

Annex 1A

Stakeholder Engagement Activities

1A STAKEHOLDER ENGAGEMENT ACTIVITIES

1A.1 OBJECTIVES OF STAKEHOLDER ENGAGEMENT

The objectives of the stakeholder engagement carried out for the Project include the following:

- To build an understanding of the need for the Project and explain the key elements of the Project to stakeholders, to actively seek their views and, address their concerns related to the future Project development and implementation; and
- To ensure transparent, responsive and responsible communications with stakeholders.

1A.2 ENGAGEMENT PERIOD

The engagement with concerned stakeholder groups commenced in May 2016 and the engagement continued throughout the EIA Study.

1A.3 KEY STAKEHOLDERS

Since May 2016, a series of briefings and meetings have been arranged with special interest groups and stakeholders as listed in *Table 1A.1*.

An introductory video, PowerPoint presentation and factsheet were used as tools to inform the stakeholders and enhance their understanding of the Project.

Table 1A.1 Type of Stakeholders Consulted

Stakeholder Type
<ul style="list-style-type: none">• Advisory Bodies• Academia• Fishermen Groups• Green Groups• Think Tanks• Professional Bodies• Legislative Councillors and District Councillors

1A.4 KEY COMMENTS AND SUMMARY OF RESPONSES

This section provides a summary of the key comments and suggestions relating to the Project made by those stakeholders consulted.

1A.4.1 Air Quality

Most of the stakeholders agree the potential exists for the Project to contribute to improving the air quality of Hong Kong by enabling the phasing down of coal-fired power generation. The transition away from coal-fired power

generation was cited as a positive aspect of the Project with some stakeholders highlighting the need for further increasing gas-fired power generation as part of the fuel mix for Hong Kong.

The key views relating to air quality and responses are summarised in *Table 1A.2*.

Table 1A.2 *Key Views and Responses Relating to Air Quality*

Key Views	Responses
<ul style="list-style-type: none"> Supported the Project, given it enables the use of more natural gas for power generation in Hong Kong, which in turn would improve air quality in the long-term, with the added benefit of enhancing reliability/security of gas supply. Agreed that the Project is beneficial for Hong Kong to transition from coal-fired power generation to gas-fired power generation. The Project will help reduce carbon emissions in Hong Kong. 	<ul style="list-style-type: none"> Noted, the Project supports the Government’s fuel mix policy for increasing the use of natural gas for power generation, whose purpose is to improve Hong Kong’s air quality and reduce carbon emissions by phasing down coal-fired power generation.
<ul style="list-style-type: none"> The Project is not anticipated to have an adverse impact on air quality. The EIA Study should assess the air quality impacts during the operation of the Project. 	<ul style="list-style-type: none"> The air quality impact from the operation of the GRs at the BPPS and the LPS, and the LNG Terminal have been assessed and the results are presented in this EIA Report.
<ul style="list-style-type: none"> What are the impacts of boil-off gas? 	<ul style="list-style-type: none"> The air quality impacts during the operation of the LNG Terminal have been assessed and the results are presented in this EIA Report.
<ul style="list-style-type: none"> Will the Hong Kong’s emission control measures to vessels be applied to the visiting LNG carriers? 	<ul style="list-style-type: none"> After entering Hong Kong waters, the visiting LNG carriers shall comply with the relevant Hong Kong regulations, including the use of low sulphur fuel in accordance with the <i>Air Pollution Control (Ocean Going Vessels) (Fuel at berth) Regulation</i>. The relevant requirements are presented in this EIA Report.

1A.4.2 *Hazard to Life*

Common themes from stakeholders included the need to carry out an assessment of the risks from potential hazardous events related to the Project, and the arrangements to be put in place during periods of inclement weather.

The key views relating to hazard to life and responses are summarised in *Table 1A.3*.

Table 1A.3 Key Views and Responses Relating to Hazard to Life

Key Views	Responses
<ul style="list-style-type: none"> The EIA study should assess potential hazardous events (e.g. gas leak, explosion etc.) at the FSRU Vessel. 	<ul style="list-style-type: none"> A Quantitative Risk Assessment of risks associated with storage, transfer, handling of LNG and natural gas and other dangerous goods at the FSRU Vessel in normal and inclement weather or tidal situations has been carried out in accordance with the requirements of the EIA Study Brief and the EIAO-TM, and the results are presented in this EIA Report.
<ul style="list-style-type: none"> How are the risks associated with the pipelines assessed? 	<ul style="list-style-type: none"> A Quantitative Risk Assessment for evaluating the risks associated with the accidental leakage of natural gas from the subsea pipelines during operation has been carried out and the results are presented in this EIA Report.
<ul style="list-style-type: none"> How will the Project manage risks during inclement weather (e.g. typhoons)? 	<ul style="list-style-type: none"> The LNGC and FSRU Vessel will depart their berths at the LNG Terminal and sail to an area of open sea outside HKSAR waters, which is deemed to be a safe and practicable way of managing risks during inclement weather.
<ul style="list-style-type: none"> The EIA Study should consider risks associated with natural hazards (e.g. earthquakes). 	<ul style="list-style-type: none"> The risks of potential initiating external events, including natural hazards such as earthquake, subsidence, tsunami, lightning, storm surge etc., that may result in hazardous events during the operation of the Project have been assessed and the results are presented in this EIA Report.
<ul style="list-style-type: none"> What safety measures will be in place for emergency situations? 	<ul style="list-style-type: none"> Safety management plans and emergency response procedures will be prepared and agreed with the relevant Government Departments.
<ul style="list-style-type: none"> What is the consequence of LNG leakage? 	<ul style="list-style-type: none"> In the event of LNG leakage, the LNG (liquefied at -162 °C) will vaporize and disperse immediately and dissipates into the atmosphere because natural gas is lighter than air. The potential impact of accidental leakage of LNG or natural gas have been assessed and the results are presented in this EIA Report.

1A.4.3

Noise

Stakeholders enquired about the potential impact of noise during the construction and operation of the Project.

The key views relating to Noise and responses are summarised in *Table 1A.4*.

Table 1A.4 Key Views and Responses Relating to Noise

Key Views	Responses
<ul style="list-style-type: none"> Noise from the construction and operation of the Project (e.g. at the Jetty) should be considered and assessed. 	<ul style="list-style-type: none"> The construction and operational noise impacts of the Project have been assessed in accordance with the requirements of the EIA Study Brief and the EIAO-TM, and the results are presented in this EIA Report.

1A.4.4 Marine Ecology and Fisheries

Stakeholders were concerned with the potential impacts to Chinese White Dolphins and Finless Porpoises, marine parks, fisheries resources, and the cumulative impacts from concurrent projects.

The key views relating to marine ecology and fisheries, and responses are summarised in *Table 1A.5*.

Table 1A.5 Key Views and Responses Relating to Marine Ecology and Fisheries

Key Views	Responses
<ul style="list-style-type: none"> The EIA Study should include sufficient coverage of marine ecology and fisheries surveys and related consultation. 	<ul style="list-style-type: none"> Baseline surveys on marine ecology and fisheries have covered the locations of the different project components and were conducted in both wet and dry seasons. The survey methodologies were agreed with the relevant authorities in accordance with the requirements of the EIA Study Brief and the EIAO-TM. The baseline survey results are presented in this EIA Report. Ongoing consultation with relevant stakeholders will be continued in relation to the marine ecology and fisheries aspects of the Project.
<ul style="list-style-type: none"> Have alternative route options been considered for the BPPS Pipeline? 	<ul style="list-style-type: none"> Alternative route options have been considered for the BPPS Pipeline, including “marine only” routes passing north of Soko Islands and passing through the South Lantau Marine Park, as well as “marine-land-marine” route passing through Lantau Island. The evaluation of these alternative routes has been conducted and the findings are presented in this EIA Report.

Key Views	Responses
<ul style="list-style-type: none"> The impacts on marine ecology and fisheries, including Chinese White Dolphins and Finless Porpoises, should be included in the EIA Study, and appropriate mitigation measures and marine mammal monitoring (in particular Finless Porpoise) identified. Underwater noise impact during construction works (e.g. piling) and operation on marine mammals should be examined. Environmental impacts of the construction of the subsea pipelines should be assessed. 	<ul style="list-style-type: none"> Impacts on marine ecology and fisheries, including Chinese White Dolphins and Finless Porpoises, during the construction and operation of the Project have been assessed and the results are presented in this EIA Report. Appropriate measures have been recommended where practicable for mitigating and reducing the potential impacts on marine ecology and fisheries. Appropriate marine mammal monitoring programme has also been recommended and presented in this EIA Report.
<ul style="list-style-type: none"> Will the Project fall within a marine park? 	<ul style="list-style-type: none"> The LNG Terminal and the LPS Pipeline will be located outside existing, proposed and potential marine parks. The BPPS Pipeline route will be located outside existing, proposed and potential marine parks except that it will run parallel to the western boundary of the proposed Three Runway System (3RS) Marine Park which is anticipated to be designated after construction of the BPPS Pipeline.
<ul style="list-style-type: none"> What are the impacts of the Project (e.g. pipeline construction) on marine parks? 	<ul style="list-style-type: none"> There might be potential temporary impacts in the water quality of the marine parks during pipeline construction works. Such impacts have been assessed in accordance with the requirements of the EIA Study Brief and the EIAO-TM and the results are presented in this EIA Report.
<ul style="list-style-type: none"> Cumulative impacts to the marine environment, in particular in the western Lantau waters from concurrent projects should be assessed. 	<ul style="list-style-type: none"> The cumulative impacts from other concurrent projects based on the best available information, particularly during the construction of the pipelines, have been assessed and the results are presented in this EIA Report.
<ul style="list-style-type: none"> How would the FSRU Vessel (e.g. cooled water intake and discharge) affect the fisheries in the vicinity of the LNG Terminal? 	<ul style="list-style-type: none"> Potential impact on the fisheries resources associated with the operation of LNG Terminal has been assessed in accordance with the requirements of the EIA Study Brief and the EIAO-TM, and the results are presented in this EIA Report.

Key Views	Responses
<ul style="list-style-type: none"> What are the impacts associated with anticipated increase of marine traffic during operation on nearby marine life? 	<ul style="list-style-type: none"> During the operation of the LNG Terminal, the FSRU Vessel will depart the Jetty only during inclement weather, and the frequency of LNGC visits on average is expected to be one LNGC arriving every five to eight days subject to actual gas demand, therefore the increase in marine traffic will be minimal. The impacts associated with this minimal increase in marine traffic during operation has been assessed in accordance with the requirements of the EIA Study Brief and the EIAO-TM, and the results are presented in this EIA Report.
<ul style="list-style-type: none"> Will the design of the underwater structures (e.g. foundation piles) of the Jetty be optimized to enhance the artificial reef effect? 	<ul style="list-style-type: none"> At the detailed design stage, optimization of the Jetty's underwater structural design to enhance the artificial reef effect will be explored where appropriate with due consideration of its structural integrity.
<ul style="list-style-type: none"> Will the project consider any additional/enhancement measures on marine conservation/fisheries? 	<ul style="list-style-type: none"> Enhancement measures on marine conservation and fisheries have been considered and presented in this EIA Report.

1A.4.5

Water Quality

Stakeholders were concerned about the potential impacts to water quality from the Project, in particular, the construction of the subsea pipelines and the discharge of cooled seawater from the FSRU Vessel, and the cumulative impacts from concurrent projects.

The key views relating to water quality and responses are summarised in *Table 1A.6*.

Table 1A.6 Key Views and Responses Relating to Water Quality

Key Views	Responses
<ul style="list-style-type: none"> Environmental impacts during the construction of the pipelines should be assessed. 	<ul style="list-style-type: none"> The impacts of suspended sediment elevations associated with the pipeline construction have been assessed in accordance with the requirements of the EIA Study Brief and the EIAO-TM, and the results are presented in this EIA Report.
<ul style="list-style-type: none"> Cumulative impacts to the marine environment, in particular in the western Lantau waters from concurrent projects should be assessed. 	<ul style="list-style-type: none"> The cumulative impacts from other concurrent projects based on the best available information, particularly during the construction of the pipelines, have been assessed and the results are presented in this EIA Report.

Key Views	Responses
<ul style="list-style-type: none"> Will there be any emissions from the FSRU Vessel into the sea? What are the impacts to the marine environment? What are the environmental impacts of the chemicals used in the regasification process? 	<ul style="list-style-type: none"> The EIA Report describes that seawater will be used in the open loop regasification process at the LNG Terminal (to enable the change in state of LNG to natural gas). Only low concentrations of sodium hypochlorite are used in the regasification process and this is added to the seawater intake and outfall systems to control biofouling. The discharge of cooled seawater with residual chlorine will be at a low concentration. The impacts of such seawater discharge on water quality, marine ecology and fisheries have been assessed in accordance with the requirements of the EIA Study Brief and the EIAO-TM, and the results are presented in this EIA Report.
<ul style="list-style-type: none"> Can the Project adopt a closed-loop system during the regasification process? 	<ul style="list-style-type: none"> Closed-loop system is less energy efficient for the regasification process when compared to open-loop system and generates more air emissions. If propane is used as the heat transfer fluid, it may pose potential hazards to the FSRU Vessel and its operations as a result of increasing the explosion and fire risk. The consideration of the closed-loop system alternative is presented in this EIA Report.

1A.4.6

Waste

Some stakeholders were concerned about the handling and disposal of sewage and potential waste generated by the Project.

The key views relating to waste management and responses are summarised in *Table 1A.7*.

Table 1A.7 Key Views and Responses Relating to Waste Management

Key Views	Responses
<ul style="list-style-type: none"> How will sewage and waste generated from the FSRU Vessel be treated, and how will these activities be monitored? 	<ul style="list-style-type: none"> A small amount of sewage is anticipated and will be treated in a treatment unit on board the FSRU Vessel. Waste will be collected, sorted, stored and transferred by barge to designated onshore waste disposal facilities.

1A.4.7

Other Comments

Some stakeholders were also concerned about other aspects of the Project such as impact on tariff, the use of renewable energy, LNG for the marine

transportation sector, compensation related to the fisheries sector, etc. which are not directly related to the Project's environmental impact and thus these will not be included in the EIA Report. Responses were made separately and updates will be provided, if necessary, in the future.