

Risk Factors

In the risks discussed below, we highlight the factors that could have an adverse material effect on the Group's revenues, cash flows, market competitiveness and operations on the Chinese mainland and Hong Kong. For further details on how the Group manages its risks, please refer to the "Risk Management and Internal Control" section of our Corporate Governance Report on pages 86 to 89.

Business Environment

The outbreak of COVID-19 during the last three years had created unprecedented challenges in the global business environment, including lockdowns, global supply chain disruptions, travel bans and restrictions, and at-home work and school arrangements.

At the beginning of 2022, we saw a sharp slowdown in the global economy. This was followed by the eruption of hostilities in Ukraine, which triggered an energy crisis in Europe and a surge in gas prices across the world. These factors, together with heightened geopolitical tensions and interest rate hikes caused by persistently high, broader-based inflation, have dimmed global prospects for growth and added to our downside risks.

Nevertheless, sustainability remained an important focus for 2022 and is already being positioned as an opportunity for accelerating business growth in the transition to net-zero carbon emissions. Policies supporting this transition could drive investment in green infrastructure, creating a turning point in the fight against climate change.

Hong Kong's GDP in 2022 fell by 3.5 per cent from the year before while the rate of underlying consumer price inflation for 2022 was 1.9 per cent. The deteriorated external environment and continued disruptions to cross-boundary cargo flows dealt a serious blow to Hong Kong's exports. Tightened financial conditions resulting from the sharp interest rate hikes weighed heavily on domestic demand, although the generally stable epidemic

situation, improved labour market conditions and the disbursement of Consumption Vouchers Scheme supported private consumption.

Despite the repeated lockdowns and ongoing property market turmoil, the GDP of the Chinese mainland recorded a growth of 3.0 per cent. Yet, the official manufacturing purchasing managers index (PMI) fell to 47 in December from 48 in November, still below the 50-mark.

Business challenges faced by the Group include a slowdown in gas demand owing to global warming, competition from providers of electricity in Hong Kong, and direct sales by upstream gas companies, as well as suppliers of liquefied natural gas (LNG) and alternative energy sources on the Chinese mainland. Other threats to our business include the increased number of extreme weather events, rising commodity prices due to logistics interruptions, and changes in government policy (political, legal, regulatory, environmental or competition related), all of which could also affect our operations.

Our strategy for dealing with business risks continues to be critical for the sustainable growth and success of the Group. In line with this strategy, we remain prudent in our capital investments and seek ways to improve the productivity and cost-effectiveness of all our operations. Credit monitoring is also reinforced to minimise the risk of a customer default.

Furthermore, we are constantly exploring new gas applications and new business opportunities to achieve business diversification on both the Chinese mainland and Hong Kong, while maintaining close communication with our operational partners and governments whose support is essential for our business growth. We are also conducting a pilot study on the supply of hydrogen separated from our town gas mix for bus companies in Hong Kong, as part of our green initiative to combat climate change and achieve carbon neutrality.

In response to the epidemic, a variety of countermeasures have been put in place to alleviate its impact on our operations and relieve the pressure on our customers, including the granting of credit period extensions. In addition, special measures have been taken to minimise the impact of the epidemic on our workforce, as mentioned later in this section.

Reliability of Gas Supply

We secure multiple sources of feedstock for the production of town gas in our Hong Kong operations. These include natural gas transmitted from our LNG receiving terminal in Shenzhen to our gas production plant in Tai Po, naphtha imported from places such as Southeast Asia and Australia, and treated landfill gas obtained from our landfill project sites in Hong Kong.

A major risk of interruption to our feedstock supply for natural gas includes the possibility of inclement weather delaying LNG tankers. We have addressed this risk under our diversified production strategy, in which we have given our Tai Po production plant the capability of switching between natural gas and naphtha for feedstock.

On the Chinese mainland, to facilitate more efficient gas inventory management and reduce supply bottlenecks during high-demand periods, we have built LNG storage facilities as well as a natural gas storage facility at our underground salt caverns in Jiangsu province. A variety of energy sources have also been obtained, including natural gas from Russia to northern and north-eastern China, LNG imported directly from receiving terminal owners, and the reinforcement of our pipeline network interconnections.

To ensure reliable gas transmission, we have a sophisticated Supervisory Control and Data Acquisition (SCADA) system to monitor and control our pressure-regulating stations and network. We also have a comprehensive staff training programme, asset management systems, and contingency plans with regular practice drills, in preparation for unforeseen events that might affect our customers and the public. Moreover, changes in regulatory requirements for gas reserves applicable to our gas operations on the Chinese mainland are being closely monitored.

Production and Network Safety

Preventing gas leakages or explosions in our production and storage facilities, pipelines and networks is a top priority for Towngas. Risks include the possibility of damage to critical facilities or related infrastructure from a third party, a security threat or extreme weather events such as typhoons, flooding or landslides. These and other factors affecting the safety of our infrastructure or causing an interruption to service would have a significant legal, financial and/or reputational impact on the Group.

Towngas conducts regular reviews of all operating procedures to mitigate these risks and implements targeted strategies for addressing them. Our Total Quality Management system, for example, covers all critical production, storage, transmission and distribution facilities, as well as renewable energy systems. We are developing a centralised platform to be launched by our gas operations on the Chinese mainland to optimise operational management on safety. We also manage our assets according to international standards and external certifications, and maintain insurance coverage against any property damage or financial loss.

Financial Liquidity

Our operations and investments, which are long-term in nature, are exposed to liquidity risks. For mitigation, we will continue to improve operational cash flows, assess liquidity positions through regular reviews of capital needs, monitor our investment-grade credit ratings and maintain a healthy capital structure. We also secure diversified funding sources and maximise our funding options.

Information Security

Our business operations are dependent on information technology systems that are vulnerable to a critical system failure, leakage or loss of sensitive information, all of which would adversely affect the Group's business. Accordingly, we have put in place protective measures to manage data loss and monitor suspicious cyber activities. We also commission third parties to assess our security standards and identify areas for enhancement. Other security measures include contingency plans with regular drills to counter system failures as well as staff awareness programmes on cybersecurity and sensitive information handling to fully safeguard our operations against growing information security threats. Furthermore, the development of new regulatory requirements on the Chinese mainland relating to information security is also under close scrutiny for proper compliance.

Ethics and Integrity

Maintaining strong corporate governance standards and operating ethically are among management's top concerns. Poor ethical behaviour by employees could damage our corporate reputation as well as adversely affect our long-established business relationships with stakeholders, including our customers and suppliers, which may have financial implications. In order to provide an ethical workplace with integrity, we have policies on the standards of behaviour we expect of our employees and provide them with regular training in these policies. We have also established formal channels

for reporting suspected cases of fraud and encourage our business partners to follow the same ethical principles that we promote in our Anti-Fraud Policy.

Health and Safety

We recognise the importance of maintaining high levels of occupational health and safety in all our operations. Serious accidents or the outbreak of a communicable disease, among other risks, could cause injury, loss of life and operational disruption that would result in huge recovery costs, litigation or reputational damage.

To mitigate and contain the risks directly or indirectly under our control, we encourage staff at all levels to monitor and report any hazards or potential threats. We also have comprehensive safety guidelines and measures that ensure our safety performance conforms to the highest industry standards. Our safety management system, certified for compliance with international standards, is reviewed and updated regularly. We also emphasise the importance of maintaining a comprehensive and effective safety culture by providing staff and contractors with systematic professional, technical and safety-related training.

With regard to the epidemic, countermeasures (e.g. social distancing, video conferencing, enhanced hygiene controls, an employee quarantine policy) have been incorporated into the "new normal" way of operating in order to reduce the risk of the epidemic spreading to working premises and ensure business continuity. In addition, special human resources initiatives have been adopted to encourage our Hong Kong workforce to participate in the government's vaccination programme.