RISK MANAGEMENT AND RISK FACTORS

Risk Management

PTT Global Chemical Public Company Limited ("The Company") is aware of risks associated with its business operation, investment and strategy and therefore has adopted enterprise-wide risk management in a systematic manner under corporate risk management policy, framework and guideline as approved by its Risk Management Committee (RMC) and within the Company's risk tolerance.

The Company emphasizes proactive risk management both in short and long terms. It pioneered its own EWS ("Early Warning System") to monitor and analyze external uncertainties and risks. If such risks were to materialize, they would considerably affect the performance and/or investment of the Company Group.

The Company has begun to manage an external-based risk that may disrupt its supply chain using Business Continuity Management (BCM) since November 2013. The use of BCM aims to lessen impact from the disruption if such risk were to occur. At present, the Company has BCM in place at its head office at Energy Complex (ENCO), Building A and branch 2 (Olefins Plant I-1 including high-density polyethylene (HDPE) plant). The Company is to expand BCM to the other areas of its supply chains in the near future.

The RMC governs risk management through the Company Management Committee (MC), its core mechanism, and through the Company Commercial and Financial Risk Management Committee (CFRM), a team in charge of formulating a hedging strategy and setting price and volume of raw material feedstock, products and funds to be hedged, all of which are in accordance with the Company's risk management policy and framework as approved by the RMC.

The Company conducts both qualitative and quantitative risk assessments of its group constantly. It uses a Risk Map, a 4x4 matrix, in evaluating risk severity in term of relationship between impact and likelihood. The Company's risk assessment processes and criteria are laid out in its Corporate Risk Management Manual and Investment Risk Management Manual for reference.

The Company conducts a Value-at-Risk (VaR) analysis using its financial model. The analysis helps the Company in identifying potential impact on its financial performance under possible scenarios. Analysis between impact severity and probability of occurrence is used to comprehend a potential risk that may affect the Company's business and project objectives. A risk owner will be requested to identify an existing control and formulate a mitigation plan, if appropriate or necessary, of his/her designated risk to be in accordance with the set guideline. A review of risk profile, including risk management results, is conducted following a set timeframe. Monitoring and analysis of internal and external factors that could possibly affect production, sales, and pricing of both feedstock and products, as well as of financial and economic conditions are performed on a continual basis. All these are to minimize the probability of the risks to occur and/or to reduce impact if such risks were to take place. This helps members of the Company management and other employees to understand the changes of information in the same way as to be able to make proper preparation for a potential risk scenario.

Risk Factors

The Company places importance in managing risk to meet, or exceed wherever possible, the international standard. However, due to the nature of the industries that the Company is involved in, it may not be possible to avoid certain risks inherent in such industries that, if these risks were to occur, they may significantly affect the Company Group's business objectives or performance, and/or shareholders' expected return from investment in the Company.

Outside risk factors that are discussed in this report, there may be a number of other risk factors that the Company does not know or is not aware of their significance at the time of this report preparation; are evaluated to fall within the Company's risk tolerance but they later develop to be severe risk factors, which, if they were to materialize, could impact business, investment or strategic objectives of the Company or members of its group seriously; or exacerbate beyond the Company's risk tolerance in the subsequent period.

Risks of the Company Group that are assessed to fall beyond its risk tolerance in 2014 are summarized as follows:

Market Risks - Crude Oil Price, Product Price and Margin Risks

The crucial market risks of the Company in 2014, which is evaluated without taking potential results from risk mitigations into account, that may fall outside the Company's risk tolerance are the following three risks: crude oil price, product price and margin risk.

Crude oil price risks that may greatly impact the Company performance derive mainly from three sources: crude oil price fluctuation, lower crude oil price during refinery process and lower value of crude oil inventory at the end of accounting period from prior period.

In regards to product and margin risks, prices and margins of major products of the Company Group may impact its performance critically should they change from the budget assumption and/or forecast to a certain extent. Important products whose prices are of importance to the Company Group are ethylene, high-density polyethylene (HDPE) and mono ethylene glycol (MEG). Important pairs of feedstock and product whose margins are of importance to the Company are diesel and Dubai crude oil, methyl ester (ME) and crude palm oil (CPO), phenol and benzene (BZ), paraxylene (PX) and condensate, and benzene (BZ) and condensate. These products and pairs of feedstock and product are major products or feedstock of Group Performance Center (GPC)/Business Unit (BU) of the Company Group. In fact, the last two pairs, which are of Aromatics GPC, may encounter somewhat lower margins in 2014 from the Company budget assumption.

As long as the market risks are of concern, the world economic outlook led by the United States, Europe and China, will lead to a change in the expected demand for crude oil and the Company's feedstock and products whose prices are of or linked to world markets.

Mitigation Measures: The Company has a transparent pricing policy it uses in its purchase and sales contracts of products and feedstock, both for the Company itself and members of its group. This policy results in pricing that reflects several market prices, with the aim of reducing pricing volatility. Additionally, it provides a pricing model that is included in its vendor contracts for the Company products and feedstock, as well as between the Company and members of its group or among members of the Company Group themselves. It provides flexibility in pricing of feedstock to reflect the value it represents for the end products that are produced from them, helping to avoid situations in which the investment cost to retrieve such feedstock is higher than its true market value. Through this pricing model,

the Company is able to protect itself from the adverse effects of price volatility, especially during industry down-cycles or times of sluggish market activities.

The Company also manages risks of product prices and margins, including that of crude oil price and other feedstock and products, whenever feasible and appropriate. In the past, the Company uses financial derivatives and/or a forward contract in managing these risks of Refinery and Aromatics GPCs under RMC policy and framework. The overall aim is to reduce the risk of price changes in feedstock and products that are influential to the business objectives of the Company Group.

In addition, the Company sets a plan to coordinate among GPCs and BUs within the Company Group whenever relevant and appropriate. This practice is emphasized among Olefins GPC, Polymers and Ethylene Oxide BUs in terms of ethylene allocation for the production units to use as feedstock that would yield the highest economic value to the Company Group under existing constraints of sales and purchase agreements and the market conditions. Effects on the Company Group from price volatilities in feedstock and products are thus reduced to a certain degree.

Overall, if the risk measures are taken efficiently, the effects on the Company Group will be reduced substantially particularly in Refinery GPC whose crude oil price risk may reduce considerably while the risks of product prices and margins of Aromatics BU may yet stay at the level beyond the Company's risk tolerance due to the fact that factors influencing these risks are usually out of the Company's control.

Feedstock Risk - Ethane Risk

The crucial feedstock risk of the Company in 2014, which is evaluated without taking potential results from risk mitigations into account, that may fall outside the Company's risk tolerance is ethane (supply) risk. Being a major ethane-based ethylene producer in the region, ethane is always one of the principal feedstock of the Company. Its ethane supply from PTT gas separation plants (GSPs) may be lower as well as less reliability than what specified in the contracts. If such events were to occur extremely and/or continuingly, there could be a negative impact on the Company financial performance significantly.

Mitigation Measures: The Company has discussed with PTT, from time to time, in receiving other feedstock for compensation for the lost ethane that its GSPs do not deliver as planned as well as closely coordinated with PTT in monitoring plans to improve efficiency of its GSPs.

This ethane risk is caused by an external factor which is out of the Company's control directly. Therefore, the risk severity would depend largely on the efficiency of PTT GSPs. However, should the Company manage such risk efficiently including the capability of the Company Olefins Plant I-4 in receiving alternative feedstock other than ethane such as LPG, the ethane risk could then significantly reduce to fall within the Company's risk tolerance.

Operational Risk - Underutilized LPG Risk and Disaster Risk

The crucial operational risks of the Company in 2014, which is evaluated without taking potential results from risk mitigations into account, that may fall outside the Company's risk tolerance are underutilized LPG and disaster risks.

Underutilized LPG risk is the case when the Company may not be able to utilize LPG feedstock as specified in its business plan because of a technical restraint of Olefins Plant I-4. Disaster risk is the case when there may be a severe accident in a production unit and feedstock/product transport and logistics both on land and in the sea of the Company and/or members of its group.

Mitigation Measures: For underutilized LPG risk, the Company is planning to sell excess LPG to external customers but its risk may yet fall outside the Company's risk tolerance. Nonetheless, if the Company can minimize the technical restraint of Olefins Plant I-4, the risk would be decreased dramatically to fall within its risk tolerance. For disaster risk, the Company Group is reviewing plans in response to emergency/crisis and setting up a system and process of Operational Risk Management (ORM), which is under Operational Excellence Management System (OEMS) of PTT Group. The ORM aims to raise the capability of the Company Group in response to an acute incident that may cause loss of life, deterioration of health of its employees and people in the communities surrounding its production units or logistics system, or hazard to the environment. The ORM will integrate operational risk management throughout the organization, moreover. Whenever applicable, the Company Group has a policy to hold an All Risks Insurance Policy, Business Interruption Insurance Policy, and a Thirty Party Liability Insurance Policy, all of which meets international standards. This practice aims to minimize losses to the Company and members of its group in case of any the disaster risk materialized.

Post International Investment Risks

Post international investment risks of the Company Group, which is evaluated without taking potential results from risk mitigations into account, of a certain investment may fall outside the Company's risk tolerance. Most crucially are financial risk, execution risk (of newly built plant), operational risk (of an ongoing plant), technology risk, market risk, human resource risk (of the acquired company and the Company Group themselves) and organizational risk (including culture risk). Should the Company or a member of its group be unable to manage these risks after it invest abroad, there could be a severe impact on the investment and strategic objective of the Company in the medium and long terms.

Mitigation Measures: The Company is always aware of the prevalence of its post international investment risk. It assigns a project owner to be a risk owner to be primarily accountable for investment risk management to be in accordance with RMC risk management policy, framework and guideline. The guideline includes project risk identification, risk impact and likelihood evaluation, risk mitigation setup and execution, and risk management report and review, all of them must be exercised on a regular basis. Should the Company Group manage risk as planned, the likelihood of and/or impact from such risk should reduce. Consequently, impact on the investment objectives and the Company strategic objectives would be reduced substantially.

In addition to all aforementioned risks that may cause the Company to miss its business or investment objectives, it is still encountering the other risks that are, at the time of this report preparation, evaluated to fall within the Company's risk tolerance such as other operational and domestic/international investment risks and foreign exchange risk. These currently acceptable risks may nonetheless cause the Company Group to fail to achieve its business and/or investment critically should any of them were to materialize.

Nevertheless, having a mechanism of the Company Group risk management which is executed in a systematic manner under the Risk Management Committee, the Management Committee and Corporate Risk and Internal Control Function with a risk owner as a frontline executor, it is believed that should the Company manage the existing controls and /or mitigation plans efficiently and effectively, other risks that are evaluated to fall within the Company's tolerance will likely to lessen in their severity and move closer to the Company's risk appetite. In that way, it will enable the Company Group to have a higher chance to achieve business, investment and strategic objectives in both short and long terms.