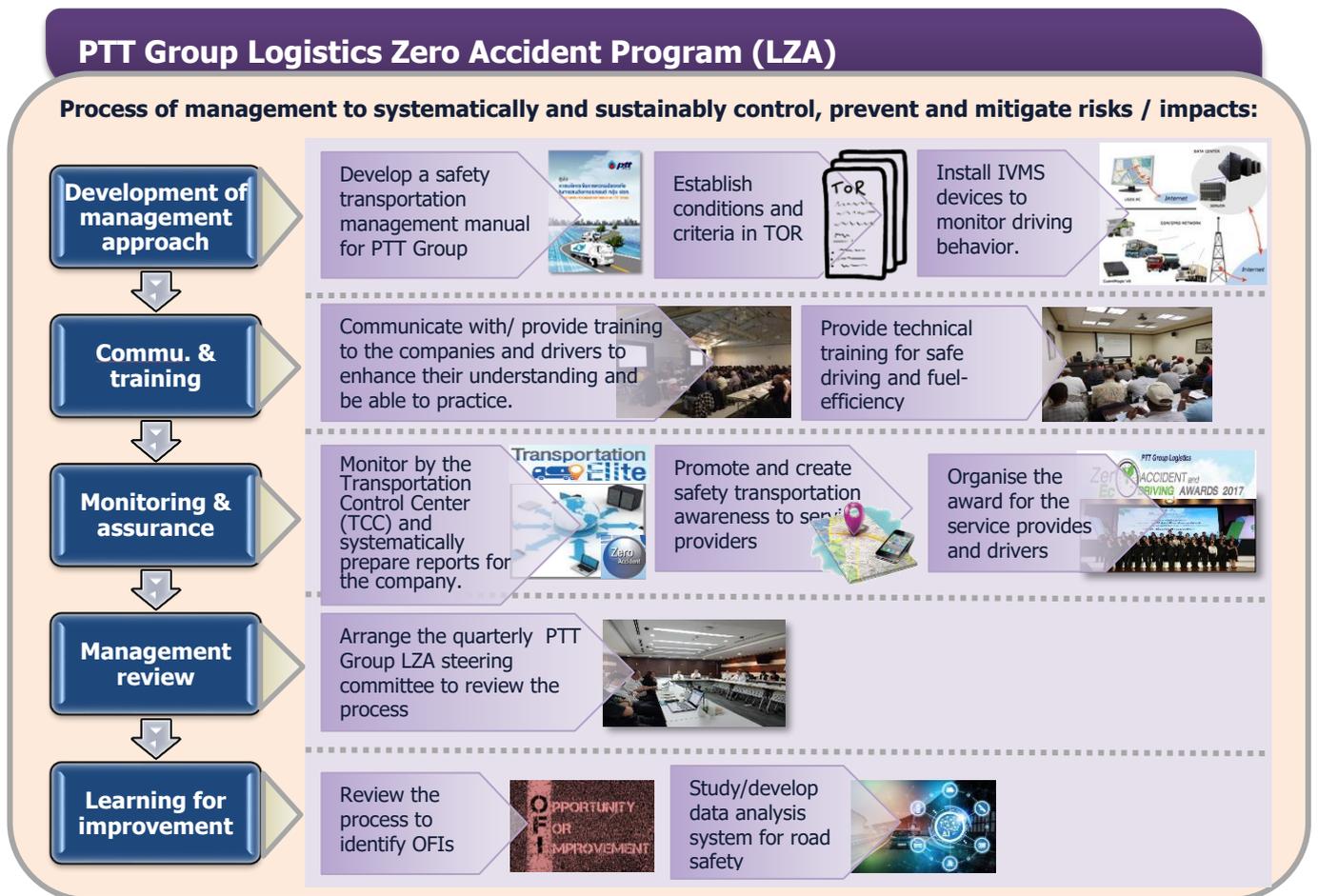


Business Case: Managing Human Rights Risks and Impacts in the Transportation of Petroleum Products of PTT Group

Since 2012, minor to serious traffic accidents caused by the delivery of petroleum products by outsourced transportation companies to PTT Group and its subsidiaries have resulted in lost goods, wasted money and time, as well as an adverse impacts on other road users, properties, the quality of life in the communities, the environment, and numerous other outcomes.

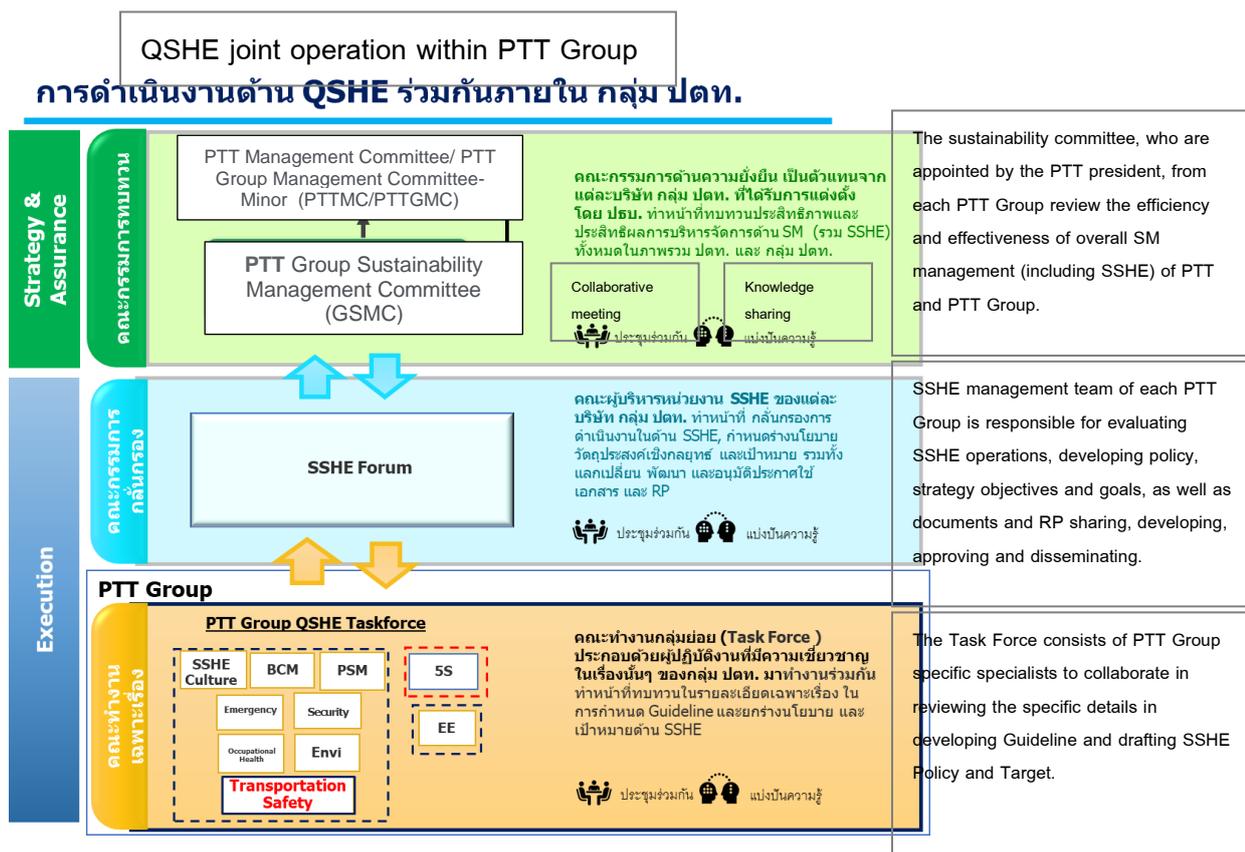
PTT and its subsidiaries believe that petroleum transportation is one of the key supply chain elements. Although this is not PTT Group's own operation, the appropriate measures to effectively monitor, prevent, and reduce any potential risks and negative impact from the contractor's operations shall exist. PTT and its subsidiaries have therefore established the **PTT Group Logistics Zero Accident (LZA)** campaign, which contains the systematic management methodologies as follows:-

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- Forming the Steering Committee, with the vice president of Oil Business Unit serving as a chairman, to set up policies, roadmaps, indicators, annual and long-term goals, and continuously monitor and review the performance. Currently, for the flexibility on operation, the Steering Committee has now been changed to PTT Group Transportation Safety Management Taskforce.
- In 2013, the PTT Group Motor Vehicle Transportation Safety Management Manual was created to serve as a standard and guideline for managing the contractors during the procurement process. Along with the development of the assessment methodologies and assessors, communicating and training activities were also carried out to increase contractor efficiency.
- In 2014, the manual was applied in the contract term of the new contractor. Starting a Journey Risk Management evaluation and a rewarding program to drivers who have outstanding driving behavior.
- In 2015, the In-vehicle Monitoring System (IVMS) (GPS, Camera) was installed to monitor driving behavior. Encouraging the use of rewards and penalties system.
- In 2016, the Transportation Control Center: TCC of the Oil Business Unit was established to enhance the control and inspection of the petroleum transport system. The officers are on duty 24 hours to monitor driving behavior and handle traffic accidents.
- In 2018, the IVMS was improved by installing other additional features, such as a face detection and seeing machine, which is a device for monitoring the driver's iris to assess fatigue during transportation.
- 2019 to 2023: Promoting ECO-Driving practices for PTT and its subsidiaries' petroleum transport vehicles which aim to reduce carbon dioxide and other greenhouse gas emissions.
- 2021 to 2023: Organising the "Risk in Road Safety" activity to encourage and raise awareness of safety transportation among petroleum product transporters with the following processes:
 - The drivers must report, with the determined level of risk, to the system when a risky area along the transportation route is identified.
 - PTT will examine the information provided and assess the risky area based on the severity and accident statistical data of the area. PTT will conduct a detail assessment for the area if the high risk is identified.
 - The results of the evaluation will be used to establish corrective, preventive, or risk mitigation measures if high risk area has been confirmed.
 - The high risk area will be communicated to product transporters through the PTT Group Transportation Safety Management Taskforce working group.

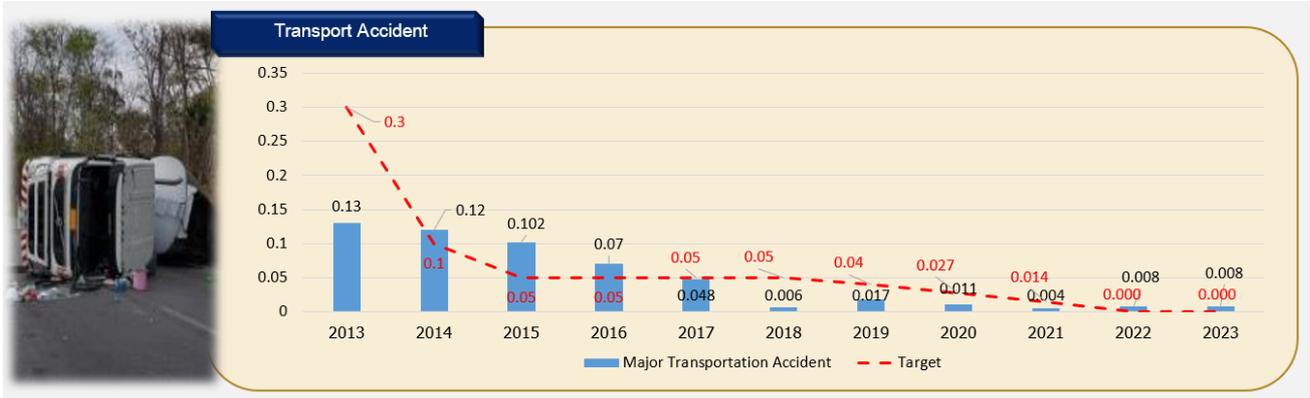
- Drivers and the product transporters who participate the program and met the criteria will be awarded.
- In 2021-2023, research and development on the Road Safety Data Analysis System to further analyze the information derived from the IVMS System for risk level and trend of road accidental risk.
- In 2023, provide e-learning on technical training for safe driving and fuel-efficiency to drivers of the petroleum product transporters, in order to equip the petroleum product transporters with knowledge and also to mitigate impact on the petroleum transportation of PTT group and its subsidiaries.



It is obvious that a committee assists with the screening and impacts assessment prior to implementation at each level. Starting with the Transportation Taskforce who will initially study, review, and analyze the standard, guideline, policies, strategies, and goals of the operation, then presenting to the committee as a process evaluation with the contribution of PTT Group executives in order to accomplish the objective of Zero Accident in Petroleum Product Transportation.

The accident rate for PTT petroleum transportation by road has consistently decreased as a result of the well-organized operation along the supply chain. In comparison to the target of zero times

accident per million kilometres, the current performance is at 0.008 times accident per million kilometres.



In 2022, there are 33 suppliers participated in PTT Group Logistics Zero Accident (LZA) campaign which are covered critical/strategic suppliers in transportation group.