput of 0.56 (m tonnes CO2-equivalent/mmbbl) was on par with the peer average. Looking ahead, by 2023, Sinopec is targeting to i) expand natural gas supply capacity to 60bcm/year from 38bcm/year in 2018, ii) reduce energy consumption by 6million tonnes of standard coals from 2017, iii) and reduce the emission of chemical oxygen demand, ammonia nitrogen, sulphur dioxide and nitrogen oxide by 12%, 12%, 18% and 18% respectively from 2017.</p>
<p>Wastage management</p>  <p>Good</p>	<p>Sinopec has implemented a comprehensive waste management system for both non-hazardous and hazardous waste. The company has tailor-made resource utilisation plans for 127 kinds of solid wastes, and attained a 100% proper waste disposal rate in 2018. In the same year, Sinopec also successfully developed a new water recycling process, and applied it to one of its natural gas fields. The new technology is expected to recycle around 150,000m3 of water every year.</p>
<p>Biodiversity and ecological conservation</p>  <p>Good</p>	<p>All of Sinopec’s projects and operations conform with relevant regulations under the Environmental Protection Law and Convention on Biodiversity. The company performs a thorough ecological impact assessment prior to every project, and ensures that the environment is restored as best as possible after project completion.</p>
<p>Oil spills</p>  <p>Good</p>	<p>Sinopec constantly performs oil spillage risk analysis and evaluation, and has in place emergency drills/procedures to deal with potential oil spills. The last major oil spill that occurred was back in 2013, when a leak in one of its crude oil pipelines led to an explosion that killed 35 people.</p>



Source: DBS HK

Social factors

Factor	Comments
Operational safety	Operational safety is Sinopec’s top ESG priority, and the company continuously strives to minimise workplace accidents and uphold rigorous safety mechanisms. In this aspect, Sinopec also enforces strict requirements on its contractors, and only works with contractors that are QHSE certified.
	
Community engagement	Sinopec actively promotes social and economic development via investments, providing job opportunities and domestic procurement - Sinopec’s international JVs are largely localised with elevated domestic procurement rates. In 2018, Sinopec invested RMB6.7bn to boost the development of local communities, education and healthcare.
	
Public welfare	Over the years, Sinopec has been highly active in providing humanitarian aid and alleviating poverty in China’s developing and impoverished regions, via vital infrastructure construction, and the provision of education, labour training and healthcare. For example, in 2018 alone, Sinopec invested RMB25.9m to improve education facilities, purchase education equipment and granted subsidies to 1,374 students; in Tibet, the company aided in the construction of a hospital in Baingoin County, which is situated on the world’s highest altitude, and integrated the country’s natural glacial water with its extensive convenience store network to provide employment for 732 people.
	

Source: DBS HK

Governance factors

Factor	Comments
Risk management 	Sinopec has established a Comprehensive Risk Management working group which is responsible for working with the relevant departments to control and mitigate risks related to work safety, environmental protection, climate change, legal affairs and overseas public security. The working group meets regularly to identify, evaluate and formulate solutions to all significant risks. Additionally, Sinopec tries to maintain a robust risk management culture by mandating risk training for all employees, and tying the annual performance bonus of top management with the fulfilment of risk objectives.
Anti-corruption 	Sinopec has independent departments that are responsible for the detection, investigation and resolution of corruption incidents. Moreover, the company also organises anti-corruption training for all senior managers and online trainings/seminars on law, regulations, and integrity for all employees annually.

Source: DBS HK

Business development factors

Factor	Comments
R&D/innovation management	Sinopec has 4 state key laboratories, 5 national engineering research centres, 2 national energy R&D centres and 2 state-certified enterprise technology centres. The company has been expanding investments in R&D, strengthening its technological capabilities in the fields of new energy, new materials, and cleaner technology, such as the provision of greener and higher quality gasoline and diesel. In 2018, Sinopec invested RMB12.9bn in R&D and obtained 4,434 authorised patents.
Intelligent operations	Sinopec is in the midst of upgrading the entirety of its operations technologically; its intelligent plants will enable real-time monitoring and early detection of equipment failure to prevent unplanned refinery shutdowns, while its intelligent service stations will facilitate the use of big data and analytics and self-service equipment (for both refueling and retail) and wireless payment. The company aims to have ten intelligent refineries by 2020 (from 2 in 2018) and transfer the vast majority of its data to the cloud by 2023.
Quality management	Sinopec abides by the Product Quality Law and other relevant regulations. The company has strict quality control measures, and regularly evaluates its suppliers (primarily crude oil) to moderate quality risk. In 2018, 120 batches of products were randomly inspected by various national and local administrative regulators, all of which met quality requirements.



Source: DBS HK

Environmental, Social and Governance

China Vanke (2202 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$32.50

Price Target 12-mth: HK\$35.40 (8.9% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMB m)	2017A	2018A	2019F	2020F
Turnover	237,345	297,083	369,182	429,465
EBITDA	66,134	94,583	105,578	117,844
Pre-tax Profit	64,682	87,065	97,077	109,293
Net Profit	28,052	33,773	42,079	49,183
Core Profit	26,526	33,964	42,079	49,183
Core Profit Gth (%)	25.7	28.0	23.9	16.9
Core EPS (RMB)	2.40	3.08	3.81	4.46
Core EPS (HK\$)	2.67	3.48	4.31	5.03
Core EPS Gth (%)	25.7	28.0	23.9	16.9
Core PE (X)	12.2	9.4	7.6	6.5
P/Cash Flow (X)	3.4	9.5	3.8	6.4
EV/EBITDA (X)	5.3	5.0	4.2	3.8
DPS (HK\$)	1.00	1.21	1.51	1.76
Div Yield (%)	3.1	3.7	4.6	5.4
Net Gearina (%)	8.8	30.9	8.5	3.6
ROE (%)	22.8	23.4	24.6	24.2
Book Value (HK\$)	13.35	15.94	19.04	22.56
P/Book Value (X)	2.4	2.0	1.7	1.4

EPS Rev (%):		Nil	Nil
Consensus EPS (RMB)			3.69
Other Broker Recs:	B: 16	S: 0	H: 8

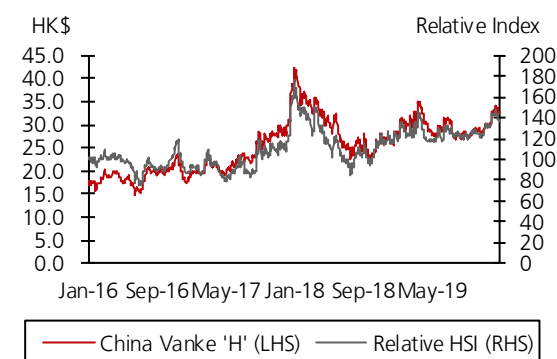
Bloomberg ESG Disclosure Score (2018)[^] 43
 - Environmental / Social / Governance 37 / 42 / 57

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

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Pioneer in housing industrialisation in China. Being one of the top players in terms of residential property sales, China Vanke (Vanke) has strived to transform itself from pure residential developer into "urban and rural developer and life services provider" to ensure sustainability. Vanke has gradually beefed up its commercial property, property management and logistics property segments, and has been incubating related life services. The new business lines are expected to become the new drivers in the mid to long term. Vanke is well-known as a pioneer in promoting housing industrialisation and green building to reduce building waster and improve water efficiency. It has also initiated innovative schemes and processes to improve efficiency and optimise risk management, such as introducing co-investment schemes and supply chain financing. The company has established a standardised corporate governance framework for internal risk control and anti-corruption/fraud measures.

Price Relative




Environmental factors


Factor	Comments
Energy conservation and emission reduction	The cumulative green buildings built by Vanke have reached 147m sm by 2018. Vanke has also attached great importance to the R&D of green and eco-friendly technologies.
	

Water and waste management	Vanke’s green building and continuous R&D efforts on green infrastructure enable it to improve water conservation and reuse of rainwater. Its rising housing industrialisation proportion also helps reduce building waste. In 2018, the application percentage of plaster-free external/internal walls, prefabricated internal walls and prefabrication has improved further to 80.2%, 77.0% and 31.4% respectively.
	

Source: DBS HK

Social factors

Factor	Comments
Poverty alleviation	Vanke has been exploring several ways of poverty alleviation through relocation, culture development, education, healthcare improvement and industrial development.
	

Access to product / service	Vanke has worked with two villages in Guangdong to improve the infrastructure of the villages, and promote agriculture and tourism products since 2018.
	

Source: DBS HK

Social factors (con't)

Factor	Comments
Customer engagement	Vanke has strived to improve its product quality and customer satisfaction. It launched the “6+2” customer relationship management approach to closely monitor customer needs and provide active services/solutions.
Charity	Vanke Foundation was founded in 2008, with good end results in many fields including environment protection, children’s health, education, and targeted poverty alleviation.
Care for employees	Vanke has set up a partnership culture that involves shared responsibility and returns, and encourages employees to grow with the company. The company is also well-known for its internal fitness/sports culture.




Strong

Good

Strong



Source: DBS HK

Governance factors

Factor	Comments
Transparency and reporting 	Vanke has kept improving communication and interaction with investors through various channels, including site visits, investor conferences, conference calls, etc.
Internal control and risk management 	Vanke is also well known for its risk consciousness and risk-oriented principles. The company has adopted a three-tiered assessment system covering headquarters, business group/units and front-line subsidiaries. Vanke's financial leverage is always contained at a certain level, backed by investment-grade credit ratings by international rating agencies.
Anti-corruption and anti-fraud 	Vanke has been continuously improving its anti-fraud system through internal education/case study, internal control, and combining internal/external resources.

Source: DBS HK

Business development factors

Factor	Comments
R&D / innovation management 	Vanke has continuously focused on R&D in housing industrialisation and improving working efficiency. Apart from housing industrialisation, Vanke is also a pioneer in co-investment schemes at the project level and supply-chain financing.
Product / service sustainability 	Vanke strives to meet customers' need for a better life by providing good products and services. The company has actively been expanding its logistics property, property management, long-term rental housing and retail mall segments. In addition, it has also tapped into some new areas including elderly care, ski resorts, education and industrial parks.

Source: DBS HK

Environmental, Social and Governance

China Yuhua Education (6169 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$5.92

Price Target 12-mth: HK\$6.20 (4.7% upside)

Analyst

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Forecasts and Valuation

FY Aug (RMB m)	2018A	2019A	2020F	2021F
Turnover	1,195	1,714	2,449	2,676
EBITDA	702	737	1,673	1,786
Pre-tax Profit	592	542	1,074	1,293
Net Profit	531	485	967	1,169
Net Pft (Pre Ex) (core profit)	609	793	1,023	1,213
Net Profit Gth (Pre-ex) (%)	49.1	30.1	29.1	18.6
EPS (RMB)	0.17	0.15	0.29	0.33
EPS (HK\$)	0.19	0.17	0.32	0.37
Core EPS (HK\$)	0.22	0.28	0.34	0.39
Core EPS (RMB)	0.19	0.24	0.30	0.34
EPS Gth (%)	37.1	(9.7)	90.8	15.7
Core EPS Gth (%)	20.8	28.6	23.5	13.4
Diluted EPS (HK\$)	0.21	0.27	0.33	0.38
DPS (HK\$)	0.11	0.13	0.17	0.20
BV Per Share (HK\$)	1.32	1.45	1.50	1.69
PE (X)	31.7	35.1	18.4	15.9
Core PE (X)	27.6	21.5	17.4	15.3
P/Cash Flow (X)	22.4	9.3	7.2	9.1
P/Free CF (X)	26.7	10.2	7.2	9.1
EV/EBITDA (X)	22.4	22.3	10.0	9.1
Net Div Yield (%)	1.8	2.1	2.9	3.4
P/Book Value (X)	4.5	4.1	4.0	3.5
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	17.0	12.3	21.9	23.4
Earnings Rev (%):			Nil	Nil
Consensus EPS (RMB)			0.30	0.34
Other Broker Recs:		B:17	S:0	H:1
Bloombera ESG Disclosure Score (2018)^				35
- Environmental / Social / Governance			27 / 39 / 48	

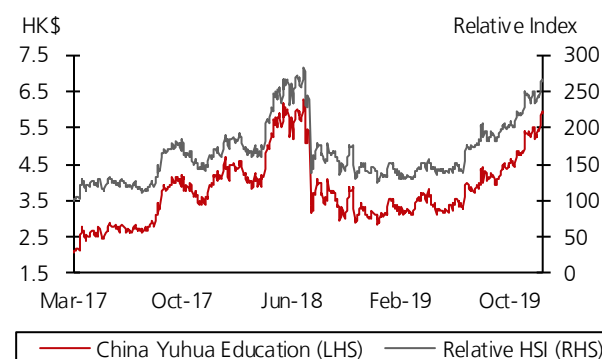
Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
Thomson Reuters

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Leading education provider of K-12 and university education. As the largest private school education provider in central China, Yuhua Education offers school education from K12 to higher education. In 2019, it also expanded its footprint overseas by acquiring an international university in Thailand. The Group not only focuses on helping students achieve excellent academic performance, but also emphasizes the overall coordinated development of "body quotient, moral intelligence quotient, emotional quotient and intelligence quotient" of students, dutifully shouldering the responsibility of nurturing social pillars.

We have identified several factors to respond to the material issues relevant to stakeholders regarding its social responsibility, corporate governance and business development.

Price Relative






Environmental factors

Factor	Comments
Energy management 	The company has made a Detailed Regulations for Energy Conservation Management to guide its schools energy use efficiency plan. It improves the utilisation of energy and resources by clarifying the responsibilities of various departments within the school, and through measures such as scientific management, technology upgrades, and behavioural training. This includes promotion of use of new energy-saving and environmentally friendly products. In FY18, the power consumption density has decreased by 9.8%, the total natural gas consumption has decreased by 26.0%, and the total gasoline consumption has decreased by 11.4%.



Source: DBS HK

Social factors

Factor	Comments
Product quality and safety 	Yuhua has a policy in place to ensure a safe environment for students and teachers. For example, the company considers the quality, brand names, and qualification of their products when screening suppliers. Also, for any teacher with deficiencies in teaching quality, schools will talk to and guide him/her to improve, while including this in the relevant performance appraisal to avoid the recurrence of teaching accidents.
Workers' health and safety 	Yuhua places great attention on the health and safety issues of staff and students. Following the basic principle of "paying attention to prevention, self-rescue and mutual aid, ensuring safety and reducing losses", it has formulated the Staff Health and Safety Management System of Yuhua Education Group to ensure the health and safety of staff and students.
Local communities 	The Group actively participates in all kinds of community activities and encourages teachers and students to learn through community education, humanistic care, etc. Examples of community engagement activities include community construction activities, "Henan Festival" activities; "Thanksgiving Day" activities, volunteer activities, etc.



Source: DBS HK

Governance factors

Factor	Comments
Anti-corruption 	Following the principle of teaching with clean hands and being a role model for others, Yuhua strictly obeys related laws and regulations to prevent bribery, extortion, fraud and money laundering. It has set up a series of internal control and reporting processes to ensure all work procedures are in compliance with the relevant regulations.
Legal compliance 	Yuhua has taken effort to make sure its activities comply with related regulations and laws, including but not limited to the advertising law in their marketing campaign, copyright law in their teaching materials, and privacy laws in protecting personal information of students and teachers.

Source: DBS HK

Business development factors

Factor	Comments
Business model resilience 	The education regulators are paying more attention on safety requirement, especially after another listed education company has safety accident in its kindergarten. All schools of Yuhua have established the Identification and Treatment of Teaching Accident to prevent such accidents from happening. The company is also increasing welfare to both teachers and students as they are the most important assets for education companies. Training expense and scholarship increased by 25% to Rmb 23m in FY19.
Product / service sustainability 	Yuhua keeps attracting students by exploring various opportunities to meet students' new demand. For example, the company acquired an international university in Thailand in early 2019, which enables it to offer international exchange programs or overseas further study opportunities for its high school and domestic university students. In Yuhua's K12 schools, they are also offering international courses or art courses for students with demands other than Chinese university entrance exams.

Source: DBS HK

Environmental, Social and Governance

ENN Energy (2688 HK)

BUY

Last Traded Price (14 Nov 2019):HK\$90.80

Price Target 12-mth:HK\$108.0 (18.9% upside)

Analyst

Patricia Yeung +852 3668 4189, patricia_yeung@dbs.com

Forecasts and Valuation

FY Dec (RMBm)	2018A	2019F	2020F	2021F
Turnover	60,698	72,812	89,266	107,413
EBITDA	7,524	11,464	12,552	14,721
Pre-tax Profit	5,601	9,461	10,304	12,223
Net Profit	2,818	5,982	6,253	7,427
Net Profit Gth (Pre-ex) (%)	0.6	112.3	4.5	18.8
EPS (RMB)	2.55	5.32	5.56	6.61
EPS (HK\$)	2.89	6.03	6.30	7.48
EPS Gth (%)	(1.3)	108.4	4.5	18.8
Diluted EPS (HK\$)	2.89	5.99	6.26	7.43
DPS (HK\$)	1.35	1.81	1.89	2.24
BV Per Share (HK\$)	21.55	27.57	31.82	37.16
PE (X)	31.4	15.1	14.4	12.1
P/Cash Flow (X)	10.7	9.2	7.7	6.6
P/Free CF (X)	37.2	27.4	17.4	12.4
EV/EBITDA (X)	14.1	9.3	8.4	7.0
Net Div Yield (%)	1.5	2.0	2.1	2.5
P/Book Value (X)	4.2	3.3	2.9	2.4
Net Debt/Equity (X)	0.5	0.3	0.2	0.1
ROAE(%)	14.7	24.5	21.2	21.7
Earnings Rev (%)		Nil	Nil	Nil
Consensus EPS (RMB)		4.66	5.37	6.25
Other Broker Recs:		B: 23	S: 1	H: 4

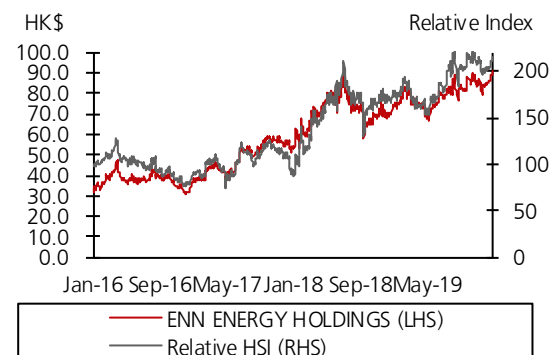
Bloomberg ESG Disclosure Score (2018)[^] 44.2
 - Environmental / Social / Governance 43.4 / 33.3 / 57.1

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A major natural gas distributor with improving ESG practices. With the mission of “Building a Modern Energy System, Improving the Quality of Life”, ENN has continuously extended access to natural gas to more users with 74.5% and 154.9% growth in the number of residential and industrial/commercial users in the past five years respectively. For a more sustainable development, ENN has diversified into integrated energy (IE), offering tailor-made, efficient and innovative energy solutions to customers. The adoption of renewable energy in IE also allows ENN to further reduce carbon emissions and resolve air pollution issues.



After setting up an ESG committee and an ESG working group in 2019, ENN aims to meet higher ESG standards with various initiatives being put in place, such as incorporating ESG into the KPIs of senior management/ board of directors, enhancing the accuracy of ESG data by setting up an IT system, improving ESG practices within the group, setting ESG targets, etc. We believe the successful implementation of these initiatives would be positive for ENN’s sustainable development, and could lead to a higher valuation. Thus, we have lowered our discount rate by 0.4ppt to 8.1% to give a new target price of HK\$108.00.

Price Relative





Environmental, Social and Governance

Environmental factors

Factor	Comments
Greenhouse gas emissions 	Apart from reducing greenhouse gases emissions through supply cleaner energy to customers, ENN also plans to reduce carbon emission arising from its own operating activities. In 2018, the total amount of GHG emissions dropped 32%. It also took various measures to carry out residual gas recovery to reduce methane leakage, including residual gas recovery devices, tank evaporation gas re-liquefaction devices, etc. Total CO2 emission density was lower than its international peers in 2018.
Ecological impacts 	Given ENN’s projects are mainly located in cities, the ecological impact from the construction of pipeline network is minimum. Nevertheless, apart from strict environmental assessment, ENN also conducts in-depth investigation with the city dwellers and formulates comprehensive soil and water conservation scheme to minimise any adverse impact on the environment or the community.

Source: DBS HK



Social factors

Factor	Comments
Product quality & safety 	To ensure safe and stable gas supply to customers, an advanced and intelligent management and operation system is adopted. It includes a real-time dispatching and monitoring system to ensure the normal operation of the city-gas pipeline network and to trigger emergency alarms in case of gas leakages. With the adoption of Internet of Things, ENN can effectively and efficiently monitor and manage the safety of a large number of refuelling stations, city-gate stations and the large-span pipeline networks in a timely manner. So far, ENN has not been involved in any serious accident due to gas leakages.
Access to product / service & affordability 	Gas supply and related services are offered to both residential and non-residential users. Even in the event of gas shortage during winter seasons, ENN is able to ensure sufficient and stable supply for its users, particularly for heating systems for residential users. Although ENN has continuously extended its geographical reach to expand its service access to more customers, its services are mainly focused in urban areas. Despite more incentive from government for replacing coal with gas in rural areas, ENN’s development in this aspect is relatively slow.

Source: DBS HK



Environmental, Social and Governance

Social factors (con't)

Factor	Comments
 <p>Customer engagement</p>	<p>ENN is more focused in customer engagement than its peers, as reflected in its regular customer satisfaction surveys, which allow ENN to be closer to the market and integrate the potential needs of customers into its products and services compared to its peers. ENN achieved an average score of customer satisfaction of 90.3 (out of 100) in 2018, up from 89.3 in 2017. The improvement was achieved through various initiatives, including improving customer communication channels, enhancing the function of customer feedback system, addressing customers' complaints or concerns in a timely manner, etc.</p>
 <p>Employees' health & safety</p>	<p>Apart from adhering to the national laws and regulations, ENN has formulated its internal guidelines on the production safety management and organised trainings on a visualisation system for the construction and engineering department to ensure safety for its employees. There are also accidents management and emergency measure with emergency drills being conducted regularly. ENN has not disclosed any data on related to work-related injury or fatalities but no news about occupational health and safety related to ENN were found.</p>

Source: DBS HK



Governance factors

Factor	Comments
 <p>Business ethics</p>	<p>ENN's track record with regard to its minority shareholders is not without blotches. For instance, a loss-making gas station operation in the US and Canada was injected from the parent company in 2014; an Executive Director was involved in an insider dealing case in 2011; etc. But we reckon ENN is improving in this regard, for example, an EGM was held for the approval of the acquisition of an energy network operation from the Chairman in 2018. We believe further improvements will be made with minimum related-party transactions after the establishment of an ESG committee and incorporating ESG into the KPIs of its board of directors.</p>
 <p>Board diversity & structure</p>	<p>ENN has a good corporate governance structure with five committees under the board of directors, including audit committee, nomination committee, remuneration committee, risk management committee and ESG committee. The directors have different expertise and relevant industry experience and background. The roles of Chairman and CEO are segregated to ensure a balance of power and authority. However, the board of directors lacks diversity with only one female INED among 10 members within the board. The ratio of female member within senior management is higher at around 36%.</p>

Source: DBS HK



Environmental, Social and Governance

Governance factors (con't)

Factor	Comments
Risk management 	ENN has a good well-established enterprise risk management framework to manage various risks, in particular risk related to policy, pricing and safety on employees and operation. In addition, there is a risk management committee under the board of directors, responsible in assessing and determining the types and extent of risks that the company is willing to accept in business lines.
Transparency & reporting 	ENN has maintained regular communication with stakeholders. Various channels have been established with stakeholders for mutual communications. While transparency has improved in 2018 through more disclosure of information in annual reports and ESG reports, more data could be published, such as ESG targets, non-mandatory items (employee turnover rate, number and rate of work-related fatalities, etc.). The CEO is now leading the ESG working group and we expect its transparency to improve going forward.

Source: DBS HK

Business development factors

Factor	Comments
Product / service sustainability 	In an effort to achieve sustainable growth as well as to seek ways to do social good to the environment, ENN is more proactive than its peers in making use of gas as well as renewable energy to offer integrated energy service to its customers. This service allows customers to enjoy cleaner, more efficient, economical and intelligent integrated energy solutions according to their needs. Not only will this service help improve their energy efficiency to at least 85% but also reduce their total energy bills and reduce pollution emissions. Many of these projects have been selected as national demonstrative projects for energy optimisation or ecological demonstration.
R&D / innovation management 	ENN has put in a lot of efforts to encourage R&D and innovation, focusing on the innovation of construction engineering and equipment related to gas business/integrated energy operation. An innovation platform and a database of experts were set up among the member companies. An appraisal programme on projects is carried out to promote technical innovation, efficiency improvement and cost savings. In 2018, 19 projects, out of 56, were selected as excellent technical innovations. ENN also obtained five patents for construction utility models, 35 patents related to gas sales business and information construction, and 16 invention patents for integrated energy business.

Source: DBS HK

Environmental, Social and Governance

Guangzhou Automobile Group Co. Ltd (2238 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$9.96

Price Target 12-mth: HK\$9.20 (7.6% downside) (under review)

Analyst

Rachel Miu +852 36684191; rachel_miu@dbs.com

Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Turnover	72,380	56,679	61,171	65,757
EBITDA	14,814	11,522	13,634	14,878
Pre-tax Profit	11,863	8,625	10,500	11,539
Net Profit	10,900	8,901	10,426	11,256
Net Pft (Pre Ex) (core profit)	10,900	8,901	10,426	11,256
Net Profit Gth (Pre-ex) (%)	(1.0)	(18.3)	17.1	8.0
EPS (RMB)	1.07	0.87	1.02	1.10
EPS (HK\$)	1.21	0.98	1.15	1.24
Core EPS (HK\$)	1.21	0.98	1.15	1.24
Core EPS (RMB)	1.07	0.87	1.02	1.10
EPS Gth (%)	(11.1)	(18.3)	17.1	8.0
Core EPS Gth (%)	(11.1)	(18.3)	17.1	8.0
Diluted EPS (HK\$)	1.21	0.98	1.15	1.24
DPS (HK\$)	0.43	0.34	0.40	0.44
BV Per Share (HK\$)	8.47	9.07	9.85	10.67
PE (X)	8.3	10.1	8.7	8.0
Core PE (X)	8.3	10.1	8.7	8.0
P/Cash Flow (X)	nm	21.8	17.0	14.1
P/Free CF (X)	nm	nm	nm	nm
EV/EBITDA (X)	4.2	5.9	5.2	4.9
Net Div Yield (%)	4.3	3.5	4.0	4.4
P/Book Value (X)	1.2	1.1	1.0	0.9
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	14.9	11.2	12.2	12.1

Earnings Rev (%):		Nil	Nil	New
Consensus EPS (RMB)		0.78	0.98	1.07
Other Broker Recs:		B:30	S:1	H:6

Bloombera ESG Disclosure Score (2018)^ 43
 - Environmental / Social / Governance 38 / 46 / 54

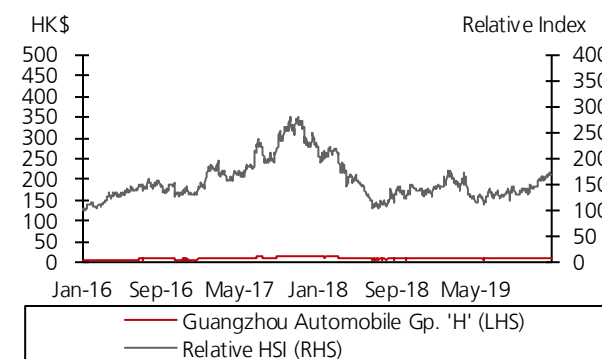
Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

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Leading in GBA green car development. Guangzhou Automobile Group Company Ltd (GAC) is one of the largest auto groups in China. Based in Guangzhou, the group has tied up with Toyota, Honda, Fiat Chrysler Auto, Mitsubishi and Hino, as well as BYD to assemble gasoline and new energy vehicles, on top of manufacturing parts and components and being involved in trade and financial services. To support a low carbon automobile strategy, GAC is embarking on a mega hub to develop smart electric cars in Guangzhou, riding on the green car initiative in Greater Bay Area (GBA). Under the Guangzhou Automobile 2025 Development Plan, the goal is to produce one million units of new energy vehicles by 2025, via extensive value-chain support (such as battery technology, charging network and recycling).

We have extracted the key initiatives and measures which GAC is embarking on to achieve a higher standard in ESG and innovative business which are important to all the stakeholders.

Price Relative







Environmental factors

Factor	Comments
GHG (Greenhouse Gas) emission	GAC adheres to the environmental protection laws and regulations. It also formulates its own environmental management systems and promotes a low-emission culture. For example, greater adoption of renewable energy has helped to reduce carbon emission.
	
Water and wastewater management	Measures such as regularly water balance test and wastewater station treatment have also been put in place for water savings and water pollution reduction. Different specific approaches are adopted in different subsidiaries and joint ventures. For example, a condensate recycling system has been used in GAC Motor's workshops to help wastewater management.
	
Waste and hazardous waste materials management	By engaging external professionals to train employees in solid waste management, GAC promotes the practices of classifying wastes in a scientific manner and hand over to the qualified organisation for further treatment.
	
Energy management	For efficient energy management, GAC has actively adopted measures including setting up energy management committee, initiating ISO 50001 energy management system, promoting energy conservation culture to its employees, etc.
	


Source: DBS HK

Social factors

Factor	Comments
Workers' health & safety 	GAC adheres to the safety policy of 'safety first, prevention foremost, comprehensive treatment'. It persistently improves its safety production management system, set up comprehensive safety rules, promoting safety and health awareness among its employees through regular training.
Product quality & safety 	GAC commits to building the life-cycle quality management system towards a 'zero' defect target. It proactively takes preventive measures to avoid defects and advance its quality by technology innovation.
Local communities 	GAC actively engages itself in targeted poverty alleviation. It helps in infrastructure and public services improvements. On the other hand, it also helps the poverty-struck regions by providing industry support, to improve their self-development capability.
Customer engagement 	GAC highly values customer satisfaction. it builds the 'online + offline' E- commerce mode to provide a smoother and more efficient service experience for customers.



Source: DBS HK

Governance factors

Factor	Comments
Business ethics 	GAC is committed to improving its corporate governance. GAC not only makes sure that its board operations are consistent with laws and regulations but also actively improves on its internal management systems. It also sticks to consistency of information disclosure in the A-share and H-share markets, and ensures that information is disclosed on a timely basis and is free of errors.



Source: DBS HK

Business development factors

Factor	Comments
R&D / Innovation management 	GAC actively promotes self-innovation. With the self-brand Trumpchi kicked off and establishment of the GAC R&D Centre and GAC Motor in 2007, GAC Trumpchi developed rapidly and achieved 2,000,000 units of production by October 2019. Meanwhile, inspired by the 'Industry 4.0' strategy, GAC has tried out intelligent manufacturing ideas, and built intelligent plants in Guangzhou, Hangzhou and Yichang.
Product / service sustainability 	GAC emphasises the spirit of craftsmanship and importance of meeting customer demand. Its auto models are updated on a regular basis with improvements in performance as well as design details. With big data and cloud computing forming its core methods for gathering market intelligence, GAC can dig deeper into its available data to understand customer demand and carry out customised product designs.

Source: DBS HK

Business development factors (con't)

Factor	Comments
Supply chain management 	GAC focuses on forming in-depth and stable relationships with its core suppliers, and expanding its alliances with suppliers. Moreover, GAC Capital has been investing and supporting the development of a few auto part companies, and GAC actively promotes the integration of these companies in its supply chain.
Material sourcing & efficiency 	With GAC's expansion into global markets, it forms the new pattern of 'globalised purchasing and sales'. On material efficiency, GAC has finished the construction of its Smart Eco-plant for new energy vehicle production, thus becoming a pioneer in material comprehensive utilisation.

Source: DBS HK

Environmental, Social and Governance

Haier Electronics (1169 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$25.00

Price Target 12-mth: HK\$26.56 (6.2% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Turnover	85,250	75,696	81,284	88,177
EBITDA	4,760	6,072	5,929	6,605
Pre-tax Profit	4,864	9,134	5,859	6,525
Net Profit	3,790	7,325	4,650	5,167
Net Pft (Pre Ex) (core profit)	3,790	4,165	4,650	5,167
Net Profit Gth (Pre-ex) (%)	12.8	9.9	11.7	11.1
EPS (RMB)	1.36	2.60	1.65	1.84
EPS (HK\$)	1.53	2.94	1.87	2.08
Core EPS (HK\$)	1.53	1.67	1.87	2.08
Core EPS (RMB)	1.36	1.48	1.65	1.84
EPS Gth (%)	12.4	92.0	(36.5)	11.1
Core EPS Gth (%)	12.4	9.1	11.7	11.1
Diluted EPS (HK\$)	1.52	2.94	1.87	2.08
DPS (HK\$)	0.38	0.42	0.47	0.52
BV Per Share (HK\$)	9.44	10.48	12.01	13.63
PE (X)	16.3	8.5	13.4	12.1
Core PE (X)	16.3	15.0	13.4	12.1
P/Cash Flow (X)	14.6	14.6	12.8	10.5
P/Free CF (X)	32.5	19.7	17.1	13.4
EV/EBITDA (X)	9.5	7.7	7.5	6.2
Net Div Yield (%)	1.5	1.7	1.9	2.1
P/Book Value (X)	2.7	2.4	2.1	1.8
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	17.2	16.9	16.6	16.2
Earnings Rev (%)		Nil	Nil	Nil
Consensus EPS (RMB)		1.75	1.65	1.84
Other Broker Recs:		B:11	S:0	H:2

Bloombera ESG Disclosure Score (2018)[^] 17
 - Environmental / Social / Governance 7 / 12 / 46

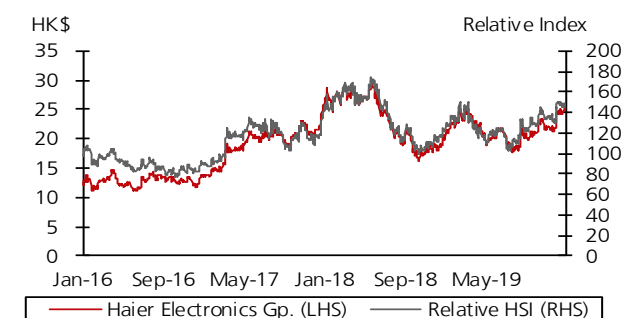
Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

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Leading washing machine/water heater manufacturers in China. Haier Electronics is a leading washing machine/water heater manufacturer in China. Its channel services business manages stores and cloud stores in villages and towns as well as community service stations spreading across cities, and sells Haier products through online channels including JD, Tmall and Shunguang. To enhance its ESG performance, the company has established a three-level management structure of "Board — ESG Executive Committee — ESG Working Team" with responsibilities, i.e. decision-making, supervision and enforcement, at all levels clearly set out. The company recently won four ESG related awards, i.e. the "Best Corporate Governance (G) Award" at the "China ESG Golden Awards 2019" awarded by Sina Finance, the "InnoESG Prize 2019" awarded by SocietyNext Foundation, the "Best Listed Company Award" and "Award for the Listed Company with Best Brand Value" at the China Securities "Golden Bauhinia Awards".

Based on global sustainable development goals, degree of stakeholder attentions and importance to Haier Electronics' business, we have identified several factors to respond to the material issues relevant to stakeholders.

Price Relative






Environmental factors

Factor	Comments
<p>Emissions</p> 	<p>Haier Electronics actively responds to national green development policies, introduce advanced environmentally friendly technologies and encourage the development of projects on energy-saving and emission reduction. The company has established the Environmental Protection Committee and formed a 3-tier environmental responsibility management network, specifying the responsibility undertaken on each stage, collaboratively promoting environmental protection work and continuously improving the environmental protection performance of Haier Electronics.</p> <p>In 2018, its carbon dioxide emission per unit of product decreased by 9.05% YoY.</p>
<p>Waste management</p> 	<p>Haier Electronics actively explores hazardous waste reduction solutions, integrates the resources of stakeholders such as suppliers and actively maintains inter-communications to encourage suppliers to deliver hazardous wastes (such as waste chemical containers) to factories for recycling, so as to promote hazardous waste reduction.</p>
<p>The environment and natural resources</p> 	<p>Haier Electronics actively promotes photovoltaic power generation projects in parks, which currently cover parks in regions such as Qingdao, Jiaonan, Hefei and Foshan. The company has also promoted water conservation and strengthened the use of recycled water. Some recycled water and treated water have been used in flushing toilets and greening. Each factory also actively carries out technological transformation to reduce water consumption.</p> <p>Energy consumption per unit of product decreased by 9.55% YoY in 2018</p>

Source: DBS HK

Social factors

Factor	Comments
Product responsibility 	All of Haier’s washing machine and water heater factories have obtained ISO9001 quality management system certification. The company has established quality management systems such as the module stock-in inspection procedures and random sample checking management procedures to enhance quality control during the manufacturing process. Besides, it has developed and optimised the mechanism of information protection for users in accordance with the requirements of relevant laws and regulations In 2018, the resolution rate of customer complaints of Haier Electronics was 100%. The overall satisfactory rate of washing machine users was 98%, and the overall satisfactory rate of water heater users was 99%.
Employee health and safety 	In 2018, Haier Electronics fully promoted safety standardisation and OHSAS 18001 Occupational Health and Safety Management System Certification. The company also upgraded 53 production safety management system process platforms, ensured the accountability of micro business owners of all factories and improved Haier Electronics’ three-level network of safe production. Besides, Haier Electronics has actively enhanced its capability to handle safety emergencies, established an organisational structure for safety emergencies and delineated duties at work.
Community investment 	By the end of 2018, Haier Group had invested more than RMB100 million in building a total of 286 Hope Schools (285 Hope Primary Schools and 1 Hope Secondary School), covering 26 provinces, municipalities and autonomous regions in the PRC. It also embraces and undertake Haier’s public welfare philosophy, helping poverty areas in the PRC to establish basic education facilities as well as improving the conditions of school operation in under-developed areas.




Source: DBS HK

Governance factors

Factor	Comments
Risk management 	The company’s Internal Audit Department formulates annual review plans on internal control for the major internal control systems, covering operation control, financial control and compliance control. While the Risk Management Committee ultimately reviews the results of identification and assessment of such risks. Mitigation strategies and plans with respect to each risk identified are formulated and implemented, which include establishing or enhancing internal controls with regular review and update.

Source: DBS HK

Business development factors

Factor	Comments
R&D/ innovation management 	The company is in the lead in R&D patent in the industry as it is actively involved in the formulation of standards. In 2018, the company obtained 742 new patents, among which 194 were invention patents. It owned a total of 3,762 patents, among which 903 were invention patents. It participated in the formulation and publication of 13 industry standards.
Product / service sustainability 	Haier Electronics has been committed to providing outstanding living solutions for consumers around the world. The company maintains communication and intimate interaction with users, and integrate and manage global supply chain and R&D resources to deliver different user groups with the best experience that meets their individual needs.
Supply chain management 	In 2016, Haier Group initially launched the large-scale customised internet structure platform COSMOPlat based on users' experience. By 2018 Year-end, COSMOPlat has gathered 0.33 billion users and more than 3,900,000 supplier resources. Large-scale customisation requires numerous excellent suppliers to interact with users. The company has leveraged on the Haidayuan platform to break the traditional home appliance industry model of selling components and raw materials with fixed location, price and contract. In 2018, Haidayuan platform received a total of 3,495 requests from users that were related to Haier Electronics, while Haier Electronics' suppliers uploaded a total of 6,125 resource solutions.

Source: DBS HK

Environmental, Social and Governance

Ping An Insurance (2318 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$96.50

Price Target 12-mth: HK\$115.0 (19.2% upside)

Analyst

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Forecasts and Valuation

FY Dec (RMB m)	2018A	2019F	2020F	2021F
Net earned premiums	677,703	774,555	869,975	982,415
Net investment income	120,520	190,714	187,300	218,449
Net Profit	107,404	156,597	159,585	178,021
EPS (RMB)	5.88	8.57	8.73	9.74
EPS (HK\$)	6.64	9.68	9.86	11.00
EPS Gth (%)	20.6	45.8	1.9	11.6
PE (X)	14.6	10.0	9.8	8.8
DPS (HK\$)	1.69	2.90	2.96	3.30
Net Div Yield (%)	1.8	3.0	3.1	3.4
BV Per Share (HK\$)	34.39	42.37	49.33	57.37
P/Book Value (X)	2.8	2.3	2.0	1.7
P/EV (X)	1.6	1.3	1.1	0.9
ROAE (%)	20.9	25.2	21.5	20.6
Earnings Rev (%):		Nil	Nil	New
Consensus EPS (RMB)		8.79	8.75	9.91
Other Broker Recs:		B:24	S:0	H:2

Bloombera ESG Disclosure Score (2018)[^] 48
 - Environmental / Social / Governance 43 / 48 / 59

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters

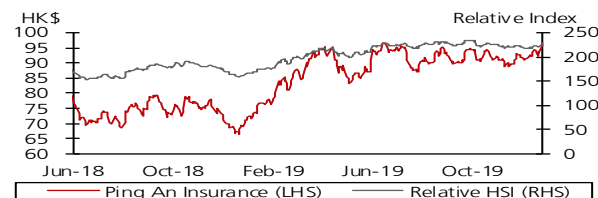
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Leading life insurer and Fintech advocate in China. Ping An is the leading financial conglomerate in China, with its business scope ranging from life and P&C insurance, banking, trust services, asset management, and financial technology (Fintech). Its incubation of Fintech businesses is mainly focused within five ecosystems, which include financial services, healthcare, auto, real estate and smart city, where it aims to improve day-to-day life and living quality of individuals.



To ensure business sustainability and development, Ping An operates under a well-established corporate governance structure and has a leading comprehensive risk management system. Since 2017, Ping An further included ESG-related duties in its Group Executive Committee. The six core topics Ping An has highlighted to address include 1) Poverty alleviation, 2) Embracing technology changes, 3) Financial services to real economy, 4) Addressing Healthcare challenges, 5) Addressing climate change risk, and 6) Responsible investment.

In addition, Ping An's Fintech incubation in smart city application revolves around the pain-points arising from the emerging urbanisation trend in China, with challenges at city level that includes traffic, inadequate medical resources, public safety, pollution control, food safety, elder care, epidemic prevention, difficulties in accessing government services to name a few. With Ping An's effort in addressing various ESG issues, we believe the insurer deserve to be valued at a premium valuation compared to its peers.

Price Relative



Environmental factors

Factor	Comments
<p>Energy management and wastage reduction</p> 	<p>Ping An has established detailed operating procedures for environmental management and adopted quantitative approaches to manage utilisation of resources such as energy and water in the office. Ping An is making continuous improvements in green office management such as pushing for a paperless office and using energy-saving electronics in office and branches.</p>
<p>Climate change</p> 	<p>Ping An has proactively responded to business risks and operational risks arising from climate change. Actions have been taken to address the issues such as developing climate change-related risk management systems, launching Smart Environmental Protection solutions to monitor and analyse environmental data, and implementing a Digital Risk System to ranks 9 types of natural disasters and evaluate corresponding operating risks.</p>

Source: DBS HK




Social factors

Factor	Comments
Local communities	Ping An is proactively participating in public welfare through establishing the Ping An Public Welfare Foundation and the Ping An Volunteers Association to coordinate resources for social welfare projects. In addition, Ping An continues to emphasise poverty alleviation via healthcare and education.
Privacy and data security	Ping An has established Group Security Response Center to detect and respond to threats to information security. The Information Security Management System that Ping An possesses is ISO 27001 certified at the group level. Ping An Cloud has met over 60 compliance requirements and has passed twelve cloud certifications including ISO 27001, ISO 20000, ISO 27018, ISO 22301, C-STAR, Trusted Cloud, Level 4 Graded Protection 2.0, etc.
Employee diversity	Ping An has a balanced and diversified employee structure in terms of gender, age, and ethnicity.






Source: DBS HK

Governance factors

Factor	Comments
Risk management 	Optimising the risk management system of the group and its subsidiaries is an ongoing process. Ping An has set up dual risk management structures to strengthen risk coverage and develop one common platform across the group for better collaboration. Ping An has also developed a unified risk management reporting mechanism and Smart risk monitoring system.
Board diversity and structure 	Ping An has a balanced and diversified board structure. Among the 15 directors on the board, the number of executive directors/non-executive directors/independent non-executive directors is 6/4/5. Among the 5 members in the supervisory committee, external/shareholder /employee representatives stand at 2/1/2.
Transparency & reporting 	Ping An has a multi-channel structure to effectively communicate with institutional investors and small/medium-sized investors via public briefings, video and teleconferences, online and offline roadshows etc. Information disclosures and corresponding conferences are linked together in a timeliness manner to ensure efficiency and effectiveness.

Source: DBS HK

Business development factors

Factor	Comments
<p>R&D</p> 	<p>Ping An continuously invests in technology innovation across its banking, insurance, and asset management businesses. Its AI + finance solutions segment provides services in marketing, product, risk management, and service and operations. In addition, Ping An has built up technology ecosystems covering financial services, healthcare, automobiles, and smart cities.</p>
<p>Product sustainability</p> 	<p>Ping An provides bespoke financial and insurance services to address poverty alleviation. Projects includes core agricultural enterprise loan schemes to provide low-interest loans, poverty alleviation loan scheme to support infrastructure building, and insurance scheme to provide insurance protection with low participation threshold.</p>
<p>Business model resilience</p> 	<p>Ping An proactively follows the national guidance of building a green financial system and promotes positive environmental and social values in its major business lines as annuity, bank, securities, asset management, and trust services.</p>

Source: DBS HK

Environmental, Social and Governance

Swire Properties (1972 HK)

BUY

Last Traded Price (14 Jan 2020): HK\$26.90

Price Target 12-mth: HK\$29.25 (7.7% upside)

Analyst

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Forecasts and Valuation

FY Dec (HK\$ m)	2018A	2019F	2020F	2021F
Turnover	14,719	14,565	14,764	13,689
EBITDA	10,326	10,770	9,217	9,372
Pre-tax Profit	11,304	25,133	8,993	9,195
Underlying Profit	10,148	23,850	7,597	7,779
EPS (HK\$)	1.73	4.08	1.30	1.33
EPS Gth (%)	29.5	135.0	(68.1)	2.4
PE (X)	15.5	6.6	20.7	20.2
P/Cash Flow (X)	13.5	14.1	17.2	16.1
EV/EBITDA (X)	17.0	16.3	19.0	18.7
DPS (HK\$)	0.84	0.88	0.90	0.90
Div Yield (%)	3.1	3.3	3.3	3.3
Net Gearina (%)	11	6	7	8
ROE (%)	3.8	8.4	2.6	2.6
Est. NAV (HK\$)			51.1	48.7
Disc. to NAV (%)			(47)	(45)
Earnings Rev (%)		Nil	Nil	Nil
Consensus EPS (HK\$)		1.35	1.40	1.46
Other Broker Recs:		B:9	S:2	H:3

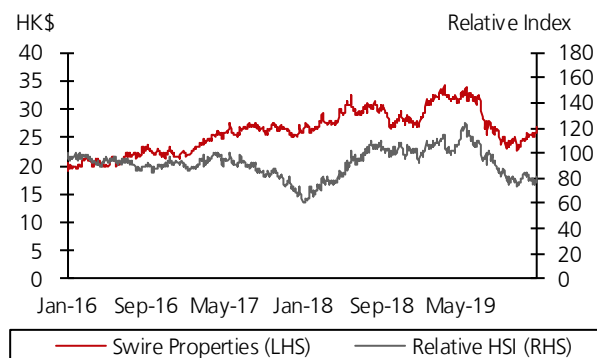
Bloombera ESG Disclosure Score (2018)^A 50
 - Environmental / Social / Governance 47 / 46 / 63

Source: Company, DBS Bank (Hong Kong) Limited ("DBS HK"),
 Thomson Reuters






[Click here to the latest report](#)

One of the leading real estate players in ESG. Swire Properties has continued to improve its ranking in the Dow Jones Sustainability World Index (DJSI World), reaching No.8 (or No.1 in Asia) in 2019. The company aims to be a leading real estate company in terms of sustainability by 2030, led by its "SD 2030 Strategy". The SD 2030 strategy covers a comprehensive set of >80 key performance indicators across five areas: people, places, partners, economic performance, and environmental performance. The company's efforts in sustainability are increasingly being recognised internationally. For its physical properties, 100% of the company's projects under development have achieved the highest environmental assessment ratings. Swire Properties already has 92% of its existing buildings certified green. For employees, Swire Properties has achieved 1:1 gender pay ratio and also gender parity in senior management. Working with its partners, Swire Properties adopts a green procurement strategy, especially in the construction process. The company also works with its tenants to recycle waste and reduce energy consumption.

Price Relative



Environmental factors

Factor	Comments
Green building performance 	Swire Properties aims to develop its properties to the highest standards of environmental building assessment. The company is on track to meet its self-imposed target of having 100% of its projects under development achieving the highest green building certification ratings by 2020. One Taikoo Place was certified Final Platinum by the international WELL Building Institute. Two Taikoo Place, which is currently under development, was pre-certified platinum. For its existing buildings, 92% of GFA are certified green. Over 95% of gross rental income was contributed by green-certified buildings.
Energy 	Swire Properties aims to decouple GFA growth from energy consumption growth. Since 2008, the company has reduced energy usage at its Hong Kong portfolio (including hotels) by 25% and is on track to achieve 26% reduction by 2020.
Waste 	Swire Properties tackles waste management with a circular approach of redesign, reuse, recycle, and regeneration. For properties under development, the company aims to reuse as much construction materials as possible. For investment properties, the company diverted 21% and 23% of commercial waste away from landfills in Hong Kong and China respectively in 2018. For demolition waste at Two Taikoo Place, 83% has been diverted away from landfills. For construction waste at One Taikoo Place, 78% has been diverted away from landfills.
Water 	Swire Properties is developing a new water management policy. For its Hong Kong portfolio, the company has achieved 6% water intensity reduction since 2016. For the Mainland China Portfolio, the company has reduced water intensity by 14%. For hotels, Swire Properties has reduced water intensity per guest night by 34%.
Climate Change 	Swire Properties has implemented a climate change policy which aims to mitigate and adapt to climate-related risks. The company seeks to understand climate-related vulnerabilities on an asset level. Climate/water data are collected and modelled to assess both physical risk and business impact. Climate risk factors are then prioritised and incorporated into strategic action planning.

Source: DBS HK

Social factors

Factor	Comments
Diversity & Inclusion	Swire Properties has achieved 1:1 gender pay ratio and 45% of its executive committee members are women. Around half of management positions are also held by women.
Tenant engagement	The company works with commercial tenants to integrate sustainable practices into their tenancies. It provides free energy audits for commercial tenants, covering 3.2m sf and 2.1m sf in Hong Kong and China respectively since 2008. Swire Properties also provides guidelines to both office and retail tenants for sustainable fit-out and renovations.
Customers	Swire Properties engages owners and occupiers of its residential projects developed for sale to identify areas for improvement in both design and construction of future residential projects. The company also seeks feedback from hotel guests and residents at its serviced apartments.



Source: DBS HK

Governance factors

Factor	Comments
Risk management	Swire Properties has been incorporating sustainable development factors in its corporate risk analysis since 2018. Besides more traditional areas such as economic volatility and government policy changes, the risk management framework also encompasses emerging risks such as climate change.

Source: DBS HK

Business development factors

Factor	Comments
<p>Business model resilience</p> 	<p>The company has been actively exploring green financing. In Jul-19, the company issued a sustainability linked loan. This loan pays an interest rate tied to the y-o-y improvements in the sustainable development performance targets. The lending bank will grant a reduction in interest rate paid each year based on Swire Properties meeting certain ESG targets. In Jan-18, the company issued a 10-year US\$500m green bond which carries a coupon rate of 3.5% p.a.. Part of the proceeds was used to finance the construction of One Taikoo Place, rated Platinum for LEED and BEAM certifications.</p>
<p>R&D and Innovation</p> 	<p>The developer has a technology pipeline and innovation fund known as New Ventures. The New Ventures network comprises 50 venture capital firms, accelerators, incubators and other organisations. As at end-2018, 25 pilot tests had been confirmed and/or launched in areas including data analytics, smart buildings, sustainability, customer engagement, and human resources.</p>

Source: DBS HK

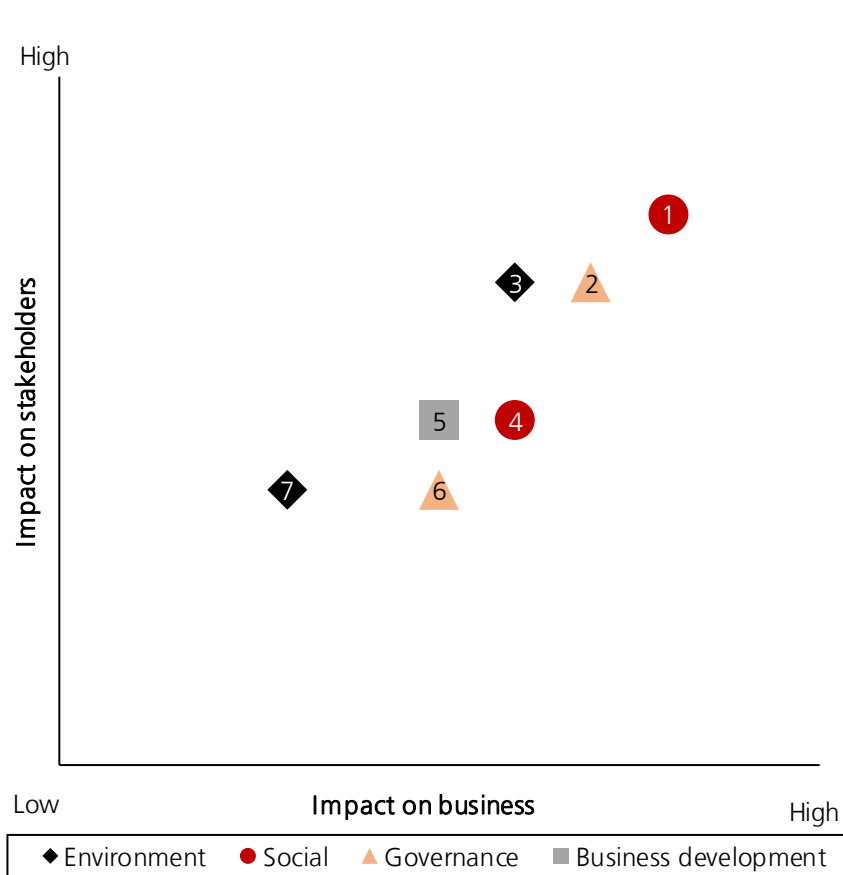


SECTOR PROFILES

China Airlines Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Labour practices and relations	1
High	Risk management	2
Moderate	GHG emission	3
Moderate	Technology infrastructure and data security	4
Moderate	Business model resilience	5
Low	Competitive behaviour	6
Low	Climate change	7

Source: DBS HK

Key ESG issues

Labour practices and relations - labour strikes are a high-stakes game

Many airlines are heavily unionised and strikes can be very costly and disruptive. Such industrial actions are fairly common especially in the US and Europe, and are also happening in Asia, impacting not just travelers but also often resulting in higher costs for the company and shareholders in the long term. There is a need for management and the respective human resource teams to invest both time and effort in relationship building, preparations and negotiations to head-off any potential strikes, which can be very damaging to any company's reputation and bottom line.

Risk management - safety and public relations are of paramount importance for airlines

While air travel is statistically the safest form of transport, any incident, especially those resulting in fatalities, attracts much more media attention and visibility. A loss in confidence in the safety of the airline's services would result in substantial damages to the company's reputation and financials. The company therefore needs to have a comprehensive risk management in place to prevent the occurrence of such incidents, and a good public relations team should critical incidents occur.

Greenhouse gas emissions - tighter regulations on GHG emissions could become costly

Air travel is estimated to account for c. 2% of all man-made carbon emissions, thus there is a lot of focus on reducing the growth in GHG emissions, or even cutting overall emissions, arising from the growth in global air travel. Failure to achieve these goals could have a material impact on climate change and attract stricter, and more costly regulations on the sector. The sector therefore needs further technological breakthroughs on fuel efficiency (engines or biofuels) to address this issue. It is also important for an airline to improve its fuel efficiency to lower its fuel consumption, which helps improve margins in the long run.

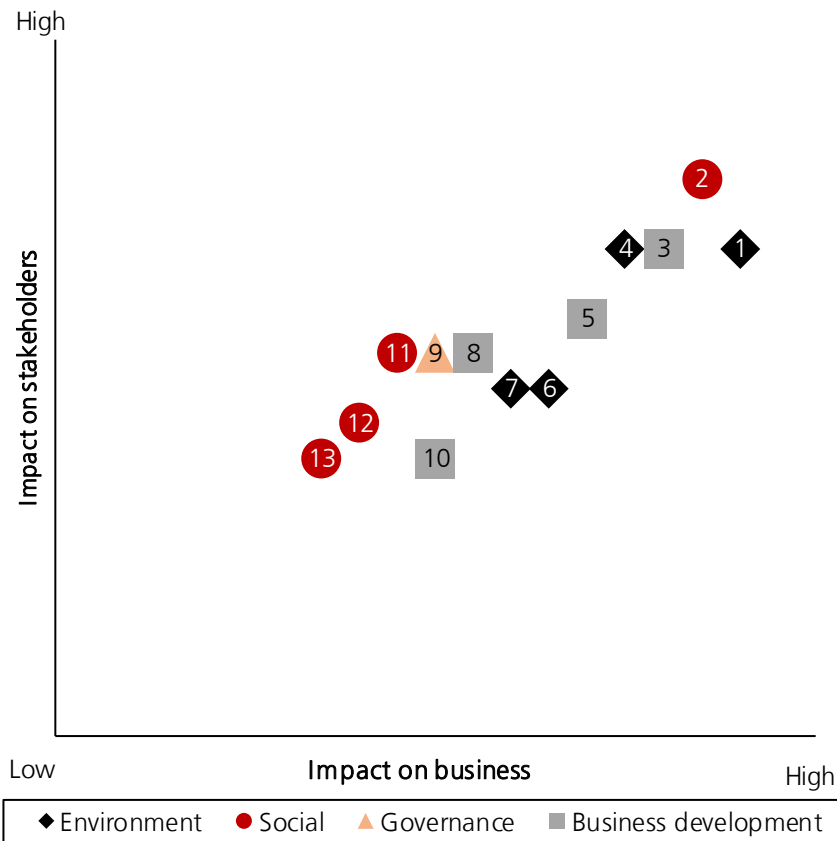
Technology infrastructure and data security - investment needed for reliability and security

Airlines today are heavily reliant on their IT systems and infrastructure to manage operations and bring in revenues. IT outages have resulted in canceled or delayed flights, leading to significant financial losses for many airlines in recent years. The growing threat of cybersecurity and potential loss of sensitive data, including confidential customer information, is also a material risk. Airlines would need to invest to ensure their IT systems are reliable and safe from such threats.

China Auto Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	GHG emission	1
High	Product quality & safety	2
High	Product / service sustainability	3
High	Energy management	4
Moderate	Material sourcing & efficiency	5
Moderate	Waste and hazardous waste materials management	6
Moderate	Water and wastewater management	7
Moderate	R&D / Innovation management	8
Moderate	Business ethics	9
Moderate	Supply chain management	10
Moderate	Workers' health & safety	11
Low	Customer engagement	12
Low	Local communities	13

Source: DBS HK

Key ESG issues

Carbon emission and hazardous materials management – carbon emission reduction a global trend

Automobiles have contributed to the rising pollution in China and automobile companies are facing a rising need to address the climate change through carbon emission reduction. By developing innovative and environmentally friendly vehicle technologies, this would pave the way to reduce CO2 emissions and vehicle electrification strategy is on the cards of all automakers in China.

Under the Chinese government's regulation on new energy vehicle (NEV) development as part of its efforts to cut CO2 emissions, automakers are required to fulfil the dual credit policy, in meeting the NEV-to-total vehicle production ratio (NEV ratio) as well as the stringent vehicle average fuel-consumption requirement.

Chinese automakers need to have comprehensive NEV development plans to comply with the new regulations, including NEV model pipeline and R&D on powertrain technologies. Besides, developing energy efficient vehicles is also important to address the carbon issue. Apart from compliance with the carbon emission standard, there is also a requirement for waste management monitoring (such as wastewater, exhaust gas, etc.) by qualified hazardous waste management institutions in accordance with applicable requirements, targeting to meet zero environmental incidents.

In China, failure to address the carbon emission issue is a breach of regulatory requirement and could lead to fines or suspension of production. However, the Chinese NEV policy is relatively new, automobile companies are given some flexibility to adjust their NEV business plans to meet the requirement. In overseas, incidents of non-compliant with carbon emission standard has led to fines and affected the brand value.

Resources (energy) management – cost savings

Consumption of resources such as energy and water within the automotive manufacturing segment is high, and companies are looking at ways for more efficient manufacturing processes to reduce energy and water consumption. Companies are introducing energy management systems to monitor energy consumption and energy efficiency. Besides the cost-saving benefits from such investments in lowering energy consumption, it is also positive on carbon emission footprint in the long term. Hence, some automobile companies have increased the use of renewable energy in their productions to achieve better resource management.

Production quality and safety – company reputation

A weak grasp on production control could result in faulty products and ultimately affect a company's reputation. Vehicle safety is critical, as it involves human lives. During the product development stage, braking systems, airbags, sensory systems are areas that should receive more attention to enhance quality and safety. Automakers are building more electric cars these

days and battery safety is another highly critical area to avoid fire hazards. Potential untoward incidents involving electric cars (particularly relating to battery packs) could seriously affect the value of a company, in terms of future sales and profitability.

Companies that invest in R&D to improve product quality to enhance vehicle safety generally have good market reputation and tend to receive better customers confidence on their products. On the other hand, recent reports of electric car fire hazards had affected NIO's reputation and resulted in substantial recall cost and impacted its financial performance.

Production design and lifestyle changes – catering to consumer buying preference and to improve recycling

Existing products can be improved on or new ones designed to enhance functionality, quality, safety and environmental compatibility. Intelligent lightweight construction is a rising trend to reduce CO2 emissions and to reduce fuel consumption. Automobile manufacturers need to look into developing a sustainable value chain, from production all the way to recycling, especially in electric vehicle battery development, to reduce pollution.

Urban mobility change is another area that requires automobile companies to reconsider their business strategy to meet future demand for cars. By 2030, about 60% of the world's population is expected to live in cities. Car-sharing services could be a new business preposition for automakers as car ownership demand

declines. Hence, mobility pattern changes are expected to revolutionise transportation demand.

Material sourcing and efficiency – margin enhancement

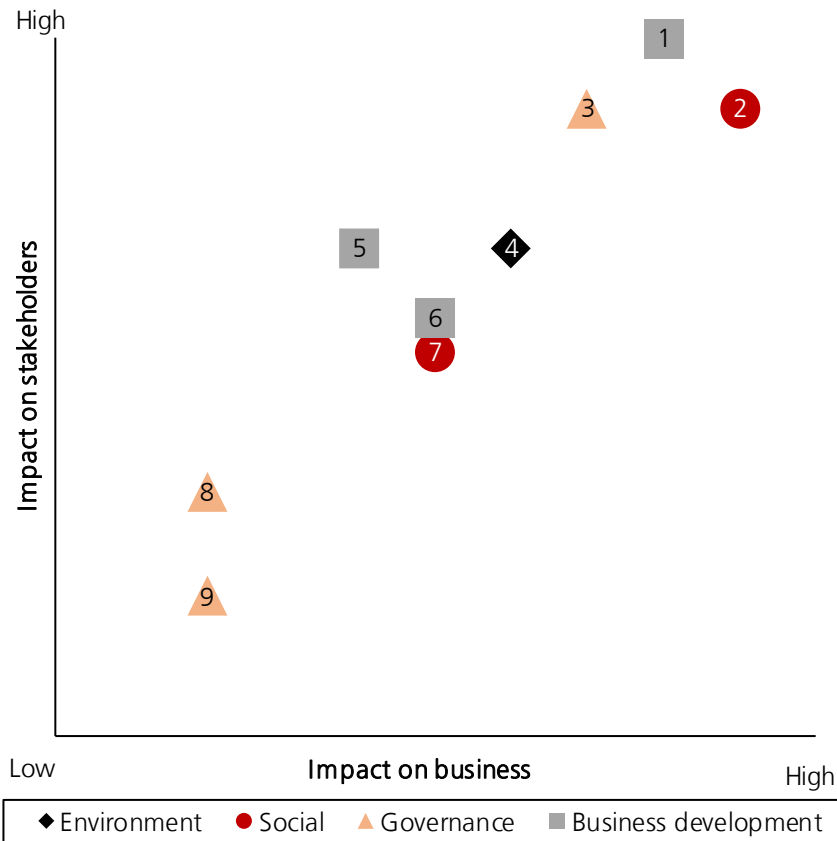
Automakers are adopting modular architecture manufacturing to have more spare parts sharing and reduce redundancy and wastage. This enhances efficiency in resource utilisation and automakers will be able to build various types of vehicles on a single production line. R&D investment is the first step to achieve resource utilisation efficiency. By sharing best practices, automakers can help the supply chain to improve on their product quality and the whole automotive industry should benefit. The recycling and return of raw materials to the production cycle would also help to improve material sourcing. Companies are increasingly maximising the use of recycled and renewable raw materials in their products.

While there are many factors which are important under the ESG drive, automobile companies have to tailor their ESG initiatives to cater to the various aspects of the environmental, social, governance issues and on top of these, business innovation to move ahead of time and peers. Failure to address these factors could lead to reputational, financial and market values decline. We have considered the automobile companies' EGS scorecards to arrive at our valuation analysis and automobile companies with a long-term commitment in addressing carbon footprint have higher earnings multiples.

China Banking Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Product / service sustainability	1
High	Access to product / service & affordability	2
High	Risk management	3
Moderate	Energy management	4
Moderate	Business model resilience	5
Moderate	R&D / Innovation management	6
Moderate	Workers' health & safety	7
Low	Corruption & bribery	8
Low	Legal compliance	9

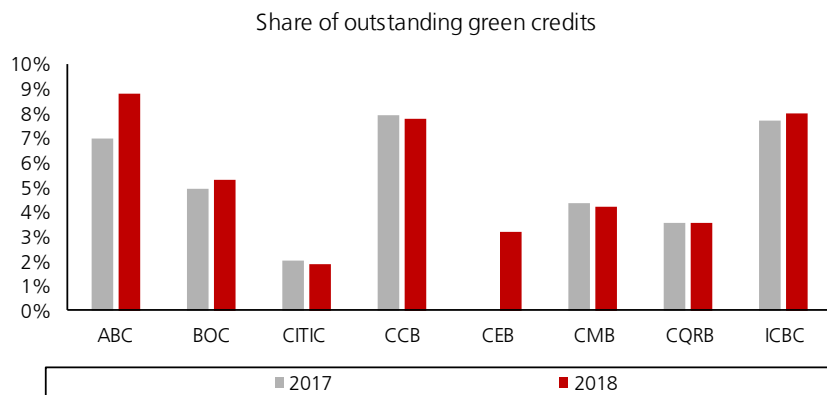
Source: DBS HK

Key ESG issues

Product/service sustainability – enhancing business sustainability through green financing

We see green financing as the most important avenue for China banks’ ecological contribution to direct more capital to eco-friendly areas, support development of eco-friendly industries and create value for environmental protection. The People's Bank of China (PBOC) has taken a number of steps to promote green financial development through a combination of macro-prudential and monetary policy. In 2018, ABC, ICBC and CCB had the highest portion of loans supporting green financing within our China banking coverage. We give these three names a high environmental score given their endeavours to support the eco-friendly economy.

Green finance in total loans ratio within our China banking coverage

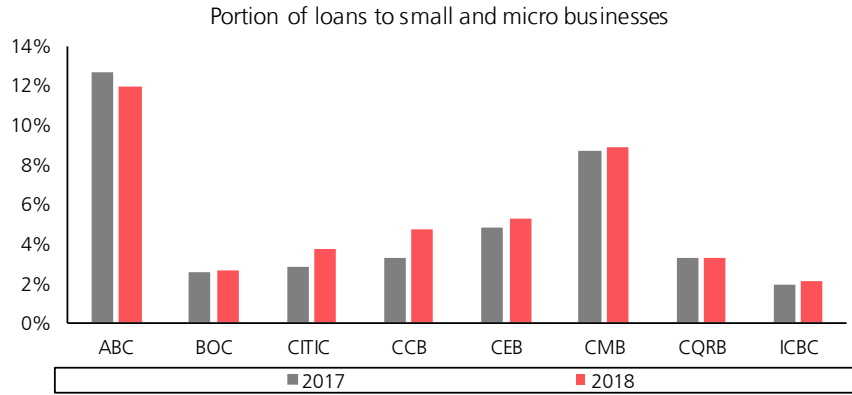


Source: Company, DBS HK

Access & affordability - promoting the harmonious development of local community through inclusive finance

Inclusive finance aims to improve the livelihood of small business owners and help small businesses obtain loans more easily. It also provides a tool for banks to better serve customers and seize business opportunities. Through inclusive finance, China banks can help more customers attain better lives, and thus we rate it as a key factor for social – access and affordability. Starting from 2018, the PBOC launched dynamic evaluation rules for qualifying financial institutions to enjoy a lower reserve requirement ratio (RRR) in a move to encourage inclusive finance. This means financial institutions can place a lower deposit in the central bank as reserve funds if they issue out a certain portion of their loans to small and micro firms. Therefore, more banks are incentivised to support inclusive finance, as well as to meet the credit needs of different classes. In 2018, ABC, CMSB and CMB had the highest portion of loans supporting SMEs and micro business within our China banking coverage. We give these three names a high social score given their support to the real economy.

SMEs loans in total loans ratio within our China banking coverage



Source: Company, DBS HK

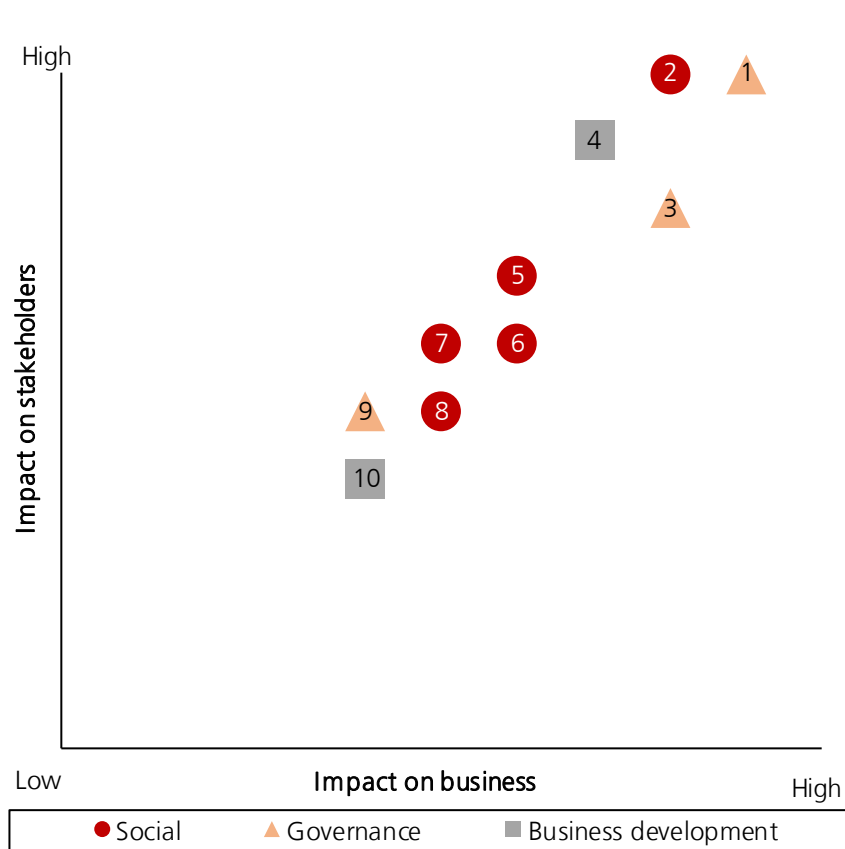
Risk management - a key factor for loan loss provision and profit margin

Risk management is always a key factor in terms of governance issues for China banks. A good credit risk control and compliance operations could create more value to customers and provide sustained and stable returns to shareholders. Banks could perform onsite inspections on clients' exposure to risks, and conduct surveys with relevant parties, such as upstream and downstream suppliers, to ensure the authenticity of the assessment content, and post-loan management. On the other hand, the internal risk policy and training courses could deepen the employees' awareness of risk management. How management balances profitability and risk would be a key area to watch. Our assessment incorporates how the company's NIM and loan quality have progressed over business cycles, and whether the management has set and met achievable targets.

China Education Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Business ethics	1
High	Product quality & safety	2
High	Legal compliance	3
High	Product / service sustainability	4
Moderate	Privacy and data security	5
Moderate	Customer engagement	6
Moderate	Workers' health & safety	7
Low	Employee relations & diversity	8
Low	Transparency & reporting	9
Low	R&D / Innovation management	10

Source: DBS HK

Key ESG issues

Business ethics - first step to win parents' preference

Compared to other consumer sectors, the education sector is unique in that the service user (children) and the consumption decision maker (parents) are usually separate, especially for the companies and products targeting young children. Parents cannot experience for themselves firsthand whether the service is good, or at least safe. This makes it especially important for companies to adopt good business ethics.

Previous failure cases include a few alleged cases of child abuse in kindergartens in China, one of which was under listed company RYB (RYB US), which hired some unqualified teachers to save on salary costs. It lost more than half of its share price when news on the scandal broke out.

To prevent this from re-occurring, companies need to set up internal control processes as well as external supervision systems, so as to increase its operational transparency to parents. This may increase costs in the short term, but will help them build up their reputation in the long run.

Product quality and safety - increasing pricing power

The likelihood of an education product to help students achieve better exam results or to find a good job weighs heavily on the consumption decision-making process. Product safety is only the

first step. A product can only be competitive and succeed in the market when it is able to really add value.

For example, the listed K12 school operator Wisdom Education (6068 hk) focuses on both improving teaching quality and ensuring campus safety (e.g. to manage the school canteen by themselves to ensure food safety). By achieving better examination results than local peers and providing good service, it is able to have strong pricing power and charges premium tuition fees.

Legal compliance - key to survival for the heavily regulated industry

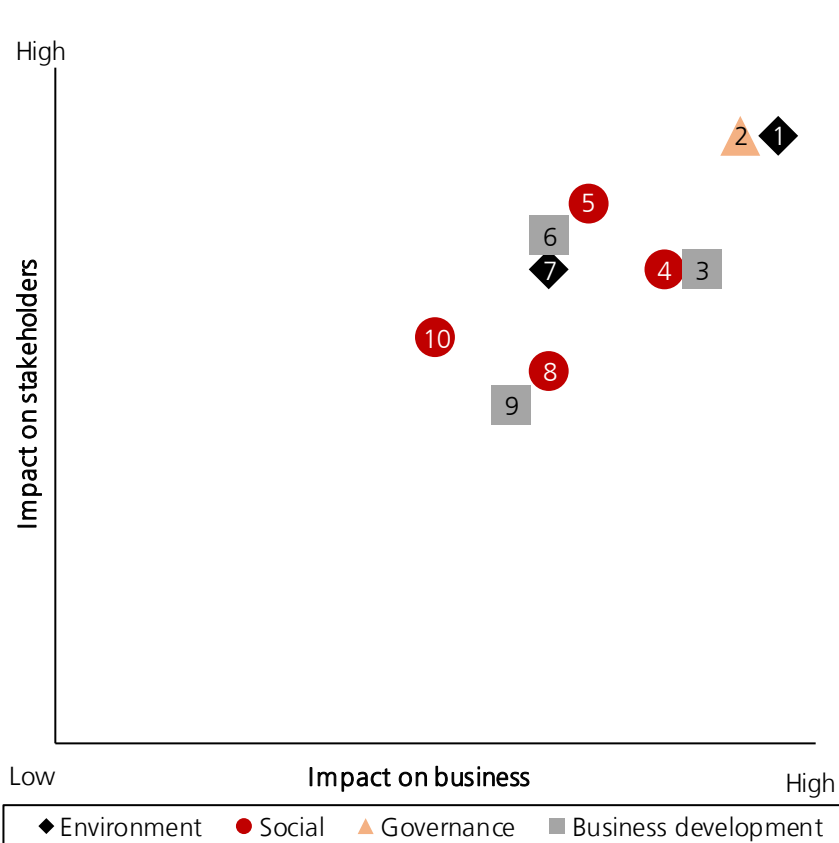
In China, the education sector, especially the schools and tutoring centres targeting K12 students, are heavily regulated by the government. For example, primary and middle schools can be non-profit type only, and the K12 after-school tutoring centres have to meet a series of requirements on teacher qualification, teaching content, tuition pre-collection, etc.

In late 2018, quite a number of tutoring institutions in Beijing were forced to shut down due to their non-compliance. Even some learning centres of TAL (TAL US) were shut down by the government in previous years for not meeting fire control requirements. Companies have to carefully adhere to the government's regulations to avoid fines or warnings.

China Environmental Services Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Energy management	1
High	Legal compliance	2
High	Product / service sustainability	3
High	Product quality and safety	4
Moderate	Disaster and emergency planning	5
Moderate	R&D / Innovation management	6
Moderate	Waste and wastewater management	7
Low	Customer engagement	8
Low	Material sourcing & efficiency	9
Low	Employee relations & diversity	10

Source: DBS HK

Key ESG issues

Energy management – achieving green and low-carbon operation

Energy is a major operating cost of water treatment, hazardous waste treatment and waste-to-energy plants, estimated to account for 10-20% of total cost. Advocating green and low-carbon operations helps reduce consumption of energy and improve profitability. The use of renewable energy will also lower the risk of non-compliance with future carbon regulations.

Regulatory and environmental compliance – both opportunities and risks

The government's mission of "Building a more beautiful China" has prompted tightening in execution of environmental regulations, leading to stronger demand for environmental services and higher turnover growth for environmental service providers.

Meanwhile, the government has also tightened the requirements on environmental compliance, leading to higher operating costs. Failure to comply will also lead to a government penalty or even suspension of operations.

Product / service sustainability – broadening revenue stream

Penetration rates of certain environmental services are already high, particularly in major cities, after years of services, such as sewage treatment service. Along with increasing disposable income and climbing living standard, the general public has higher demand for broader and even more professional environmental services, triggering environmental service providers to diversify and broaden the service scope. Those service providers who are able to make such changes will have a more sustainable impact on revenue as well as the environment or society as a whole.

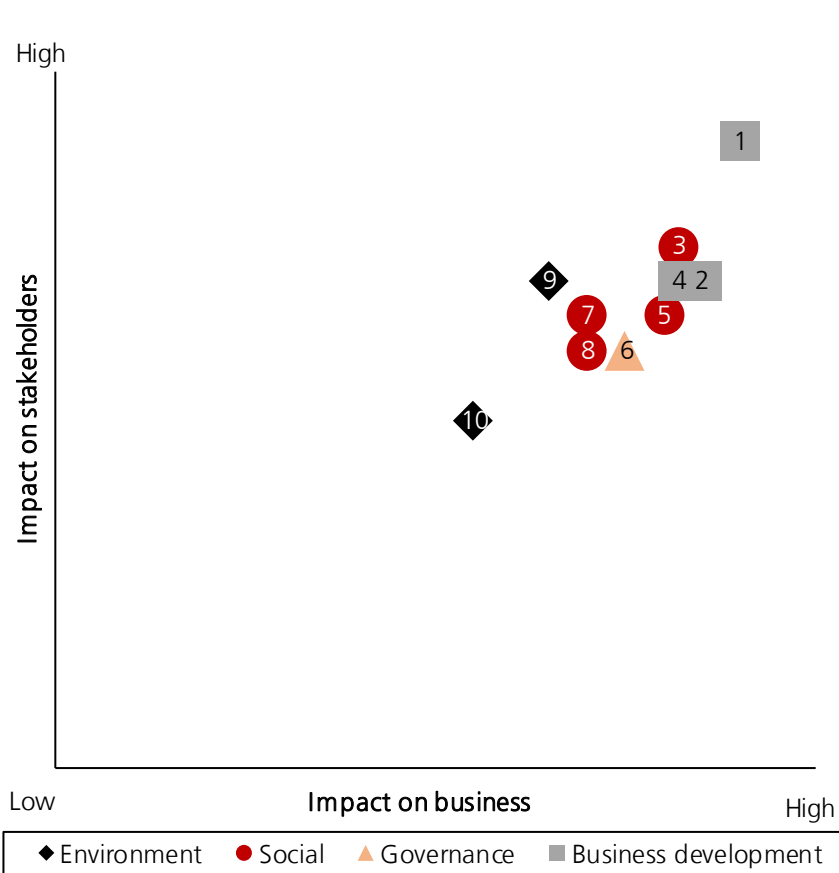
Service quality and safety - crucial in building good reputation and brand name

Given the business nature of environmental services, which involve treatment of wastewater, solid waste or even hazardous waste, it is important to ensure high service quality and safety. Failure to meet quality or safety standards could also incur penalties from the government. In addition, any serious accident will shake the general public's confidence and cause damage to brand name and reputation. This will in turn negatively affect the chances of winning future projects.

China Gas Utilities Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Material sourcing & efficiency	1
High	Product / service sustainability	2
High	Access to product / service & affordability	3
Moderate	Business model resilience	4
Moderate	Product quality & safety	5
Moderate	Legal compliance	6
Moderate	Workers' health & safety	7
Moderate	Customer engagement	8
Low	Ecological impacts	9
Low	GHG emission	10

Source: DBS HK

Key ESG issues

Sourcing and efficiency of gas supply – a key factor for profit margin

With the government's push to replace coal with gas, and the increasing gas penetration, demand for natural gas has increased with total gas consumption rising from 178.6bcm in 2014 to 280.3bcm in 2018. It is important to ensure sufficient gas supply, particularly during the winter when demand for gas is very strong and always leads to gas shortage (mainly to commercial/industrial users) and fluctuation in gas prices. Gas distributors are able to pass through cost hikes to non-residential users through direct negotiation. However, for residential users, it takes a much longer time to increase gas prices due to the need for documentation and public hearings. The time lag in passing through cost hikes is one of the key factors affecting profit margin.

In addition, with the set-up of a national oil & gas pipeline company, gas connectivity will improve, allowing gas distributors to have access to lower-cost gas sources. The ability to secure lower-cost gas supply will be a key factor for profitability.

Product/service sustainability – increasingly important earnings driver

The gas penetration rate is still low in China compared with other developed countries and the growth potential remains huge. Nevertheless, many gas distributors are exploring new revenue opportunities by extending the value chain, such as distributive energy, value-added services, etc. These new revenue streams will become increasingly important earnings drivers for sustainable development.

Access to natural gas supply and affordability – a structural change in pricing mechanism

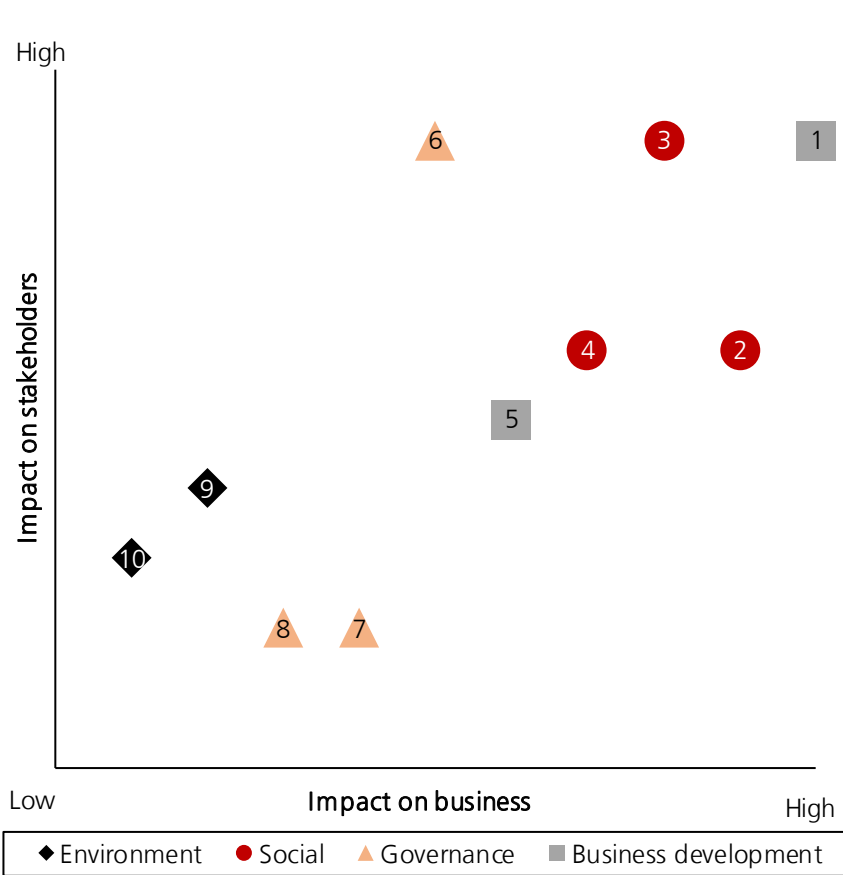
As the gas penetration rate in first-tier or major cities is already very high with limited room to grow, gas distributors' ability to explore new geographical areas, such as rural areas, will be the key for future growth.

In addition, with liberalisation of the gas sector, gas prices will be more driven by market forces. The exceptionally low gas price for residential users, currently being subsidised by commercial/industrial users, is expected to increase in the long run. This structural change in the pricing mechanism will have a material impact on turnover growth.

China Telecom Hardware Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	R&D / Innovation management	1
High	Employee relations & diversity	2
High	Product quality & safety	3
High	Intellectual property rights	4
High	Material sourcing & efficiency	5
High	Legal compliance	6
Moderate	Board diversity & structure	7
Moderate	Transparency & reporting	8
Low	Waste and hazardous waste materials management	9
Low	Water and wastewater management	10

Source: DBS HK

Source: DBS HK

Key ESG issues

R&D / innovation management capability – Core competence for sustainable revenue growth and margins

Hardware companies with R&D/innovation management capability are likely to perform better in the long run. This is because technology products have a short product cycle. For example, smartphone vendors usually launch 1-2 flagship models each year. Therefore, hardware companies' (i.e. smartphone vendors and smartphone component suppliers) R&D/innovation management capability to develop new products /new businesses to meet the evolving customer demand is critical for their sustainable growth. If they fail to do this, its technological advantage may weaken. Hardware companies may lose market share, especially in the high-end market, while their legacy products may face increasing pricing pressure and negatively impact hardware companies' revenue and margins. Therefore, hardware companies should reinvest a significant percentage of revenue in R&D or M&A to build sustainable technology roadmaps.

Employee engagement, diversity and inclusion – Key factors for technology development and retention

Hardware companies rely on their R&D teams for technology capability development. Losing those valuable talents to

competitors may lead to leakage of key technology, which would see competitors fast catching up. This would then lead to lower market share and profitability. Therefore, to retain talents, hardware companies should keep employees incentivized, empowered, and compensate them based on their performance. Interests of employees and companies can be aligned with a share-based compensation scheme. Hardware companies should also formulate policies to strengthen intellectual property (IP) management, in order to avoid leakage of key technology in the event of losing a key talent.

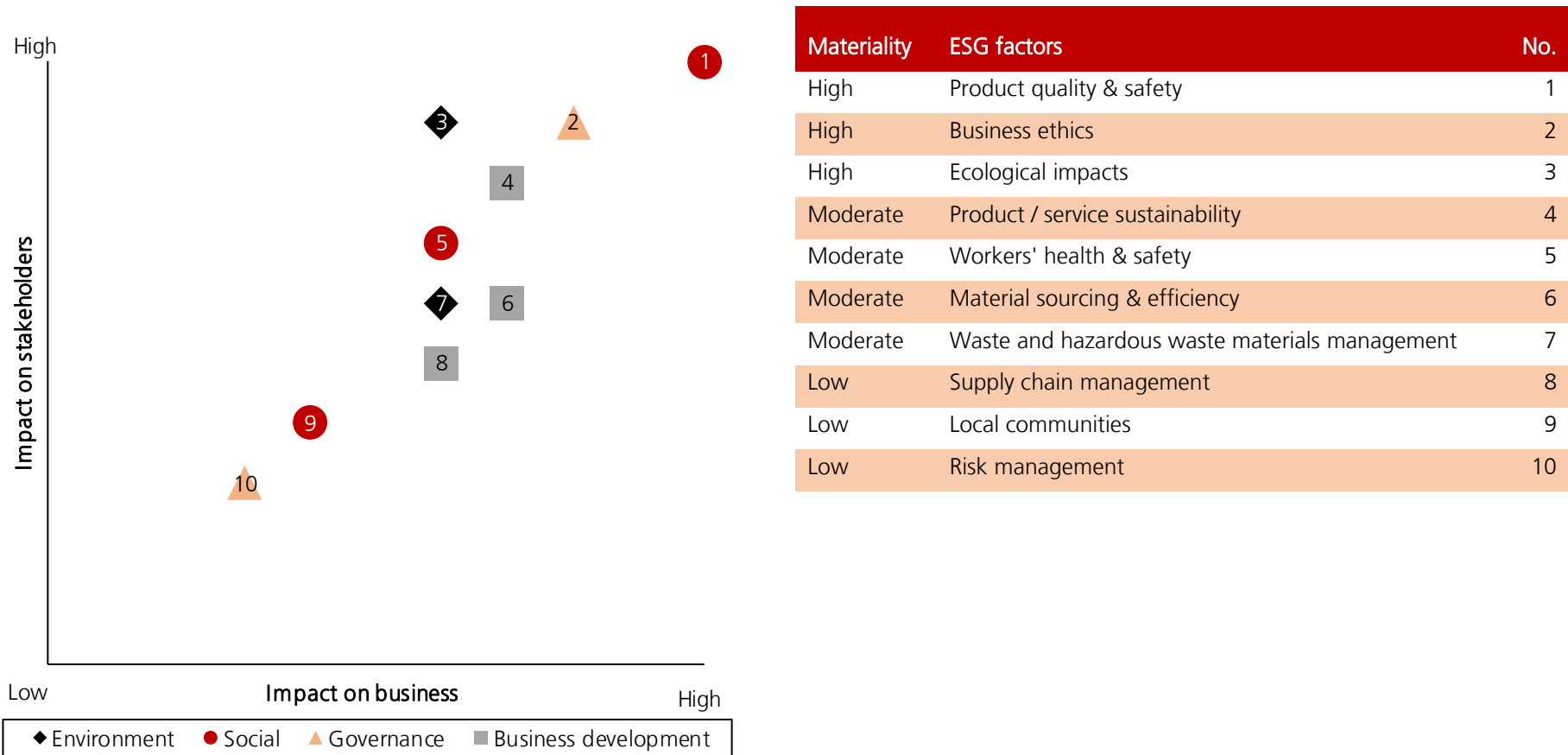
Product quality & safety – Importance of tapping into new products / new businesses

Lower than expected yield rate of new products / new businesses will negatively impact hardware companies' margins and may lead to order delays or cancellations. Hardware defects, safety-related defects may lead to product recalls as well as reputational risks. Therefore, hardware companies should formulate a practice to strengthen quality control management. Hardware companies should also optimise yield rate and product quality & safety through small projects initially, before going on to larger projects, when introducing new products / new businesses.

China Infrastructure Sector

Sustainability analysis

Materiality assessment



Source: DBS HK

Key ESG issues

Product quality and safety - foundation for all

Product quality and safety is essential for infrastructure construction companies. Though the risk of accidents is low, any untoward incidents may prove to be fatal. The railway construction and equipment companies, including CRRC (1186 hk) and CRG (390 hk), saw a significant share price drop after the high-speed railway accident in Wenzhou in July 2011, which killed 40 people. Passengers and investors lost their trust in the railway construction and operating entities for a long time.

To reduce such risks, companies have to strictly adhere to the regulations and construction process, and also focus on their internal control systems to prevent corruption.

Corruption and bribery - threat to quality control

Most of the largest infrastructure companies are SOEs, where corruption could be a persistent problem. Cases of corruption and bribery would result in higher expenses and lower efficiency, damage a company's reputation and image, or in the worst-case scenario, pose a danger to product quality and safety.

The implementation of the Supervision Law of the People's Republic of China in 2018 has made it necessary for companies to put in more effort to strengthen their anti-corruption system and staff integrity training, so as to ensure the compliance of their operations at home and abroad.

Companies have to strictly adhere to the latest regulations. Investors also have to take a closer look at the management's background and compensation, as well as projects' bidding prices, to evaluate the potential risks.

Ecological impacts - providing long-term benefits

Railway and highway construction will bring ecological impacts on the surroundings. To protect the ecological environment, construction companies may have to invest more in the short term. For example, the famous c.2,000-km Qinghai-Tibet Railway has incurred a total of c.Rmb1.5bn on environmental protection.

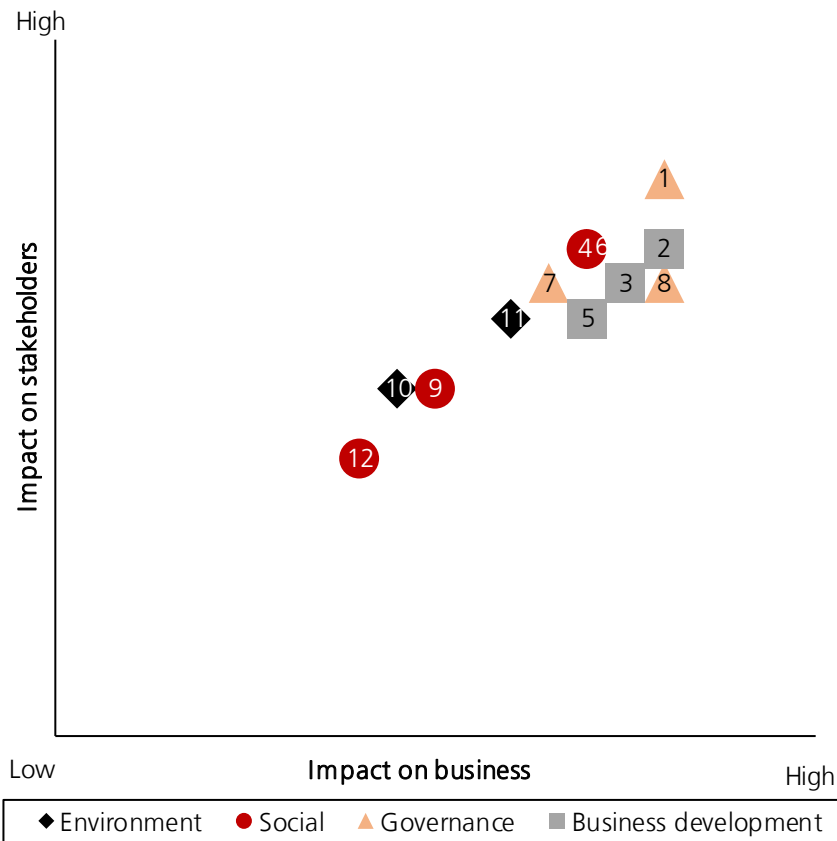
In the long term, however, environmental protection would bring benefits not only to the public, but also to the companies themselves. For example, it helps construction companies to accumulate experience in the realted area, and help them to win overseas contracts as ecological protection might be an important requirement in overseas project tenders. Overseas projects usually command higher margins, which would in turn improve the company's profitability.

To achieve this, companies have to conduct studies on ecological environmental protection, create practical and effective protection programmes (especially those that focus on construction sites where ecology is likely to be disrupted), and plan their ecological environment protection and project construction synchronously.

China Insurance Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Risk management	1
High	Business model resilience	2
High	R&D / Innovation management	3
High	Climate change	4
High	Product / service sustainability	5
Moderate	Privacy and data security	6
Moderate	Transparency & reporting	7
Moderate	Board diversity & structure	8
Moderate	Local communities	9
Moderate	Energy management	10
Moderate	Waste and hazardous waste materials management	11
Moderate	Employee relations & diversity	12

Source: DBS HK

Key ESG issues

Business model resilience – offering poverty reduction, exclusive risk coverage, and green finance products that influence asset/liability management are key drivers to earnings.

With the nation's target of becoming an affluent society by 2020 and preserving the environment, insurance companies, with their financial might and influence, are in a strong position to champion this cause.

The various strategies undertaken by different insurance companies may be applied to fight poverty, such as offering risk coverage to certain targeted counties, developing exclusive poverty-alleviation products, and granting agricultural financing loans. As for performance, PICC in 2018 gave RMB131bn to four targeted counties to help reduce poverty, developed 242 exclusive products, and granted RMB4.08bn for agricultural financing.

For most of the insurance giants, providing environmental pollution liability insurance and allocating capital to energy-saving and green assets are key strategies in the area of providing green financing. In 2018, PICC provided environmental pollution liability insurance to 6648 enterprises with the risk coverage of RMB12.2bn, and raised RMB20bn for clean power construction and green transportation.

As poverty alleviation and environment preservation are key national targets, insurance companies are expected to contribute more towards poverty reduction and green financing, which would not only enhance their corporate image, but more importantly help to drive future earnings.

Risk management – a crucial factor to avoid/minimise potential losses

Regulatory requirements and risk control have become more stringent in recent years in order to reduce financial risks. Failure to meet CBIRC's requirements may result in more serious consequences than before. Therefore, it is important for insurance companies to adhere to CBIRC's requirements and to build a solid and viable risk management system.

Different insurers may adopt different systems based on their own scale and business model. The main areas of risk control include cash flow risk, credit risk, and counter-party management. In practice, most of the insurance giants in China are continuously refining their risk management information systems and enhancing risk performance evaluation to improve risk control.

Laws and regulations in the insurance sector are expected to become increasingly stringent over time and thus require insurers to adopt more comprehensive and refined risk control systems. We believe a less chaotic and more regulated market

environment may enhance the industry's image and reduce the risk of incurring losses in the long run.

Research and Development – Fintech application to drive businesses transition and upgrade

In response to more advance internet era that is currently happening in China, insurance companies made great investments in Fintech R&D and penetrated new technologies to business lines such as financial services, health care, and auto insurance, to improve user experience and staff productivity.

Key targets and applications that insurance companies currently pursuing are to provide more convenient customers and staff services via online platform or APPs, enhance risk management by applying technologies such as facial recognition, and to grow customer base in a productivity-increasing matter.

As expectation from customers and costs from staffs increase, insurance companies are expected to expand investments and penetrations in Fintech development in order to maintain and improve their market competitiveness and profitability.

Climate change – increasing occurrence of catastrophes implies rising cost pressure

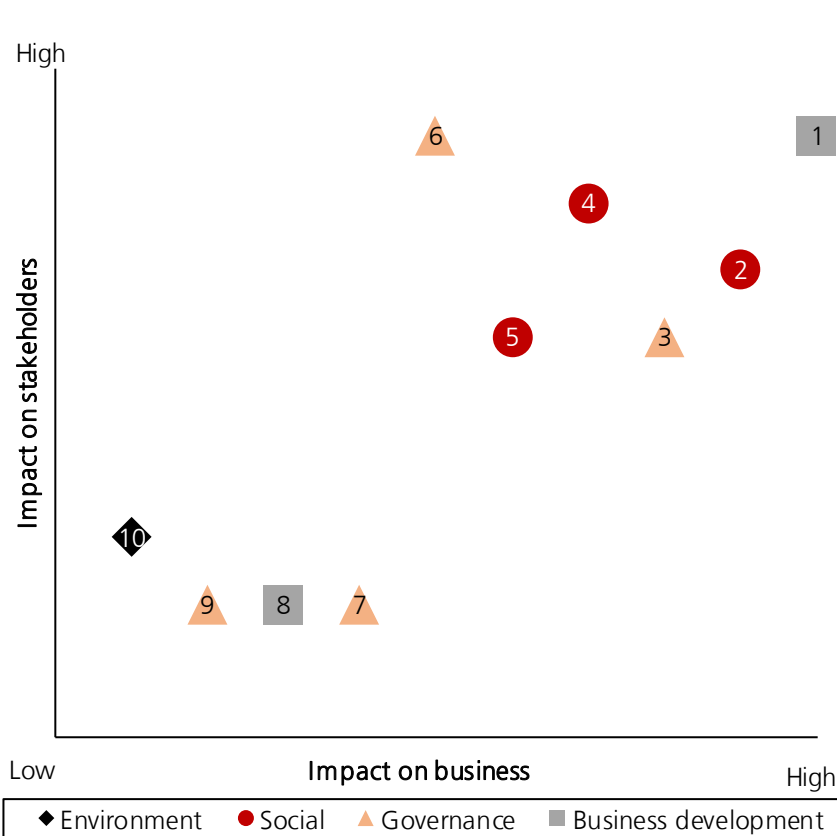
Frequent occurrence of catastrophes in recent years are of increasing concern to insurance companies because of the direct impact on earnings. Insurance giants in China are making efforts to educate the society to tackle climate changes. China Reinsurance Corp. for example has made a contribution by (i) applying technologies and taking measures such as using satellite remote sensing and geographic information technology to identify and position insured objects, (ii) utilising multi-data sources and analysis to assist in catastrophe risk management, and formulating catastrophe models to provide solutions for risk pricing.

As climate change worsens, insurance companies are expected to have more comprehensive and viable measures to not only provide protections to the insured, but also prevent significant losses that could hurt overall earnings.

China Internet Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	R&D / Innovation management	1
High	Employee relations & diversity	2
High	Business ethics	3
High	Product quality & safety	4
High	Selling practices & product labelling	5
High	Legal compliance	6
Moderate	Board diversity & structure	7
Moderate	Material sourcing & efficiency	8
Moderate	Transparency & reporting	9
Low	Energy management	10

Source: DBS HK

Key ESG issues

R&D / innovation management capability – core competence for continuous revenue growth and margins

Though Internet products (such as WeChat and Taobao) have a relatively long product cycle, Internet companies have to add new features or expand the ecosystem (i.e. short video and mini programs) to meet customers' changing demand in order to support sustainable revenue growth and margins. If they fail, Internet companies may lose market share, and revenue growth and margins may turn sluggish. Therefore, Internet companies should reinvest a significant percentage of revenue into R&D spending (i.e. Alibaba: 10.3% in 2018, Tencent: 7.3%, Baidu: 15.4%) to build a sustainable ecosystem.

Employee engagement, diversity & inclusion – key factor for innovation in response to evolving competitive landscape

Key management, with responsibilities for strategic planning, are always closely intertwined with the fortunes of Internet companies. If the key management team fail to grow with the times, this may lead to market share loss to emerging Internet players. Besides share based compensation for talent retention, Internet companies should recruit new members to their management teams for innovation to respond to the changing competitive landscape.

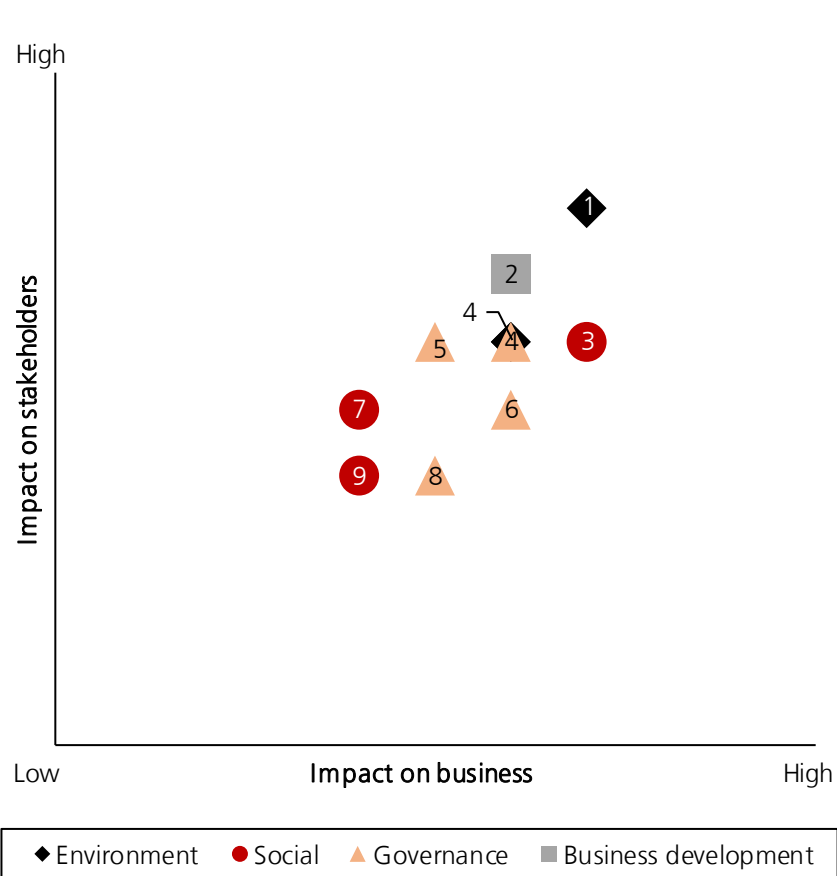
Business ethics – importance for business sustainability

The government has raised concerns on the adverse impact of online content (i.e. online games and video) on citizens, especially minors. Therefore, violating ethics may lead to penalties, or closure of that particular content or even platform. Therefore, Internet companies should formulate content screening management and anti-addiction systems to promote balanced entertainment especially for under-18 year old.

China Materials Sector

Sustainability analysis

Materiality assessment



Source: DBS HK

Key ESG issues

GHG Emissions – tightening requirements by the government

Since the government has imposed strict requirements to comply with all environmental protection laws, regulations, rules and provisions, as well as industry standards, materials companies are incorporating energy conservation and emission reduction as their long-term development strategy. There are several explicit indicators including air quality, such as the concentration level of SO₂, NO_x and particulate matters, as well as emission of CO₂ per unit of product, followed by parameters for hazardous waste and energy required to be fulfilled in order to be compliant. Not only will outdated and high-pollutant capacities be eliminated, fines will also be imposed and rectification notices be served for violations relating to dust emissions from production facilities. In response, companies are constantly increasing their investments in scientific research and adopting technological innovation with the aim of reducing emissions through technological improvement, namely desulphurisation, dust collection, denitration, and carbon capture and storage, thereby achieving the goal of clean production.

Supply Chain Management – reducing emissions and production costs

There is rising awareness on the benefits of conserving and recycling resources, and incorporating the resource utilisation policy of “minimisation, recycling and renewability” into production and management. For example, China’s cement industry has extensively applied the residual heat power generation technology to cement kilns, as it promotes energy-saving and reduces consumption, lowers production costs, and improves enterprise performance, while indirectly reducing carbon emissions. Anhui Conch Cement is one of the advocates of residual heat power generation. In 2018, a total of 112 residual heat power generation units were installed and operated on group’s cement and clinker production lines, with a total installed capacity of 1,399 MW. During the year, the amount of generated electricity was 8,279 GWh, saving 2.98m tonnes of standard coal as compared with thermal coal-generated electricity, and reducing emissions of CO₂ by 7.95m tonnes. As a result, Anhui Conch was China least cost producer despite unit production cost increased in 2018 due to raw materials price.

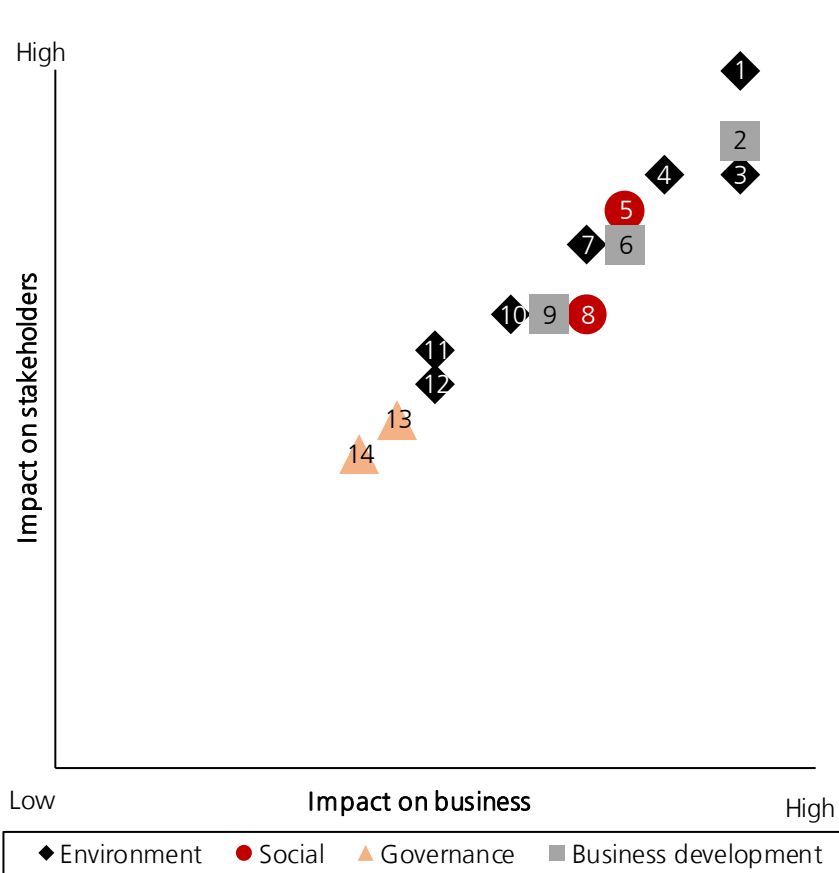
Employee Health & Safety – “zero” casualties and environmental accidents

Besides, the China materials sector is seen as having higher safety risks than other industries and therefore “Health & Safety” is one of the core areas in its ESG management. Abiding by the relevant laws and regulations on occupational health and safety, companies are adhering to the goal of zero work-related casualties and major environmental accidents, and prioritising on safety issues. Inadequate safety management may result in accidents, and cause casualties or property damage. Nowadays, companies, like China Shenhua have formulate their Three-year Plan for Safe Production in the Coal Industry of China Shenhua, continuously raising their standards of safety and building an invulnerable bulwark for safety. We believe that there is rising importance to implement strict safety production management and employees’ occupational health management to minimise personal injury and death as well as economic losses during production and operation.

China Oil & Gas Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
high	Production safety	1
high	R&D / Innovation management	2
high	Greenhouse gas emissions	3
high	Hazardous waste disposal	4
high	Occupational health and safety	5
high	Risk management	6
moderate	Energy transformation	7
moderate	Staff development	8
moderate	Supply chain management	9
moderate	Biodiversity protection	10
moderate	Land resource management and protection	11
moderate	Water management	12
low	Corruption & bribery	13
low	Transparency & reporting	14

Source: DBS HK

Key ESG issues

Operational safety management - chief priority for upstream companies

The combination of heavy machinery/equipment, highly flammable and hazardous substances and harsh operating conditions make the oil and gas sector one of the most dangerous industries in the world. An oversight or lapse in safety practices could not only translate into production outages, but also severe personnel injuries and even death. CNOOC was forced to suspend operations at its Long Lake project after a fatal explosion left one worker dead and another critically injured in 2016. Similarly, an explosion in an oil pipeline owned by Sinopec in Qingdao killed 62 people and injured more than 136 in 2013. The direct economic damage of the incident amounted to RMB751m, which was mostly borne by Sinopec. By establishing a thorough safety management process, encompassing a strong safety culture, comprehensive safety guidelines, contingency solutions and continuous employee training, E&P companies can greatly reduce the frequency and severity of workplace accidents.

Emissions and waste management - increasing cost of compliance on stricter regulatory requirements could erode operating margins

Oil and gas production is a major source of greenhouse gases such as carbon dioxide, methane and nitrous oxide, through gas leaks, gas flaring and pollutive production methods like hydraulic fracturing. Additionally, pollution can also occur

because of oil spills/leakages, and environmental contaminations. An inability to meet environmental standards could result in substantial legal liability – Chad withdrew five exploration permits issued to CNPC after the latter refused to pay a US\$1.2bn fine for repeated violations of environmental standards in 2014, while the Ministry of Environmental Protection suspended approvals of PetroChina and Sinopec's new refining projects in 2013 when they fell short of pollution targets. Companies must enhance their carbon management systems, and actively assess and monitor the environmental risks of each project to excel in this aspect.

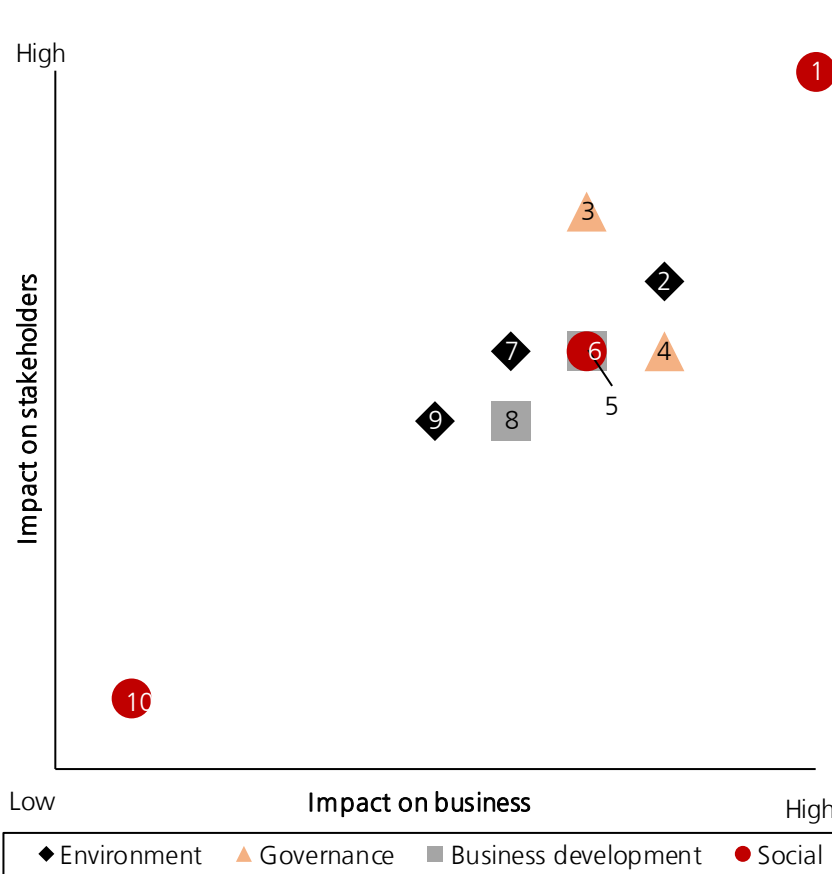
Energy transformation and climate change - portfolio optimisation to ensure sustainable growth and profitability

Climate change is an increasingly pertinent issue in today's world, and the development strategy of oil and gas companies has a material bearing on climate-related risks. On this front, the oil majors in China are striving to reduce their carbon footprint, by pivoting towards the production of natural gas and diversifying their operations into renewable energy. CNPC has announced an ambitious plan to greatly expand the production of natural gas at a 4.6% CAGR between 2018 and 2025, and CNOOC recently began the development of an offshore wind project in the Jiangsu Province in early 2019. Upstream companies need to optimise their asset portfolios to position themselves for the eventual decline in fossil fuel demand (crude oil in particular), and embrace cleaner forms of energy to combat climate change.

China Pharmaceutical Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Product quality & safety	1
High	Waste and hazardous waste materials management	2
High	Business ethics	3
High	Legal compliance	4
High	R&D / Innovation management	5
High	Workers' health & safety	6
High	Water and wastewater management	7
High	Supply chain management	8
Moderate	Energy management	9
low	Local communities	10

Source: DBS HK

Key ESG issues

Product quality and safety – the foundation for a pharmaceutical company to generate revenue

Product quality and safety is the foundation for a pharmaceutical company to generate revenue. Because the government will not allow the production to commence if the company fails to meet the requirement on product quality and safety, particularly the following respects:

1) Product safety in clinical trial phase 1. Passing all phases of clinical trial is necessary for a drug to launch. For chemical drugs that require clinical trials, the primary endpoint to be assessed in phase 1 trial is drug safety. If the safety and quality cannot be guaranteed, there is no way for it to enter phase 2. As a result, the associated R&D costs are wasted with no returns. According to global statistics from 2006-2015, only 60% of drugs could pass phase 1 and enter phase 2. In China, the ratio of phase 2: phase 1 trials which started in 2018 was 1:3.

2) Unannounced Good Manufacture Practice (GMP) inspection by China Center for Drug Evaluation (CDE). Failure in the inspection might result in termination of production. This applies to all medicines and medical devices. In 2017, CDE had inspected 57 enterprises without prior notice, out of which 38 were traditional chinese medicine makers. The results showed

that 27 out of these 57 companies faced severe problems in product manufacturing and thus their GMP certificates were revoked. This will impact revenues as the production facilities will be left idle until the companies regain their GMP certificates.

To reduce such risks, it is recommended to pick companies that have fewer early stage clinical assets and more late-stage assets in their R&D pipelines. Also track the history of the company to see whether it has had issues with GMP in the past.

Waste and hazardous waste materials management – a crucial cost item with growing attention from governmental authorities

Many pharmaceutical companies produce active pharmaceutical ingredients (API). Production of API will discharge waste and hazardous waste. Waste and hazardous waste management are key risks for these players. For example, in Taizhou (Zhejiang province), there used to be thousands of API makers. However, unregulated waste emissions significantly damaged the local environment and people's health. In 2015, the execution of new Environmental Protection Law posted great pressure on these drug companies in Taizhou, especially for the small-mid caps. In fact, only fewer than 10% of the original makers remain in Taizhou, with the others either closed or relocated to other regions. The push for environmental protection is not likely to cease, given that in 2018 the Ministry of Ecology and

Environmental, Social and Governance

Environment issued documents questioning over 1,048 personnel in seven provinces on environmental issues.

If a company fails to manage waste properly, this may affect its revenue as production would need to be ceased for facility upgrading to meet related environmental protection requirements or even factory relocation. To avoid punishment imposed by government, in Taizhou, Hisun pharm (600267) spent RMB300m to upgrade its environmental protection facilities from 2003-2007.

To reduce related risks, it is recommended to pick companies already upgraded their environment protection facilities to meet government requirement.

Corruption and bribery – watch out for hidden perils in the pharmaceutical industry

Corruption and bribery are present in China's pharmaceutical industry. In order to facilitate regulatory matters such as drug approvals, pharmaceutical companies may bribe the governmental authorities. That will hurt the company's reputation and consumers might question the company's products' quality. In 2017, a division director in China Food and

Drug Administration (currently known as National Medical Product Administration, NMPA) responsible for drug registration was charged with accepting bribes from at least 28 companies, out of which 27 were pharmaceutical companies while several were listed in the A-share market. The director was found guilty of receiving bribes worth c. RMB14m and was convicted and sent to jail.

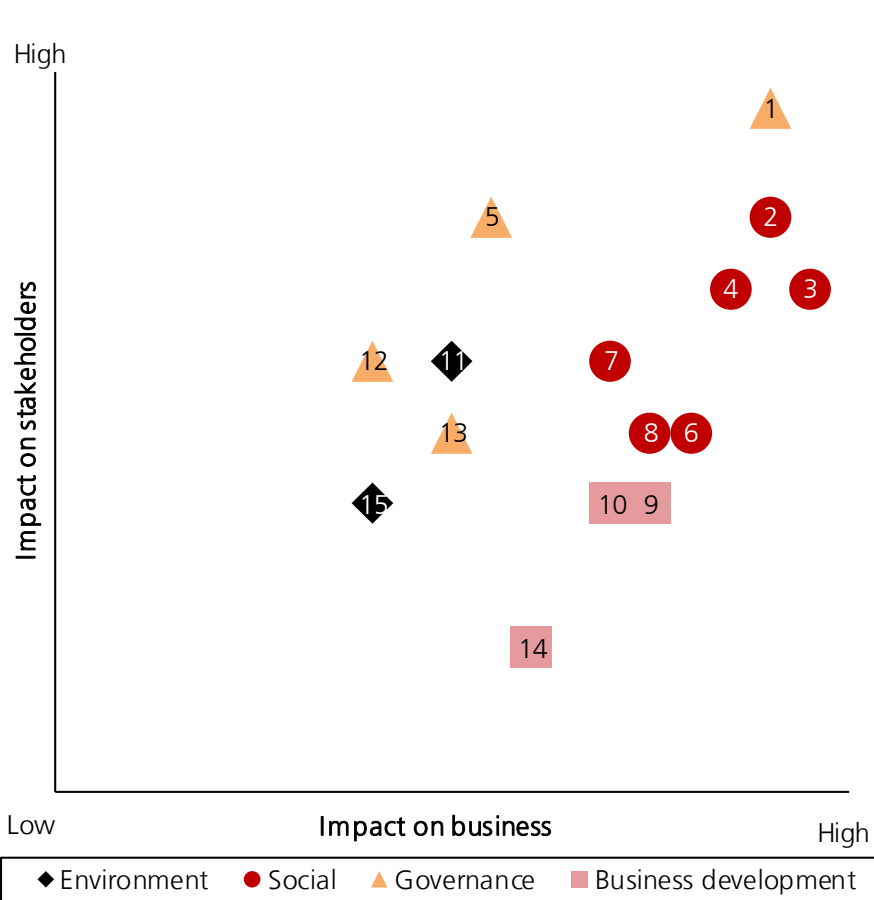
Any reports of corruption and bribery will shake the confidence of shareholders and investors in the market, eventually harming share prices. Furthermore, corruption and bribery are likely to distort the financial statements for small- and mid-cap companies. In 2019, the Ministry of Finance and National Healthcare Security Administration of China announced that it would examine the financial documents of 77 pharmaceutical companies. This indicates the authorities' to clamp down on corruption and bribery in the pharmaceutical industry.

To reduce related risks, it would be helpful to perform a check on the career history of the company's personnel who hold key positions (where the risk of bribery is present) such as sales heads or officers for regulatory affairs.

China Property Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Transparency & reporting	1
High	Product quality & safety	2
High	Employee Turnover	3
High	Worker's health & safety	4
High	Board diversity & structure	5
High	Selling practices & product labelling	6
Moderate	Access & affordability	7
Moderate	Customer engagement	8
Moderate	Product design & lifecycle management	9
Moderate	R&D / Innovation management	10
Moderate	Energy management	11
Low	Business ethics	12
Low	Executive pay	13
Low	Material sourcing & efficiency	14
Low	Ecological impacts	15

Source: DBS HK

Key ESG issues

Transparency and reporting

Investor accessibility is key. Capital market communication has always been regarded as a key element for investors investing into the sector. There are updates (e.g. monthly presales, sell-through rates) readily available. Generally, developers that offer more regular data disclosure and are more actively engaged in capital market communications are typically seen as more transparent and do attract more investor attention.

Management track record in meeting guidance is another key element. The other side of capital market communication is the overall accuracy of information provided and track record in successfully achieving guidance. Developers with senior management team of less promising track records in meeting guidance or those that have frequently disappointed the market may trade at a discount versus peers. Credit ratings may also be affected and could adversely affect developers' on- and offshore funding costs.

Track record and data availability are directions to work towards.

We believe market perception on the company's overall transparency and reliability is an ongoing development. Regular operational updates, and offering achievable guidance would be key points to improve market perception on the counter.

Employee turnover and incentive schemes

Directly linked to developers' performance in terms of land acquisitions and operational efficiency. The performance of China Property Developers is very much tied to the developer's ability to attract and retain appropriate talents, especially senior and mid-level personnel, which are critical to ensure day-to-day operations proceed smoothly. While the business is increasingly standardised with relatively static product designs and construction typically outsourced to third party contractors, core business decisions (e.g. land acquisition) remains in the hands of top- and mid-level management. Their ability to influence key items such as project quality, completion deadlines, cash collection etc. is critical.

Country Garden (2007 HK)'s earlier introduction of a co-investment scheme is a case in point. Through aligning the interests of mid- and high-level personnel by requiring them to invest partially into their respective projects of responsibility, the company has greatly enhanced the quality of their land acquisitions as well as project turnover. This has resulted in accelerated presales growth over the past few years.

Talent is an increasingly sought after resource. In the case of property development in China, developers are only able to access certain bank financing channels and land opportunities once they achieve a satisfactory scale. As such, small- and mid-cap developers have been pressing on the pedal to expand their operating scale and raise talent quality, especially mid-level and frontline staff. The talent pool has concurrently become more competitive in the past few years.

In the event where developers fail to attract and retain appropriate talent in their businesses, their operational efficiency and thus fundamentals could be adversely affected, not to mention potentially incurring higher cost for new recruits. In the case of small- and mid-cap developers who are actively expanding their scale, their pace of expansion may be hampered.

Incentive schemes are core to retain staff. Logically, we believe incentive schemes are an important consideration that developers can use to attract and retain staff, particularly under an increasingly competitive talent market. An incentive scheme can reward talents more appropriately and incentivise them to perform or even outperform developers' expectations. The co-investment scheme as mentioned above is a good example. More generous packages would also help to reduce staff turnover.

Product quality and safety

Critical factors that are receiving more attention. The shorter project development cycles for Chinese developers have been in the limelight over the past few years to enhance project returns. Yet, one of the consequences of this strategy is the impact on project quality. Several of the larger Chinese developers have reported quality issues on their delivered projects, and safety concerns at the construction sites of their ongoing projects. As such, product quality and safety awareness is an increasingly key factor for investors, homebuyers, as well as other stakeholders like local regulators.

Significant impact to reputation and P&L, among others.

Developers unable to ensure decent quality and safety standards for its projects could suffer substantial reputational loss and this would have earnings implications. They would not be able to command price premiums, and may have to incur additional costs for rectifications. Meanwhile, safety issues on their construction sites could have regulatory implications, leading to hefty fines and delays in project deliveries, which would also adversely impact its reputation and earnings, and future sales.

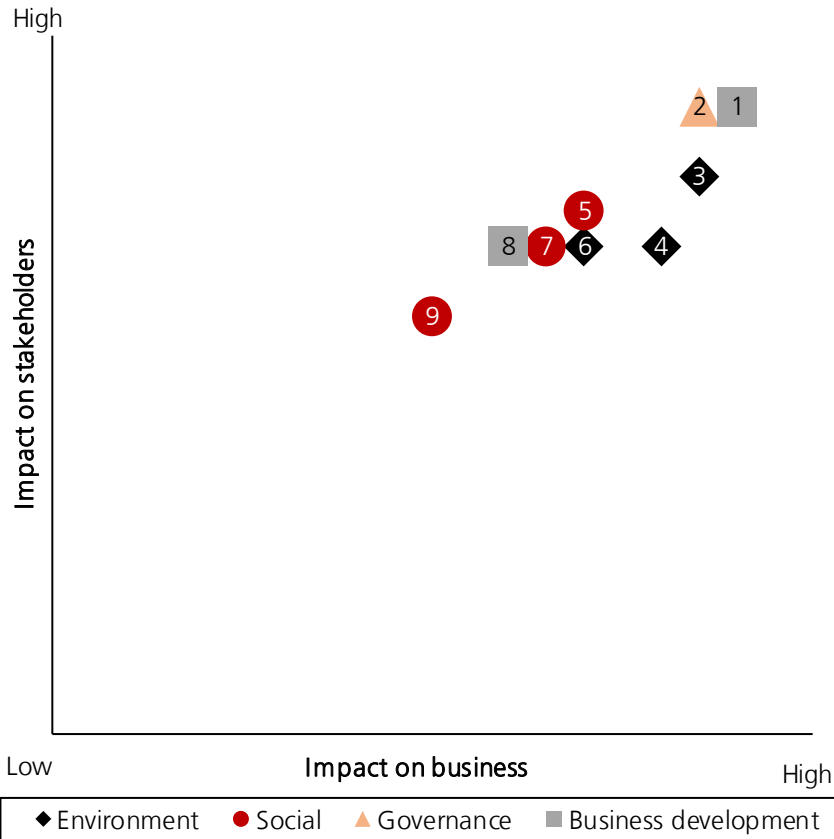
Technology utilisation and implementing stricter safety standards to minimise risk of failure.

With developers' profitability increasingly squeezed by higher land costs and property price caps, we believe merely extending the project development cycle is unlikely to be positive for developers. Instead, we believe an optimal solution would be to combine a less stringent development timeline together with higher technology involvement and stricter safety standards within construction sites to strike a balance between profitability and product quality/safety concerns. Country Garden is a case in point. Since project quality and safety issues emerged on the developer's several project sites, the company has devoted sizable amount of resources to adopt more technology/automation during the construction phase of its projects, securing decent development pace while reducing risks on construction site staff's safety.

China Renewable Energy Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	R&D / Innovation management	1
High	Legal compliance	2
High	Climate change	3
High	Ecological impacts	4
Moderate	Product quality & safety	5
Moderate	Energy management	6
Moderate	Customer engagement	7
Moderate	Supply chain management	8
Low	Workers' health & safety	9

Source: DBS HK

Key ESG issues

Technology innovation – a key factor for product sustainability

For upstream component manufacturers, it is important to continuously enhance integral innovative capability and advanced technologies to keep up with the market and customers' needs. This would allow sustainable product development and turnover growth.

In addition, for solar component manufacturers, advancement in technology is the major driver to reduce manufacturing costs and improve efficiency, which directly affect the set-up costs and investment returns of solar farm operators. In particular, the government is pushing for grid-parity projects where low set-up cost is the key.

Regulatory and environmental compliance – more regulated environment for sustainable development

The government's plan to achieve energy and low-carbon transformation remains intact with non-fossil energy targeted to account for 15% of total energy consumption by 2020. Hence, the use of renewable energy will continue to increase. However, in order to promote a sustainable and healthy development of the renewable energy market, more guidelines and policies have been issued to regulate various aspects, such as mechanism of

gradual phase-out of feed-in tariff, construction timeline for projects that have yet to commence, market-oriented reforms for distributed projects, etc. Failure to comply with these regulations will result in project delays.

Impact of climate change – resilient adaptations

Global climate change presents both opportunities and challenges for renewable energy operators. While climate change has prompted governments to increase the utilisation of renewable energy, extreme weather, rising sea levels and ocean acidification will also affect the efficiency of renewable energy farms. The adaptability of such facilities under harsh environments must be enhanced. Otherwise, profitability will be negatively affected.

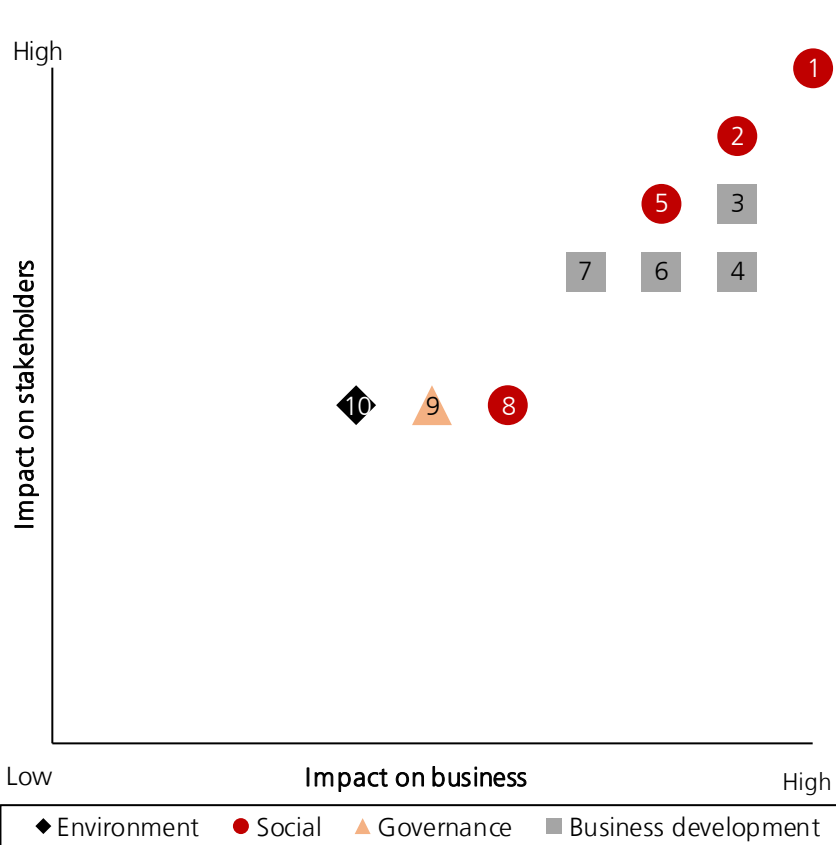
Ecological impacts – effective measures required

Construction of solar or wind farms will inevitably impose negative environmental impacts, such as light-shadow flickers, wildlife and landscape disruption, etc. Effective measures and solutions are required to tackle factors that are identified to cause environmental impacts. Failure to do so will result in project delays and may even negatively affect chances of winning future projects.

China Telecom Equipment Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Selling practices & product labelling	1
High	Customer engagement	2
High	Product / service sustainability	3
High	Material sourcing & efficiency	4
Moderate	Product quality & safety	5
Moderate	R&D / Innovation management	6
Moderate	Supply chain management	7
Low	Employee relations & diversity	8
Low	Risk management	9
Low	Waste and hazardous waste materials management	10

Source: DBS HK

Key ESG issues

Selling practices and product labelling – key factors to pricing and market share allocation mechanism

Telecom operators periodically launch tenders for their equipment procurement process. All factors considered, market share allocations and pricing mechanism set for the tender will be critical to telecom equipment suppliers. For example, price competition and higher market share concentration for tender winners will likely result in lower tender prices as bidders compete for higher volume by offering lower prices.

The number of components included in one tender will also impact the competitive advantages of equipment suppliers. For example, integrated players are likely to gain more market share if a tender includes different components integrated into one product, as compared to a manufacturer producing only one specific component. Vertical integration will help reduce this risk.

Customer engagement – important in a buyer's market

In most markets in terms of geography, the number of customers i.e. telecom operators is very limited. Therefore,

customer relationships are very important for telecom equipment suppliers. Risk of customer disengagement could arise from management changes, mergers & acquisitions and geopolitics. Failure to engage customer well could lead to significant market share losses. Geographical diversification will help expand the customer base and reduce the risk from customer concentration.

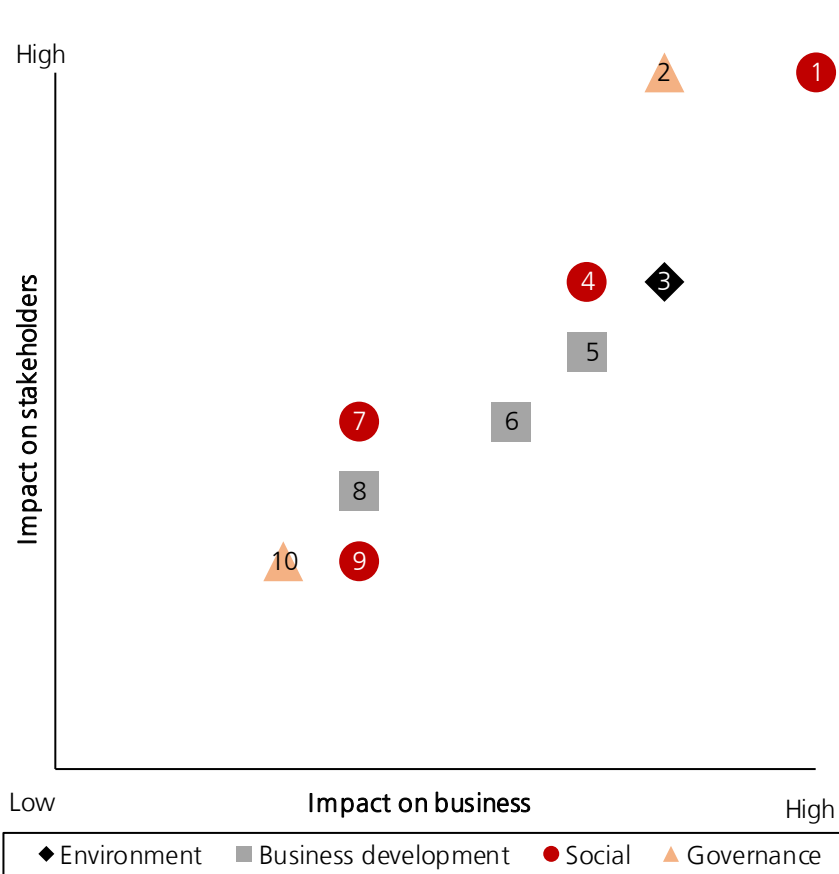
Product design and lifecycle management – keeping up with technology advancement is key

Telecommunications technology changes from time to time. Telecom equipment suppliers have to constantly upgrade or change their product designs to keep up with technological advancements. There are also different industry standards adopted by different customers. Failure to keep up with the latest industry trends could lead to loss of competitive advantages and customers. Telecom equipment suppliers have to maintain continuous communication with customers to understand their needs in terms of technology development.

China Telecom Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Access to product / service & affordability	1
High	Executive pay	2
High	Energy management	3
High	Product quality & safety	4
Moderate	Business model resilience	5
Moderate	R&D / Innovation management	6
Moderate	Privacy and data security	7
Low	Supply chain management	8
Low	Selling practices & product labelling	9
Low	Board diversity & structure	10

Source: DBS HK

Key ESG issues

Access and affordability – business applications needed to justify network coverage investment

Coverage and quality of access to a telecommunication network are critical considerations for consumers when choosing a telecom service provider. This will impact the market share and the pricing of telecom operators. On the other hand, the purchasing power of consumers will determine the usage of a telecom network and its potential revenue.

The desired coverage and quality of network access also determine the capital expenditure required. Telecom operators have to strike a balance between the potential revenue from customers and capital expenditure to maximise their return on investment. HK/China telecom operators will start their major 5G capex in 2020. However, business applications have yet to reach a mature level. Hence, there is risk of achieving a lower return on investment. Telecom operators can mitigate this risk by co-building and co-sharing 5G networks to lower their capex.

Executive pay – a key element in SOE reform

Telecom operators in many places such as China are state-owned. The structure of executive pay is important to incentivise

the management to perform better in those state-owned enterprises (SOE). Adoption of employee share incentive schemes is an important part of the SOE reform. Aggressive financial targets set for the executive will be positive to the company's performance.

Also, the key performance indicators set for management will impact business performance. For example, focusing on gaining market share may lead to pressure on pricing and profitability.

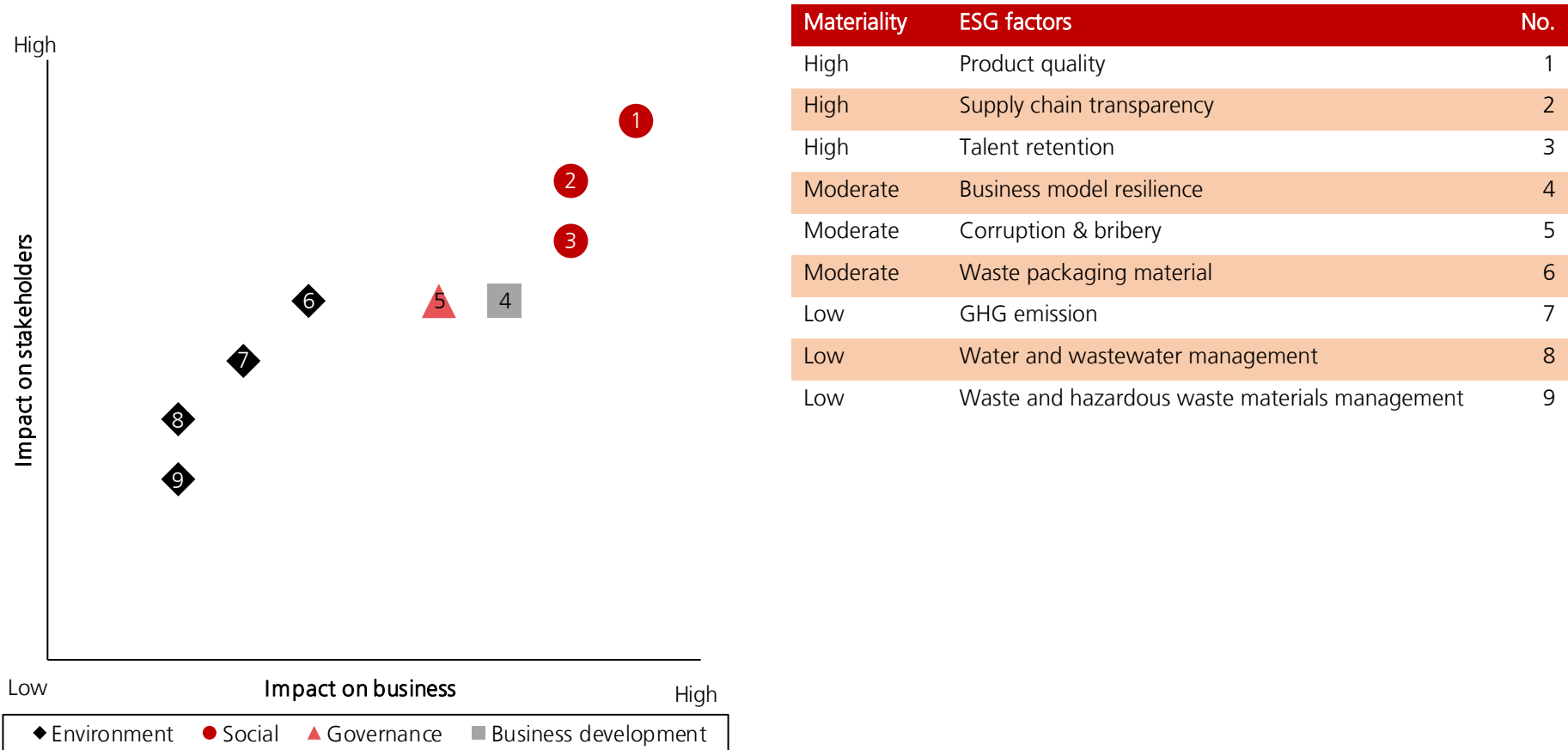
Energy management – increasing power consumption and costs on 5G network

The power consumption of 5G base stations will be 2-3 times of 4G base stations. They will need to source more power supply and upgrade their power equipment. This will incur higher electricity costs as well as capital expenditure. The base stations will also need more batteries for power backup. Failure to secure the power supply required could lead to lower 5G network stability and quality. Telecom operators are working with telecom equipment suppliers to reduce the power consumption of the 5G equipment. They are also recycling the used lithium batteries of electric vehicles to be used as power backup batteries.

Consumer Discretionary (Brands & Retailers) Sector

Sustainability analysis

Materiality assessment



Source: DBS HK

Key ESG issues

Product quality – business fundamental

Product quality and customer health and safety are central to the consumer brands and retailers. The products must meet sufficient quality standards and satisfy all current regulations in different countries/regions where they are sold. Failure in product responsibility could lead to fading consumer trust and brand equity, potentially resulting in declining sales and shrinking shareholder value. Product testing and inspection of raw materials, components and finished goods are normally required to ensure the products meet required standards. After-sales services also matters to the business.

Talent retention – crucial for sustaining business

Retention of talents, especially highly professional salesperson and skilled managers are crucial for sustaining businesses, especially for brands and retailers. For brands without their self-owned stores, it is very important to have their franchisees/managed stores well-under-controlled, inclusive of their products, brand images and customer services. Without successful retention of talents, brands and retailers are difficult to maintain high-quality customer relation and potentially result in declining sales. A proper rewarding system is normally required to reduce staff turnover.

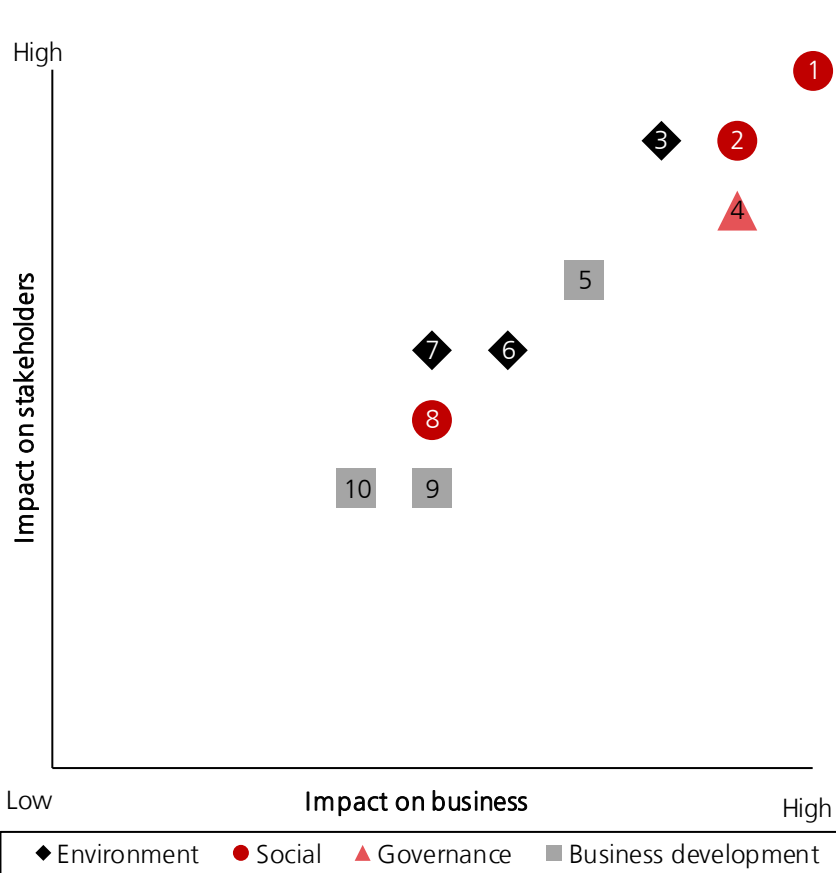
Supply chain management – To meet the ethical standards

Supply chain management is a vital lifeline for any consumer discretionary company, which should be vigilant to ensure that all regulations are respected for their independently owned production base and outsourced OEM facilities. If suppliers of consumer brands fail to meet ethical standards, e.g. workers' right, working conditions, terms of employment, etc., consumer brands could suffer from damaged brand reputation and even consumer boycott. Strict adherence to local and international regulations on all manufacturing procedure as well as careful selection of suppliers are in need for smooth operation.

Consumer Discretionary (Semi-Durables) Sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Product quality & safety	1
High	Workers' health & safety	2
High	GHG emission	3
High	Legal compliance	4
Moderate	R&D / Innovation management	5
Moderate	Waste and hazardous waste materials management	6
Moderate	Energy management	7
Moderate	Privacy and data security	8
Moderate	Product / service sustainability	9
Moderate	Supply chain management	10

Source: DBS HK

Key ESG issues

Product responsibility – Appliance makers' first concern

Product quality and safety is the most critical factor for appliance makers as it is the fundamental factors involving almost all stakeholders, including consumers, shareholders, government, distributors, etc. If an appliance manufacturer fails in product responsibility, it will likely lose consumer trust and brand equity, leading to declining sales and shrinking shareholder value. A strict compliance to industry standard and well-established quality control mechanism should help improve product responsibility, in our view. Besides, after-sales services also matters to business.

Workers' health and safety – Harmonious working environment matters

Safe and healthy production is a serious matter in the manufacturing industry. A harmonious working environment should improve employees' satisfactory level and production efficiency. While any failure in health and safety issues would lead to a breach of law or regulation, as well as public pressure. Continuous safety standard promotion and education among employees, as well as well-rounded contingency plans to handle safety emergencies are needed at work.

Emissions – Go green for an ecological civilisation

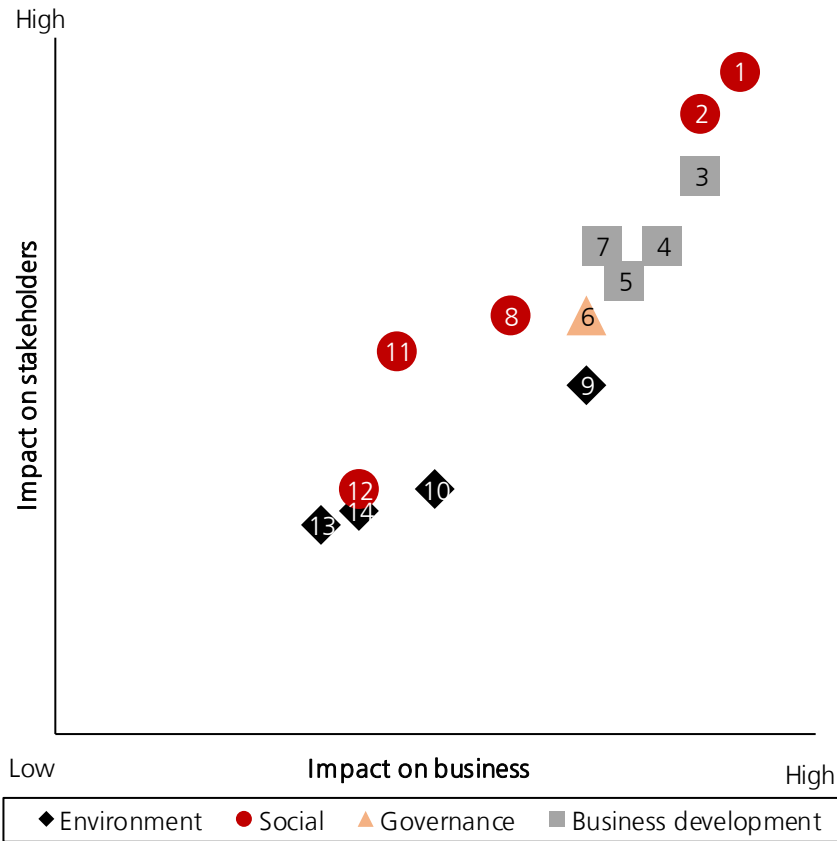
In the era of establishing an ecological civilisation and protecting the environment, carbon emissions are the most obvious factors manufacturers need to consider. Given the increasingly stringent environmental regulations, failures in reducing gas emissions will not only do harm to the environment, but also bring financial fines to companies. Going forward, we expect a gradual adaption to more advanced technology, as well as a better traction on gas emissions on the company level should help reduce carbon emissions.

Environmental, Social and Governance

Consumer staples sector

Sustainability analysis

Materiality assessment



Materiality	ESG factors	No.
High	Product quality & safety	1
High	Access to product / service & affordability	2
High	R&D / Innovation management	3
High	Business model resilience	4
High	Product / service sustainability	5
Moderate	Risk management	6
Moderate	Supply chain management	7
Moderate	Workers' health & safety	8
Moderate	Energy conservation & emission reduction	9
Moderate	Biological and ecological conservation	10
Low	Customer engagement	11
Low	Local communities	12
Low	Ecological impacts	13
Low	Wastage management	14

Source: DBS HK

Key ESG issues

Product quality and safety – a key factor in sustainable growth

The FMCG sector regards quality as the lifeline of the brand. From sourcing to end-customers, companies are expected to adhere to the highest standards across the supply chain, ensuring best quality products to be delivered at an affordable price to consumers. Due to prior food safety incidents, product quality and safety are the most important factors that can have an impact on the companies' stakeholders and business. Major food companies have taken their own initiatives to comply with international standards and maintain food safety standards to ensure full security across the supply chain.

Supply chain management – maintaining steady profit margin

To ensure accountability and traceability across its supply chain, companies have invested heavily on building a comprehensive information platform to ensure quality assurance and stronger management. This also helps to improve communication and traceability within the end-to-end supply chain between factories, suppliers and dealers. For example, China Mengniu Dairy holds a controlling stake in the largest upstream dairy farm player in China, China Modern Dairy, and smaller investment stakes in other upstream plays including Shengmu Dairy.

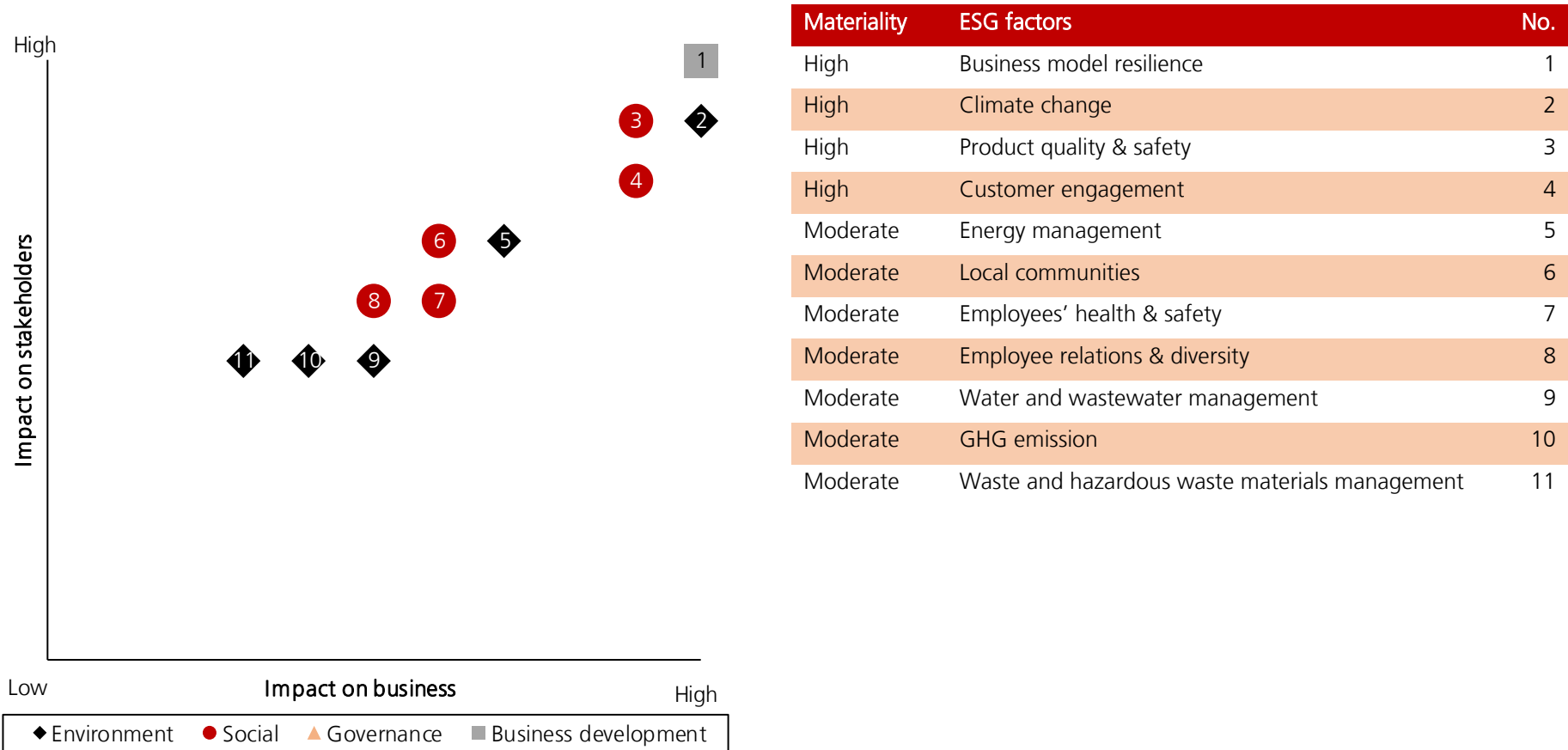
R&D/ Innovation management – important earnings driver

Consumer-orientated companies are required to compete and stay ahead of consumer trends which includes product innovation, and diversification. One of the key trends seen in Food and Beverages sector include rising demand for food with nutritional benefits, which could see the shift towards higher protein, and lower sugar and fat products. F&B sector typically spends less than 1% of sales in R&D.

Hong Kong Property Sector

Sustainability analysis

Materiality assessment



Source: DBS HK

Key ESG issues

Business model and innovation – low land bank cost a key competitive advantage

For Hong Kong property developers, landbanking channels are of utmost importance. Hong Kong Property companies currently have access to several avenues to replenish their landbanks, including government tenders, MTR tenders, URA tenders, land use conversion (including farmland), and redevelopment of old buildings. Failure to actively manage these channels would result in compressed development margins.

Climate change – physical assets need protection from extreme weather

Real estate is a location specific business. Climate change and related impact (i.e. sea level changes, stronger storms) directly impacts top line revenue. For example, waterfront properties are susceptible to storm surges. Projects located on slopes are susceptible to landslides. For landlords, damage to properties caused by storms and/or other climate related phenomena can result in loss of rental income. For developers, climate related property damage can delay construction progress.

Product quality and safety – premium quality homes drive premium pricing

The quality of construction is important for Hong Kong Property developers. High quality homes can command a price premium. This could result in higher development margins, especially for upmarket projects.

Customer engagement – helps drive revenue for retail landlords

In the investment property business, customer engagement is essential to drive retail rental income. Hong Kong landlords introduce loyalty programs to drive repeat business at their shopping malls. Marketing and events are also an important method to draw foot traffic to shopping malls.

Energy management – cost savings

In the investment property business, energy cost management is an essential component affecting operating margins. Most companies under our coverage have proactively conducted asset enhancement initiatives (AEIs) to replace chiller plants and lighting fixtures. This can result in both reduction of energy costs and associated greenhouse gas emissions.

Environmental, Social and Governance

Appendix

Environmental factors

- **GHG emissions:** Direct greenhouse gas emissions that a company's operation generates
- **Water and wastewater management:** The impact of operations on water resources
- **Waste and hazardous waste materials management:** Environmental issues associated with hazardous and non-hazardous wastes generated by companies
- **Energy management:** Environmental impact from energy consumption
- **Ecological impact:** The impact of operations on ecosystems and biodiversity
- **Climate change:** The impact of operations and assets due to climate change

Governance factors

- **Business ethics:** How a company manages risk and opportunities related to ethical conduct of business, including fraud, bribery, corruption, facilitation payment, etc.
- **Executive pay:** How executive compensation packages are aligned with the long-term value of a company
- **Board diversity & structure:** The composition, skills, tenure, diversity, independence and structure of the board of directors
- **Legal compliance:** How a company manages risk and opportunities arising from the changes in legal and regulatory requirements
- **Transparency & reporting:** The level, consistency and accuracy of information disclosed by a company
- **Risk management:** How a company uses management systems to identify, understand and minimise risks arising from operations

Source: DBS HK

Social factors

- **Employee relations & diversity:** The ability of a company to keep a diversified labour force, acquire and retain talent, and ensure fair labour standards
- **Employees' health & safety:** The ability of a company to provide a healthy and safe working environment
- **Product quality & safety:** The risks that products/services may pose health and safety hazards to end-users
- **Local communities:** Management of relationship between a company and the communities
- **Privacy and data security:** Management of risks related to customers' data
- **Customer engagement:** The ability of a company to provide a product/service that meets societal expectations
- **Access to product/service & affordability:** The ability of a company to provide broad access to products/services, particularly in underserved markets
- **Selling practices & product labelling:** The ability to manage the transparency and accuracy of marketing information on products/services

Business development factors

- **R&D/innovation management:** The ability of a company to adopt innovation/technology advancement to achieve long-term value in its business
- **Product/service sustainability:** The ability of a company to address demand for more sustainable products/services and changes in regulatory requirements
- **Business model resilience:** A company's responsiveness in terms of long-term business planning to changes in ESG factors
- **Supply chain management:** The ability of a company to manage the ESG risks within its supply chain
- **Material sourcing & efficiency:** Resilience of material supply chains to impacts of climate changes and ESG factors

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STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)

BUY (>15% total return over the next 12 months for small caps, >10% for large caps)

HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

FULLY VALUED (negative total return, i.e., > -10% over the next 12 months)

SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

**Share price appreciation + dividends*

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