Environmental, Social and Governance Report 2018





POLYTEC ASSET HOLDINGS LIMITED

保利達資產控股有限公司

(Stock Code 股份代號: 208)



Contents

15	Business Review	2
O.C		
緣	About this Report	3
	Reporting Standard, Period and Scope	3
	Stakeholder Engagement	4
	Materiality Assessment	5
	Contact Details	6
White Many	Words to Stakeholders	7
B	Preserving a Sustainable Operation	8
	Steering Sustainable Operational Practices	8
	Upholding an Environmentally-conscious Operation	11
緣	Promoting Responsible Practices	19
	Providing Equal Opportunities	19
	Maintaining Production Safety	23
	Upholding an Ethical Practice	25
	Supporting the Community	26
	т 1. г 1	
	Looking Forward	28
الإلا	Performance Table	90
-	T CLIOTHIGHICE LAUTE	4

Business Review

Listed in Hong Kong since 1998, Polytec Asset Holdings Limited ("the Company" or "PAH") (Stock Code: 208) is a listed subsidiary of Kowloon Development Company Limited (Stock Code: 34). PAH and its subsidiaries (collectively "the Group") currently focus on property market in Macau, ice manufacturing and cold storage business in Hong Kong and oil production and exploration business in Kazakhstan.

The Group's ice manufacturing and cold storage company, The Hong Kong Ice & Cold Storage Company Limited, is one of the largest ice making distributors in Hong Kong, which manufactures edible ice, industrial ice and trades dry ice. The Group is dedicated to maintaining sanitary manufacturing and packaging systems to guarantee the hygiene and quality of the ice. It also has a storage facility to maintain its clients' food freshness and packaging integrity. With an internal professional logistics team, the Group is committed to providing reliable and efficient services to clients.

The Group's oil company in Kazakhstan, Caspi Neft TME, has been producing and exploring oil under the 25 years contract with local government since 2006. The business operates under the local social and environmental laws and regulations.

In dedication of minimising social and environmental impacts, the Group strives to improving its Environmental, Social and Governance ("ESG") management approaches and policies.





Reporting Standard, Period and Scope

PAH hereby presents its third standalone ESG Report (the "Report").

The Report is complied with the Environmental, Social and Governance Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("the ESG Reporting Guide"). The Group adheres to the reporting principles of Materiality, Quantitative, Balance and Consistency to report on the measures and performances.

The Report covers the Group's operations in Hong Kong consisting of 4 ice plants located at Yau Tong Bay, Aberdeen, Castle Peak and Tai Po, and a cold storage facility situated beside the ice plant in Aberdeen; and the oil production business in Kazakhstan.

For PAH's property development business in Macau, PAH does not involve in full controls over the development. In view of this, the management of the Company decided to exclude the ESG performance of the Macau operations in the Report.

To build a solid foundation for sustainable growth for the Group, PAH acquired strategically important assets in Zhongshan and Zhuhai in 2018 (the "Zhongshan Project" and the "Zhuhai Project"). As the acquisition of the Zhongshan Project was completed on 31 December 2018, whereas the acquisition of the Zhuhai Project was pending to complete by the end of 2018, the ESG performance of the aforesaid projects is not included in the Report.

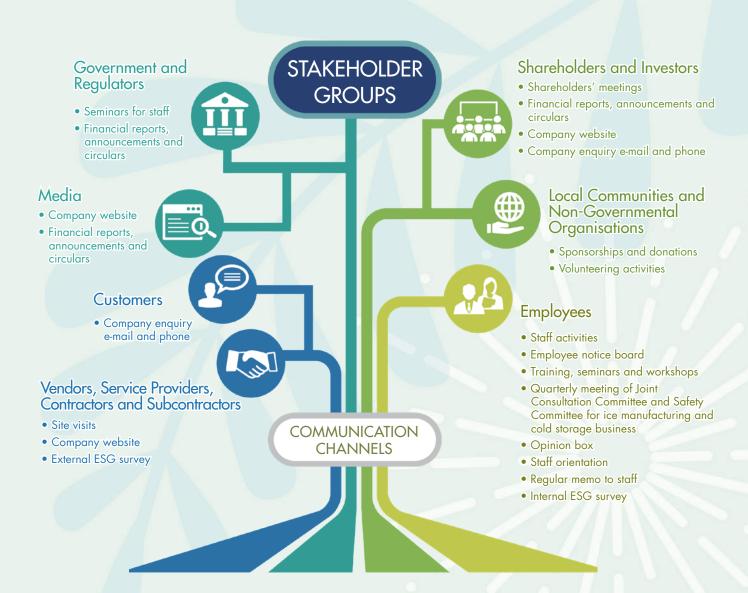
The Report covers the Group's ESG performances and progresses from 1 January 2018 to 31 December 2018 (the "Reporting Year").



Stakeholder Engagement

The Group is aware of the prevalent environmental and social challenges that would potentially influence its long-term business development. Upon identifying these challenges, the Group is committed to aggressively improving and strategically modifying the relevant policies and measures.

Aligning with ESG approaches with stakeholders' expectations, effective communication with stakeholders has become the steppingstone to pinpoint the underlying challenges and growth factors for a sustainable and responsible business operation. To facilitate stakeholder engagement, the Group has set up several communication channels for various stakeholder groups:

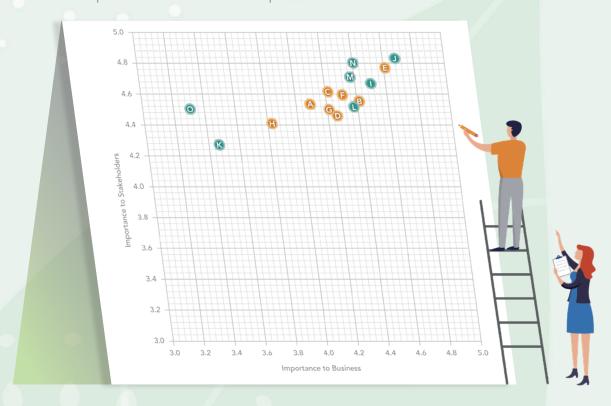




Materiality Assessment

The Group has taken steps to further continue to conduct ESG surveys to bridge stakeholders' perceived perspectives. Hence, the Group has identified a list of 15 ESG-related issues relevant to its long-term development. In the past 2 years, close to 200 stakeholders such as employees, management, vendors, contractors/subcontractors and service providers were surveyed and had rated the importance of each issue on a scale of 1 to 5 (where 1 being the lowest and 5 being the highest).

With this survey, the Group is able to construct a materiality matrix in accordance to the consolidated results gathered from the past 2 years. The materiality matrix demonstrates the relative importance of each ESG-related issue to the Group's stakeholders and business operations.



Environmental	As	pect

Iso of Material

Ose of Maleriais	A
Greenhouse Gas and Air Pollutants Emissions	B
Resource Consumption	0
General Waste Management	D
Hazardous Waste Management	(3)
Wastewater Discharge and Management	•
Noise Pollution	G
Use of Renewables	

Social Aspect

Social Aspect	
Employment Practices	0
Occupational Health and Safety	0
Community Investment	K
Procurement Practices	0
Contractor / Subcontractor Quality	M
Ethics and Integrity	
Whistle-blowing Policy	0



The Group identified the top 3 material environmental and social issues as listed below:

Environmental Aspect

- Hazardous Waste Management
- Greenhouse Gas and Air Pollutants Emissions
- Wastewater Discharge and Management



Social Aspect

- Occupational Health and Safety
- Ethics and Integrity
- Employment Practices

Through identifying top material issues and their importance, the Board is guided to envision future ESG approach and prepare for the challenges. Gradually, the Group will adopt and strategise measures for these key material issues.

Considering stakeholders' concerns, the management adequately addressed the top material issues in depth throughout the Report. The Group will continuously engage different stakeholder groups to procure a more comprehensive materiality assessment. The Group will periodically review the material issues and improve its sustainability performances as its long-term objective.

Contact Details

We welcome any comments or suggestions from our stakeholders. If you have any comments, please contact:

Polytec Asset Holdings Limited

23rd Floor, Pioneer Centre, 750 Nathan Road, Kowloon, Hong Kong

Tel: (852) 2380 9682 Fax: (852) 2380 6310 E-mail: enquiry@polytec.com.hk





Words to Stakeholders

Dear Stakeholders,

I am delighted to present the Company's 2018 ESG Report. This Report shows our contribution and endeavour in a competitive environment. The Group having extensive experience is taking responsibility of addressing the material sustainability issues and planning our strategies for the years ahead. We hope to connect stakeholders by showcasing different perspectives and preserve sustainable operations while promoting responsible practices.

Hong Kong

We have been integrating sustainability in our operational practices. We strictly enforce operational protocols in compliance and fulfilment of our environmental and social responsibility and operational safety. We have taken measures to reduce our carbon and pollution footprints. In addressing the environmental issues, we installed cost-saving lighting fixtures and water treatment system in all of our ice plants. The Group places great importance on health and safety in the workplace to safeguard our employees' welfare. Meeting the discriminating demand of the markets for our products and services, our employees are well-trained to execute their daily tasks in the production value-chain to uphold sanitary requirement and provide quality products and services.

Kazakhstan

With nearly a decade of experience of the oilfield operation, we have supported our sustainability obligation and a responsible operation. Without doubts, the production of oil has many underlying environmental and social challenges. Keeping this in mind, we continuously carry out on-site assessments. We have developed emergency and occupational safety plans to reduce our environmental and social impacts. Joining forces with our employees and the community, we root for the prosperity and wellbeing of the environment and society. The Group aspires to contribute to the local green landscape and provide help to flood victims in East Kazakhstan and the underprivileged.

Moving ahead, we continue to address upcoming challenges and ensure sustainability creating values for our stakeholders. I would like to take this opportunity to express my sincere gratitude to our staff for their contributions and supporting our long-term sustainable development.

Yeung Kwok Kwong

Managing Director

Hong Kong, 24 July 2019



The Group will continue to identify environmental issues to ensure sustainable procurement and quality control process over ice manufacturing and cold storage business and oil production and exploration business. In pursuance of this commitment, the Group undertakes comprehensive operational mechanisms with environmental awareness to preserve a sustainable operation.

Steering Sustainable Operational Practices

Focusing on sustainable operational practices, the Group continues to cooperate with our suppliers, contractors and customers to ensure product quality.

Supplier and Contractor Management

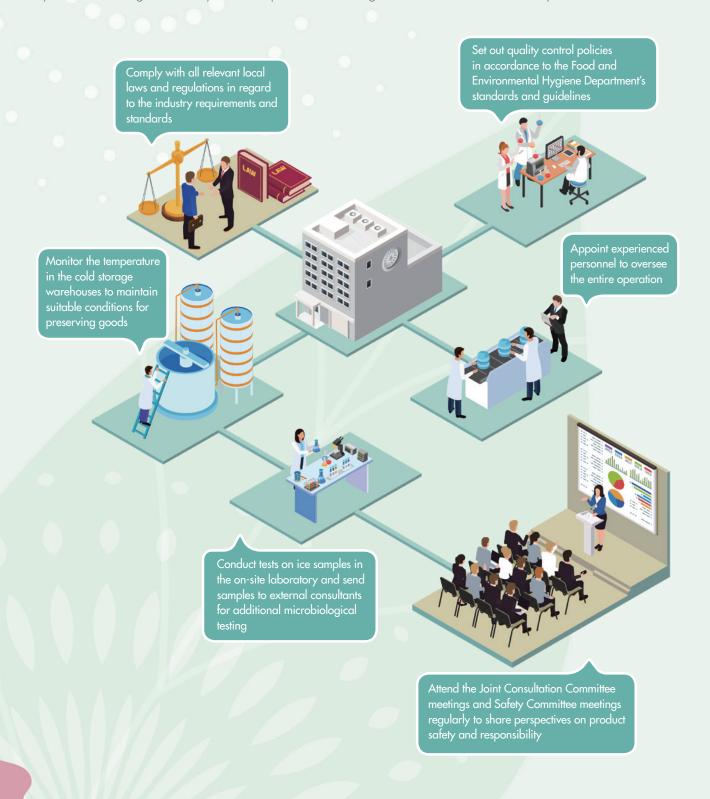
Recognising that suppliers and contractors have influences in the sustainability of the Group's business in delivering reliable and high quality products, the Group requires the suppliers and contractors to demonstrate the full compliance to the environmental and social aspects.

Quality Assurance

The Group is committed to delivering quality products to customers. Hence, the Group has relevant procedures and measures to ensure product quality.

Ice Manufacturing and Cold Storage

As the leading ice distributor in Hong Kong, the Group places great importance on quality assurance from production, storage to delivery. The Group has the following measures to illustrate our Group's commitment:



Oil Production and Exploration

The operation is run by qualified professionals. Procedures are in place to ensure compliance with local laws and regulations. Emphasis is placed on quality assurance meeting market expectations. Our product is routinely sampled and examined by independent laboratories.





Upholding an Environmentally-conscious Operation

With an awareness of pertaining environmental impacts, the Group consciously safeguards the environment by overseeing the management of resources, wastes and emissions.



Hazardous/Dangerous Raw Material Management

Acknowledging the potential impacts of hazardous/dangerous raw materials to the environment, the Group continually pays attention while managing these materials. Procedures are in place to prevent leakage and wastage during production process.



Ice Manufacturing and Cold Storage

The ice manufacturing plants use ammonia as a refrigerant. Concentrated ammonia may be hazardous. Hence, the plant is duly licenced to store dangerous goods to ensure the welfare of our employees, and the following preventive and mitigative measures are adopted:

- Provide training and instructions for all on-site employees regarding handling of ammonia
- Require all on-site employees to wear personal protective equipment while handling ammonia; the ice plants are equipped with chemical protective clothing and neutraliser
- Perform ammonia leakage detections prior to daily production

- Install ammonia concentration sensors and check daily
- Train engineering staff to immediately identify and stop any leakages
- Report the location and time of any leakages occurred and inform the management immediately





Oil Production and Exploration

To prevent leakage, the Group religiously pays attention by implementing the following preventive measures:

- Install all processing facilities on concreted areas to negate land contamination
- Equip automation controls, shut-off valves and safety valves to relieve excess pressure of the equipment
- Carry out regular on-site inspection to ensure safe and normal operations
- Conduct routine checks on the oil processing and transporting equipment

Waste Handling

Addressing stakeholders' concerns, the procedures related to handling of hazardous and non-hazardous wastes are in place in accordance with respective regulations and standards.

The ice plants recycle wastes, such as ironware. This practice will be extended to include office stationery and progressively to include other recyclable materials. Lubricating oil is properly disposed of by qualified waste collector and no hazardous wastes are produced during the production process.



Oil Production and Exploration

The Group continually strives to reduce waste. The wastes are properly handled in accordance with the established guidelines and policies. Employees are instructed to collect, store, handle, transport and dispose of the hazardous wastes, such as spent caustic and used accumulators, in proper receptacles.

In the Reporting Year, the Group complied with all relevant local laws and regulations in regard to disposal and discharge of waste, such as the Waste Disposal Ordinance of Hong Kong and the Environmental Code of the Republic of Kazakhstan.



Waste Discharged (Note 1)

	Offili	2010	2017
Hong Kong			
Hazardous waste (liquid) (Note 2)	Litres ("L")	2,800	2,200
Kazakhstan			
Non-hazardous waste (Notes 3 & 4)	Tonnes	24.11	20.97
Hazardous waste (liquid) (Notes 4 & 5)	m ³	6,001	3,533
Hazardous waste (solid) (Note 5)	Tonnes	0.43	0.67

- Note 1: Waste discharged is insignificant to the Group's business. Therefore, waste intensity figures were not disclosed.
- Note 2: Used lubricating oil is a type of liquid hazardous waste produced in ice plants. Any increase is due to the maintenance and the replacement of lubricant.
- Note 3: Based on the environmental rules of Kazakhstan, non-hazardous waste is categorised into the green category.
- Note 4: The non-hazardous and hazardous waste figures in 2017 in Kazakhstan are modified due to the refinement of the calculation method.
- Note 5: Based on the environmental rules of Kazakhstan, hazardous waste is categorised into the amber category (mildly hazardous) and the red category (hazardous). No red category hazardous waste was recorded for both years.



Energy Consumption and Emissions Monitoring

High energy consumption is used in maintaining daily production and storage operations. The Group systematically monitors the electricity and fuel consumptions as well as the consequential greenhouse gas ("GHG") and air emissions. In the Reporting Year, the Group complied with all local laws and regulations related to relevant emissions.



Ice Manufacturing and Cold Storage

The ice plants use electricity for production equipment and refrigeration systems, and fossil fuel for vehicles to transport ice products. The Group periodically monitors such consumptions and makes necessary adjustments to improve energy efficiency.

As a preventive measure, the Group regularly observes and reviews the energy consumption of different facilities through the monitoring systems. The Group also appoints responsible personnel to identify any malfunctions for necessary maintenance, in order to ensure normal operations and prevent any wastage of energy.

Conventional lighting fixtures are replaced with light emitting diode ("LED") lighting fixtures for energy saving.

Oil Production and Exploration

In Kazakhstan, the Group uses electricity for plant operation and fossil fuels for industrial machinery and vehicular transportation. Complying with the local Kazakhstan laws, the Group conducts energy audits to monitor energy consumption and various emissions. Quarterly self-reviews of on-site equipment are also conducted to explore more energy-efficient alternatives.

Energy-saving lighting fixtures are installed and obsolete equipment is replaced after such audits and reviews to improve the onsite energy-efficiency.



Energy Consumption

22,789,543	23,534,847
82,042	84,726
18,056,120	19,515,425
65,002	70,256
4,733,423	4,019,422
17,040	14,470
14,547	13,949
194,673	213,697
3,302	4,149
7,627	8,391
128,422	100,794
53,676	46,039
1,582	315
1,929	1,993
6,920	5,558
96,589	98,675
72,629	78,647
23,960	20,028
0.617	0.596
0.319	0.323
	7,627 128,422 53,676 1,582 1,929 6,920 96,589 72,629 23,960 0.617

Note 1: 1 kWh = 0.0036 GJ.

Note 2: The 2018 and 2017 data cover the headquarters in the Pioneer Centre, cold storage in Aberdeen, ice manufacturing in Aberdeen, Yau Tong Bay, Castle Peak and Tai Po.

Note 3: The conversion rates for diesel oil (for automotive), diesel oil (for industrial), petrol, LPG and oil are 38.6 Megajoules ("MJ")/L, 39.6 MJ/L, 34.2 MJ/L, 25.7 MJ/L and 40.8 MJ/L respectively.

Note 4: The revenues in Hong Kong for 2018 and 2017 are HK\$117,801,000 and HK\$131,954,000 respectively.

Note 5: The revenues in Kazakhstan for 2018 and 2017 are HK\$75,053,000 and HK\$61,930,000 respectively.





Greenhouse Gas (GHG) Emissions

	Unit	2018	2017
Hong Kong			
Direct GHG emissions (Scope 1) (Note 1)	Tonnes CO ₂ equivalent ("tCO ₂ e")	518	570
Indirect GHG emissions (Scope 2) (Note 2)	tCO ₂ e	11,636	12,727
Total GHG emissions	tCO ₂ e	12,154	13,297
Total GHG emissions intensity	tCO ₂ e/'000 revenue	0.103	0.101
Kazakhstan			
Direct GHG emissions (Scope 1) (Notes 1 & 3)	tCO ₂ e	3,328	3,949
Indirect GHG emissions (Scope 2) (Note 2)	tCO ₂ e	3,692	3,135
Total GHG emissions	tCO ₂ e	7,020	7,084
Total GHG emissions intensity	tCO ₂ e/'000 revenue	0.094	0.114

Note 1: Scope 1 GHG emissions in Hong Kong refer to the direct GHG emission from mobile vehicles, while Scope 1 GHG emissions in Kazakhstan refer to the direct emissions of GHG from sources owned or controlled by the Group, including (i) mobile vehicles and (ii) stationary machinery usage.

Note 2: Scope 2 GHG emissions refer to the indirect GHG emissions resulting from the generation of the electricity which the Group purchased.

Note 3: Scope 1 GHG emissions in Kazakhstan refer to the direct GHG emissions for mobile and stationary sources in 2018 which were 462 tCO₂e and 2,866 tCO₂e, respectively, while Scope 1 GHG in Kazakhstan refer to the direct GHG emissions for mobile and stationary sources in 2017 which were 381 tCO₂e and 3,568 tCO₂e, respectively.



Air Pollutant Emissions at Kazakhstan

	Unit	2018	2017
Nitrogen oxides (NO _x)	Tonnes	5.9	5.2
Sulphur dioxide (SO ₂) (Note 1)	Tonnes	39.3	51.1

Note 1: The decrease of SO₂ was mainly attributable to more effective use of furnaces.

Water Consumption and Discharge Monitoring

The Group monitors water consumed and replaces water fixtures to optimise consumption, reduce environmental footprint and operational cost eventually.

Ice Manufacturing and Cold Storage

lce manufacturing is a water-intensive industry. However, there are no significant issues with sourcing water from the government.

Water meters are installed in the ice plants to regularly monitor water consumption. The Group regularly reviews the consumption and analyses any abnormal fluctuation and institutes proper corrective actions to conserve water.

The temperature of sea water rises during production process. Such sea water is treated in a system before discharging to the sea in order to minimise thermal pollution. Complying with the Water Pollution Control Ordinance, the Group was granted an effective discharge licence.

Oil Production and Exploration

Water in Kazakhstan is mainly used for drinking by site staff; only a small amount is used for oil processing. Water tanks are used as a backup for storage and emergency purpose. During the Reporting Year, remedial actions were taken to prevent and stop water leakage. The Group maintains best water saving practices and staff are mandated to follow. In addition, both sewage and production wastewater were treated with current best practices to reduce environmental impact.





Water Consumption

Unit	2018	2017
m^3	253,632	293,622
m ³	245,563	286,340
m ³	8,069	7,282
m ³ /'000 revenue	2.085	2.170
m ³ /'000 revenue	0.108	0.118
	m ³ m ³ m ³ m ³ /'000 revenue	m ³ 253,632 m ³ 245,563 m ³ 8,069 m ³ /'000 revenue 2.085

Note 1: Water consumption data include industrial and non-industrial (i.e. domestic use) usage. The water consumption increased in 2018 was mainly for greenery purpose.

Packaging Material Selection

Durable food-grade plastic bags are used in packaging edible ice to prevent contamination. In the Reporting Year, the Group consumed 61.2 tonnes of such plastic bags for ice packaging.



Promoting Responsible Practices

Addressing the identified social issues and other relevant topics, the Group promotes responsible practices within corporate culture and the communities it operates in.

Providing Equal Opportunities

The Group views employees as a valuable asset and treats all employees and candidates equally and fairly. Thus, the Group places an emphasis on acquiring and retaining talented staff while adhering to all local employment laws.

The Equal Opportunity Policy strictly prohibits any form of discrimination. As stated in the internal policies, the Group forbids all forms of discrimination on gender, religion, race, family status, disability or age at all time during recruitment, promotion, internal transfer and resignation. All operation departments in the Group are required to comply with all applicable laws and regulations relating to employment practices and strictly forbid the employment of child or forced labour. In the Reporting Year, no such unlawful employment practice was noted.

The Group provides all employees with paid holidays and maternity leaves, and ensures reasonable working hours in accordance with the respective local laws and regulations. In the Reporting Year, the Group was unaware of any material non-compliance with regards to employment laws in Hong Kong and Kazakhstan.

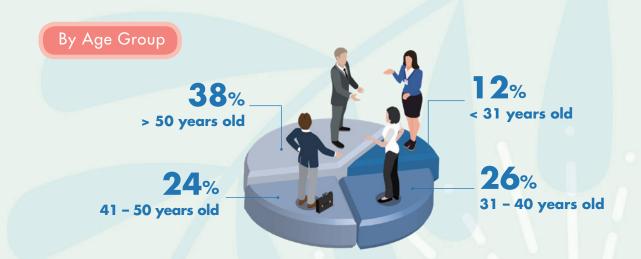
At the end of the Reporting Year, the total number of full time employees of the Group was 261 with the total turnover of 75. Append below is the breakdown of employees by different categories:





Promoting Responsible Practices *







* Promoting Responsible Practices

Professional Development

The Group treats employees as an important asset to sustaining business operation. The Group has continuous training and upgrading programmes for employees to participate, such as quality management, corporate governance and industrial safety. An average of 51 training hours per employee was accomplished in the Reporting Year.

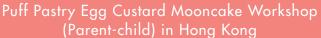
Staff Activities

Creating an inclusive and harmonious workplace, the Group endeavours to show care and appreciation to employees. In this regard, the Group held different activities such as annual dinner and festive parties for all employees to boost employees' morale and enhance team building in the Reporting Year.













Promoting Responsible Practices *



New Year's Party in Kazakhstan





Kazakhstan Nauryz (Traditional New Year) Party



Staff Birthday Party in Kazakhstan



Celebration of the Holiday of the Defenders of the Fatherland in Kazakhstan





Maintaining Production Safety

The Group places great importance on occupational health and safety of employees by adopting various safety measures.

Ice Manufacturing and Cold Storage

In Hong Kong, the Group has implemented the following safety measures:

- Conduct regular meetings with the Safety Committee and the Joint Consultation Committee to discuss and seek improvements in operational safety;
- Provide mandatory on-board orientation and safety training for employees to ensure their understanding of potential work hazards;
- Designate well-trained employees to handle and store hazardous substances properly;
- Require employees to wear personal protective equipment at designated premises; the ice plants are equipped with chemical protective clothing and neutraliser;
- Provide necessary warm clothing for employees when entering the cold storage warehouse;
- Verify the number of employees entering and exiting the low temperature cold storage warehouse to ensure no one is locked in the facility;
- Review cases of health and safety incidents and develop preventive measures;
- Place visible warning signs to remind employees of the potential risks on-site; and
- Conduct regular drills (e.g. fire hazard and ammonia leakage) to increase employees' familiarity and awareness of escape routes.



Oil Production and Exploration

In Kazakhstan, the Group has implemented the following safety measures:

- Conduct quarterly trainings for employees on topics such as industrial safety, fire safety and blow-out safety;
- Require all employees and subcontractors to undergo training to ensure their familiarity of the on-site equipment before conducting field works;
- Appoint designated employees to oversee all operations to ensure the safety requirements and standards are met; and
- Establish emergency response plans and provide relevant training to increase employees' awareness and enhance their capacity to react under emergency.

In the Reporting Year, no material non-compliance of occupational health and safety was reported with zero work-related fatality.



* Promoting Responsible Practices

Upholding an Ethical Practice

The Group is committed to maintaining good standards of probity and integrity to reflect the Group's corporate governance. In line with sound corporate governance, the Group has policies and guidelines to prevent any violations so as to safeguard an ethical practice.

Anti-corruption

The Group strictly prohibits any bribery, extortion, fraud and money laundering activities. The Group also requires all employees to declare any conflicts of interest or any acceptance of advantages such as gifts and discounts offered during the discharge of official duties.

The whistleblowing policy permits employees to report on any suspected impropriety, misconduct or malpractice within the Group through appropriate channels. In the event of any reports, the Group shall investigate and undertake disciplinary actions or refer to relevant authorities.



Data Protection

As stated in the Code of Conduct, the Group prohibits employees to solicit unnecessary personal data and ensures the information obtained is protected from unauthorised or accidental access. Details of customers and business partners are not to be divulged to third parties.

In the Reporting Year, the Group complied with all relevant local laws and regulations and there was no material non-compliance related to anti-corruption or data protection.





Supporting the Community

The Group is dedicated to extend its corporate responsibility and participated in the following community projects in the Reporting Year.



Charity Cookies

The Group encouraged employees to purchase cookies baked by Madam Hong's Bakery (established by Ngai Shing Workshop of Fu Hong Society) to support Fu Hong Society's education, training and rehabilitation services. A bag of "Charity Cookies" was also presented to each shareholder who had attended the 2018 Annual General Meeting of PAH.

The Community Chest - Dress Causal Day 2018

Supporting for the Community Chest – Dress Causal Day 2018 event, the Group encouraged employees' generous donations by committing to donate the same amount of funds raised by employees. The Group's collective donation would be used to support Community Chest's services to assist the less privileged.







Hill's x SPCA Dogathon 2018

The Group sponsored free edible ice in the Society for Prevention of Cruelty to Animals (the "SPCA")'s "Dogathon" activity for dogs to relieve heat in hot weather.

* Promoting Responsible Practices



Tree Planting



In celebration of the newly opened local park in Kazakhstan, employees participated in the tree planting activity to promote environmental protection in the local areas.



Unnecessary lighting were switched off in the Pioneer Centre for one hour on 24 March 2018 showing support for the World Wide Fund – Hong Kong's Earth Hour campaign.



In the Reporting Year, the Group donated HK\$1,013,000 supporting various communities across Kazakhstan. The donation was used to provide school supplies and gifts to students from poor families and orphanages, support the refugees of the flooding in the East Kazakhstan region and contribute to the development of the children rehabilitation centre.

Looking Forward

The Group continues to review its environmental and social footprint so as to minimise any negative impacts. Adding sustainability elements into operational practices in the future, the Group is hopeful to elevate its sustainability achievements.



Performance Table

Indicator	Unit	2018	2017
Energy consumption			
	kWh	22,789,543	23,534,847
Total electricity consumption	GJ (Note 1)	82,042	84,720
(Note 2)	kWh	18,056,120	19,515,42
Hong Kong (Note 2)	GJ	65,002	70,250
V	kWh	4,733,423	4,019,422
Kazakhstan	GJ	17,040	14,470
Total fuel consumption	GJ	14,547	13,949
	Diesel, L	194,673	213,697
Hong Kong (Notes 2 & 3)	Petrol, L	3,302	4,14
	Total, GJ	7,627	8,39
	Diesel, L	128,422	100,79
	Petrol, L	53,676	46,039
Kazakhstan (Note 3)	LPG, L	1,582	31.
	Oil, L	1,929	1,99
	Total, GJ	6,920	5,55
Total energy consumption	GJ	96,589	98,67
Hong Kong ^(Note 2)	GJ	72,629	78,64
Kazakhstan	GJ	23,960	20,02
Total energy intensity			
Hong Kong ^(Notes 2 & 4)	GJ/'000 revenue	0.617	0.59
Kazakhstan ^(Note 5)	GJ/'000 revenue	0.319	0.32
GHG emissions			
Hong Kong			
Direct GHG emissions (Scope 1) (Note 6)	tCO ₂ e	518	57
Indirect GHG emissions (Scope 2) (Note 7)	tCO ₂ e	11,636	12,72
Total GHG emissions	tCO ₂ e	12,154	13,29
GHG emissions intensity	tCO ₂ e/'000 revenue	0.103	0.10
Kazakhstan			
Direct GHG emissions (Scope 1) (Notes 6 & 8)	tCO ₂ e	3,328	3,94
Indirect GHG emissions (Scope 2) (Note 7)	tCO ₂ e	3,692	3,13
Total GHG emissions	tCO ₂ e	7,020	7,08
GHG emissions intensity	tCO ₂ e/'000 revenue	0.094	0.11
Air pollutant emissions			
Nitrogen oxides (NO _x)	Tonnes	5.9	5.1
Sulphur dioxide (SO ₂) ^(Note 9)	Tonnes	39.3	51.

Performance Table

Indicator	Unit	2018	2017
Water consumption			
Total water consumed	m^3	253,632	293,622
Hong Kong	m^3	245,563	286,340
Kazakhstan ^(Note 10)	m^3	8,069	7,282
Water intensity			
Hong Kong	m ³ /'000 revenue	2.085	2.170
Kazakhstan	m ³ /'000 revenue	0.108	0.118
Usage of packing materials			
Plastic bags used for Hong Kong ice manufacturing	Tonnes	61.2	68.9
Waste discharged (Note 11)			
Hong Kong			
Hazardous waste (liquid) (Note 12)	L	2,800	2,200
Kazakhstan			
Non-hazardous waste (Notes 13 & 14)	Tonnes	24.11	20.97
Hazardous waste (liquid) (Notes 14 & 15)	m^3	6,001	3,533
Hazardous waste (solid) (Note 15)	Tonnes	0.43	0.67

- Note 1: Note 1: 1 kWh = 0.0036 GJ.
- Note 2: The 2018 and 2017 data cover the headquarters in the Pioneer Centre, cold storage in Aberdeen, ice manufacturing in Aberdeen, Yau Tong Bay, Castle Peak and Tai Po.
- Note 3: The conversion rates for diesel oil (for automotive), diesel oil (for industrial), petrol, LPG and oil are 38.6 Megajoules ("MJ")/L, 39.6 MJ/L, 34.2 MJ/L, 25.7 MJ/L and 40.8 MJ/L respectively.
- Note 4: The revenues in Hong Kong for 2018 and 2017 are HK\$117,801,000 and HK\$131,954,000 respectively.
- Note 5: The revenues in Kazakhstan for 2018 and 2017 are HK\$75,053,000 and HK\$61,930,000 respectively.
- Note 6: Scope 1 GHG emissions in Hong Kong refer to the direct GHG emissions from mobile vehicles, while Scope 1 GHG emissions in Kazakhstan refer to the direct emissions of GHG from sources owned or controlled by the Group, including (i) mobile vehicles and (ii) stationary machinery usage.
- Note 7: Scope 2 GHG emissions refer to the indirect GHG emissions resulting from the generation of the electricity which the Group purchased.
- Note 8: Scope 1 GHG emissions in Kazakhstan refer to the direct GHG emissions for mobile and stationary sources in 2018 which were 462 tCO₂e and 2,866 tCO₂e, respectively, while Scope 1 GHG in Kazakhstan refer to the direct GHG emissions for mobile and stationary sources in 2017 which were 381 tCO₂e and 3,568 tCO₂e, respectively.
- Note 9: The decrease of SO₂ was mainly attributable to more effective use of furnaces.
- Note 10: Water consumption data include industrial and non-industrial (i.e. domestic use) usage. The water consumption increased in 2018 was mainly for greenery purpose.
- Note 11: Waste discharged is insignificant to the Group's business. Therefore, waste intensity figures were not disclosed.
- Note 12: Used lubricating oil is a type of liquid hazardous waste produced in ice plants. Any increase is due to the maintenance and the replacement of lubricant.
- Note 13: Based on the environmental rules of Kazakhstan, non-hazardous waste is categorised into the green category.
- Note 14: The non-hazardous and hazardous waste figures in 2017 in Kazakhstan are modified due to the refinement of the calculation method.
- Note 15: Based on the environmental rules of Kazakhstan, hazardous waste is categorised into the amber category (mildly hazardous) and the red category (hazardous). No red category hazardous waste was recorded for both years.