

Clear business model with achievable long-term value

Huatai Research

Initiation

4 July 2021 | China (Hong Kong)

Utilities & Environ Services/Environ Services

Rating (Initiate):

BUY

Target price (HKD):

1.41

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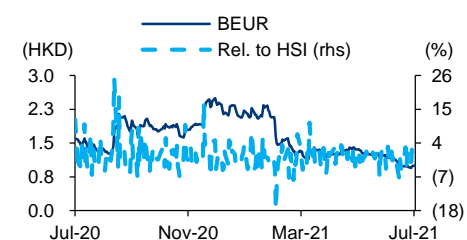
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Key data

| | |
|---------------------------------|-----------|
| Target price (HKD) | 1.41 |
| Closing price (HKD as of 2 Jul) | 1.00 |
| Potential upside +/- (%) | 41 |
| Mkt cap (HKDmn) | 3,600 |
| 6m avg daily val (HKDmn) | 17.47 |
| 52wk price range (HKD) | 0.94-2.54 |
| BVPS (HKD) | 0.84 |

Share performance



Source: S&P

BEUR's long-term value becoming clearer

We are optimistic on the prospects of Beijing Enterprises Urban Resources (BEUR) to realize long-term value, given: 1) BEUR is a leading company in the industry, mainly engaged in providing sanitation services and hazardous waste treatment; 2) synergy with its actual controller, Beijing Enterprises Water Group (BEW), is facilitating BEUR's development; 3) offered in parallel, its sanitation and hazardous waste services should build a "one-stop solution" supplier brand, helping stabilize BEUR's cash flow performance and reducing capex; and 4) intelligent operation and refined management underpin the company's gross profit margin, through the construction of a smart sanitation platform. We initiate coverage on BEUR with a BUY rating and a target price of HKD1.41.

Benefiting from sanitation service market expansion

According to our estimates, the scale of China's sanitation service market was RMB327.5bn in 2020, with third-party operation ratio at c. 55%; we expect the scale of the third-party segment to rise from RMB178.7bn in 2020 to over RMB360bn in 2025E, implying a CAGR of 21%. With its business scale expansion so far, BEUR looks well placed to gain further projects and keep profit margin high, in our view. We expect BEUR's revenue from sanitation services in 2021/2022/2023 to be HKD3.49/4.45/5.60bn, up 24/28/26% yoy.

Hazardous waste treatment mainly driven by ecological protection

Solid waste law revisions (effective September 2020) and local policies have together raised the threshold to entering or continuing in the industry, and boosted demand. Against this backdrop, BEUR's market share should rise, in our view. We expect capacity expansion and higher capacity utilization to improve BEUR's operating performance, and see its 2021E/2022E/2023E revenue from hazardous waste disposal growing by 54/13/11% to HKD742/838/927mn.

Initiate with BUY; target price of HKD1.41

For 2021/2022/2023, we forecast BEUR's revenue to be HKD4.46/5.52/6.77bn, and attributable net profit to be HKD465/599/772mn, which corresponds to EPS of HKD0.13/0.17/0.21 and implies 7.7/6.0/4.7x PE. In view of the share's low liquidity in the Hong Kong stock market, we assign it 10.9x 2021E PE, a 20% discount to peer-average 13.6x (per Wind consensus estimates), which derives a target price of HKD1.41. Initiate with BUY.

Risks: sanitation marketization progress falls short of our expectations, intensified competition, and implementation risks in hazardous waste treatment projects.

Financials

| YE 31 Dec | 2019 | 2020 | 2021E | 2022E | 2023E |
|--------------------|---------|--------|--------|--------|--------|
| Revenue (HKDmn) | 2,711 | 3,520 | 4,459 | 5,524 | 6,766 |
| +/-% | 22.58 | 29.83 | 26.67 | 23.88 | 22.49 |
| Net profit (HKDmn) | 281.33 | 426.83 | 465.21 | 599.38 | 772.02 |
| +/-% | (34.63) | 51.72 | 8.99 | 28.84 | 28.80 |
| EPS (diluted, HKD) | 0.10 | 0.12 | 0.13 | 0.17 | 0.21 |
| ROE (%) | 15.51 | 14.17 | 13.38 | 14.70 | 15.92 |
| PE (x) | 9.60 | 8.35 | 7.74 | 6.01 | 4.66 |
| PB (x) | 1.49 | 1.18 | 1.04 | 0.88 | 0.74 |
| EV EBITDA (x) | 4.45 | 1.91 | 1.82 | 1.23 | 0.62 |

Source: Company announcements, Huatai Research estimates

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Investment thesis

- 1) **State-owned background and optimized management bring long-term value to BEUR.** BEUR's major shareholder is Beijing Enterprises Water Group (BEW), which holds 28% of BEUR shares. The shares of both companies are ultimately held by Beijing Enterprises Group Co. Ltd., which was established and is wholly owned by People's Government of Beijing Municipality. BEUR's main businesses are largely focused on sanitation services and hazardous waste treatment services, which accounted for 80% and 14% of its revenue in 2020, respectively. BEUR's overall gross profit margin increased from 27% in 2017 to 31% in 2020. The company's revenue has been growing year by year, and its operating efficiency has been improving.
- 2) **Sanitation service: rapid industry growth, ample room for marketization.** We expect China's sanitation service market scale to exceed RMB350bn in 2021 and exceed RMB450bn in 2025, representing a 2021-2025 CAGR of 7%. More specifically, we estimate the scale of the business under third-party operation surpassing RMB360bn in 2025 (2021-2025 CAGR of over 21%), pushing the marketization rate to 80% in 2025E from 55% in 2020. We believe that benefiting from the large market potential, BEUR's ability to obtain projects should result in rapid revenue growth. Meanwhile, we expect smart operations and refined management to help BEUR's gross profit margin expand further.
- 3) **Hazardous waste treatment service: favorable policies to boost market share gains.** Revisions to "Law on the Prevention and Control of Environmental Pollution by Solid Waste" (revised solid waste law) came into effect on September 2020, with some of the revisions effectively raising the barrier to entering or continuing in the industry. Several provinces with large output of hazardous waste have put forward new policies with specific indicators for hazardous waste disposal, which we expect to drive up hazard waste treatment demand. With the tightening of industry supervision and qualification review, and stricter industry standards, we expect market share in the hazardous waste market to concentration among the leading players. With BEUR's capacity utilization rising, we expect the company's business performance to improve, and BEUR's hazard waste treatment business to expand.

Difference from the market

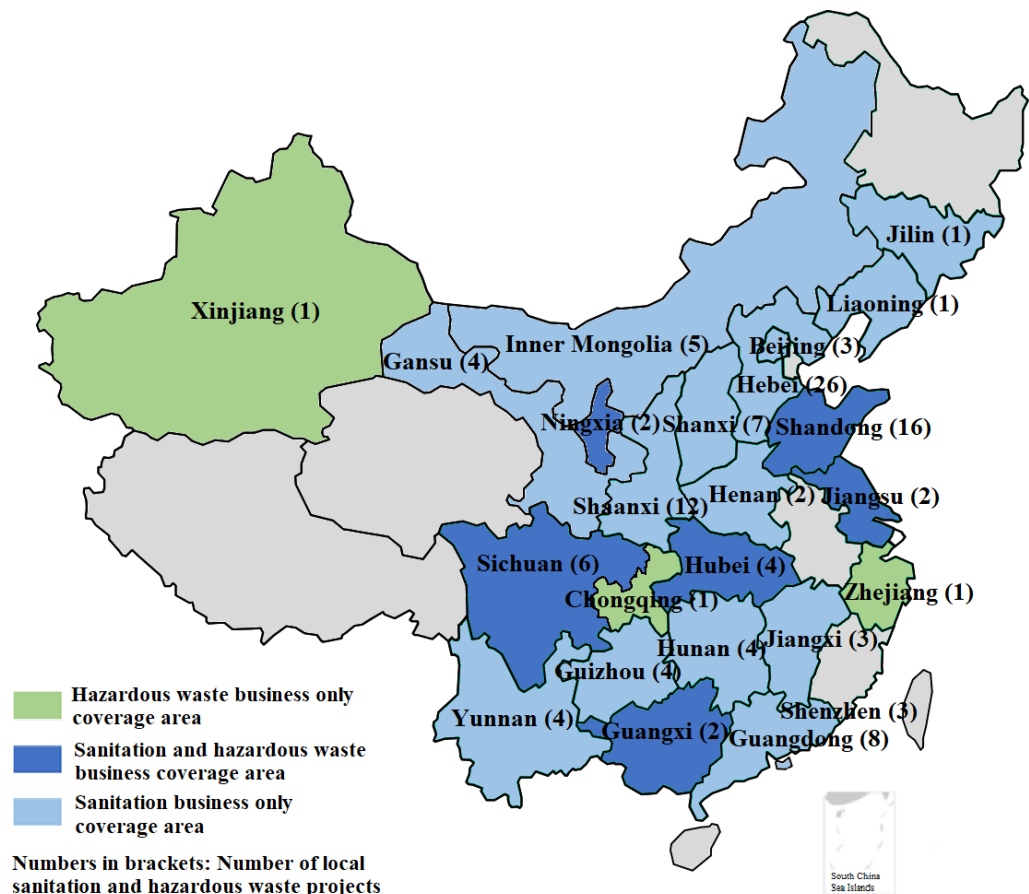
The market believes the competitive landscape in the sanitation service market has deteriorated. However, we believe that local financial pressure may increase due to the impact of the COVID-19 pandemic, leading to acceleration in the miniaturization of sanitation services. From 2021, as the economy continues to recover, we expect the competitive landscape of the industry to improve. We estimate the scale of China's sanitation business under third-party operation to increase from RMB178.7bn in 2020 to over RMB360bn in 2025 (implying a CAGR of 21%), and that the marketization rate to rise from 55% to 80%. We expect BEUR to benefit from the marketization of sanitation services by leveraging its state-owned background, capital advantages and refined management experience.

Quality provider for urban environment and resource utilization

Synergies boost BEUR's rapid growth of revenue

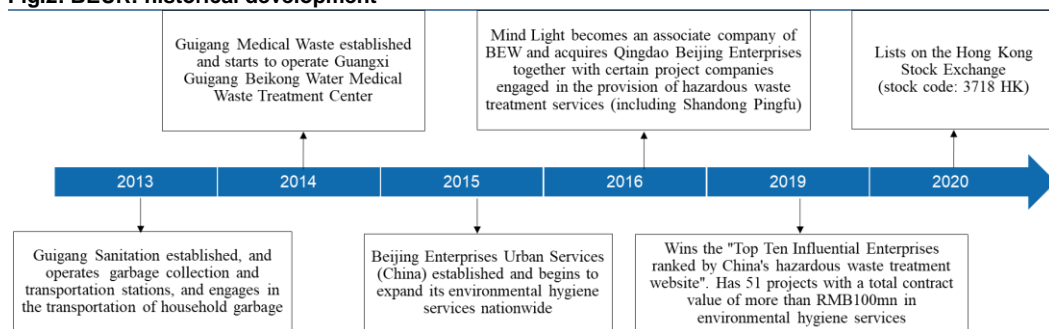
BEUR listed on the Hong Kong Stock Exchange in January 2020. BEUR predecessor Guangxi Guigang Beikong Water Sanitation Service Co., Ltd. (Guigang Sanitation), was established in 2013. After eight years of development, BEUR mainly engages in the provision of environmental sanitation services and hazardous waste disposal business; other businesses include the dismantling of waste electrical appliances and electronic products, and the sale of such dismantled products. As of end-2020, the company's business covers 24 provinces, cities, and autonomous regions, and has 113 existing sanitation service projects in hand, with the service area amounting to 194mn sqm. Within the hazardous waste disposal business, the designed processing capacity of harmless disposal and resource-based projects is 423.7ktpa and 250ktpa, respectively, with 247.3ktpa and 250ktpa already under operation (as at end-2020).

Fig.1: BEUR: business covers 24 provinces, cities and autonomous regions (end-2020)



Source: BEUR's 2020 performance meeting, Huatai Research

Fig.2: BEUR: historical development



Source: Company website, Huatai Research

The controlling shareholder is Beijing Enterprises Water Group (BEW). As of end-2020, BEW holds 28% of BEUR shares, making it BEUR's controlling shareholder. In addition, the management teams of BEUR and BEW collectively hold 12.3% of BEUR shares via four platforms, namely Shanghai Ziyue, Maolin, Xingcai, and Zhihua, aligning the interests of management and shareholders, in our view. Both BEUR and BEW are ultimately held by Beijing Enterprises Group Co., Ltd., and the actual controller is Beijing Municipal State-owned Assets Supervision and Administration Commission.

Backing from Beijing Enterprises Group generates significant synergy. Since 2016, BEW has ranked as a China Fortune 500 company for five consecutive years. Per Brilliance Ratings, BEW has a AAA debt rating. Being a state-owned enterprise gave a financing advantage to BEUR and underpinned its early development of environmental service projects. According to the prospectus of BEUR, the revenue from environmental sanitation service projects recommended by BEW accounted for 100/75/68/70% of total project revenue in 2016/2017/2018/1H19.

Fig.3: BEUR: sanitation service projects (2016-1H19)

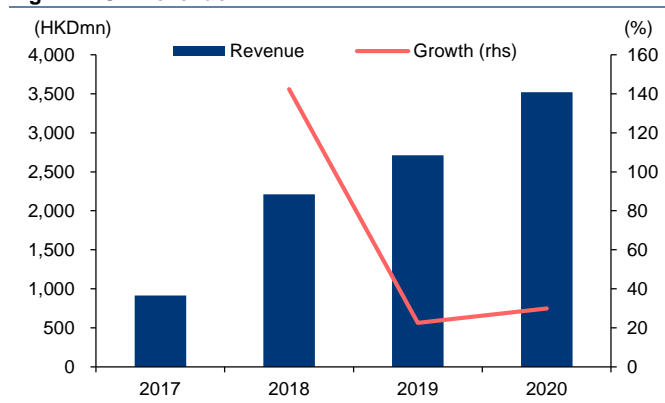
| (HKDmn) | 2016 | | | 2017 | | | 2018 | | | 1H19 | | |
|--------------------|-----------------|---------|---------|-----------------|---------|---------|-----------------|---------|---------|-----------------|---------|---------|
| | No. of projects | Revenue | GPM (%) | No. of projects | Revenue | GPM (%) | No. of projects | Revenue | GPM (%) | No. of projects | Revenue | GPM (%) |
| From BEW | 1 | 19 | 36 | 40 | 496 | 23 | 52 | 1100 | 20 | 54 | 770 | 23 |
| Independent access | 0 | 0 | - | 31 | 167 | 20 | 54 | 513 | 25 | 58 | 325 | 20 |

Source: Prospectus, Huatai Research

Revenue grows rapidly, refined management improves efficiency

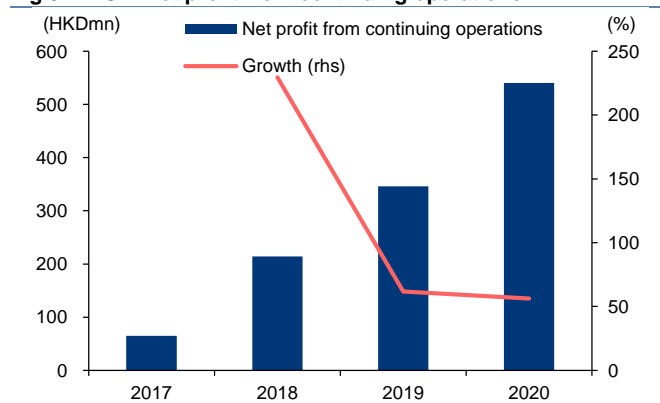
Sanitation service contributes most to revenue growth; profitability keeps improving. From 2017 to 2020, BEUR's revenue increased from HKD912mn to HKD3.52bn, a CAGR of 57%. Sanitation service development has contributed most of the revenue growth, and the net profit from continuing operations increased from HKD65mn to HKD540mn over the same period, a CAGR of 103%.

Fig.4: BEUR: revenue



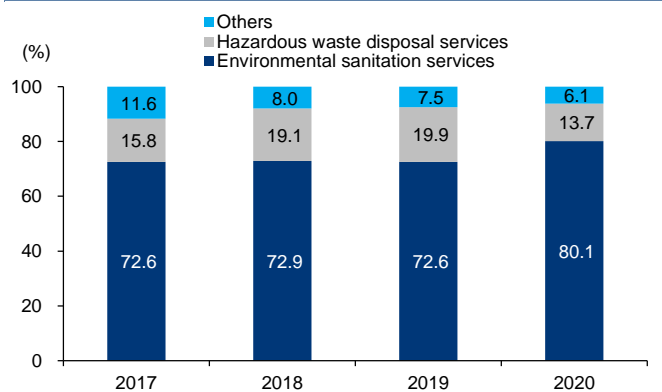
Source: Prospectus, Company announcements, Huatai Research

Fig.5: BEUR: net profit from continuing operations



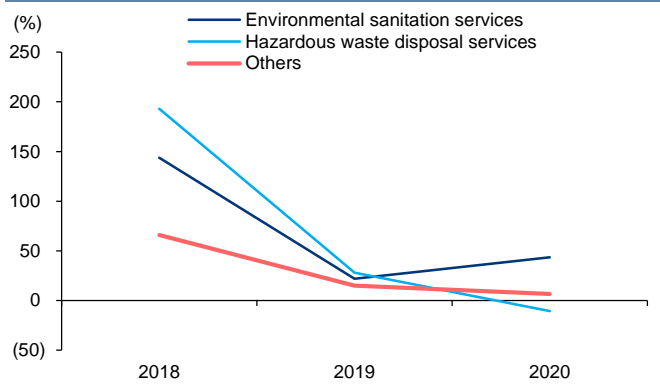
Source: Prospectus, Company announcements, Huatai Research

Fig.6: BEUR: revenue by segment



Source: Prospectus, Company announcements, Huatai Research

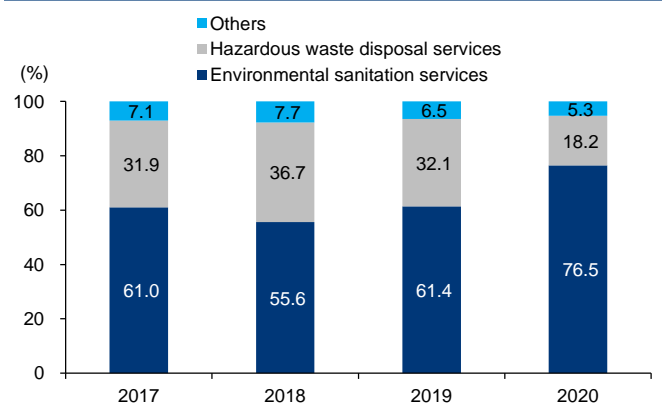
Fig.7: BEUR: revenue growth by segment



Source: Prospectus, Company announcements, Huatai Research

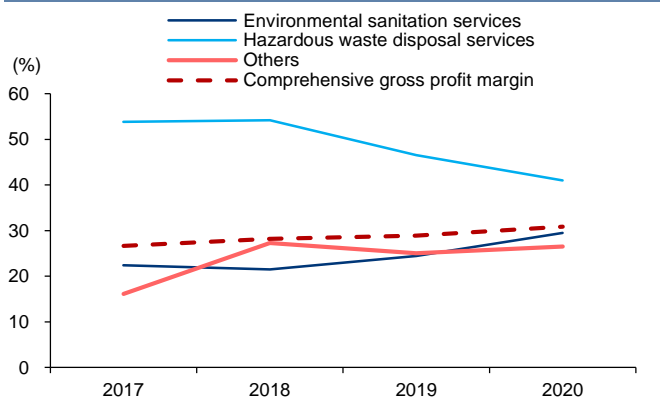
Sanitation services GPM improvement has driven overall GPM rise. The company's comprehensive gross profit margin increased from 26.6% in 2017 to 30.9% in 2020 (26.9% after excluding value-added tax and social insurance discounts during the COVID-19 pandemic). More specifically, the gross profit margin of sanitation services increased from 22.4% in 2017 to 29.5% in 2020 (24.6%, up 0.1pp yoy, after excluding value-added tax and social insurance benefits); the gross profit margin of the hazardous waste disposal business dropped from 53.8% to 41.0%. The decline in gross profit margin in 2020 is mainly due to the impact of the pandemic on the progress of work resumption and production, the insufficient upstream waste supply, and decline in the price of hazardous waste disposal.

Fig.8: BEUR: gross profit breakdown



Source: Prospectus, Company announcements, Huatai Research

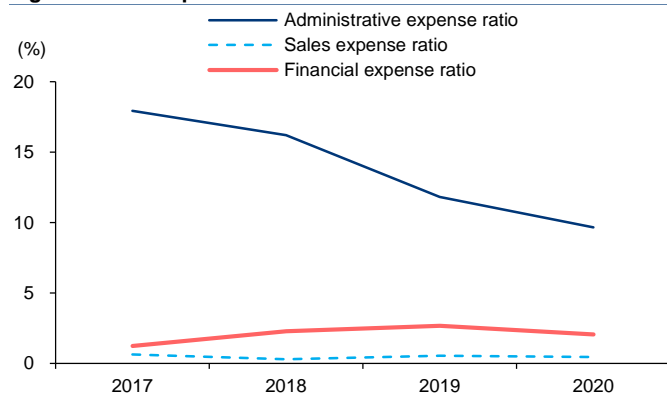
Fig.9: BEUR: GPM by segment



Source: Prospectus, Company announcements, Huatai Research

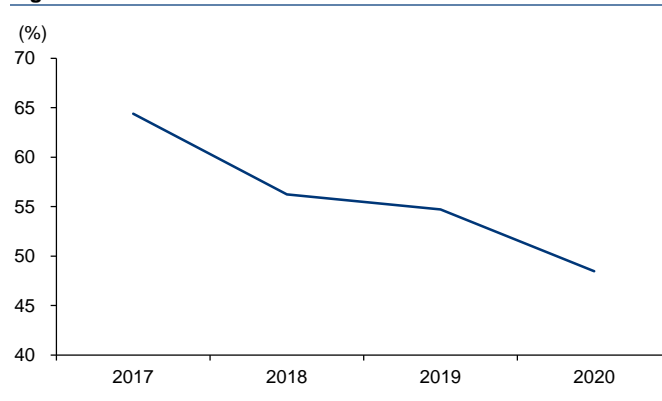
Expense ratio has continued to fall. The company's expenses mainly come from administrative expenses, which accounted for 79% of total expenses in 2020. Since 2017, with the rapid increase of the company's revenue scale and the expense control due to management optimization, the administrative expense ratio has been decreasing year by year, from 17.9% in 2017 to 9.7% in 2020. In 2017-2019, the financial expense ratio increased slightly (from 1.2% to 2.7%) as the company's business scale expanded. After the company entered the capital market in 2020, the financial expense ratio decreased by 0.7pp yoy to 2.0%.

Fig.10: BEUR: expense ratio



Source: Prospectus, Company announcements, Huatai Research

Fig.11: BEUR: debt to asset ratio

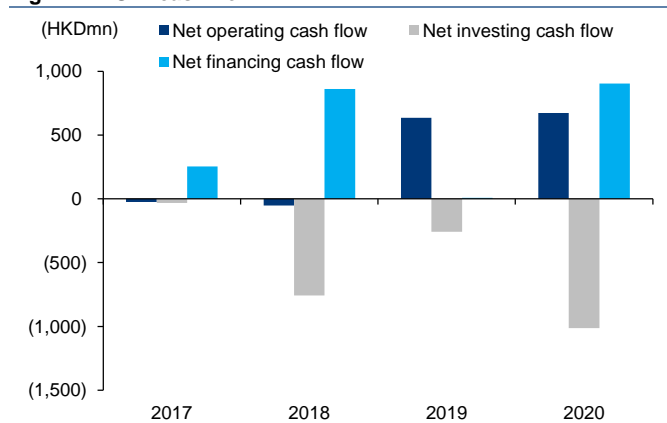


Source: Prospectus, Company announcements, Huatai Research

Operating cash flow continued to improve. In 2017-2018, BEUR's net cash flow from operating activities was negative, mainly due to: 1) the recovery of government subsidies receivable from the disposal of waste electrical appliances and electronic products was slow; such subsidies can only be recognized as income when there is reasonable assurance that the government grant is to be received and all attached conditions are to be complied with (per BEUR's prospectus, the payment cycle of the subsidies is usually 3-4 years); therefore, Gansu Huayi, a BEUR subsidiary which is mainly engaged in the disposal of waste electrical appliances and electronic products, posted a net loss of HKD113/58mn in 2017/2018; and 2) the cash flow from the acquired sanitation services is poor. After selling 62% of the equity of Gansu Huayi in June 2018 as well as strengthening the integration of the acquired projects and the recovery of accounts receivable, BEUR's net operating cash flow in 2019 was HKD636mn.

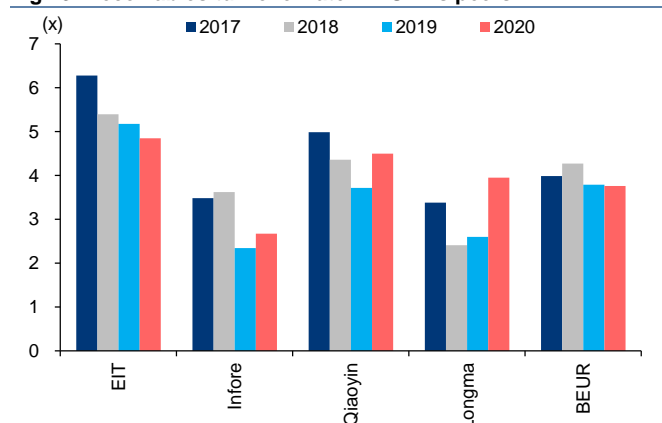
BEUR's revenue has expanded rapidly since 2017, and the scale of receivables has increased simultaneously. The receivable turnover rate was 3.76x in 2020, close to the average level for peers.

Fig.12: BEUR: cash flow



Source: Prospectus, Company announcements, Huatai Research

Fig.13: Receivables turnover rate: BEUR vs peers



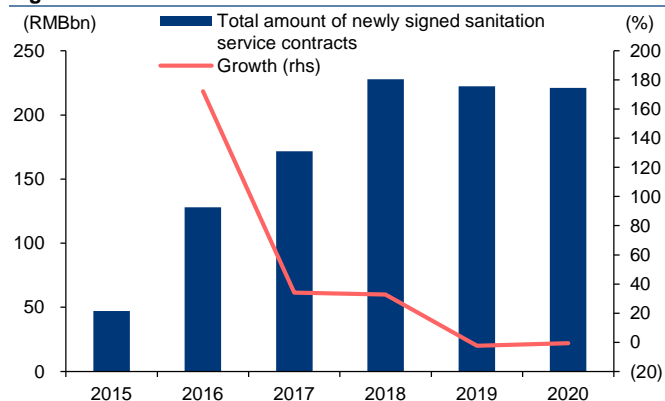
Source: Wind, Huatai Research

Sanitation services: demand booms, BEUR outshines

2021E-2025E value CAGR for China's third-party sanitation: 21%

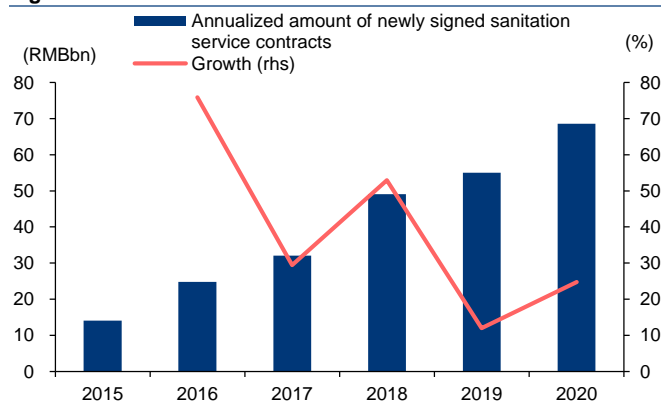
Annualized value of new orders: 2016-2020 CAGR of 37%. According to statistics from the Ministry of Environment, the marketization of environmental sanitation has been rapidly progressing since 2016. In 2016, the total amount of newly signed sanitation service contracts in China reached RMB128bn (up 172% yoy), with the annualized amount at RMB24.8bn (up 76% yoy). From 2017 to 2020, the pace of marketization of environmental sanitation accelerated, and the annualized amount of newly signed sanitation service contracts continued to post new highs, reaching RMB32.1/49.1/55/68.6bn in 2017/2018/2019/2020.

Fig.14: China: total amount of new sanitation service orders



Source: Sinan Data, Huatai Research

Fig.15: China: annualized value of new sanitation service orders



Source: Sinan Data, Huatai Research

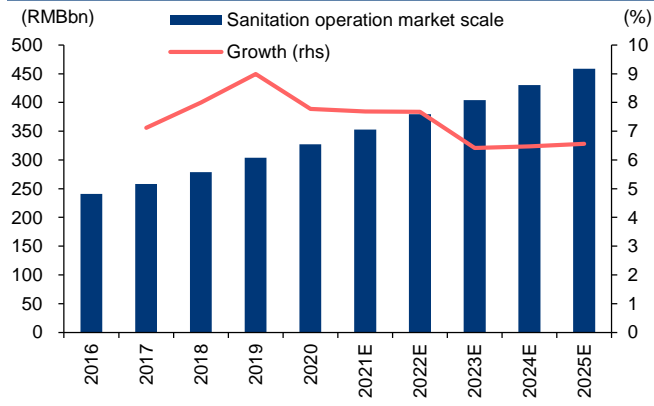
We expect the domestic sanitation operation market scale to exceed RMB450bn in 2025E. In our report dated 16 March 2021, "New-energy sanitation leader back on reverse takeover", we estimated the total market scale of sanitation services in 2020 at RMB327.5bn, based on urban and rural road cleaning area, the volume of domestic waste removal, the number of public toilets and the length of graded roads, per the National Bureau of Statistics of China (NBSC) and the Ministry of Housing and Urban-Rural Development (MOHURD).

With the improvement of living standards and the gradual integration of rural domestic waste into the urban waste treatment system, there is still potential to increase the amount of per-capita urban waste, in our view. Besides, rural per-capita waste generation and waste removal ratio should have more room to increase, and the sanitation market should show rapid growth momentum, in our view. We expect the market scale of domestic sanitation operation to exceed RMB350bn in 2021E, and RMB450bn in 2025E, for a 2021E-2025E CAGR of 7%.

The proportion of sanitation under third-party operations in China was c. 55% in 2020. Per our calculations, the proportion of domestic sanitation under third-party operations increased from less than 10% in 2015 to c. 55% in 2020, with the scale reaching RMB178.7bn in 2020. Per the progress observed in developed countries, 80% is regarded as a high level of marketization in environmental sanitation. Therefore, there is still room for improvement in the marketization rate of environmental sanitation in China, in our view. According to statistics from Sinan Data, the annualized amount of new sanitation market orders in China in 2020 was c. RMB68.6bn, up 25% yoy. We assume that the annualized value of sanitation market orders maintains annual growth of 10-20% in 2021E-2025E.

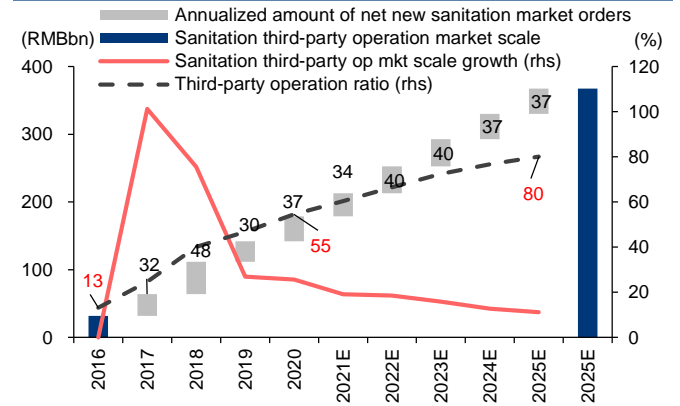
Assuming that the average service life of sanitation orders is three years in the domestic market (orders newly added in 2019 expire in 2022 to be retendered), the annualized net increase in sanitation market order value each year in 2021 to 2025 should be RMB34-41bn. We estimate that in 2025, the scale of China's sanitation business under third-party operations should exceed RMB360bn, with the marketization rate rising to 80%.

Fig.16: China: market scale for sanitation operation



Source: NBSC, MOHURD, Urban and rural construction statistical bulletin, Huatai Research estimates

Fig.17: China: market scale for third-party sanitation operation

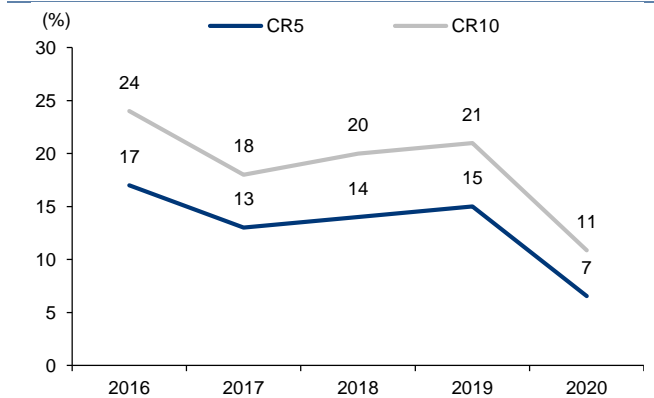


Source: NBSC, MOHURD, Urban and rural construction statistical bulletin, Huatai Research estimates

China sanitation market concentration: CR5 of 7% in 2020 notably lower than in US. Under the franchise mechanism, sanitation operation, as the entry link for urban solid waste treatment, has gradually drawn many industry participants' attention. In addition, the small scale of projects and low entry barriers led to intense competition. Competing companies mainly include the original environmental sanitation companies, solid waste leaders expanding upstream, equipment companies expanding downstream, and local state-owned enterprises and property management companies expanding horizontally. According to Sinan Data and E20, during 2016-2019, CR10 in China's environmental sanitation market was c. 21% and CR5 was c. 15%.

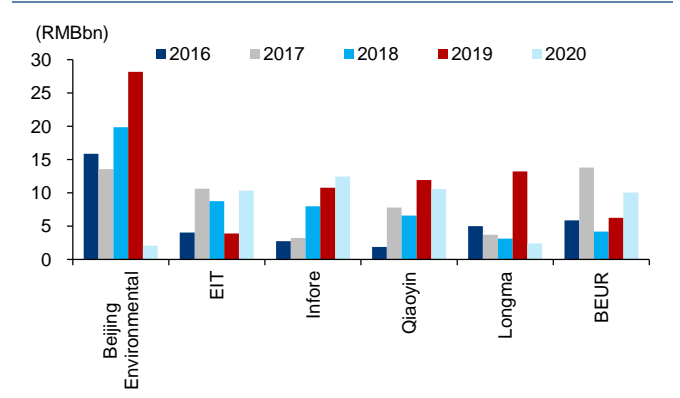
In 2020, the domestic sanitation market saw increasingly fierce competition, with CR10 at only 11%, a significant decline compared to the 21% in 2019, indicating a fragmented sanitation market compared with CR3 of 52% in the US in 2020, per Waste Business Journal data. We believe that local financial pressure may increase due to the impact of the pandemic, leading to an acceleration in the miniaturization of sanitation services. From 2021, as China's economy continues to recover, we expect the competitive landscape of the industry to improve.

Fig.18: Domestic city urban sanitation leaders' market share



Note: by annualized new service amount
Source: Sinan Data, E20, Huatai Research

Fig.19: Total amount of new sanitation service contracts



Note: Beijing Environmental - Beijing Environmental Sanitation Engineering Group Co., Ltd.; EIT - EIT Environmental Development Group Co., Ltd.; Infore - Infore Environment Technology Group Co. Ltd.; Qiaoyin - QiaoYin City Management Co., Ltd.; Longma - Fujian Longma Environmental Sanitation Equipment Co., Ltd.
Source: Sinan Data, E20, relevant company announcements, Huatai Research

BEUR: faster sanitation business layout & improving operational efficiency

BEUR has formulated a "1+N" environmental sanitation business model, based on the traditional sanitation business — eg, coordinating garbage classification, landscaping, property management, and water cleaning — and on providing a full range of urban management services, to build itself up into a comprehensive service provider. In 2020, the company added 23 new bid-winning projects, corresponding to an annualized contract value of HKD1.048bn and a total contract value of RMB11.3bn. According to the company's 2020 performance meeting, the company is to further develop business in the Yangtze River Delta Economic Belt, the Guangdong-Hong Kong-Macao Greater Bay Area and the Beijing-Tianjin-Hebei region, as well as in various provincial capitals and central cities, focusing on acquiring large-scale, long-term projects.

Fig.20: BEUR: operational overview of sanitation service projects (2020)

As of 31 December 2020

- **23** tenders newly won
- Approximately **39,000** employees
- Serving more than **20mn** people
- More than **190mn** sqm cleaning area
- More than **22,780**tpd daily garbage collection and transportation
- **418** garbage transportation stations
- **2,126** public toilets
- **11** garbage landfills
- **18.18**mn sqm landscaping area
- **23.86**mn sqm river cleaning area



Source: BEUR's 2020 performance meeting, Huatai Research

The smart sanitation platform facilitates refined management and operation. Based on the Internet of Things, the company uses big data analysis to optimize the allocation of labor and vehicle resources to control costs and improve operational efficiency. As of end-2020, the company has launched the smart sanitation system with 21 projects, an application rate of 30%.

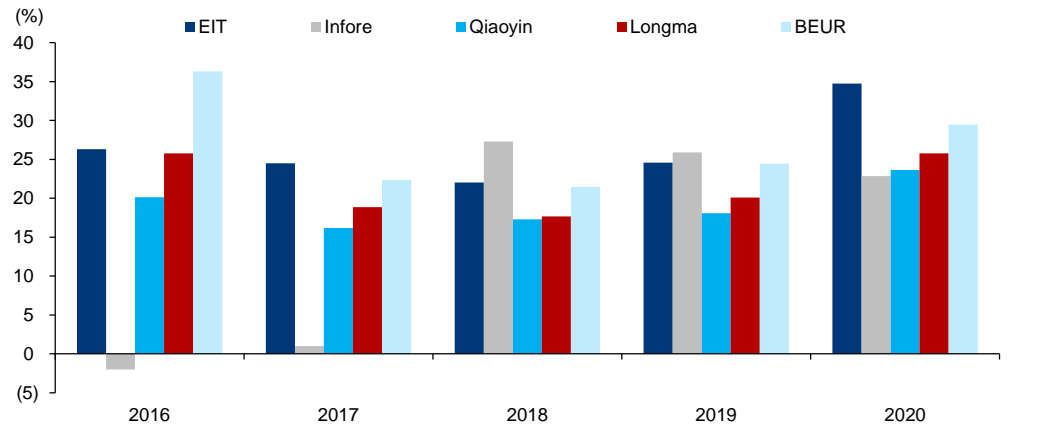
Fig.21: BEUR smart sanitation platform



Source: BEUR's 2020 performance meeting, Huatai Research

Smart operation and refined management support a GPM of 20-25%. The gross profit margin of the sanitation services of a typical listed sanitation company is basically kept between 20% and 25% (not considering the impact of value-added tax and social security preferential policies in 2020). The replacement of the business tax with a value-added tax in 2016 led to a general decline in the gross profit margin of sanitation companies; gross profit margin then levelled out in 2017 and 2018. In 2020, BEUR's environmental sanitation business gross profit margin was 29.5%, which was surpassed only by EIT's 34.8%.

Fig.22: Sanitation service companies: GPM comparison



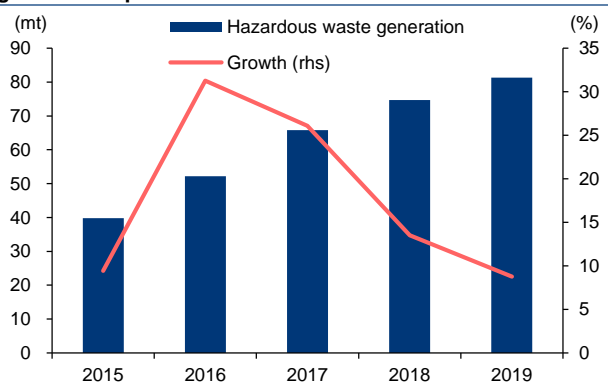
Source: Wind, Huatai Research

HW disposal: large market, BEUR's capacity expanding

Revised solid waste law promises industry a bright future

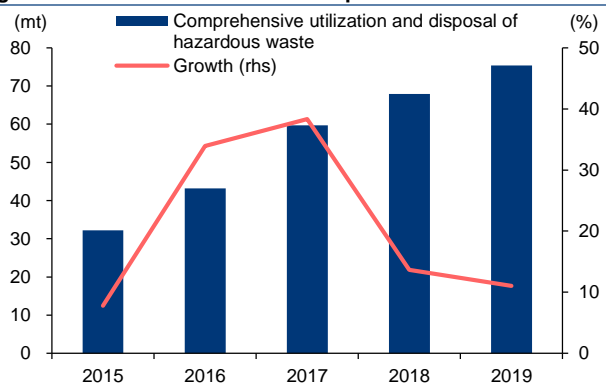
The amounts of hazardous waste generated and treated have increased in tandem. China's hazardous waste (HW) is characterized by large production volume, a wide variety of types and sources, and difficulty in environmental supervision. However, the disposal of HW has a great impact on public health and ecological safety. In recent years, the amount of HW generated and disposed of in China has been increasing constantly. According to the "Ecological Environment Statistical Bulletin", the amount of HW generated nationwide in 2019 was 81.26mt, and the level of comprehensive utilization and disposal was 75.39mt, implying a disposal gap of 5.87mt. The 2016-2019 CAGR for the volume of HW generated and HW utilization and disposal reached 20% and 24%, respectively.

Fig.23: China: production of hazardous waste



Source: Ministry of Ecology and Environment, Huatai Research

Fig.24: Amount of utilization and disposal of hazardous waste

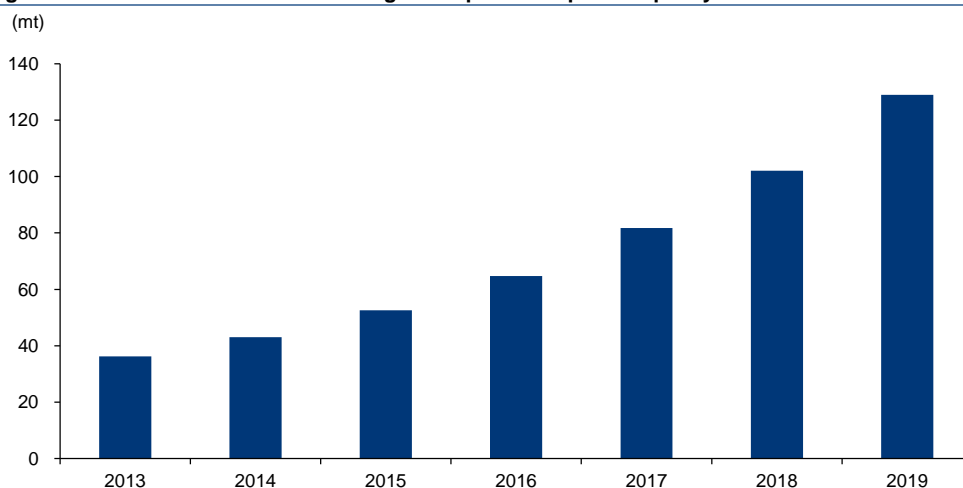


Source: Ministry of Ecology and Environment, Huatai Research

Gap in HW disposal industry still exists. According to the "2020 National Annual Report on the Prevention and Control of Solid Waste Pollution in Large and Medium-sized Cities" by the Ministry of Ecology and Environment, as of end-2019, the approved collection, utilization and disposal capacity of HW (including medical waste) license holders reached 128.96mtpa nationwide. The actual collection, utilization and disposal volume was 35.58mt, and the approved production capacity commission rate was 27.6%.

At present, the processing capacity corresponding to the permits issued by the provincial government and the total production of HW have basically reached an equilibrium, but due to factors such as the difficulty in matching the qualifications of HW disposal enterprises with the regional purchasing and storage structure, and the lack of operational control capabilities, the actual HW processing capacity is much lower than the permitted processing capacity. Currently, a significant amount of HW disposal demand has not been met.

Fig.25: National hazardous waste management permit disposal capacity

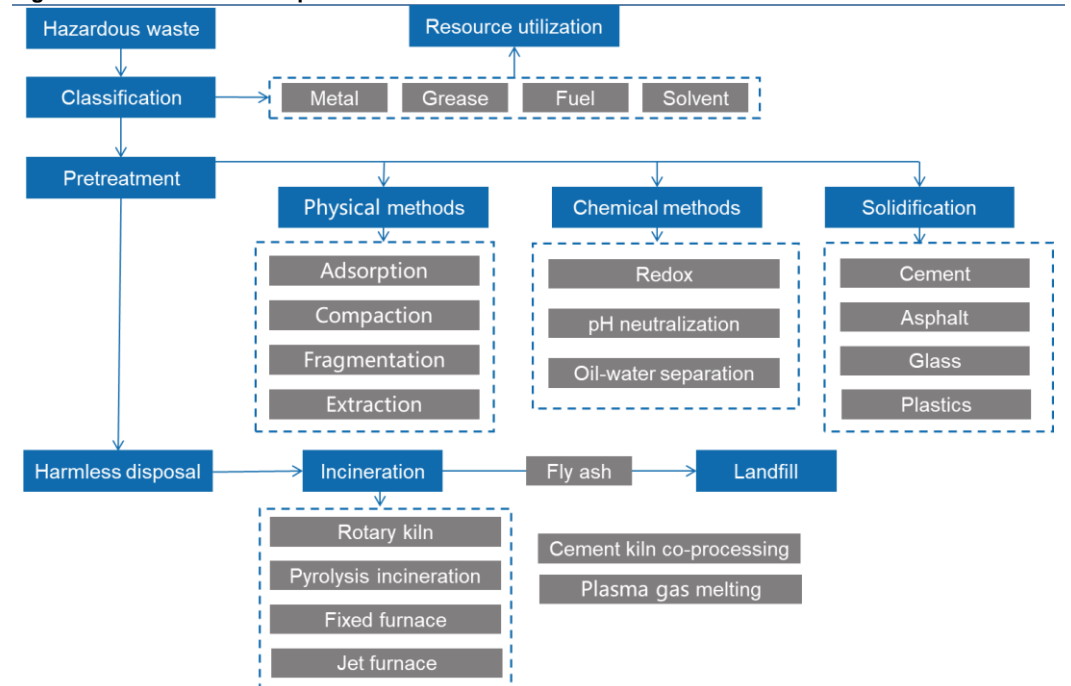


Source: Ministry of Ecology and Environment, Huatai Research

Traditional HW treatment methods. Traditional HW treatment methods mainly include: 1) resource utilization — for some HW that has high reutilization value, after it is transported to the treatment plant, the resources are first classified, then undergo extraction using comprehensive utilization technologies such as pretreatment, fine purification, raw material purification and synthesis reaction; a small part of the waste after resource utilization process is subjected to harmless disposal; and 2) centralized harmless disposal — for industrial waste that cannot be recycled or which is of too low value for recycling, harmless disposal is required and comprises pretreatment technology and disposal technology.

Pretreatment technology includes physical methods, chemical methods and solidification. After solidification, most of the solid residue is landfilled. Disposal technologies include incineration, safe landfill, and physicochemical methods, among others. For HW that cannot be reduced by incineration, sanitary landfill can be adopted, while physicochemical methods are used for waste emulsion, waste acids and waste bases.

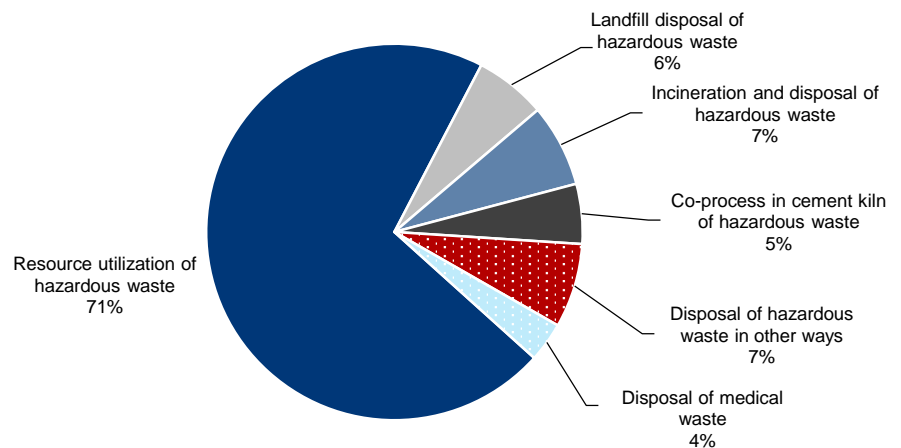
Fig.26: Hazardous waste disposal: overview



Source: Prospectus, Huatai Research

Demand for harmless disposal expected to increase. Taking 2019 as an example, the actual HW treatment volume that year was 34.77mt. Of this, 24.68mt were used as resources, accounting for 71%, 2.13mt were disposed of by landfill, 2.47mt were disposed of by incineration, 1.79mt were disposed of by co-processing in cement kilns, and 2.52mt were disposed of in other ways.

Fig.27: Hazardous waste disposal, by disposal method (2019)



Source: Ministry of Ecology and Environment, Huatai Research

Revised solid waste law focuses on improving HW supervision system. The revised solid waste law that came into effect on 1 September 2020 has brought in wide-ranging revisions and improvements, in our view, such as to the identification of HW definition, the source of production, the transfer process, and the collection, utilization and disposal.

Fig.28: Revised solid waste law: overview of the new amendments (effective 1 Sep 2020)

| Revision | Content and impact |
|--|--|
| New identification system and classification management system were added to hazardous waste definition system | Dynamically adjust the hazardous waste list according to the identification standards. Establish an informatized supervision system for hierarchical and classified management. Share hazardous waste transfer data and information. Definition and identification systems promote the refined management of hazardous waste, which is beneficial to diminishing the reliance on qualifications. |
| Source regulation system includes four new items: ledger, pollutant discharge permit, clean manufacturing, and joint liability | In terms of ledger, information on the type, amount, flow, storage, and disposal of hazardous waste is required to be recorded to further enhance information transparency. The other three new items stipulate: companies that generate industrial solid waste should obtain a pollutant discharge permit and implement clean manufacturing in accordance with the law; and related transportation and disposal companies shall bear joint liability in accordance with the law if they cause environmental pollution and ecological damage. The system is intended to regulate the production, transportation, and disposal of industrial solid waste at source by curbing illegal dumping and strengthening source supervision. |
| New transfer management guidelines were supplemented to transfer-related systems | Emphasize the necessity of digital or paper transfer forms for hazardous waste to clearly differentiate the responsibilities of transferers, transporters, and receivers, to help strengthen the supervision of the transfer process. |
| Collection, utilization and disposal system | Article 76 proposes that neighboring provinces, autonomous regions, and municipalities can develop regional cooperation to coordinate the construction of regional hazardous waste centralized disposal facilities and sites. This is to be advantageous for the current increase in hazardous waste disposal rate and capacity utilization. At the same time, it further emphasizes the application of licenses, which puts forward higher requirements on enterprise qualifications, leading to higher industry barriers. |

Source: gfdl.bjx.com.cn, Huatai Research

Governments have introduced HW policies, which should boost industry demand. Jiangsu, Shandong, Zhejiang, Xinjiang, Shaanxi and other major HW production provinces have all proposed specific HW disposal indicators to achieve a balance between supply and demand. They also emphasize the construction of HW management systems and are strengthening HW management levels. Taking as an example Shaanxi Province, which has the largest amount of HW disposal in the country, the "Plan for the Construction of Hazardous Waste Disposal and Utilization Facilities in Shaanxi Province (2017-2025)" proposes that by 2025, the safe disposal of HW should be basically achieved, and the capacity for centralized HW disposal should reach 371.5ktpa, which is an increase of 200ktpa compared to 2020.

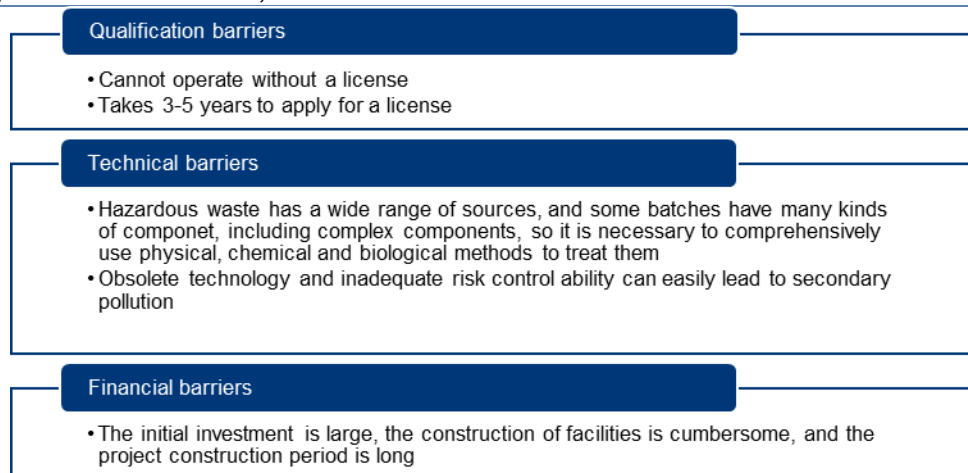
Fig.29: Local hazardous waste policy planning

| Province | Source | Content |
|-----------|--|--|
| Zhejiang | Zhejiang Hazardous Waste Utilization and Disposal Facilities Construction Plan Revision (2019-2022) (Draft for Solicitation of Comments) | By 2022, the province plans to increase the total utilization and disposal capacity of hazardous waste by approximately 390ktpa, including incineration of 35ktpa, landfill of 32ktpa, comprehensive utilization of 316ktpa, and medical waste disposal capacity 0.7mtpa. The goal for this stage is to make sure the local hazardous waste utilization and disposal capacity exceeds the local generation of hazardous waste. |
| Xinjiang | Guiding Opinions on the Construction and Layout of Hazardous Waste Disposal and Utilization Facilities in the Autonomous Region | By the end of 2023, the district's centralized disposal and utilization capacity of hazardous waste is to reach 2.3mtpa |
| Shaanxi | Shaanxi Province Hazardous Waste Disposal and Utilization Facilities Construction Plan (2017-2025) | By 2025, the safe disposal of hazardous waste is to be achieved. The province's centralized disposal capacity of hazardous waste is to reach 371.5ktpa with an increase of 200ktpa; the capacity of medical waste disposal is to reach 76.2ktpa with incremental capacity of 25ktpa. |
| Sichuan | Plan for the Construction of Centralized Disposal Facilities for Hazardous Waste in Sichuan Province (2017-2022) Mid-term Adjustment Plan | By the end of 2022, the province's centralized disposal capacity of hazardous waste is to reach 1,078.3ktpa, the co-processing capacity in cement kilns are to reach 485ktpa, and the centralized disposal capacity of medical waste is to reach 147.4ktpa. The province's hazardous waste disposal capacity overall is to match the disposal demand. |
| Shandong | Guiding Opinions on Improving the Environmental Supervision, Utilization and Disposal Capabilities of Hazardous Wastes, and Environmental Risk Prevention Capabilities | By the end of 2023, the province is to establish and accomplish a hazardous waste environmental supervision system featuring "strict prevention at the source, strict management of the process, and severe punishment of the consequences". The province's hazardous waste utilization and disposal capabilities are to be generally balanced with actual needs, and the hazardous waste environmental risk prevention capabilities are to be significantly improved. According to the current situation and requirements, it is to be implemented in three stages. Among them, before the end of 2020, Weihai is to take the lead in realizing the above goal; before the end of 2021, Jinan, Qingdao, Yantai, and Rizhao are to achieve the goal ahead of schedule; other cities are to strive to largely achieve it by the end of 2022, and all cities should accomplish this goal by 2023. By 2025, the province's hazardous waste utilization and disposal capacity is to be further optimized, and the environmental supervision system for the entire hazardous waste process and the hazardous waste environmental risk prevention mechanism are both to be further improved. |
| Jiangsu | Construction Plan for Centralized Disposal Facilities of Hazardous Wastes in Jiangsu Province | By 2020, the hazardous waste disposal capacity of all districts in Jiangsu Province is to basically match the types and quantities of the generated hazardous waste. The layout of disposal facilities is to become more reasonable, and the problem of insufficient disposal capacity is to be effectively alleviated. A wide variety of medical waste is to be included in centralized disposal. Jiangsu is to basically establish a relatively mature hazardous waste disposal system. Among them, the centralized disposal capacity of industrial hazardous waste is to increase by 850ktpa compared with 2017, and the total annual disposal capacity is to reach 1.8mtpa. |
| Guangdong | Three-year Action Plan for the Prevention and Control of Solid Waste Pollution by the Environmental Protection Department of Guangdong Province (2018-2020) | By 2020, a solid waste resource utilization and harmless disposal system covering the whole province is to be largely built up, and a near-complete solid waste supervision system is to be established. The entire process of solid waste supervision is to be realized for the first time. The environmental pollution of solid waste is to be effectively controlled. The specific indicators are: by 2020, the province's industrial hazardous waste safe disposal rate and medical waste safe disposal rate is to reach more than 99%; the harmless disposal rate of sludge from municipal sewage treatment plants is to reach more than 90%. The harmless disposal rate of the province's municipal domestic waste is to reach more than 98%. More than 95% of rural domestic garbage is effectively treated. |
| Hunan | The 13th Five-Year Plan for Environmental Management of Key Solid Wastes in Hunan Province | By 2020, the comprehensive information about the production, storage, utilization and disposal of key solid waste in the province is to be collected and understood, especially for hazardous waste. The province's safe disposal rate of hazardous waste is to reach 100%. The qualified rate of standardized management for hazardous waste generators is to reach more than 90%. The qualified rate of standardized management for waste management business is to be more than 95%. The centralized and harmless disposal rate of urban medical waste is to be 100%, and medical waste in remote areas is to get some extent of harmless disposal. |

Source: Provincial Department of Ecological Environment, Huatai Research

The new solid waste law is expected to increase entry barriers. Qualification barriers, technical barriers and capital barriers are universal in the HW disposal industry. With the introduction of stricter standards and the implementation of a more comprehensive regulatory system, the barriers to entering or continuing in the industry are to be further increased, in our view.

Fig.30: Qualification barriers, technical barriers and financial barriers for hazardous waste treatment



Source: Ministry of Ecology and Environment, Huatai Research

The HW disposal industry concentration needs to improve. In China, provincial-level approval for cross-regional transportation of HW is cumbersome, and transportation is expensive and risky; together, these are a bottleneck for the cross-regional development of enterprises. Meanwhile, the HW industry has a fragmented competitive landscape and is still in a growth stage. Per Frost & Sullivan statistics, as of end-2018, China's HW disposal industry had more than 1,000 players. By designed processing capacity, CR10 was 9.8% (BEUR's market share was 0.7%, ranking sixth); in terms of actual processing capacity, CR10 was 13.8% (BEUR's market share was 0.6%, ranking ninth). We believe implementation of the revised solid waste law should standardize the industry's development and promote industry integration, and see room for improvement in industry concentration.

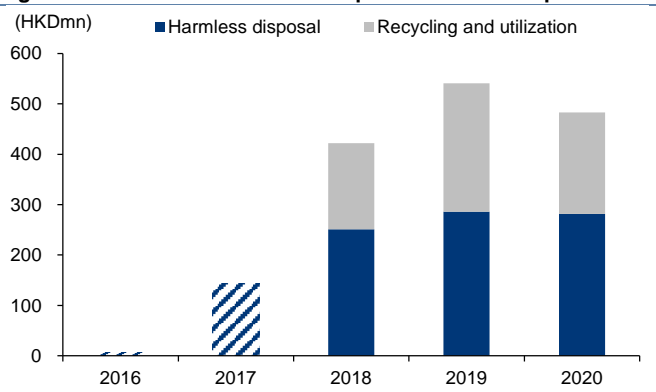
Intensification may become a future development trend. With the strengthening of regulatory requirements and the saturation of the industry, overall supply-demand in the market is tending to become more balanced than previously. We expect competition among hazardous waste management enterprises to focus on service quality upgrade. In that case, enterprises with more advanced technologies, lower processing costs, superior management systems, and lower security risk should have a competitive advantage. In addition, with the tightening of industry supervision and qualification approvals, as well as the improvement of standards, we expect the concentration of the HW market to increase as well, with smaller enterprises with poor qualifications being acquired or exiting the market.

BEUR: projects with favorable locations, utilization improvement needed

BEUR entered the HW disposal industry through M&A in 2016, and its main business includes collection, transportation, storage, and harmless disposal of HW for industrial enterprises and medical institutions. In 2018, it added recycling and utilization of industrial scrap as a line of business.

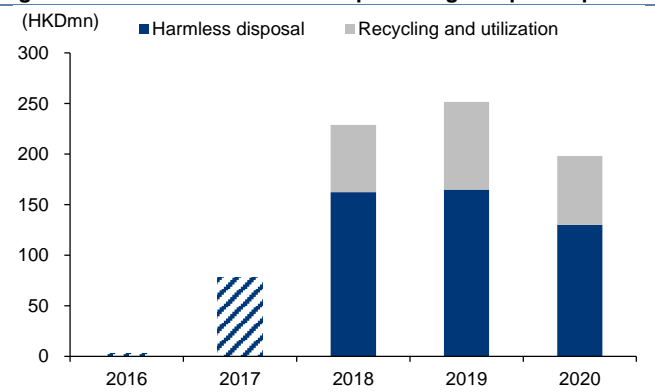
HW disposal business has been developing rapidly. By business category, BEUR's HW business is composed of harmless and recyclable sectors. Revenue from the company's HW business increased from HKD6mn to HKD483mn during 2016-2020, a CAGR of 198%. In 2020, the HW business achieved revenue of HKD483mn (down 11% yoy), and the revenue split was HKD282mn (58%) from harmless disposal projects and HKD201mn (42%) from recycling projects. In 2020, the HW disposal business achieved gross profit of HKD198mn (46% from harmless disposal and 34% from recycling projects), and gross profit margin of 41%, down 6pp yoy, mainly due to the decline in unit price of disposal.

Fig.31: BEUR: hazardous waste disposal — revenue split



Note: Revenue breakdown for 2016-2017 undisclosed
Source: Wind, Huatai Research

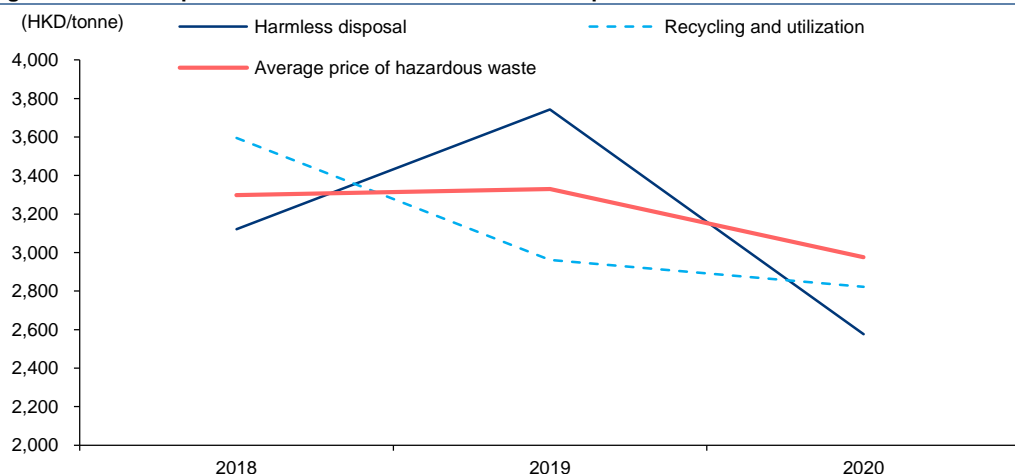
Fig.32: BEUR: hazardous waste disposal — gross profit split



Note: Gross profit breakdown for 2016-2017 undisclosed
Source: Wind, Huatai Research

The unit price of HW disposal fluctuated in 2020, after plateauing in 2018-2019. The average per-tonne price of HW disposal in 2018/2019 was HKD3,298/3,329. The unit price in 2020 decreased by 11% yoy to HKD2,976 per tonne, mainly due to the deterioration in the supply-demand balance resulting from the impact of the COVID-19 pandemic and insufficient waste generated by upstream customers. As such, a significant decrease in the unit price was seen. More specifically, the unit price of harmless disposal fell by 31% yoy to HKD2,575 per tonne, while that for recycling and utilization, impacted by a reduction in the methanol market price, decreased by 5% yoy to HKD2,822 per tonne.

Fig.33: BEUR: unit price breakdown of hazardous waste disposal



Source: Wind, Huatai Research

HW projects are mostly located in provinces that generate large volumes of waste. As of end-2020, BEUR has eight HW disposal projects in operation, two under trial operation, and three under construction. The production capacity is to be further expanded once the three projects under construction are put into production. According to the "2020 Annual Report on the Prevention and Control of Environmental Pollution by Solid Waste in Large- and Medium-sized Cities across the Country" published by the Ministry of Ecology and Environment, Shandong, Zhejiang, and Sichuan ranked first, third, and fifth among all provinces in terms of industrial HW generation volume in 2019, while Xinjiang ranked 14th. All in all, the reasonable layout of the company's HW business has made it a market leader in all major HW-generating provinces.

Fig.34: BEUR: hazardous waste disposal projects (end-2020)

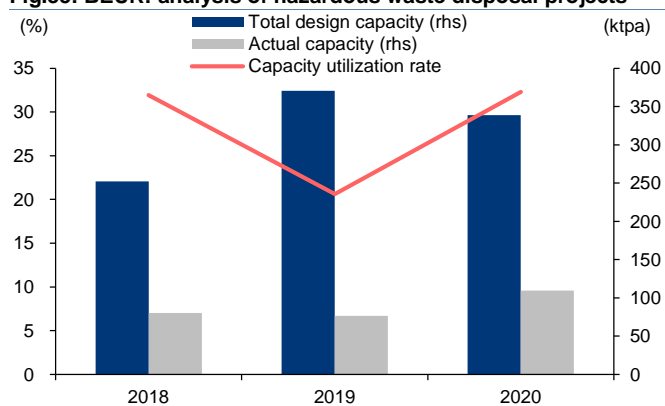
| Harmless disposal projects | Project name | Type of disposal | Designed capacity (tpa) |
|---|---|---|-------------------------|
| Projects in operation | | | |
| 1 | Guangxi Guigang Medical Waste Project | High temperature steam sterilization | 3,650 |
| 2 | Shandong Pingfu Hazardous Waste Project | Incineration / physical chemical / landfill | 81,400 |
| 3 | Shandong Shouguang Hazardous Waste Project | Incineration | 9,000 |
| 4 | Yichang Yaojiagang Hazardous Waste Project | Incineration / physical chemical / landfill | 99,692 |
| 5 | Xinjiang Hami Cement Kiln Cooperative Project | Cement kiln co-processing | 50,000 |
| 6 | Sichuan Zigong Medical Waste Project | High temperature steam sterilization | 3600 |
| Total projects in operation | | | 247,342 |
| Projects in trial operation | | | |
| 1 | Shandong Shouguang Hazardous Waste Project (II) | Incineration / physical chemical / landfill | 58,376 |
| 2 | Shandong Pingfu Hazardous Waste Project (II) | Incineration | 33,000 |
| Total projects in trial operation | | | 91,376 |
| Projects under construction | | | |
| 3 | Zhejiang Xianju Hazardous Waste Project | Incineration | 15,000 |
| 4 | Sichuan Zigong Hazardous Waste Project | Incineration / landfill | 50,000 |
| 5 | Jiangsu Suining Hazardous Waste Project | Incineration | 20,000 |
| Total projects under construction | | | 85,000 |
| Total harmless disposal projects | | | 423,718 |
| Recycling and utilization projects | Project name | Type of disposal | Designed capacity (tpa) |
| Projects in operation | | | |
| 1 | Ningxia Ruiyuan Project | Distillation and purification | 200,000 |
| 2 | Chongqing Project | Plastic recycling | 50,000 |
| Total recycling and utilization projects | | | 250,000 |

Source: Wind, Huatai Research

The capacity utilization ratio of HW disposal projects is greatly affected by the technical route. In 2020, BEUR's overall utilization rate for HW treatment was 28%, up 2pp yoy, per its annual report. As at end-2020, the company's total designed processing capacity for harmless disposal projects has reached 424ktpa, and that for recycling and utilization projects 250ktpa. Overall, BEUR's capacity can dispose of 40 major items in the national HW list.

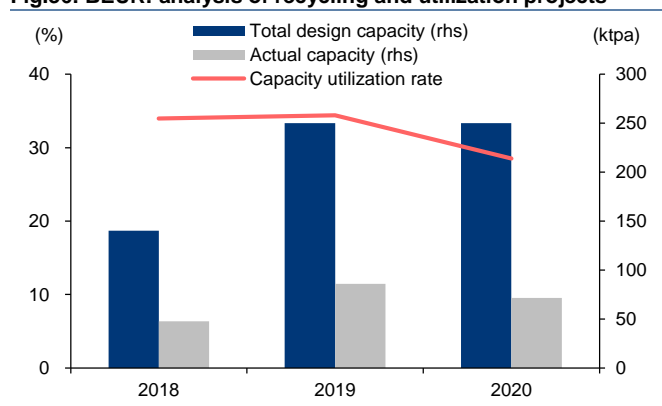
The capacity utilization rate of the company's harmless disposal projects was 32.3% in 2020, up 11.7pp yoy. We attribute the low utilization rate in 2019 to the low utilization rate of the Golmud Industrial Plant's slag centralized disposal project (1H19: 0.5%). The contract expired in 2H19, and the company's overall capacity utilization rate saw a clear recovery in 2020. The capacity utilization rate of recycling and utilization projects in 2020 was 28.5%, down 5.9pp yoy, and we attribute the drop to reduction in actual processing capacity that resulted from the pandemic hit.

Fig.35: BEUR: analysis of hazardous waste disposal projects



Source: Wind, Huatai Research

Fig.36: BEUR: analysis of recycling and utilization projects



Source: Wind, Huatai Research

Earnings estimates and valuation

Net profit attributable to parent CAGR to be 22% in 2021E-2023E

We estimate BEUR's 2021/2022/2023 revenue growth at 26.7/23.9/22.5%, and gross profit margin at 28.3/28.7/29.2%, based on the assumptions and analysis that follow.

1) Environmental sanitation services. In 2020, BEUR had a total of 23 newly signed sanitation service projects, with a total contract value/annualized amount of HKD11.27/1.048bn, up 41/19% yoy. As of end-2020, the company's annualized amount of sanitation service orders was HKD3.33bn. BEUR won the bid for the Shenzhen Xinqiao and Shajing Street Sanitation Integration Project in January 2020 (annualized amount is RMB487mn), but has yet to win any bids of a similar scale so far in 2021. Thus we estimate the annualized amount of new orders in 2021 could be HKD1.05bn, flat with the value in 2020.

Based on our assumptions, we expect the scale of China's third-party operating market for sanitation services in 2021/2022 to increase by 19/19% yoy. Considering that BEUR already has a large sanitation service business scale and rich project management experience, we expect its new order growth rate to be higher than the industry average level. Therefore, we expect the company's annualized new contract value in 2021/2022 to increase by 20/20% yoy to HKD1.26/1.51bn. In addition, we assume that the annualized amount of expired sanitation orders accounts for 3%, and that the annualized amount of the company's sanitation orders in hand for 2021/2022/2023 is HKD4.27/5.38/6.71bn.

Taking into account our assumption the company should gain new orders in 2H21, we assume that the newly added orders each year contributes a sixth of their annualized revenue to the current year and contribute a full year's annualized revenue the following year and in subsequent contract periods. Therefore, we estimate that the company's sanitation service revenue in 2021/2022/2023 should be HKD3.49/4.45/5.60bn, up 24/28/26% yoy.

In terms of gross profit margin in 2020, benefiting from the value-added tax and social security preferential policies during the COVID-19 pandemic, the gross profit margin of the company's sanitation service business was 29.5%; excluding the impact of the preferential policies, it would have been 24.6% (+0.1pp yoy). We are optimistic on the prospects for the company's "Smart Sanitation System", which we believe should lead to more intelligent and refined project management that enhances resource allocation efficiency and further improve profit margin. We expect gross profit margin of the sanitation service business in 2021/2022/2023 to be 25.6/26.6/27.6%.

2) Hazardous waste disposal business. Considering the production progress of BEUR's hazardous waste projects, we estimate that in 2021/2022/2023: 1) the total designed capacity of harmless disposal projects should be 423.7/423.7/443.7ktpa, that the capacity utilization rate should be 42/45/47% (up 10/3/2pp yoy), and that the average selling price should increase by 8/7/3% yoy to HKD2,775/2,975/3,075 per tonne; and 2) the total designed capacity of the recycling and utilization projects should remain at 250ktpa, that capacity utilization rate should be 34/37/39% (up 5/3/2pp yoy), and that the average selling price should be stable at HKD2,922 per tonne (up 4% vs 2020).

Based on the above assumptions, we estimate that BEUR's revenue from hazardous waste disposal business in 2021/2022/2023 should be HKD742/838/927mn (comprising HKD498/571/646mn from harmless disposal, and HKD245/267/281mn from recycling and utilization), and that gross profit margin should be 41.4/40.7/40.0%.

3) Other businesses. The income of other businesses mainly comes from the dismantling service for waste electrical appliances and electronic products, with a revenue of HKD216mn (up 6.6% yoy) in 2020. We expect the revenue and gross profit margin of this business to remain largely stable in the future. We estimate the revenue in 2021/2022/2023 should be HKD230/234/238mn, and that gross profit margin should be a stable 26.5%.

Fig.37: BEUR: segmental revenue and gross profit margin forecasts

| (HKDmn) | 2018 | 2019 | 2020 | 2021E | 2022E | 2023E |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Environmental sanitation services | 1,613 | 1,968 | 2,821 | 3,486 | 4,451 | 5,601 |
| yoy% | 143.7 | 22.0 | 43.3 | 23.6 | 27.7 | 25.8 |
| GPM (%) | 21.5 | 24.5 | 29.5 | 25.6 | 26.6 | 27.6 |
| Hazardous waste disposal | 422 | 540 | 483 | 742 | 838 | 927 |
| yoy% | 193.2 | 28.0 | (10.6) | 53.7 | 12.9 | 10.6 |
| GPM (%) | 54.2 | 46.5 | 41.0 | 41.4 | 40.7 | 40.0 |
| Others | 176 | 203 | 216 | 230 | 234 | 238 |
| yoy% | 65.9 | 15.0 | 6.6 | 6.7 | 1.6 | 1.6 |
| GPM (%) | 27.3 | 25.0 | 26.5 | 26.5 | 26.5 | 26.5 |

Source: Wind, Huatai Research estimates

In terms of period expense ratio: 1) sales expense scale was a low 0.5% in both 2019 and 2020, and we assume it remains at 0.5% during 2021-2023; 2) management expense ratio has dropped significantly, from 16.2% in 2018 to 9.7% in 2020, against a backdrop of rapid increase in revenue scale; we believe the company should continue to benefit from the improvement in operational efficiency brought about by optimizing management efficiency, and expect management expense ratio to continue to decrease, to 9.6/9.6/9.5% in 2021/2022/2023; and 3) the company's capital strength has been significantly enhanced after its entry into the capital market; we estimate the overall expense ratio should decrease to 1.8/1.5/1.2% in 2021/2022/2023.

Fig.38: BEUR: revenue, expense ratio and net profit

| (HKDmn) | 2018 | 2019 | 2020 | 2021E | 2022E | 2023E |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Revenue | 2,212 | 2,711 | 3,520 | 4,459 | 5,524 | 6,766 |
| yoy% | 142.4 | 45.6 | 29.8 | 26.7 | 23.9 | 22.5 |
| GPM (%) | 28.2 | 28.9 | 30.9 | 28.3 | 28.7 | 29.2 |
| Sales expenses | 6 | 14 | 16 | 22 | 28 | 34 |
| % of revenue | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Administrative expenses | 359 | 320 | 340 | 428 | 528 | 643 |
| % of revenue | 16.2 | 11.8 | 9.7 | 9.6 | 9.6 | 9.5 |
| Financial expenses | 50 | 72 | 72 | 80 | 80 | 80 |
| % of revenue | 2.3 | 2.7 | 2.0 | 1.8 | 1.5 | 1.2 |
| Net profit attr. to parent | 430 | 281 | 427 | 465 | 599 | 772 |
| NPM (%) | 19.5 | 10.4 | 12.1 | 10.4 | 10.9 | 11.4 |
| yoy% | - | (34.6) | 51.7 | 9.0 | 28.8 | 28.8 |

Source: Wind, Huatai Research estimates

Target price of HKD1.41; initiate with BUY

For 2021/2022/2023, we forecast BEUR's revenue to be HKD4.46/5.52/6.77bn, and attributable net profit to be HKD465/599/772mn, which corresponds to EPS of HKD0.13/0.17/0.21 and implies 7.7/6.0/4.7x PE. As of 2 July 2021, the average PE TTM of the constituent stocks of the Hang Seng Environmental Engineering Index in the Hong Kong stock market is 12.1x, a 43% discount to the average PE TTM (21.4x) of the A-share Wind Environment and Facilities Service Index. We assign BEUR 10.9x 2021E PE, a 20% discount to peer-average 13.6x (per Wind consensus estimates), which derives a target price of HKD1.41. We deem this discount appropriate considering BEUR's low liquidity in the Hong Kong stock market. We initiate coverage on the share with a BUY rating.

Fig.39: Peer valuation comparison

| Company | Stock code | Price (local) | Mkt cap (HKDmn) | PE (x) | | PB (x) | | ROE (%) | | Net profit CAGR (%) 21E-23E | PEG 21E |
|--------------------------|------------|---------------|-----------------|-------------|-------------|------------|------------|-------------|-------------|-----------------------------|------------|
| | | | | 21E | 22E | 21E | 22E | 21E | 22E | | |
| EIT | 300815 CH | 35.02 | 11,648 | 14.3 | 11.7 | 3.2 | 2.6 | 23.0 | 22.4 | 14.2 | 1.0 |
| Qiaoyin | 002973 CH | 15.8 | 7,759 | 17.3 | 13.8 | 3.6 | 2.9 | 21.0 | 21.0 | 15.2 | 1.1 |
| Infore | 000967 CH | 6.86 | 26,074 | 13.1 | 11.0 | 1.2 | 1.1 | 9.1 | 9.9 | 19.5 | 0.7 |
| Longma | 603686 CH | 14.92 | 7,452 | 12.1 | 10.0 | 1.9 | 1.6 | 15.9 | 16.3 | 18.8 | 0.6 |
| Dongjiang | 002672 CH | 7.48 | 7,903 | 12.9 | 11.3 | 1.3 | 1.2 | 10.6 | 11.0 | 29.3 | 0.4 |
| Rainbow Heavy Industries | 002483 CH | 4.72 | 5,344 | 11.9 | 9.8 | 1.0 | 0.9 | 8.7 | 10.1 | 28.9 | 0.4 |
| Average | | | | 13.6 | 11.3 | 2.0 | 1.7 | 14.7 | 15.1 | 21.0 | 0.7 |
| BEUR | 3718 HK | 1 | 3,600 | 7.7 | 6.0 | 1.0 | 0.9 | 13.4 | 14.7 | 30.3 | 0.3 |

Note: 1) earnings estimates for peers from Wind consensus estimates and the currency unit is RMB; 2) mkt cap for peers is based on HKDCNY = 1.20; 3) earnings estimates for BEUR are Huatai estimates and the currency is HKD; 4) data as at 2 July 2021.

Source: Bloomberg, Wind, Huatai Research estimates

Fig.40: List of companies mentioned in this report

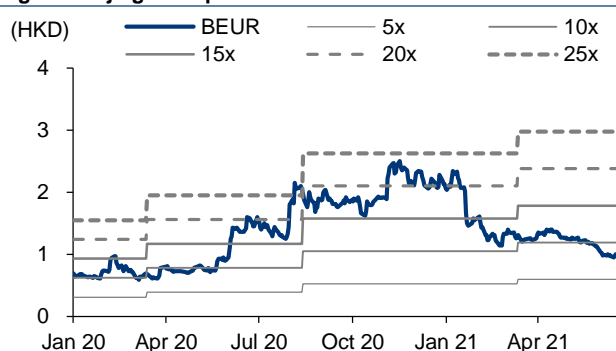
| Company | Stock code | Company | Stock code |
|---|------------|--------------------------|------------|
| BEW | 371 HK | Beijing Environmental | Unlisted |
| Beijing Enterprises Group Co. Ltd. | Unlisted | EIT | 300815 CH |
| Guangxi Guigang Beikong Water Sanitation Service Co., Ltd. | Unlisted | Infore | 000967 CH |
| Guangxi Guigang Beijing Enterprises Water Medical Waste Treatment Co. Ltd. | Unlisted | Qiaoyin | 002973 CH |
| Beijing Enterprises Urban Services (China) | Unlisted | Longma | 603686 CH |
| Mind Light Holdings Co. Ltd. | Unlisted | Dongjiang | 002672 CH |
| Qingdao Beijing Enterprises Resources and Environmental Technology Co. Ltd. | Unlisted | Rainbow Heavy Industries | 002483 CH |
| Shandong Pingfu | Unlisted | - | - |

Source: Bloomberg, Huatai Research

Risks

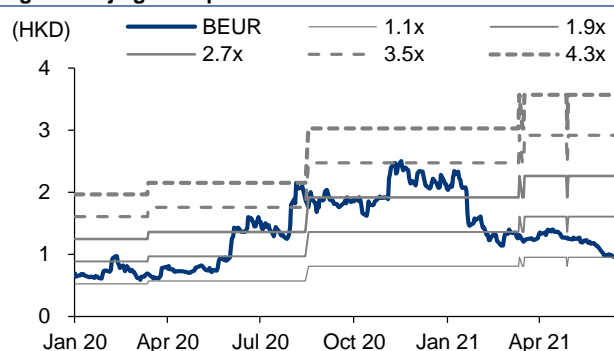
- 1) Marketization speed of sanitation service industry is lower than we expect.** The speed of marketization in the sanitation service industry is mainly driven by government policies. If the actual implementation progress in China is slower than we expect, the third-party service market growth rate could fall behind our expectation;
- 2) Profitability is lower than we expect as a result of intensified competition.** At present, the market players are fully aware of the value of environmental sanitation services. The large number of new entrants and fierce competition in environmental sanitation service projects may lead to a short-term decline in profitability, which is outside our expectations;
- 3) Risks in hazardous waste treatment project implementation.** Fluctuations in construction progress and capacity utilization rate for hazardous waste treatment projects could lead to uncertainty in profitability.

Fig.41: Beijing Enterprises Urban Resources PE-Bands



Source: S&P, Huatai Research

Fig.42: Beijing Enterprises Urban Resources PB-Bands



Source: S&P, Huatai Research

Full financials

Income statement

| YE 31 Dec (HKDmn) | 2019 | 2020 | 2021E | 2022E | 2023E |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|
| Revenue | 2,711 | 3,520 | 4,459 | 5,524 | 6,766 |
| Cost of goods sold | (1,928) | (2,433) | (3,198) | (3,937) | (4,787) |
| Gross margin | 783.45 | 1,087 | 1,260 | 1,587 | 1,979 |
| Selling and distribution cost | (14.31) | (15.95) | (22.44) | (27.79) | (34.04) |
| Admin expenses | (320.02) | (339.69) | (428.06) | (527.52) | (642.76) |
| Other income/expenses | 59.92 | 70.34 | 80.18 | 88.28 | 94.59 |
| Financial cost-net | (72.34) | (72.03) | (80.47) | (80.47) | (80.47) |
| Share of P&L of associate | 0.03 | 1.25 | 1.25 | 1.25 | 1.25 |
| Profit before tax | 433.36 | 703.78 | 776.90 | 1,001 | 1,273 |
| Tax expense | (87.49) | (163.37) | (180.34) | (232.35) | (282.70) |
| Minority interest/other | (70.69) | (113.58) | (131.35) | (169.23) | (217.98) |
| Net profit | 281.33 | 426.83 | 465.21 | 599.38 | 772.02 |
| Discount and amortization | 236.59 | 316.62 | 353.75 | 484.88 | 595.69 |
| EBITDA | 742.26 | 1,091 | 1,210 | 1,565 | 1,948 |
| EPS (HKD, basic) | 0.10 | 0.12 | 0.13 | 0.17 | 0.21 |

Balance sheet

| YE 31 Dec (HKDmn) | 2019 | 2020 | 2021E | 2022E | 2023E |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Inventories | 44.73 | 47.14 | 59.71 | 73.96 | 90.60 |
| Account & bill receivables | 994.79 | 1,427 | 1,807 | 2,239 | 2,742 |
| Cash & cash equivalents | 1,052 | 1,725 | 1,145 | 822.86 | 770.74 |
| Other current assets | 195.32 | 339.76 | 339.76 | 339.76 | 339.76 |
| Total current assets | 2,287 | 3,539 | 3,352 | 3,476 | 3,944 |
| Fixed assets | 1,749 | 2,283 | 3,129 | 3,844 | 4,449 |
| Intangible assets | 730.60 | 978.96 | 978.96 | 978.96 | 978.96 |
| Other non-current assets | 221.27 | 317.32 | 317.32 | 317.32 | 317.32 |
| Total non-current assets | 2,700 | 3,579 | 4,426 | 5,141 | 5,745 |
| Total assets | 4,987 | 7,118 | 7,777 | 8,616 | 9,689 |
| Accounts payable | 160.53 | 233.23 | 295.43 | 365.98 | 448.27 |
| Short-term loans | 563.95 | 986.07 | 986.07 | 986.07 | 986.07 |
| Other liabilities | 893.11 | 1,103 | 1,103 | 1,103 | 1,103 |
| Total current liabilities | 1,618 | 2,322 | 2,384 | 2,455 | 2,537 |
| Interest-bearing bank borrowings | 825.83 | 772.57 | 772.57 | 772.57 | 772.57 |
| Other long term liabilities | 286.22 | 356.72 | 356.72 | 356.72 | 356.72 |
| Total non-current liabilities | 1,112 | 1,129 | 1,129 | 1,129 | 1,129 |
| Equity | 270.00 | 360.00 | 360.00 | 360.00 | 360.00 |
| Reserves/other items | 1,544 | 2,652 | 3,117 | 3,716 | 4,488 |
| Shareholder equity | 1,814 | 3,012 | 3,477 | 4,076 | 4,848 |
| Minority interests | 443.74 | 655.54 | 786.89 | 956.12 | 1,174 |
| Total equity | 2,258 | 3,667 | 4,264 | 5,032 | 6,022 |

Valuation

| YE 31 Dec (x) | 2019 | 2020 | 2021E | 2022E | 2023E |
|--------------------|--------|--------|---------|--------|-------|
| PE | 9.60 | 8.35 | 7.74 | 6.01 | 4.66 |
| PB | 1.49 | 1.18 | 1.04 | 0.88 | 0.74 |
| EV EBITDA | 4.45 | 1.91 | 1.82 | 1.23 | 0.62 |
| Dividend yield (%) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| FCF yield (%) | (9.54) | (9.27) | (13.89) | (6.70) | 0.79 |

Cash flow statement

| YE 31 Dec (HKDmn) | 2019 | 2020 | 2021E | 2022E | 2023E |
|-------------------------------|-----------------|----------------|----------------|----------------|----------------|
| EBITDA | 742.26 | 1,091 | 1,210 | 1,565 | 1,948 |
| Finance costs | 72.34 | 72.03 | 80.47 | 80.47 | 80.47 |
| Changes in working cap | (120.51) | (361.75) | (330.91) | (375.32) | (437.80) |
| Tax | (87.49) | (163.37) | (180.34) | (232.35) | (282.70) |
| Other | 28.94 | 34.81 | (79.23) | (79.23) | (79.23) |
| Operating cash flow | 635.54 | 672.92 | 699.88 | 958.65 | 1,228 |
| Capital expenditure | (979.10) | (1,007) | (1,200) | (1,200) | (1,200) |
| Other investment activities | 720.65 | (6.76) | 0.00 | 0.00 | 0.00 |
| Investing cash flow | (258.45) | (1,014) | (1,200) | (1,200) | (1,200) |
| Increase in debt | 117.05 | 303.39 | 0.00 | 0.00 | 0.00 |
| Increase in equity | 0.00 | 603.41 | 0.00 | 0.00 | 0.00 |
| Dividends paid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other financing activities | (110.50) | (2.73) | (80.47) | (80.47) | (80.47) |
| Financing cash flow | 6.55 | 904.06 | (80.47) | (80.47) | (80.47) |
| Changes in cash | 383.64 | 563.47 | (580.60) | (321.83) | (52.12) |
| Cash at start of year | 677.25 | 1,052 | 1,725 | 1,145 | 822.86 |
| Effect of forex rate chg, net | (8.99) | 109.91 | 0.00 | 0.00 | 0.00 |
| Year-end cash | 1,052 | 1,725 | 1,145 | 822.86 | 770.74 |

Performance

| YE 31 Dec (x) | 2019 | 2020 | 2021E | 2022E | 2023E |
|------------------------------------|---------|--------|--------|--------|--------|
| Growth (%) | | | | | |
| Revenue | 22.58 | 29.83 | 26.67 | 23.88 | 22.49 |
| Gross profit | 25.70 | 38.71 | 15.99 | 25.87 | 24.73 |
| Operating profit | 61.57 | 57.43 | 11.07 | 25.77 | 24.76 |
| Net profit | (34.63) | 51.72 | 8.99 | 28.84 | 28.80 |
| EPS | - | 14.89 | 7.95 | 28.84 | 28.80 |
| Profitability ratios (%) | | | | | |
| Gross profit | 28.90 | 30.87 | 28.27 | 28.72 | 29.25 |
| EBITDA | 27.38 | 31.00 | 27.13 | 28.33 | 28.79 |
| Net profit | 10.38 | 12.13 | 10.43 | 10.85 | 11.41 |
| ROE | 15.51 | 14.17 | 13.38 | 14.70 | 15.92 |
| ROA | 10.21 | 11.26 | 11.45 | 12.99 | 14.42 |
| Solvency | | | | | |
| Net gearing ratio (%) | 18.63 | 1.11 | 17.66 | 22.96 | 20.38 |
| Current ratio | 1.41 | 1.52 | 1.41 | 1.42 | 1.55 |
| Quick ratio | 1.39 | 1.50 | 1.38 | 1.39 | 1.52 |
| Operating capability (days) | | | | | |
| Total assets turnover ratio (x) | 0.55 | 0.58 | 0.60 | 0.67 | 0.74 |
| Receivable | 118.72 | 123.83 | 130.56 | 131.86 | 132.53 |
| Payable | 26.37 | 29.13 | 29.75 | 30.24 | 30.62 |
| Inventory | 12.30 | 6.80 | 6.01 | 6.11 | 6.19 |
| Cash conversion cycle | 104.65 | 101.50 | 106.82 | 107.73 | 108.10 |
| Index per share (HKD) | | | | | |
| EPS | 0.10 | 0.12 | 0.13 | 0.17 | 0.21 |
| Book value per share | 0.67 | 0.84 | 0.97 | 1.13 | 1.35 |

Source: Company announcements, Huatai Research estimates

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