

Project Description for Scoping (PDS)

1. Basic Project Information

1.1 Project Information

1.1.1 Basic Information of Proponent and Project

An overview of key project information for the Shell LNG Import Terminal Project and proponent profile are provided in Table 1.

Table 1 Basic Project Information and Proponent Profile

Name of Project:	Shell LNG Import Terminal Project
Location:	Barangay Libjo, Malitam, and Tabangao Ambulong, Batangas City
Project Category per EMB Memorandum Circular 2014-005:	Category A (ECP), Category A (ECP), Heavy Industries Petrochemical and petroleum-based products (including LNG and CNG) > 30,000 MT
Project Classification per EMB Memorandum Circular 2014-005:	Heavy Industries - Petrochemical and petroleum-based products (including LNG and CNG) \geq 30,000 MT
Project Size:	53 hectares (construction) to 14 Hectares (operation phase)
Project Cost:	Php 3.5 Billion
Project Proponent:	Shell Energy Philippines, Inc. 41 st Floor, The Finance Centre, 26 th Street corner 9 th Avenue, Bonifacio Global City, 1635 Taguig City, Philippines President Mr. Bernd Krukenberg
EIA Preparer/Consultant:	CH2M HILL Philippines Inc. 16 th Floor, Rockwell Business Center Sheridan, Sheridan St. Cor. United St., Brgy. Highway Hills Mandaluyong City 1550

2. Project Description

2.1.1 Project Background

Shell Energy Philippines, Inc. (SEPH) plans to develop a Liquefied Natural Gas (LNG) import terminal (the Project) within the vicinity of the Pilipinas Shell Petroleum Corporation (PSPC) Shell Tabangao Import Terminal. The Project will supply natural gas for power use with the impending depletion of the Malampaya gas field by 2024. With its development and operation, the Shell LNG project will be able to address the anticipated deficit in electrical generation capacity and avoid adverse impacts to economic growth within the region.

Previously, Shell (through Tabangao Realty, Inc. (TRI)) proposed an LNG project in 2013 which was granted an Environmental Compliance Certificate (ECC-CO-1304-0015) by the Department of Environment and Natural Resources-Environmental Management Bureau Central Office (DENR-EMB CO) (Annex 1-1). This previous project was of a larger scale with a Floating Storage Regasification Unit (FSRU) throughput of 6.5 million tons per annum (MTPA), the construction of a new Jetty (Jetty 5), subsea and onshore pipelines, and a larger onshore footprint which included regas, metering, and storage units. However, the project did not proceed to construction and was put on hold due to development costs, market conditions, and other factors. Shell conducted technical studies to investigate more cost-effective schemes to develop the project which included alternative alignments to the new jetty and mooring location of the FSRU as well as alternative drilling and construction methods for the placement of the jetty and subsea pipeline. An Environmental and Social screening study was also conducted to determine the impacts and risks associated with the proposed options. Additionally, SEPH conducted detailed bathymetric and seismic studies within Batangas Bay in relation to the LNG project. SEPH submitted a letter of inquiry to DENR-EMB CO in 2014 to confirm if the proposed options will not require an ECC amendment. A response was sent by the Environmental Impact Assessment and Management Division (EIAMD) stating that the proposed changes require the ECC amendment with targeted updates only for the project description and environmental components that will be impacted by these changes. The proposed amendment did not proceed but the technical studies required for the project's site investigations and Front-End Engineering Design (FEED) continued.

The updated LNG project components consist of a Floating Storage Regasification Unit (FSRU) of the same technology as the previous application with a reduced throughput of 3.8 MTPA, conversion of the existing import facility Jetty 4 from a crude import jetty to a berthing facility for the FSRU, subsea and onshore gas pipeline, Pressure Reduction Metering Station (PRMS), pigging stations, and an ignitable vent. The pipeline will tie-in to the Malampaya Onshore Gas Plant (MOGP). Facilities such as the Onshore Control Room, Substation, Drainage System, and Access Roads will be shared with the existing PSPC facility. Onshore water supply will also be sourced from the existing PSPC facility. In summary, the new proposed LNG Project has significantly less environmental and social impacts than the previously permitted project. Table 2 the present LNG project details.

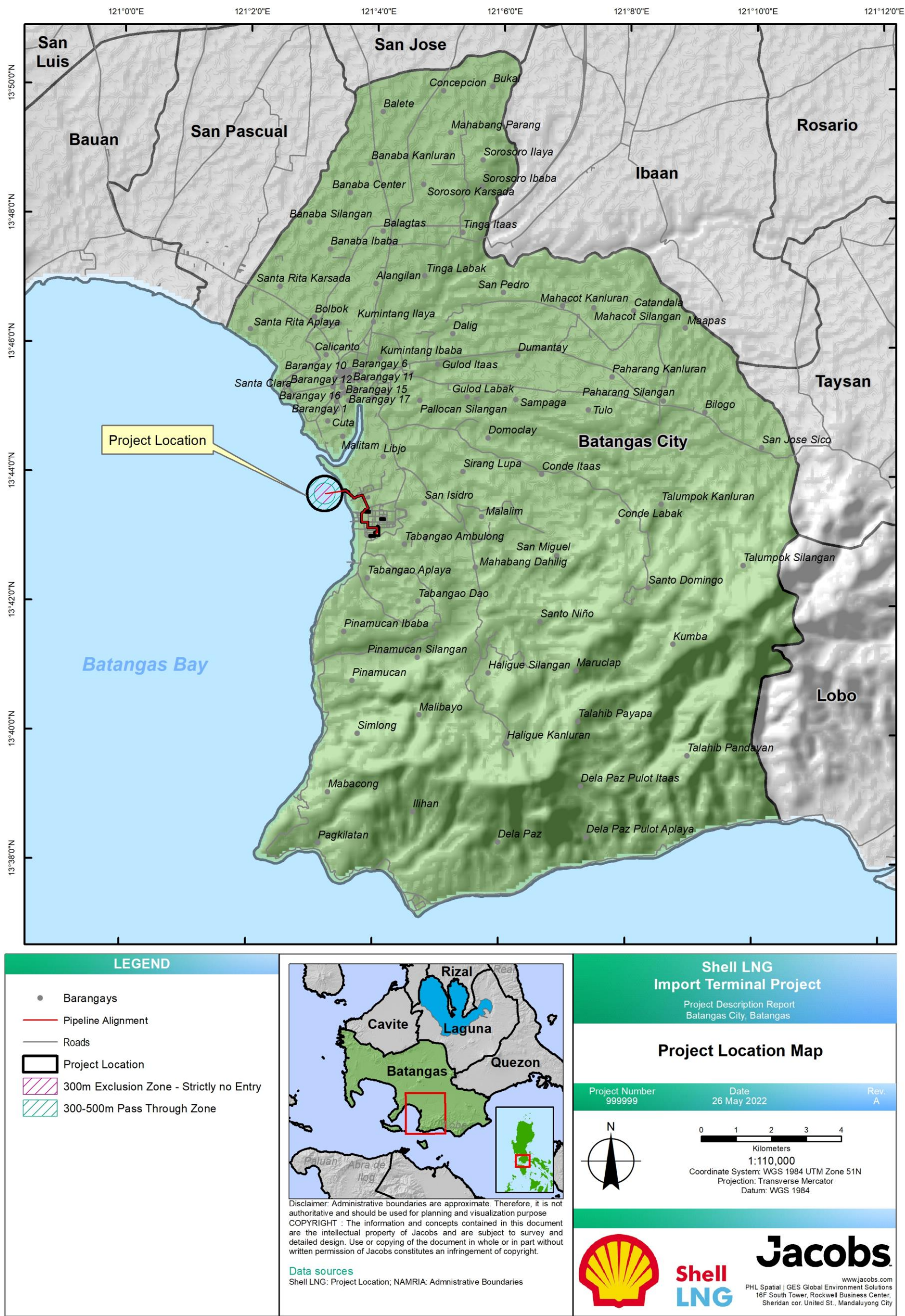
Table 2 Shell LNG Project components

Project Components	Project Specifications
FSRU	Throughput of 3.5 MTPA (peak send out) corresponding to an FSRU capacity of 175,000 m ³ only hence, all models refer to this updated maximum capacity only. There will be no onshore storage.
Berthing and Offloading Facilities (Marine)	Project will utilize existing Jetty 4 previously used by the PSPC refinery. The jetty will be refurbished to make it suitable for FSRU berthing.
Subsea pipeline	700 m with an internal diameter of 12 in. to 16 in. and 36 in. carrier pipeline
Onshore pipeline	16 in. to 20 in. carbon steel coated pipeline approximately 2,800 m long
Onshore Storage	No onshore storage. Natural gas from the FSRU regasification will go direct to pipe to the tie-in at the MOGP.
Other onshore components	Ignitable vent, pressure reduction metering station, pigging stations/receivers
Civil works and utilities	Project will share use of existing substation, control room, access roads, utilities and drainage with the existing PSPC facility.

2.1.2 Project Location and Area

The project will be located within the vicinity of the PSPC import facility in barangays (Brgy.) Libjo, Malitam, and Tabangao Ambulong (Figure 1) within Batangas City in the province of Batangas. The project site boundaries are presented in Figure 2 with the project coordinates. The proposed project has the following main components: an FSRU with a throughput of 3.5 MTPA; existing Jetty 4 that will be converted into an LNG berthing facility; 700 m subsea pipeline, 2.8 km onshore pipeline, onshore facilities which include pigging stations and ignitable vent (within onshore pipeline alignment), and shared facilities with the existing PSPC import facility which includes control room, substation, drains, and access roads to the project site and within the project footprint.

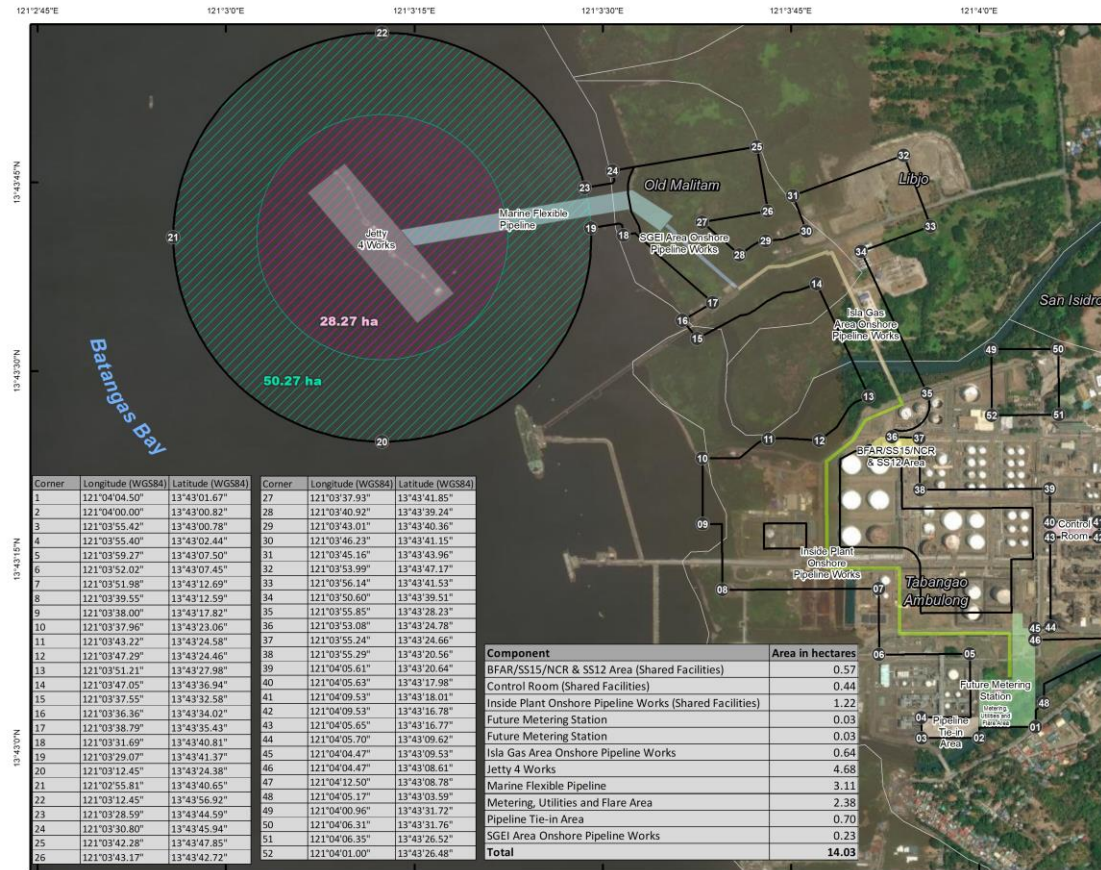
During the construction phase, the project will temporarily have a larger footprint because of temporary laydown areas for equipment, materials, and lodging for workers. The total area of the onshore project footprint during the construction phase is estimated to be 53 ha which will be reduced to 14 ha during the operations phase.



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Figure 1 Project Location Map

Project Description



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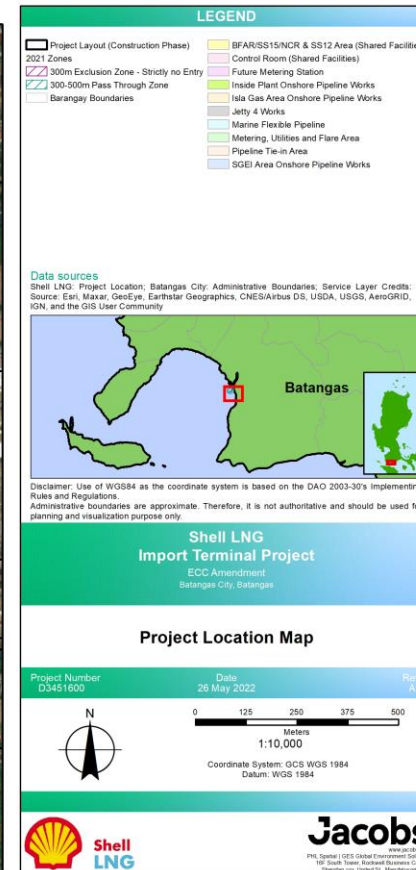




Figure 2 Project Footprint and corresponding coordinates in WGS 84 datum



Figure 3 3D rendering of location of subsea flexible gas pipeline with respect to existing facilities

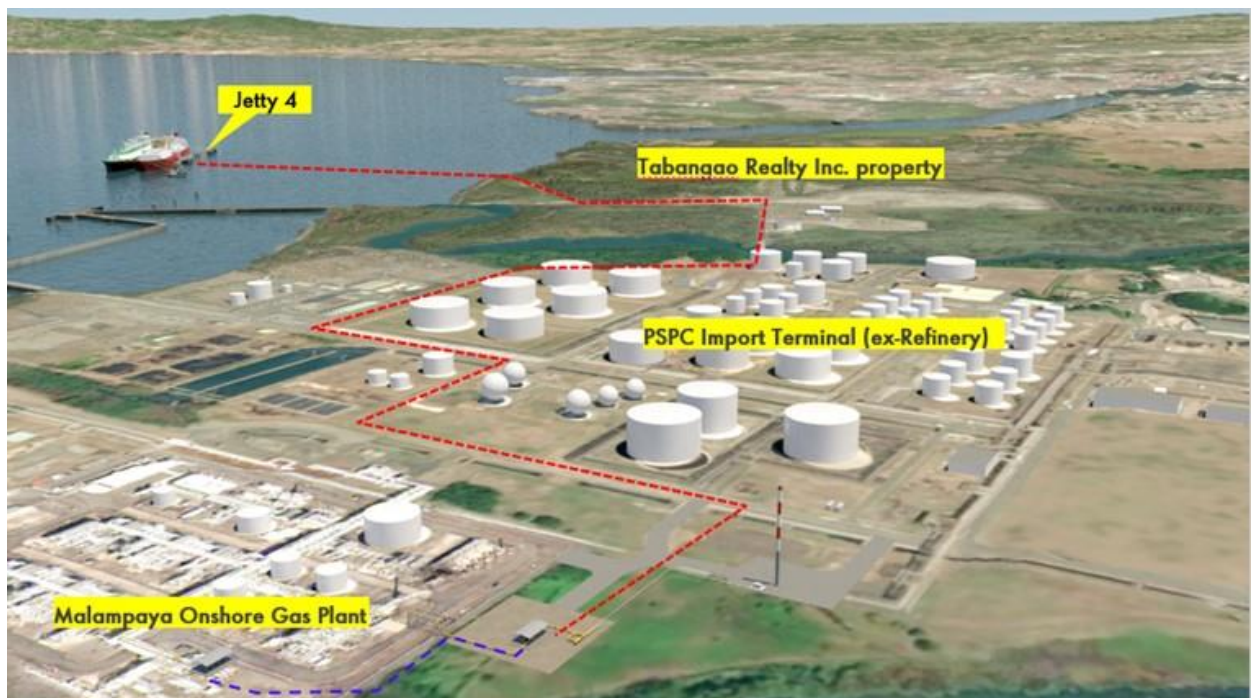


Figure 4 3D layout of pipeline (red line) with respect to existing facilities

2.1.2.1 Authority of Proponent over Project Site

The project components straddle land within existing facilities of Shell covered by different tenorial instruments and ECCs. Land that will be covered by the Project will be secured through agreements with landowners and lease holders. Existing project components and areas which are included in other facilities will be removed from their existing ECCs and included in this present application as summarized in Table 3.

Table 3 Summary of Project Components and Corresponding Proof of Authority

Project Component	Land Area (ha)	Landowner and ECC	Authority over the Area
Offshore area containing Jetty 4 and subsea pipeline	~7.8 ha	<p>Offshore area is owned by government. TRI has applied for a Miscellaneous Lease with DENR-LMB</p> <p>Jetty 4 is previously included in the PSPC Refinery's previous ECC (ECC-CO-1307-0021). PSPC Refinery amendment to convert to Full Import Terminal Facility was approved by EMB Central Office through an amendment letter dated 19 April 2022. Jetty 4 was removed from the PSPC Full Import Facility ECC and will now be a project component of this project's ECC application.</p>	<p>Application for Miscellaneous Lease with DENR-LMB (Annex 1-2 – Copy of Application Form received by CENRO dated 24 May 2021). The MLA partially covers the exclusion zone (16.54 ha out of the 28.27 ha exclusion zone)</p> <p>Once MLA is executed, PSPC will convey ownership of Jetty 4 to TRI.</p> <p>SEPH will sign a Throughput Agreement with TRI to allow the passage of products by SEPH using TRI jetty facilities. TRI and SEPH executed an NTP in January 2021 acknowledging the parties are negotiating a Throughput Agreement (Annex 1-3)</p>
Onshore tie-in of Pipeline and Pipeline Route within TRI	~0.87 ha	Tabangao Realty Inc. (TRI)	<p>Authorization and Consent of Land Use issued by TRI to SEPH (Annex 1-4 Consent of Land Use dated July 1, 2021)</p> <p>Subsequently, SEPH will sign a lease agreement with TRI over the land once project is implemented. Tax declarations of TRI appended as Annex 1-5)</p>

Project Component	Land Area (ha)	Landowner and ECC	Authority over the Area
Area for Metering and Ignitable Vent and onshore Pipeline Route within PSPC import terminal	~2.95 ha	PSPC leases the land from Ayala Corporation. The lease is effective until 03 Dec 2058. The PSPC ECC is undergoing amendment for the conversion of the refinery to an import terminal. The area of the onshore pipeline route, metering, and ignitable vent are removed from the PSPC ECC.	Authorization and Consent of Land Use issued by Ayala Corp. to SEPH. (Annex 1-6 Authorization and Consent Letter from Ayala Corp. dated 25 August 2021) This ECC only covers up to the pipeline tie-in area at the MOGP (Figure 1-3). SEPH will execute an operations agreement with PSPC over the pipeline route and a Pipeline Connection Agreement with SPEX for the MOGP.
Connection point of Onshore Pipeline inside the Malampaya Onshore Gas Plant (MOGP)	~0.70 ha	The MOGP area is leased by Shell Philippines Exploration B.V (SPEX) via an assignment of lease from PSPC which is a portion of the lease from Ayala Corporation.	

2.1.2.2 Exclusion and Safety Zone

An exclusion and safety zone will be implemented around the FSRU for the safety and security of the project, other users of Batangas Bay within the vicinity of the Project particularly nearby fisherfolk communities, and communities adjacent to the project boundaries. To protect the public and FSRU operations, SEPH together with the approval and agreement with relevant government agencies covering this jurisdiction, will implement a 300-m radius exclusion zone from the FSRU where no commercial and fishing vessels will be allowed. Extending from the exclusion zone will be a 200-m limited pass-through zone that will allow limited access of fishing vessels and smaller boats so as not to disrupt the fishing routes going out to the bay of the nearby communities. A portion of the exclusion zone is within the MLA (16.54 ha).

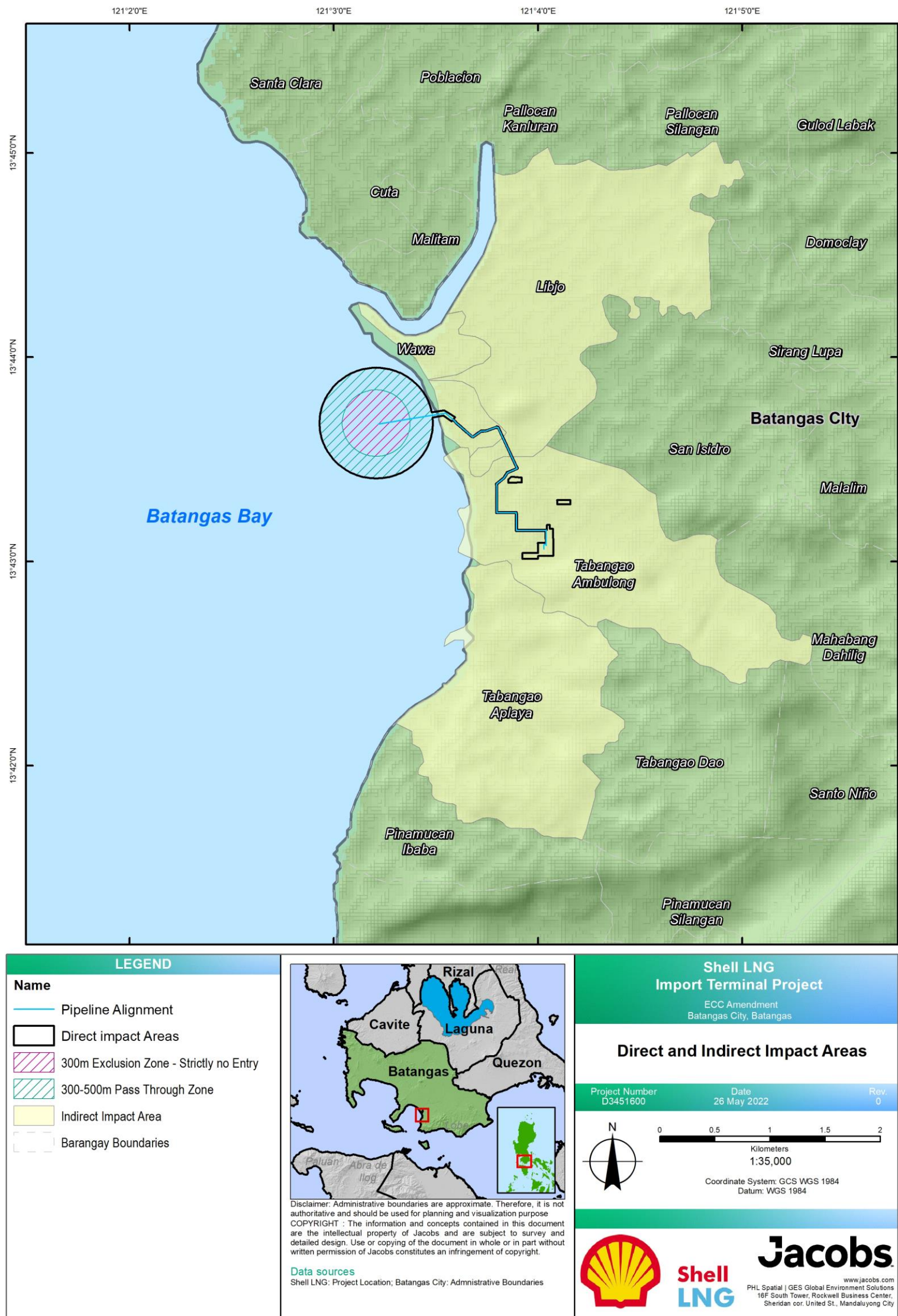
2.1.3 Primary and Secondary Impact Areas

The identification of the Direct (or Primary) and Indirect (or Secondary) impact areas were based on the Revised Procedural Manual of DENR Administrative Order (DAO) 2003-30's definition. Direct impact areas are where the project facilities will be located. Indirect impact areas include areas immediately outside the coverage of the proposed project. The Direct and Indirect Areas of the Project are presented in Figure 5 and defined in terms of Biophysical and Socio-cultural Impacts in Table 4.

Table 4 Primary and Secondary Impact Areas

Area Classification	In terms of Biophysical Impact	In terms of Socio-cultural Impact	In terms of Public/Safety Risks
Direct ImpactAreas	<ul style="list-style-type: none"> The area within the project site boundary consisting at most 14 ha of onshore facilities, and offshore facilities including the FSRU, Jetty 4, exclusion zone, pass-through zone, and subsea pipeline. The 53 ha area within the project site during the construction phase including the area for the onshore facilities including the temporary laydown areas The section of Malitam River where the pipeline will cross from the TRI area to the import terminal and its associated buffer 	<ul style="list-style-type: none"> Brgys. Tabangao Ambulong, Libjo, and Malitam in terms of project site location 	<ul style="list-style-type: none"> In relation to the safety risk offshore surrounding the FSRU, a safety zone and exclusion zone will be implemented to prevent other users of Batangas Bay moving near the FSRU Onshore pipeline alignment from TRI to PSPC import facility requires a safety buffer with respect to initial risk assessment conducted but this area falls within the project footprint and does not encroach populated areas.
Indirect ImpactAreas	<ul style="list-style-type: none"> Coastal areas adjacent to the proposed onshore location of project facilities The Ambulong River which is proximal to the onshore pipeline. Nearshore areas adjacent to the 	<ul style="list-style-type: none"> Brgys. Tabangao Aplaya, San Isidro, and Wawa that may be impacted in terms of the safety and exclusion zone and indirectly benefit from the 	<ul style="list-style-type: none"> The area of Batangas Bay immediately outside the exclusion and safety zone include marine traffic corridors Logistics route onshore passing through secondary impact barangays and main thoroughfares in Batangas City

Area Classification	In terms of Biophysical Impact	In terms of Socio-cultural Impact	In terms of Public/Safety Risks
	offshore project facilities	Project for employment and business opportunities	



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Figure 5 Direct and Indirect Impact Areas

2.1.5 Vicinity and Accessibility of the Project Site

The proposed project is located in the province of Batangas, approximately 110 km south of Metro Manila in the island of Luzon. Travel from Metro Manila to Batangas takes approximately two (2) hours through the South Luzon Expressway-Star Tollway Route. There are multiple daily bus routes to and from Batangas and Metro Manila. The Project is accessible from the islands of Visayas and Mindanao through marine navigational routes through the Batangas International Port. Also known as the Batangas Pier, it is a primary seaport of the Cavite-Laguna-Batangas-Rizal-Quezon (CALABARZON) Region. The onshore facilities of the Project are accessible through existing paved roads within Batangas City. The Site Accessibility Map is presented in Figure 6.

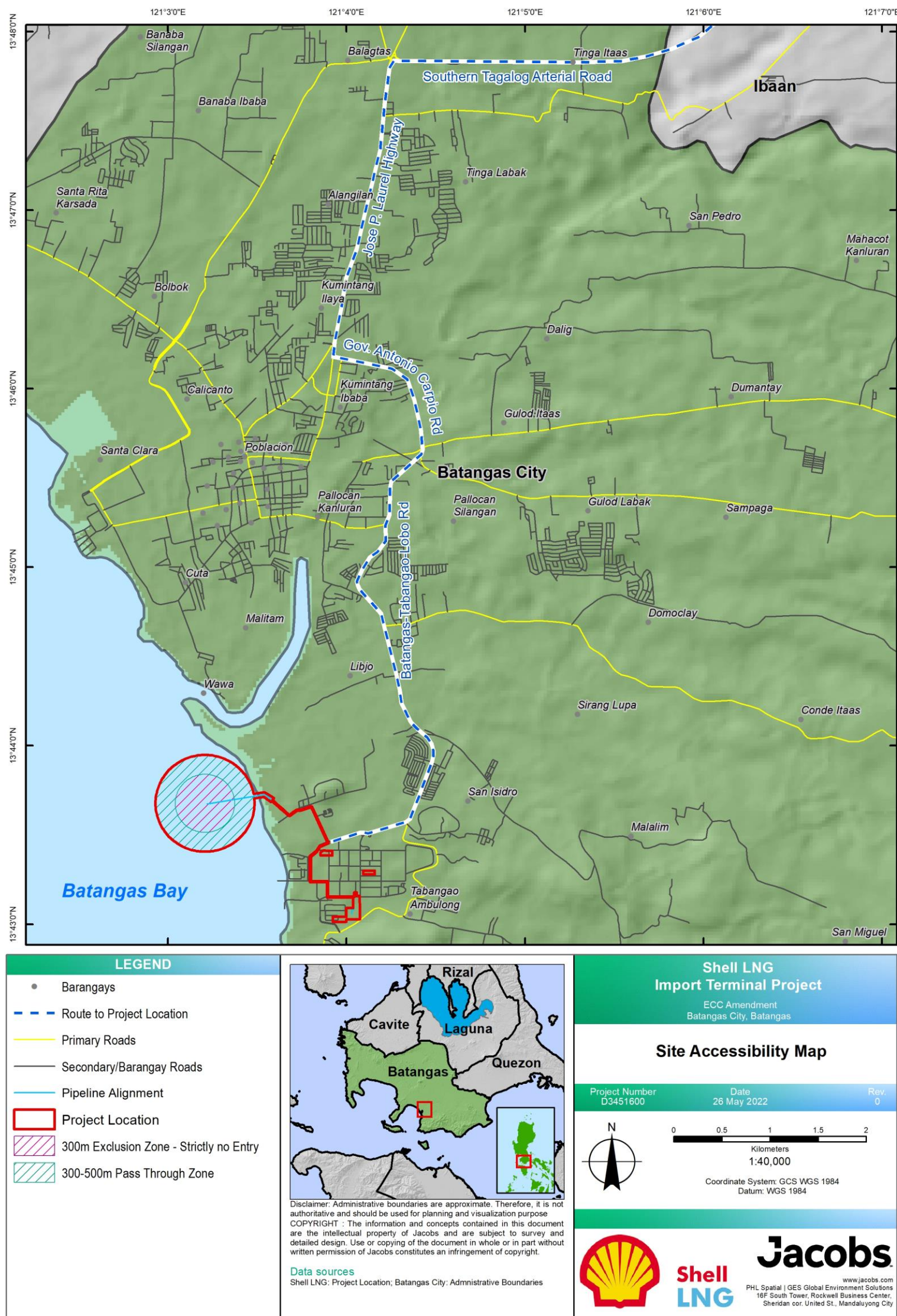


Figure 6 Vicinity and Site Accessibility Map

2.2 Project Rationale

This assessment was primarily based on the projected economic growth and energy consumption and the national and international sustainability commitments of the Department of Energy (DOE) and the Philippine Government, lower greenhouse gas (GHG) emissions of LNG compared to coal, increase in direct foreign investment due to availability of LNG and increase in indirect economic benefits brought about by the Project.

2.3 Economic Growth and Energy Consumption

The Philippine Energy Plan (PEP) 2020-2040 is the second comprehensive energy blueprint supporting the government's long-term vision known as Ambisyon Natin 2040. This updated plan, like its predecessor (the 2018-2040 PEP), reiterates the energy sector's goal to chart a transformative direction towards attaining a clean energy future. The PEP was drafted in the midst of a pandemic which affected the country's economic activities. The PEP is DOE's means to present a track to regain inclusive and equitable economic growth through the development of secure, sustainable, and resilient energy strategies.

The PEP includes policies that are meant to institutionalize programs on renewable energy (RE) development and Energy Efficiency and Conservation (EEC). This includes the introduction of the Liquefied Natural Gas (LNG) portfolio.

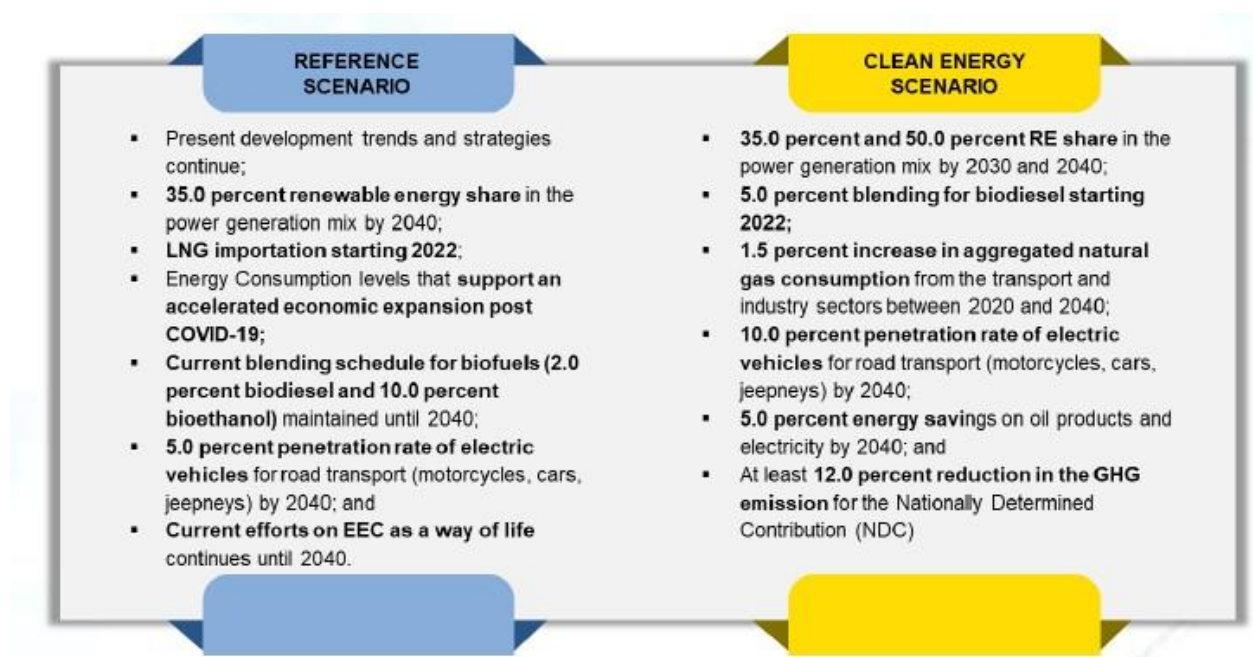


Figure 7 Clean Energy Scenario (CES) Philippine Energy Plan 2020-2040

Under its Clean Energy Scenario (CES), the PEP provides policies and targets on natural gas, alternative fuels, and energy efficient technologies. Included in these targets is LNG importation starting 2023. The CES is deemed instrumental to realize the PEP's vision of energy security, sustainable energy, resilient infrastructures, competitive energy sector, smart homes and cities, and empowered consumers.



Figure 8 PEP 2020-2040 Clean Energy Scenario

The PEP's policies and targets are also aligned to the United Nation's Sustainable Development Goal on Clean Energy (SDG 7) and the Philippines' Nationally Determined Contributions (NDC) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) as a signatory to the Paris Agreement. On 15 April 2021, the Philippines submitted its NDC that aims to reduce the country's 2030 GHG emissions by 75.0 percent as an aspirational target compared with the Business as Usual (BAU) forecast. This comprises of 72.29 percent conditional commitment and 2.71 percent unconditional commitment. The energy sector's GHG emissions only covers the combustion of fossil fuels and other activities related to the production of energy. Based on computed GHG, the energy sector targets a 2.8 percent reduction from 2020-2030, which includes both conditional and unconditional targets,

consistent with the CES of the PEP 2018-2040. This is equivalent to GHG emission reduction of about 45.9 MTCO₂e or about 1.37 percent of the country's NDC target.



Figure 9 United Nations Sustainable Development Goals 2019 (<https://sdgs.un.org/goals>)

The development of the Project will not only satisfy the commitment to SDG 7 but consequently accomplish other SDGs such as alleviation of poverty, decent work and economic growth, sustainable cities and communities, climate action, and protection of the environment (SDGs 12 to 15).

2.3.1 Economic Benefits

Despite the expected depletion of Malampaya, new projects and investments such as infrastructure, manufacturing, power generation among others are expected to be attracted to the country due to this LNG project. The project is also expected to reduce the negative economic impact due to the recent conversion of the Tabangao Refinery into an Import Facility. Alternative uses for natural gas can also be explored. In particular, the presence of an LNGhub close to the country's capital transport of LNG to support industries sprouting in areas around the capital. The potential use of natural gas for transportation and shipping may lessen the Philippines' dependence for conventional fuel aside from promoting the use of natural gas which has significantly lower emissions. The country, especially the Province of Batangas and the areas around the project, will benefit from foreign direct investments and the generation of local businesses as added positive economic impact contributing to national and international goals on sustainability.

2.3.2 Social and Environmental Benefits

It is estimated that the project's construction phase can generate approximately 150 employment opportunities during the construction phase and 50 employment opportunities during the operations phase. Aside from the potential benefits of direct job generation and due to the increase of workforce in

the area of the project site, indirect employment and livelihood in the community will be present in the following sectors:

- Service industry, construction, and electro-mechanical industry
- Catering and hospitality
- Utilization of residential property
- Retail

The project can provide a wider range of indirect employment opportunities, but it also attracts opportunities and businesses from other places in the region.

2.4 Project Alternatives

2.4.1 No Project Option

This option is the scenario that the project will not be pushing forward. In this project alternative, there will be less LNG supply available which may impact the types of fuel available for energy generation and industry. Considering the depletion of the natural gas supply from Malampaya coupled with the no project option, energy producers may opt to develop power plants that use high carbon fuel or alternative renewable projects that require specific site conditions or large land areas to be developed such as solar and wind. Thus, the no project option may have negative effects in the energy industry by not meeting the goal and consequently, impact the economic growth of the country as the energy reliability directly drives industry and transport development.

Developing the project would mean that a steady supply of 3.8 MTPA would be made available for energy production and other industries. It becomes crucial that LNG will be imported to fill the gap that will be left when Malampaya is depleted. The continued and reliable supply of LNG in the country is important for its continued development and for meeting the vision and commitments of the Philippine government.

2.4.2 Environmental Criteria

Environmental considerations were considered in the selection of the LNG import terminal option. The FSRU option was chosen due to its ability to temporarily transfer in the event of strong typhoons or extreme weather conditions at sea; thus, avoiding potential accidents as a result of adverse weather conditions.

Environmental characteristics of the project site were also considered in the site selection. The proposed location of the onshore facilities is already developed as part of the existing industrial area within the proponent's property line; hence, it is anticipated that no conflict will arise in terms of use and that no people will be displaced. The proposed onshore site is also in a topographically flat area wherein hazards associated with slope instability, erosion and mass wasting are expected to be minimal. The proposed location of the project facilities was also evaluated in terms of geohazard susceptibility based on information from government agencies such as the Mines and Geosciences Bureau (MGB) and the Philippine Institute of Volcanology and Seismology (PHIVOLCS). Generally, the project area's susceptibility to tsunami, earthquake-triggered slope failure, rainfall-triggered slope failure, and flooding

are low. With regards to seismic vulnerability and liquefaction potential, the potential ground-shaking and liquefaction susceptibility of the project site is included in the baseline studies and the outcome of which is incorporated within the design and management of the associated facilities and activities such as the jetty refurbishment and installation and specifications of the offshore pipelines.

2.5 Project Components

2.5.1 Overview of Project Components

For the new ECC application, the proposed project will cover the proposed LNG facilities and the conversion of Jetty 4 while adopting the FSRU concept but with reduced capacity of 3.8 MTPA. The proposed project will include major components such as a FSRU, berthing facility, subsea flexible pipeline, onshore rigid pipeline, other onshore facilities which include the ignitable vent, pigging stations, and PRMS, and shared facilities such as the substation, onshore control room, access roads and drains.

The Jetty 4, which is previously under the PSPC refinery ECC, was removed from the amended PSPC import facility ECC. TRI owns and operates Jetty 4. To utilize Jetty 4, TRI and SEPH will execute a Throughput Agreement which will charge a throughput fee per unit of cargo that passes through the jetty. TRI and SEPH executed a NTP acknowledging the parties are negotiating a Throughput Agreement last February 2021.

The key project components and specifications are presented in Table 5.

Table 5 Key Project Components

Component	Location	Details/Specifications	Description	Estimated area/ dimensions/ capacity
FSRU	Offshore	<p>Throughput of 3.8 MTPA. Includes the following (all found within the LNG carrier):</p> <ul style="list-style-type: none"> Sea water intake and outfall <ul style="list-style-type: none"> Intake low pressure pumps – send out In take low pressure pumps – re-export LNG arms or cryogenic hoses Vapor return arms or cryogenic hoses Re-gas skids HP pumps Boil off gas (BOG) handling system Minimum Send-Out (MSO) compressor Sea water system Power Generation (main engine, emergency generator, auxiliary boiler, gas combustion unit) Vents for Cargo system and Fuel Gas system safety protection and system maintenance Vents for emergency situations (consisting of low-pressure vent masts, high pressure vent mast, diesel tank vent, and sewage treatment plant vent) Leak detection system Effluent treatment for onboard treatment of influent domestic wastewater Bilge water tanks Riser hang-off balcony (FSRU connection for transfer of LNG) Riser or loading arms connecting to Jetty 4 for transfer of LNG Control Room 	<ul style="list-style-type: none"> Seawater is used as a cooling medium for main and auxiliary plant. It is then redirected to cargo system vaporizers to regasify LNG. The vaporizer units are heated by seawater and there is an intermediate propane circuit in between seawater and LNG to avoid freezing. The seawater does not come directly in contact with propane and heat is transferred through a titanium plate type heat exchanger assembly before it is discharged. Sea water will also be used for ballast to stabilize the ship during loading and discharging. Vapor return arms or cryogenic hoses are used to transfer the LNG from the carrier to the FSRU. HP pumps are involved in HP regasified LNG send out. BOG is gasified LNG due to external temperature influence. BOG can be sent along with LNG re-vaporized by the heat exchanger. MSO Compressor is the system for collecting the evaporated gas from the LNG storage on the FSRU, compress it to the desired pressure and feed the discharge header, so that minimum gas is sent out. Vents will be used for Cargo system and Fuel Gas system safety protection and system maintenance. Venting will only be conducted during emergencies in case other pressure build up relief systems fail and if required during maintenance. Based on this description, the use of these vents is very limited and not part of regular operations. Vent mast tips are 35 m above the water line. The low-pressure vent masts are connected to the 	<ul style="list-style-type: none"> Overall length – 294 m Length between perpendiculars 282 m Breadth, moulded 46 m Depth, moulded 26 m Depth to Trunk deck (moulded) 33 m Draught (design), moulded 11.6 m Draught (scantling), moulded 12.6 m <p>Tank capacities (100% full):</p> <ul style="list-style-type: none"> Heavy fuel oil and/or Marine diesel oil tanks including settling and service tanks – 5,200 m³ Marine gas oil tank including settling and service tanks – 500 m³ Freshwater tanks – 400 m³ Water ballast tanks including aft peak tank – 53,000 m³ Oily bilge water holding tanks – 80 m³

Component	Location	Details/Specifications	Description	Estimated area/ dimensions/ capacity
			<p>cargo tanks through mechanical pressure safety valves.</p> <ul style="list-style-type: none"> These vent masts are installed for emergency tank protection. The vent mast protecting cargo tank 1 is also connected to the common gas header for all cargo tanks and could be used for relief of pressure build up if other means (such as fuel, regasification, pressure build up margin, etc.) fail. The vent mast protecting tank 1 is also connected to the main engine gas header venting arrangement. After a gas trip on the Main engines the Engine room gas header will be purged with Nitrogen to this forward vent. The high-pressure vent mast is connected to the high-pressure parts of the regasification plant. This vent is not expected to be used as other means of pressure relief are present (such as fuel, regasification, pressure build up margin etc.). The vent is present in case other means of pressure relief fails or in some cases of maintenance. 	
Jetty 4	Offshore	<p>Former Jetty 4 will be decommissioned and converted to an LNG berthing facility instead of constructing a new Jetty. Scope includes removal of all hydrocarbon equipment used on Jetty 4 (piping, marine loading arms) and associated control systems.</p> <p>Refurbishment scope includes structural upgrades to the Jetty 4 structure, new mooring, and berthing equipment (quick release hooks and fenders) and associated repair works to the jetty structure. Up to 2 MLA or unloading hoses to connect Jetty 4 to FSRU. Limited to no topsides equipment on the jetty 4 with unmanned operation mode.</p>	<p>The existing Jetty 4 will be converted into an LNG Berthing Facility. The jetty berth will consist of four mooring dolphins and four breasting dolphins that will carry the FSRU with its bow facing the sea so that it can leave the berth in the event of an emergency dry dock. Like other berth structures, breasting dolphins must have been fitted with energy-absorbing fenders to comfortably berth and moor the full extent of the FSRU. Mooring dolphins will be fitted with quick release mooring hooks, access stairs and interconnecting walkways with safe handrails. During LNG unloading/offloading, LNG carriers would berth along the FSRU. Unloaded LNG will then be deposited in the containment tanks of the FSRU prior</p>	<p>No structural and dimension changes. Present dimensions in meters is approximately 380 m x 30 m.</p>

Component	Location	Details/Specifications	Description	Estimated area/ dimensions/ capacity
			to regasification.	
Subsea Pipeline	Offshore	Subsea HP flexible gas pipeline	The offshore pipeline will consist of a riser (dynamic) and a buried section to shore with a new shore crossing. The burial depth would be at least 1 m. Close to the shore crossing when onshore, the offshore pipeline transitions into rigid steel buried carbon steel pipeline. Both onshore and offshore the pipelines are buried using natural backfill materials. At the shore crossing area and onshore if required to manage the soil liquefaction risk, the natural backfill will be substituted by engineered backfill consisting of medium to coarse grain sand, combined potentially with gravel and geotextiles	Approximately 700 m long 12 in. to 16 in.diameter with 36" carrier pipe Spoils from dredging estimated to be 45,000-80,000 m ³ . Spoils will be placed near dredge channel and be used to cover pipeline.
Power and Communication Cable	Offshore	Power and communication cable consisting of copper for the power cables, polymeric insulation materials and fillers, fiber optic (FO)cable and steel armor wires.	Dredging and backfilling will be required for the installation of the subsea pipeline and power/signal cable to jetty 4. To be located offshore parallel to the subsea pipeline from Jetty 4 to the shore and will be installed through a dredging operation.	700-800 m
Onshore Facilities	Onshore Brgy. Libjo	Pressure Reduction Metering Station (PRMS) including associated utilities such as instrument air and nitrogen.	A PRMS is a combination of onshore facilities consisting of piping, filters, and other equipment necessary for the metering function, particularly for flowrate measurement and quality sampling. It can also perform additional treatments, such as pressure reduction, filtration, and flow control by means of flow control valves. Regasified LNG will then be monitored via several metering stations prior to distribution to potential consumer/s. No LNG will be transferred from the FSRU to the Jetty 4 or onshore.	
		Ignitable vent	Vents are usually used at regular maintenance and safety purposes; gas is sent for flaring for safety of workers working on the plant and pipeline.	H=18 m, D=12 in, On demand ignition

Component	Location	Details/Specifications	Description	Estimated area/ dimensions/ capacity
		Pigging stations to inspect pipeline	Pigging stations are integrated with the pipeline system. In pipeline transportation, pigging is the practice of using pipeline inspection gauges, devices generally referred to as pigs or scrapers, to perform various maintenance operations. This is done without stopping the flow of the product in the pipeline.	
		Back-up generator	Type of engine – four-stroke diesel fuel 6-cylinder inline type	Rating – 250 kVA, 200 eKw @ 0.8PF Voltage – 440 V Frequency – 60 Hz
		Firewater will be provisioned from PSPC import facility.		
Onshore Pipeline	Onshore	Carbon steel coated onshore HPgas pipeline		2,800 m long 18 in. to 20 in. diameter
Onshore Storage Facility	Onshore	No onshore LNG and/or gas storage. The gas will be direct to pipeline at flow rate of 350 MMSFCD.		
Shared Facilities with PSPC	Onshore, Barangay Ambulong	<ul style="list-style-type: none"> Substation Onshore Control Room Access roads Drainage system 	Access roads are considered shared facilities with PSPC since the existing road network within the import facility will also be used by the LNG project for access to its onshore project components. However, the maintenance, management, and monitoring within this road network will remain with PSPC as utilization of the LNG project during the operations phase will be minimal. Similarly, the existing drainage lines are considered shared facilities to receive surface run-off/drains from the onshore components of the LNG project during construction. The maintenance, management, and monitoring will remain PSPC as the onshore components will not generate any significant waste stream.	
	Onshore, Barangay Malitam and Barangay Libjo	<ul style="list-style-type: none"> Access roads Drainage system 		
Other Components		Fire and gas detection system and Emergency Shutdown	Sufficient fire and gas detectors are provided on strategic location in jetty, near shore and metering area.	

Component	Location	Details/Specifications	Description	Estimated area/ dimensions/ capacity
	Onshore	Firefighting system integrated in existing import facility system	<p>Detectors include flammable gas detector, flame detector and Manual Alarm Call Point (MACP) in the metering area. Executive actions are linked to confirmed fire and gas detection, i.e., automatic activation of shutdown valves, in order to control the loss of containment. Considering the foreseen scenario, reliable detection system and immediate isolation have important roles in reducing the consequences of the hazards expected in the facility.</p> <p>In the metering area, systems to alert personnel are also provided to notify events.</p> <p>Fire and gas detection system in all areas of the project is monitored in Onshore Control Room while common fire alarm signal will be sent to the FSRU control.</p>	
		Leak detection system integrated into existing import facility control and operating system	<p>Leak detection system will be provided to monitor pressure profile along entire pipeline and to detect potential of gas leak from pipeline. The leak detection system will trigger an alarm but not connected to plant shut down. Leak detection will only alert the operator and necessity of shut down shall be investigated by operator.</p>	

2.5.1.1 Floating Storage and Regasification Unit (FSRU)

FSRU is an LNG storage ship that is capable of onboard regasification and can supply LNG directly into the gas network. The converted HP gas will then be transported to the shore using HP subsea gas pipeline. This structure resembles a marine vessel that would be jetty moored except during maintenance operations and severe weather conditions. Based on the preliminary design, the FSRU will have a dimension of approximately 294 meters by 46 meters. No on-site construction for the FSRU will be done since the FSRU is an existing vessel that will be leased from another company and project-specific modifications for the FSRU will be done in a shipyard ahead of its arrival at Jetty 4. Figure 10 shows a typical layout of the vessel. Table 6 provides the nominal dimensions.

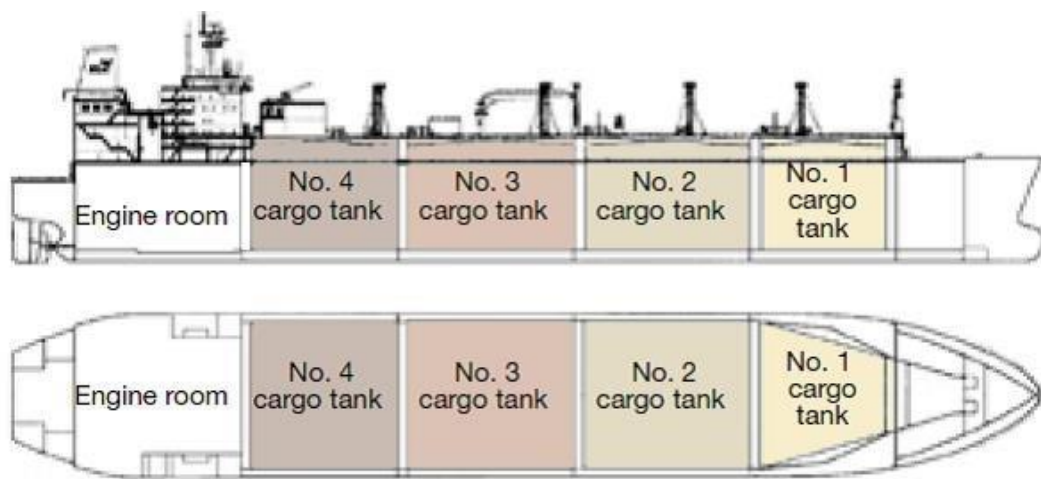


Figure 10 FSRU internal layout

Table 6 Main Dimensions

Dimension	Length (m)
Length, overall	294
Length, between perpendiculars	282
Breadth, moulded	46
Depth, moulded	26
Depth to trunk deck (moulded)	33
Draught (design), moulded	11.60
Draught (scantling), moulded	12.60

The deadweight in seawater (specific gravity of 1.025) is about 80, 500 metric tons at the design draught of 11.60 m.

Cargo tank excluding dome space capacities (100% full) together with the cargo tank capacity when geometrically calculated at the atmospheric condition (20°C atm. pressure) are presented in Table 7.

Table 7 Cargo Tank Capacities

Cargo Tank Number	Approximately 100%	Approximately 98.5%
1	26,510 m ³	26,112 m ³
2	47,830 m ³	47,112 m ³
3	47,830 m ³	47,112 m ³
4	47,830 m ³	47,112 m ³
Total	170,000 m ³	167,450 m ³

Table 8 Tank Capacities (100% full)

Components	Capacity
Heavy fuel oil and/or marine diesel oil tanks including settling and service tanks	5,200 m ³
Marine gas oil tank including settling and service tanks	500 m ³
Fresh water tanks	400 m ³
Water ballast tanks including aft peak tanks	53,000 m ³
Oily bilge water tanks	80 m ³

The vessel is designed to operate as an ocean-going vessel constructed as a type 2G ship specified in the IGS code suitable of carrying LNG of which vapor pressures are within the range from atmospheric pressure to 70 kPa g in FSRU mode. The vessel is of the type single screw electric motor driven liquefied gas carrier having continuous deck with trunk, sunken stern deck, transom stern, and bulbous bow. Three regasification trains with six booster pumps in a skid design are mounted on deck in front of the compressor room. High pressure (HP) natural gas for regasification from the regasification skid will be done by flexible riser configuration to the seabed and further by pipeline to shore. The cargo area consists of four (4) cargo tanks with Gaz-Transport & Technigaz (GTT) Mark III Membrane system. The Mark III membrane system is a cryogenic liner directly supported by the ship's inner hull. The liner is composed of a primary metallic membrane positioned on top of a pre-fabricated insulation panel including a complete secondary membrane. The primary membrane is made of corrugated stainless steel. It contains the LNG cargo and is

directly supported by and fixed to the insulation system. The orthogonal corrugated pattern enables the membrane to withstand any thermal or hull deflection stresses and to work under the fatigue limit. The secondary membrane is made of a composite laminated material consisting of a thin sheet of aluminum between two layers of glass cloth and resin. It is positioned inside the prefabricated insulation panels between the two insulation layers. The insulation consists of a load-bearing system made of pre-fabricated panels in reinforced polyurethane foam including both primary and secondary insulation layers and the secondary membrane. The panels are bonded to the inner hull by means of resin ropes which serves a dual purpose of anchoring the insulation and spreading the load evenly. Figure 11 to Figure 14 illustrate the features of the membrane tank. The two independent insulation spaces are continuously flushed with nitrogen gas. The integrity of the membranes is permanently monitored by detection of hydrocarbon in the nitrogen (Figure 14)

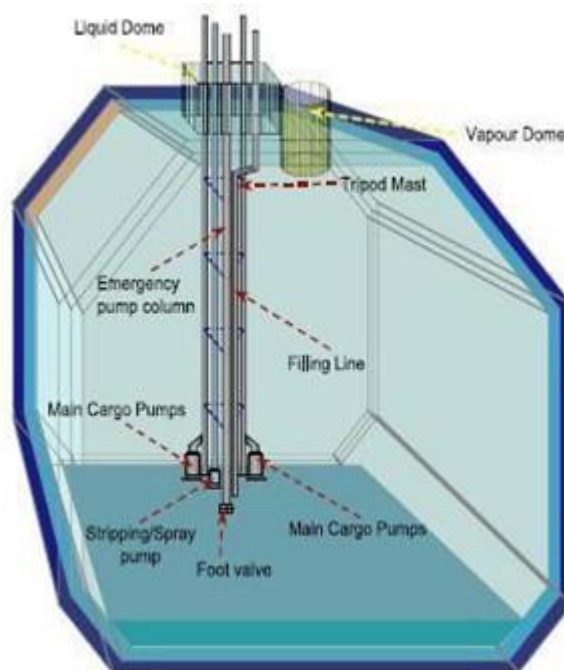


Figure 11 Key Elements of Membrane Tank

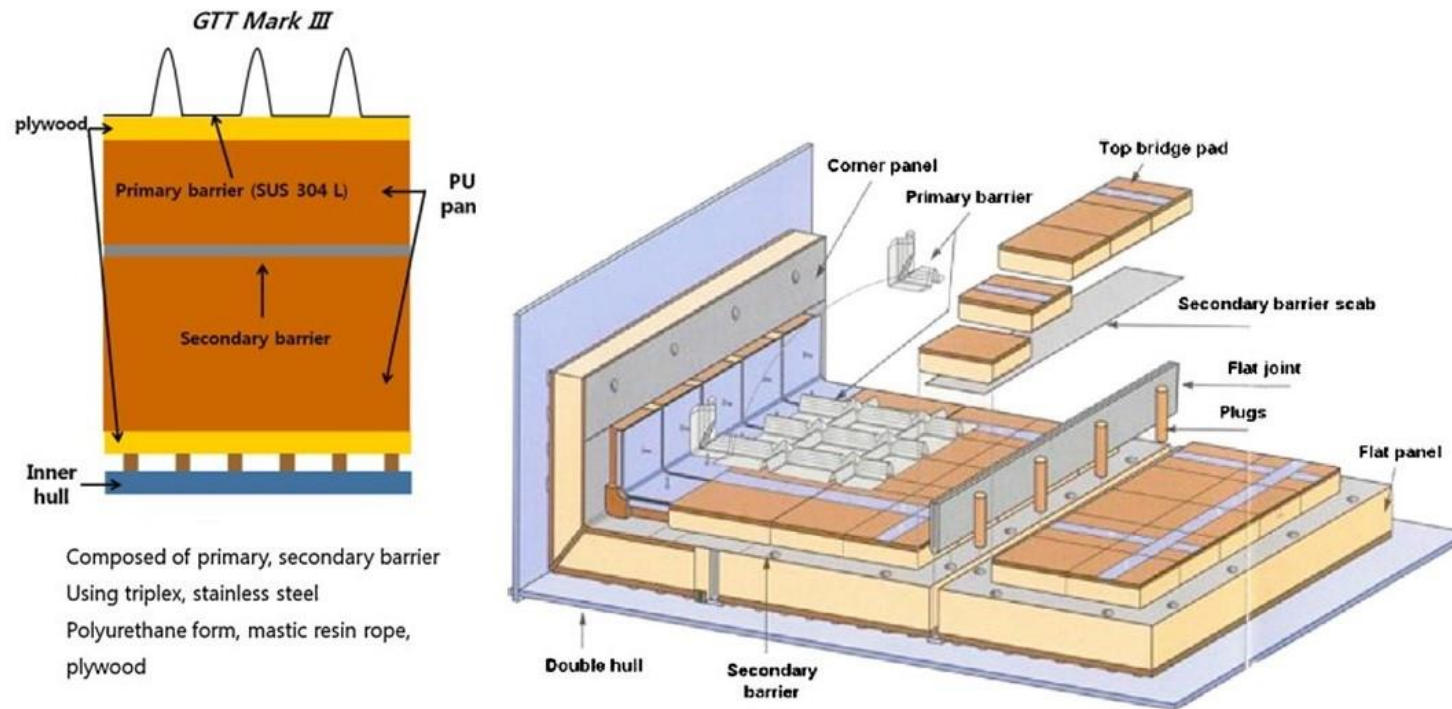


Figure 12 GTT Mark III Membrane



Figure 13 Actual Interior Mark III (GTT Gaz-Transport & Technigaz)

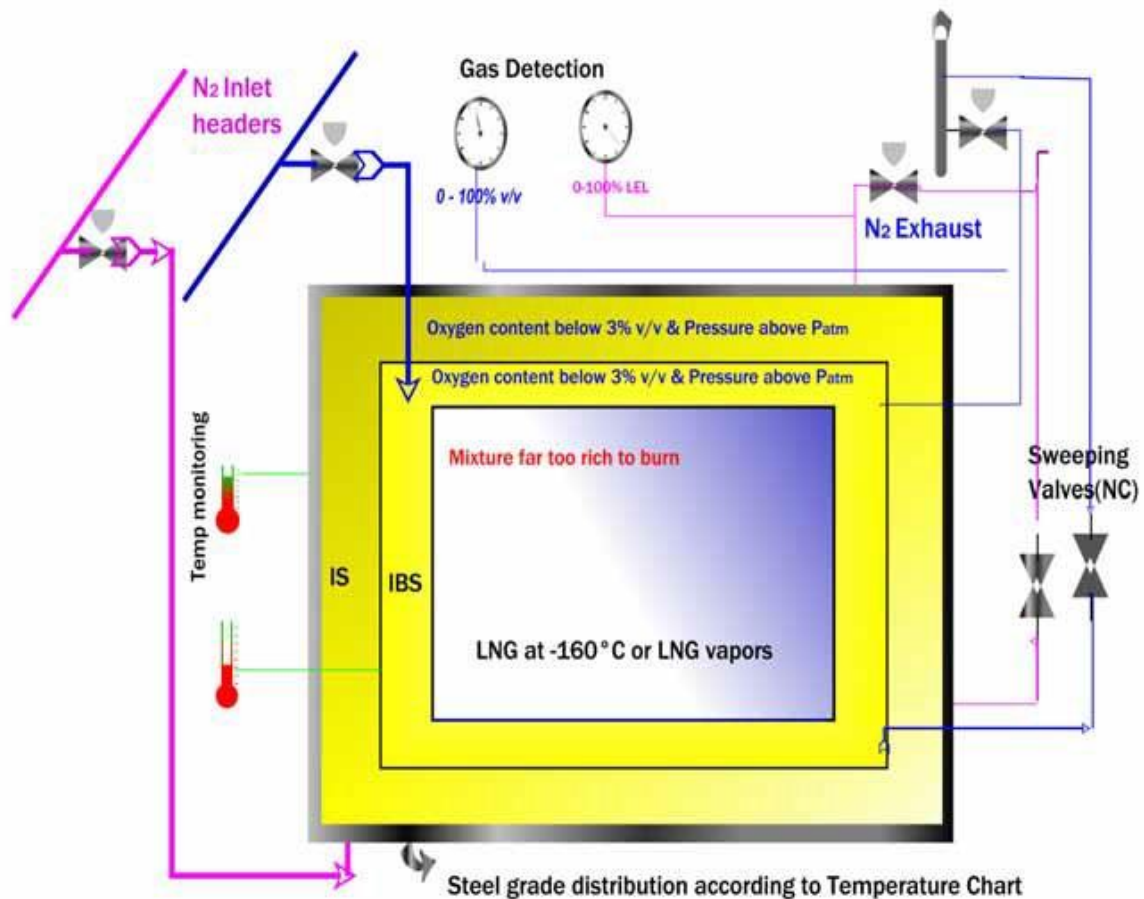


Figure 14 Membrane containment integrity detection

2.5.1.2 FSRU Water Use

The FSRU water use is presented in Table 9. The FSRU will need water to several consumers for different purposes. The main consumer will be sea water needed to vaporize LNG to NG. Seawater will also be used for fire water, water curtain, and ballast and cooling of engines and auxiliary machinery systems. Cooling water for the used for the engines and auxiliary systems (heated water) will in normal operation directed to the regasification cycle, reducing the overall water consumption instead of directly discharge to sea. The FSRU will use sea water and will generate its own fresh water for technical use. Potable water use and water that cannot be produced from seawater on board will be provided by a supply vessel/barge.

Table 9 FSRU Water Use

Water Type	Water Source	Maximum amount of water to be obtained (m ³ /day)	Maximum amount of water to be obtained (m ³ /hr)	Water Usage	Temperature difference (ΔT) at discharge	Discharge Content	Amount Discharge	Remarks
Consumptive Water Use								
Potable Water	Supply Vessel	18	1	For accommodation within FSRU	-	Black water Grey water	2 m ³ /day 17 m ³ /day	Potable water consumption will generate black and grey water. The sum of the estimated amounts of black and grey water are slightly higher than the potable water consumption since the sewage will also contain solids. The FSRU carrier will be equipped with a sewage treatment unit sized to suit the FSRU carrier living accommodations capacity. The discharge from the sewage treatment unit and other accommodation drains will be collected by a waste barge.
Intermittent/ Non-consumptive water use								
Technical Water	Seawater	1,250	1,250 once every 2 weeks only	Fire water	-			Fire water system is tested 1 hour every 2 weeks

Water Type	Water Source	Maximum amount of water to be obtained (m ³ /day)	Maximum amount of water to be obtained (m ³ /hr)	Water Usage	Temperature difference (ΔT) at discharge	Discharge Content	Amount Discharge	Remarks
Technical Water	Seawater	3,800	240	Water curtain	-			The purpose of the water curtain is to ensure that the hull of the vessel does not get into direct contact with the LNG in the event of a spill. Steel becomes brittle when cooled to very low temperatures and the hull could therefore crack.
Technical Water	Seawater	53,000	5,200	Ballast water during loading	-	Particulates, oil and grease	500 m ³ /hr depending on need	Ballast will be taken in and out of vessel to maintain stress and stability while loading and discharging. At nominal capacity expect loading every +/-5days could result in around 72 changes of ballast per year. During regas operations ballast will be pumped out at a maximum rate of about 500 m ³ /hr and could be treated in line with: (MEPC. 174(58) or MEPC.125(53))
Technical Water	Seawater	28,800	1,200	Cooling of engines	-	Marine Growth Prevention System generates	Sodium hypochlorite <0.01 ppm	In normal operation the used cooling water from the engines and auxiliary system will be sent to the

Water Type	Water Source	Maximum amount of water to be obtained (m ³ /day)	Maximum amount of water to be obtained (m ³ /hr)	Water Usage	Temperature difference (ΔT) at discharge	Discharge Content	Amount Discharge	Remarks
						sodium hypochlorite.		regasification skid before discharge to sea.
Technical Water	Seawater	31,200	1,300	Cooling of auxiliary machinery systems	-	Marine Growth Prevention System generates sodium hypochlorite.	Sodium hypochlorite <0.01 ppm	Redirected into regasification plant
Freshwater	Seawater	15	0.8	Make up of feed water to steam boilers	-	Brine		
Continuous Water Use								
Technical Water	Seawater	336,000	14,000	Heating for regasification operation	-7 °C	Marine Growth Prevention System generates sodium hypochlorite.	Spent cooling seawater 14,000 m ³ /day Sodium hypochlorite <0.01 ppm	Includes sea water used for cooling of engines and auxiliary systems in normal operation. The sea water consumption here reflects 500 MMSCFD sendout, i.e., all four 3,500 m ³ /hr sea water lifting pumps for regas system in operation.

The main seawater is abstracted through one of the two sea chests situated on different levels at each side of the engine room. The position of the sea chests is shown on the figure below (rear view of the fore section of the engine room) (Figure 15).

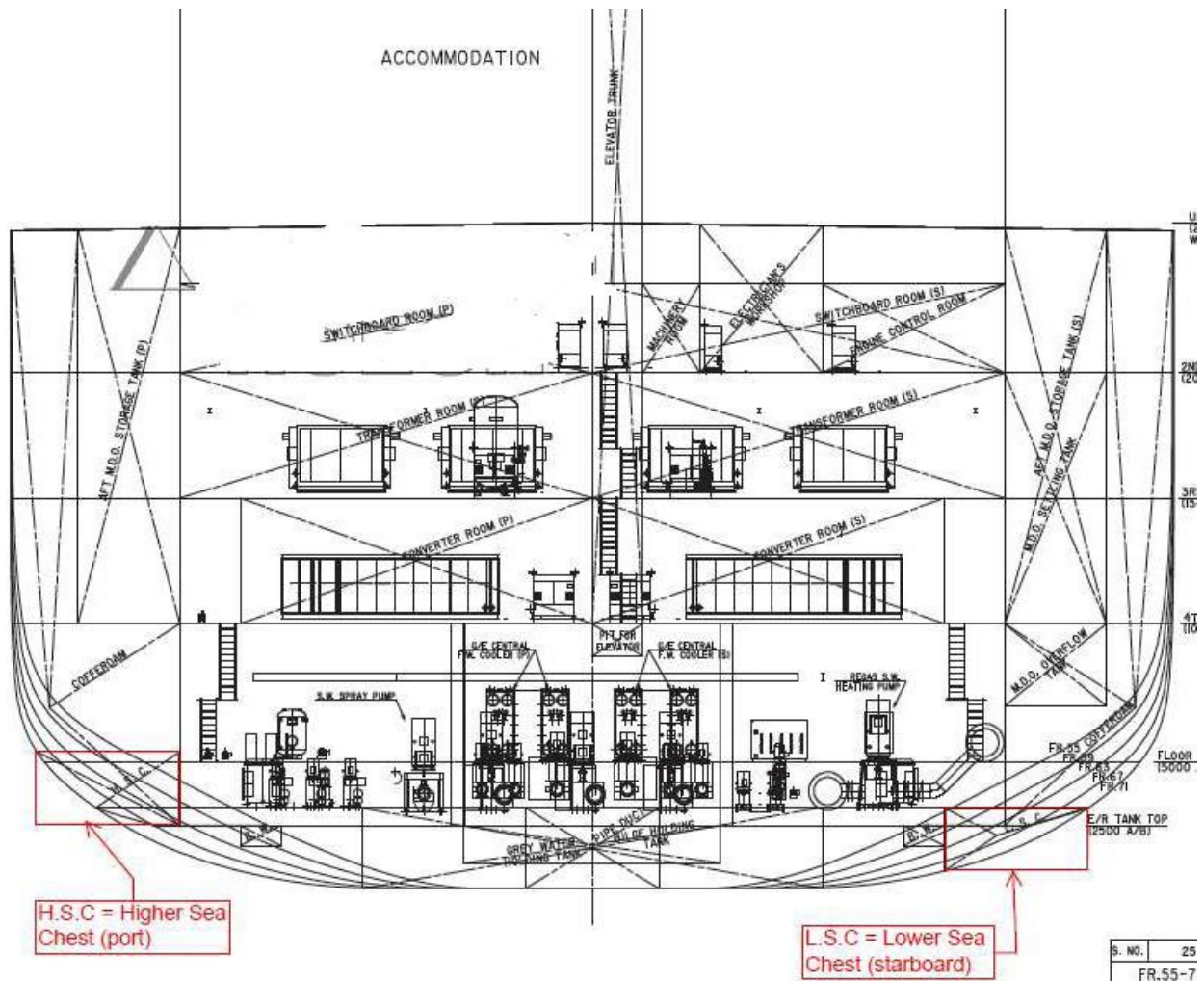


Figure 15 Location of seawater chests (intake)

The HSC at port side and LSC at starboard are both open in normal operation. The sea chests have a combined intake area of 16.1 m^2 . At 750 MMscfd the water intake flow is about $19,500 \text{ m}^3/\text{h}$ (including cooling water redirected into regasification plant). The regasification discharge pipe has an inner diameter of 1,300 mm. The regasification discharge is about 1.6 m below Lower Water Line (LWL). LWL is 11.6 m (regasification is then 10 m above keel).

To avoid marine growth in the seawater systems a MGPS (Marine Growth Prevention System) is installed. The MGPS produces from the salt in the sea water in situ, a dilute, safe solution of sodium hypochlorite in a side steam for re injection into the sea chest water. This technology makes it possible to avoid handling of

chemicals for the seawater system. A limited amount of seawater will also be taken in in the fore ship by the emergency fire water pump. This is only in use during test run 30 minutes every two weeks and in case of a fire situation (Figure 16).

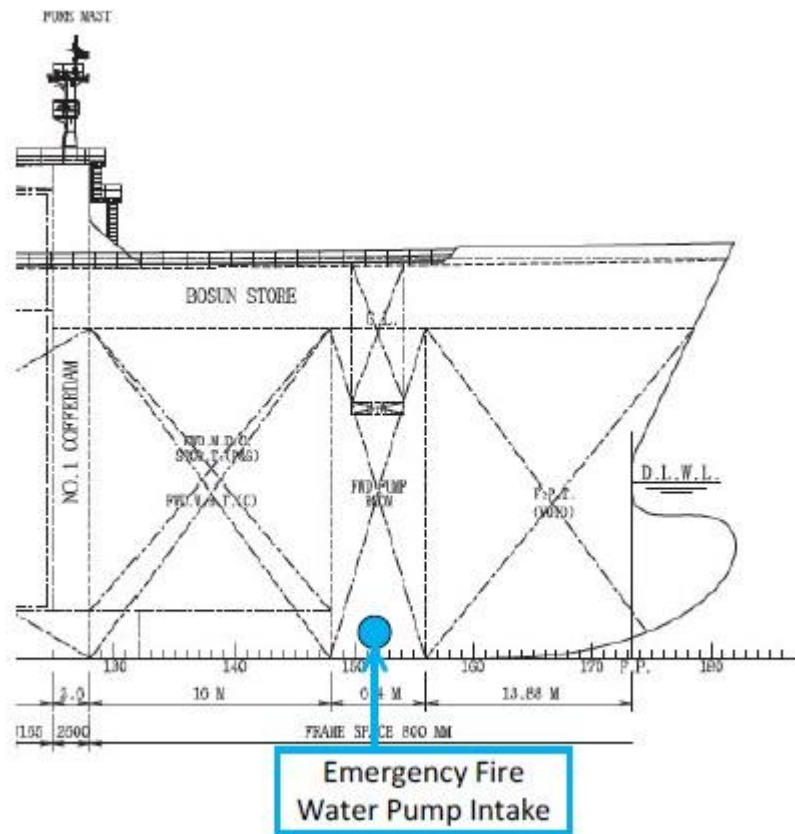


Figure 16 Fore mast emergency fire water pump intake location

2.5.1.3 Vent mast

There are four (4) different types of vent masts which are low pressure vent masts, the high-pressure vent mast, diesel tank vents and sewage treatment plant vent. The vent mast tips are situated approximately 35 meters above water line. Venting is not a normal process scenario and will only be performed in emergencies and maintenance. The low-pressure vent masts are connected to the cargo tanks through mechanical pressure safety valves. These vent masts are installed for emergency tank protection. The vent mast protecting cargo tank 1 is also connected to the common gas header for all cargo tanks and could be used for relief of pressure build up if other means (fuel, regasification, pressure build up margin etc.) fail. Low pressure venting is therefore not expected. The high-pressure vent mast is connected to the high-pressure parts of the regasification plant. This vent is not expected to be used as other means of pressure relief are present (fuel, regasification, pressure build up margin etc.). The vent is present as a last resort if everything else fails or in some cases of maintenance.

2.5.1.4 FSRU Utilities

All the utilities (i.e., power generation, nitrogen , Instrument air, fire water) are generated on board. On an LNG vessel the energy required to propel a ship is generated by gas engines which will drive alternators to create the electrical power which in turn drives the electric engines. The power created is used in an FSRU to supply power to the regasification units.

The main engines drive the generators providing the electrical power required by the FSRU for its autonomous operation. An emergency generator delivers the required electrical power for maintaining safety during a black-out situation and assure quick restart of the facility after the black-out situation is over. The auxiliary boiler provides steam for heating of auxiliary systems like fuel vaporizers, accommodation heating etc. The auxiliary boilers are not expected to operate as recovered heat from the main engines will cover the need. Excess boil off gas will be handled by a gas combustion unit. The emergency generator will also run simultaneously for 30 minutes every week for test purposes. No exhaust gas treatment plant is planned for.

2.5.1.4.1 Type of fuel and energy

The FSRU will use electrical power for operation of pumps and equipment for the regasification process, for auxiliary systems and for the accommodation. The generators will be driven by dual fuel diesel engines using BOG (vaporized LNG) as main fuel. A small amount of Marine Diesel Oil (MDO) is also required as pilot fuel in the engines. The engines are also capable of running on MDO only, but this is not considered as normal operating condition. All required energy for the FSRU will be generated on-board by diesel engines running on BOG (Boil Off Gas) in normal operating mode.

2.5.1.5 Chemical Consumption

Chemical substances & preparations will be required for process related operations and for general use on board (cleaning & maintenance). Exact quantities and volumes are yet to be determined. An estimate of yearly consumption is outlined in Table 10.

Table 10 Chemical Consumption

Name or raw materials, chemicals	Amount per year	Data Sheet (compiled in Annex)	Use
Boiler treatments	200 L	Drewplex_OX_US	Boiler water additive for oxygen removal
	200 L	Ameroyal_US	Boiler water additive
	100 L	OSD-LT	

Name or raw materials, chemicals	Amount per year	Data Sheet (compiled in Annex)	Use
Environmental cleaners	50 L	Electric_2000	All cleaning liquids which are equivalent and use and will depend on availability
	350 L	Enviromate_2000	
		Envirocare_370	
		Envirocare_GTL	
		Envirocare_WTE	
		Enviroclean	All cleaning liquids which are equivalent and use and will depend on availability
Evaporator treatments	350 L	Liquidewt-US	Cooling water additive- rust and scale inhibitor
Descalants	50 L	Gamazyme-BTC	Cleaning and frost inhibitor for smaller cooling water systems
	50 L	LT-Soot_Release	Cleaning of soot in the exhaust system (Little use for gas fuel)
	50 L	Carbon dioxide	Cleaning of oily parts
Paint and thinners	1,400 L		General maintenance
Welding gases	15 times 40 L bottles	Oxygen (8 bottles) Acetylene (4 bottles) Argon (2 bottles) Nitrogen (1 bottle)	The consumption of argon is less than 1 bottle per year. Nitrogen is sampling gas and welding gas For Oxygen and Acetylene: 1 bottle Acetylene for 2 Oxygen.
Testing kits and span gases	100 kg		
Refrigerant gases	50 kg	Refrigerant gases	
Propane for regas loop	No propane consumption expected		

2.5.1.5.1 Transportation and Storage of Chemicals

Transportation and storage of chemicals are presented in (Table 11). Stocks for three (3) months service shall be maintained and stored onboard. Transport and storage container shall be specifically chosen by the material manufacturers / suppliers and appropriate for use onboard the vessel. Handling and storage of chemical & hazardous substances onboard shall be carried out in accordance with established procedures within the company's Safety Management System and requirements as per substance data sheet.

Table 11 Raw Materials/Chemicals Storage

Name or raw materials, chemicals	Type of transportation	Stored amount	Type of storage
Oxygen	Barge or over pier	120 L	Bottles
Acetylene	Barge or over pier	80 L	
Argon	Barge or over pier	40 L	
Nitrogen	Barge or over pier	40 L	
Gamazyme-BTC, Liquidewt-US, LT-Soot_Release, Carbon dioxide	Barge or over pier	All together 200 L	Pails
Liquidewt	Barge or over pier	250 L	Pails
OSD-LT, Enviromate_ 2000, Electric_2000, Envirocare_370, Envirocare_GTL, Envirocare_WTE,Enviroclean	Barge or over pier	All together 500 L	Pails
Drewplex_OX_US Ameroyal_US	Barge or over pier	All together 250 L	Pails
Refrigerant gases	Barge or over pier	150 kg	Bottles
Propane	Barge or over pier	Approximately 20 m ³	Storage tank on decks

Name or raw materials, chemicals	Type of transportation	Stored amount	Type of storage
Paint and thinners	Barge or over pier	All together 500 kg	Pails

2.5.1.6 LNG Supply and Re-Export

LNG will be unloaded from an LNG Carrier which will be moored alongside to the FSRU via ship-to-ship transfer either through loading arms or cryogenic hoses (Figure 17). As the LNG is loaded onto the FSRU, gas is sent back to the LNG Carrier to replace the offloaded LNG in its cargo tanks. The LNG carrier delivery is estimated to be, at maximum, eight times per month. LNG will also be re-exported onto smaller carrier by ship-to-ship transfer.



Figure 17 3D rendition of LNG carrier loading into FSRU

2.5.1.7 Jetty 4

FSRU will be moored to the modified Jetty 4 which is located northwest of the PSPC Tabangao Full Import Terminal Facility. The jetty berth consists of four mooring dolphins and four breasting dolphins which the FSRU will be moored portside alongside. Like other berth structures, several breasting dolphins must be fitted with energy-absorbing fenders to comfortably berth and moor the full extent of the FSRU. In line with the nautical assessments, mooring dolphins will be fitted with quick-release mooring hooks, access stairs and interconnecting walkways with safe handrails.

The Jetty 4 crude oil system and the Jetty 4 LPG line will be decommissioned in preparation for the future FSRU operations slated for Jetty 4. It must be noted that the decommissioning activities for Jetty 4 include decommissioning of systems beyond and integrated with Jetty 4 such as the CRL shoreside, and PLPG lines from TRI as these systems integrated to Jetty 4 were permitted through independent and parallel decommissioning activities under PSPC as part of the conversion of the refinery into an import facility.

2.5.1.7.1 Jetty 4 Crude Oil System

The crude oil system of Jetty 4 will be decommissioned in preparation for its conversion to LNG operations. Most of the Jetty 4 crude oil handling systems that will not be repurposed for LNG operations will be decommissioned and removed. The scope of the Jetty 4 crude oil system decommissioning included the decontamination, decommissioning and removal the following components of the crude oil system:

- Crude oil receiving arms
- Shoreside CRL
- Safeguarding, instrumentations and electrical connections
- Receiving arm hydraulic system

The decontamination process for the crude oil handling systems was done by draining, flushing, and weathering the crude receiving arms which included the receiving line portion from the arms to the motor operated valves (MOVs). The slops vessel was decontaminated by filling it with water and pumping the contaminated water out. In line with the pigging activity by CR ASIA, the 42-inch receiving line from the MOV to the shutdown valve (UZV) was emptied. Similarly, the slops vessel was emptied via the Wilden Pump with the discharge line connection downstream of the UZV. CR ASIA conducted pigging activity of the 42-inch line from Jetty 4 to Jetty 2 to push the contents of the line along the submarine portion of the CRL. The CR ASIA pigging activity included the draining of the final effluent to a portable ISO container or totes then used barge crane for the transport. The two MOVs at Jetty 2 were isolated and the water was pushed into the CRL line back to the crude tanks. The crude tanks receiving MOVs were isolated and the CRL line was depressurized at the identified test points to check for line content quality. The crude line contents were pumped out at identified points along the CRL line. The crude tanks headers were stripped for the air gapping activity. The water collected in the crude tanks were drained using the current COCs going to the East Cell Interceptor. Upon completion of these activities, the area was handed over to the Demolition Team.

2.5.1.7.2 Jetty 4 LPG System

The liquefied petroleum gas (LPG) system of Jetty 4 was decommissioned in preparation for its conversion to LNG operations. Most of the Jetty 4 LPG handling systems that will not be repurposed for LNG operations

were decommissioned and removed. The scope of the Jetty 4 LPG system decommissioning included the decontamination of the following components of the LPG system:

- Pressurized liquefied petroleum gas (PLPG) loading arm
- PLPG line from TRI to Jetty 4
- PLPG Instrumentation/Safeguarding System
- PLPG at Jetty 2 (Connected to t Jetty 4)

2.5.1.7.3 Jetty 4 Decommissioning Schedule

The Jetty 4 decommissioning schedule commenced in January 2021 and was completed by July 2021.

2.5.1.7.4 Jetty 4 Refurbishment

Refurbishment scope includes structural upgrades to the Jetty 4 structure, new mooring, and berthing equipment (quick release hooks and fenders) and associated repair works to the jetty structure.

Components to be installed include the following:

- Two (2) marine loading arms (gas receiving arms);
- Two (2) double quick release hooks (136 tonnes);
- Four (4) triple quick release hooks (136 tonnes);
- Foam-fenders at breasting dolphins;
- Associate cabling works;
- E&I container;
- Bollards for service vessel;
- JIB crane;
- J-tube support structure;
- Marine loading arm support structure;
- Additional handrails;
- Access control gates; and
- Concrete pedestals as necessary

The following components will be refurbished:

- Handrails;
- Access ladders;
- Wooden kerbs;
- Catwalks;
- Boat landing structures;

- Lighting equipment;
- Cable trays/pipes;
- Cathodic protection system; and
- Spalled and cracked concrete

Existing pile anodes and covers will be refurbished or replaced as necessary.

2.5.1.8 Subsea and Onshore Pipelines

The gas from FSRU will be sent to the shore through a flexible offshore pipeline. The offshore pipeline system will consist of a riser (dynamic) and a buried section to shore with a new shore crossing. The burial depth would be at least 1 meter. Close to the onshore crossing, the offshore pipeline transitions into rigid steel pipeline. Exact details of the shore crossing will be worked out in the later stage. The preliminary sizing for the offshore flexible pipeline system is 12 to 16-inch nominal bore.

The design and components of the pipeline will conform to the requirements set by local and international gas pipeline safety standards such as ISO 13623:2017 (Petroleum and natural gas industries – Pipeline transportation systems) and API 17J (Specification for Unbonded Flexible Pipe)/API 17B (Recommended Practice for Flexible Pipe).

Backfilling for the cable as well as the subsea pipeline will consist of natural backfill. Engineered backfill could be applied to reduce the risk of soil liquefaction offshore and onshore through the use of medium to coarse grain sand, combined potentially with gravel and geotextiles with an estimated volume of up to 40,000 m³.

2.5.1.9 Power and Communications Cable

A 700-800 m offshore power and communications cable will be installed in parallel to the main pipeline for Jetty 4 to the shore. Once the cable is laid and installed, the cable will be along the entire length apart from a section close to Jetty 4 where a J-tube structure will serve to bring the cable from the seafloor to the loading platform deck.

Cable materials consist of copper for the power cables, polymeric insulation materials and fillers, FO cable and steel armor wires as shown in the cross-sectional diagram of the cable in Figure 18.

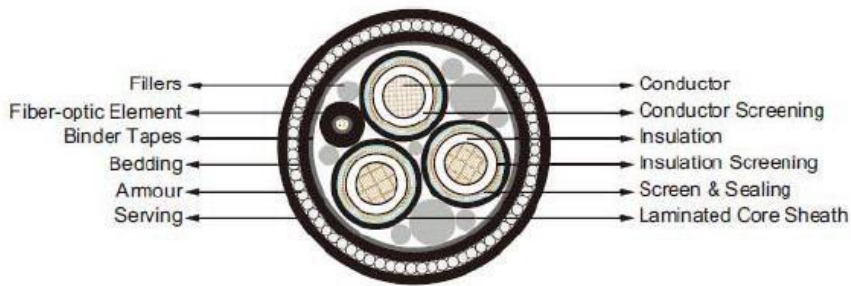


Figure 18 Cross-Sectional Diagram of the Subsea Power and Communications Cable

2.5.1.10 Onshore Facilities

Other onshore facilities will be stationed within the vicinity of the Shell Tabangao Full Import Terminal Facility at Barangays Libjo and Tabangao, Ambulong, Batangas. Onshore facilities will include gas heater, connecting gas stack, onshore pipeline and PRMS.

Pressure Reduction Metering Station (PRMS)

A PRMS is a special platform consisting of pipelines, filters, and other equipment necessary for the metering function, particularly for flowrate measurement. It can also perform additional treatments, such as pressure reduction, filtration, and flow control by means of flow control valves. Regasified LNG will then be monitored via several metering stations prior to distribution to potential consumer/s. However, no LNG will be transferred from the FSRU to the Jetty 4 or onshore.

Ignitable Vent Stack

An ignitable vent stack is a gas combustion device primarily used for burning gas released by safety valves and burning excess gas in pipeline during planned shutdowns, start-ups, and maintenance for safety purposes.

Onshore Pipeline

This is the pipeline located onshore with a total length of 2.8 km. This pipeline connects to a distribution grid.

Shared Facilities

Shared facilities are located within the existing PSPC project footprint. The control room, substation, drains and access roads will remain under the management and monitoring scope of the PSPC import facility. Access roads will be used by the LNG project for movement within the onshore project area. Drains within the PSPC facility are considered shared facilities for receiving surface run-off during the construction and operations of the LNG project. Once the pipeline is installed and is operational, no waste stream is expected from the onshore pipeline. Hence the management and monitoring of the existing drainage lines will remain with PSPC.

2.5.1.11 Electricity Use

Power for onshore requirements will be supplied through the PSPC Import Facility substation connected to the NGCP.

2.5.1.12 Onshore Water Supply

Freshwater requirements will consist of the following:

Table 12 Freshwater requirements onshore

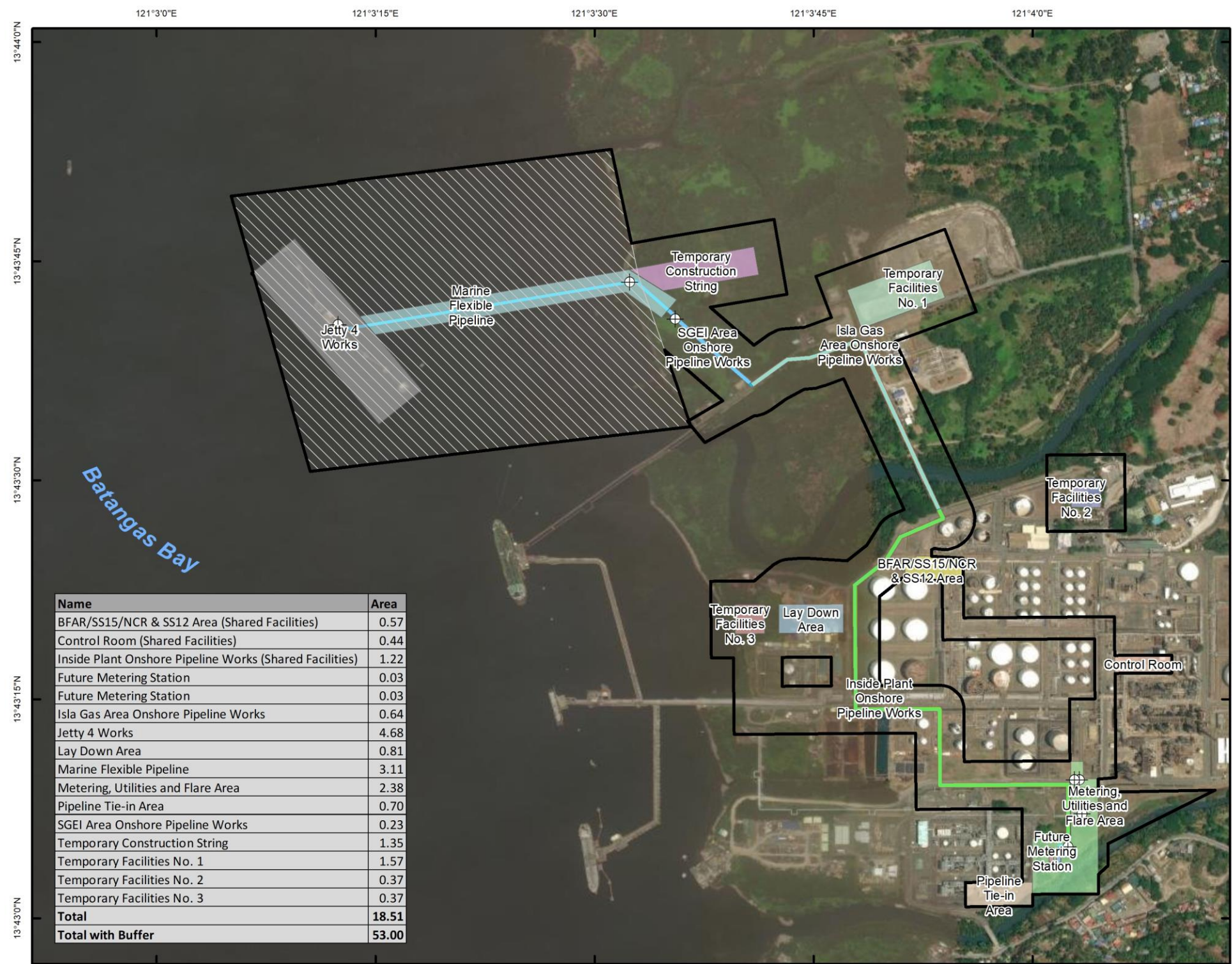
Usage	Average Demand (m ³ /day)	Average Demand (L/s)
Construction water (concrete mixing and soil conditioning for embankment and roadways)	30	0.35
Dust suppression/road watering	30	0.35
Vehicle wash down	20	0.23
Total	80	0.93

The hydrostatic water test will require approximately 1,200 m³ freshwater. It should be noted that this water requirement is for one time use only. The water used for the hydrostatic test will be disposed of after proper quality checks. Water demand for dust suppression, vehicle washdown and concrete is estimated at 0.08 ML/day or about 80 m³/day. Freshwater requirement will mainly come from the existing PSPC import facility.

2.5.2 General Layout of Facilities

The onshore project footprint during the operation phase has an approximate area of 14 ha and is shown in Figure 21.

The general layout of facilities during the construction phase is shown in Figure 20. The project footprint during the construction phase has an approximate area of 53 ha. This is larger than the operations phase footprint due to the temporary laydown areas which will temporarily host the equipment and materials to be used during the construction and conversion of Jetty 4. Areas where the temporary facilities will be located will no longer be used by SEPH and will be turned over to another entity for use and management. As such, the responsibility of SEPH to monitor and manage the temporary facilities areas is limited only during the construction phase.



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LEGEND

Project Footprint (Construction Phase)

FSRU Easement

Pipeline Alignment

BFAR/SS15/NCR & SS12 Area (Shared Facilities)

Control Room (Shared Facilities)

Future Metering Station

Inside Plant Onshore Pipeline Works

Isla Gas Area Onshore Pipeline Works

Jetty 4 Works

Lay Down Area

Marine Flexible Pipeline

Metering, Utilities and Flare Area

Pipeline Tie-in Area

SGEI Area Onshore Pipeline Works

Temporary Construction String

Temporary Facilities No. 1

Temporary Facilities No. 2

Temporary Facilities No. 3

Data sources

Shell LNG: Project Location; Batangas City: Administrative Boundaries; Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Disclaimer: Use of WGS84 as the coordinate system is based on the DAO 2003-30's Implementing Rules and Regulations. Administrative boundaries are approximate. Therefore, it is not authoritative and should be used for planning and visualization purpose only.

Shell LNG

Import Terminal Project

ECC Amendment
Batangas City, Batangas

Project Layout (Construction Phase)

Project Number
D3451600

Date
26 May 2022

Rev.
1

1:9,500

Coordinate System: GCS WGS 1984
Datum: WGS 1984

Figure 20 General Layout of Project Components (Construction Phase)

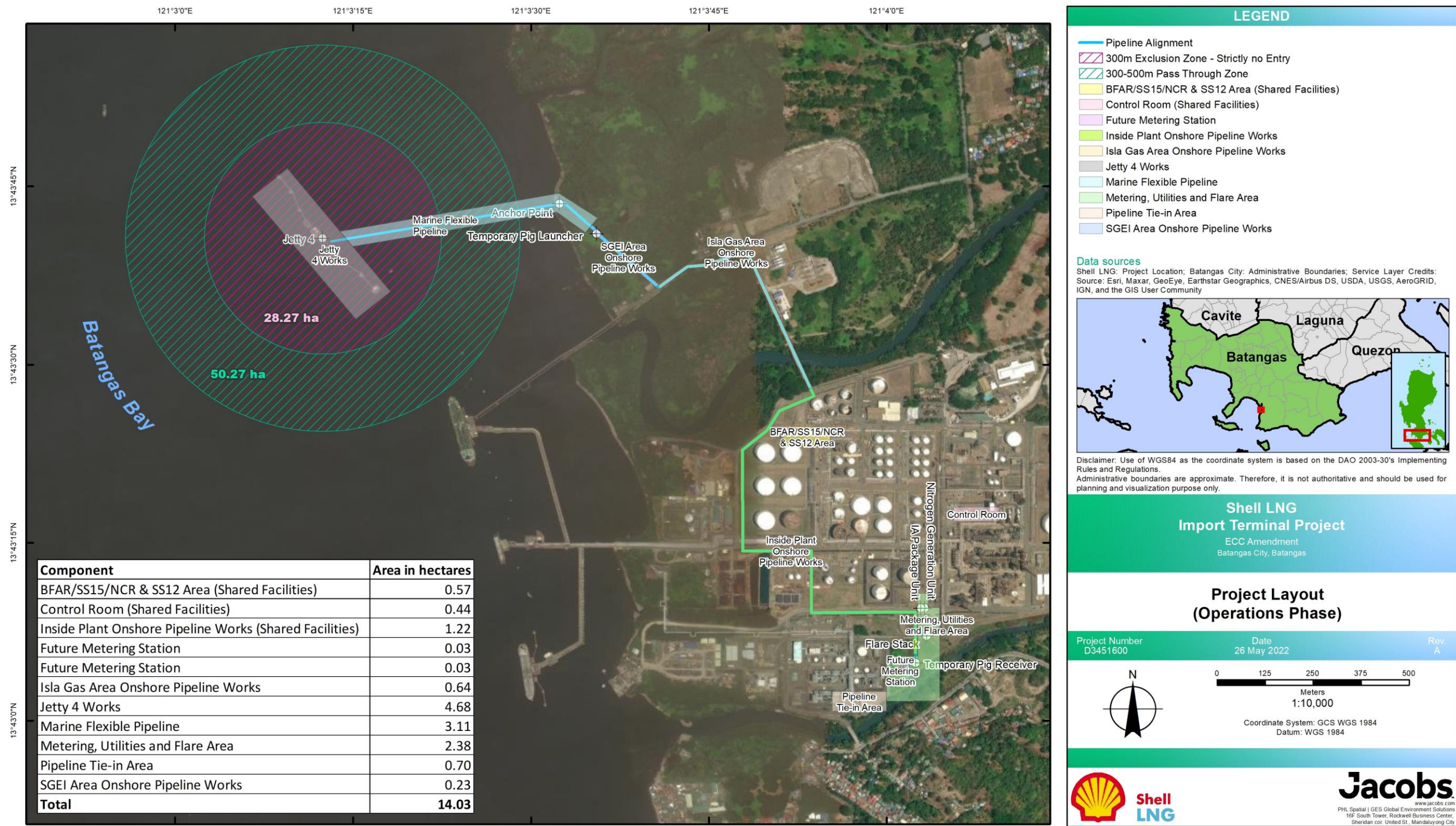


Figure 21 General Layout of Project Components (Operations Phase)

2.5.3 Types and Estimated Quantities of Waste Materials, Pollution Control Devices and Waste Management System

2.5.3.1 FSRU

After the project design has been finalized, details of each emission point, the nature and the estimated quantities of substances emitted, and the proposed treatment or management strategies will be submitted in detail.

The approximate quantities of waste materials during different project phases and the corresponding pollution control devices or waste management schemes are listed in Table 13. The waste management, pollution control and accidental spillage or leak safety, emergency, and decontamination during the various project phases will be assured by the proponent during through a waste management, pollution control and incident response management plan.

During construction, the waste management, pollution control and incident response requirements will be part of contractor construction scope and must be incorporated in the contractor pollution control and waste management plan. The contractor pollution control and waste management plan will be subject to company approval. The project construction will be undertaken through commonly-applied-to-plant construction methods. The project will only use standard, accredited and approved construction materials that meet the industry standards. Construction will include segregation and collection of waste for disposal management and recycling purposes, when applicable. Collection and disposal shall be carried out by means of dedicated, uniformly labelled waste containers per category of waste, made available to and used by the contractors and the proponent. Hazardous wastes such as used oils, paints or solvents will be collected in standard barrel sized containers to be collected by a third party licensed or accredited waste collector. Solid and domestic wastes will be collected into bins that can be covered and landed to shore for collection and offsite disposal by the municipal waste collection services as necessary.

During operations of the FSRU wastewater which is contaminated will be sent for treatment to shore reception facilities by barge. The vessel will be designed to maintain all wastewater onboard for a period of fourteen (14) days.

Table 13 Waste Generation and Waste Management (FSRU)

Waste			Waste Storage in the Storage Area	
Name	Amount	Physical Composition (Solid, Liquid, Gas)	Storage Conditions	Maximum amount (ton)
Solid Waste and Hazardous Waste Management				
Recyclable Plastics	25 TPA	Solid	Compacted in big bags	1.5
Recyclable Metals	20 TPA	Solid	Big bags	1.5
Recyclable Card and Paper	45 TPA	Solid	Compacted in bigbags	3
			Frozen in big bags to	

Waste			Waste Storage in the Storage Area	
Name	Amount	Physical Composition (Solid, Liquid, Gas)	Storage Conditions	Maximum amount (ton)
Food Waste	5 TPA	Frozen	prevent odor and decay	0.2
Recyclable used Batteries	0.5 TPA	Solid	Specialized container	0.1
Hazardous Packaging	4.5 TPA	Solid	Big bags	0.5
Unspecified Non-Hazardous Waste	5 TPA	Solid	Big bags	0.2
Fluorescent Tubes	100 pcs	Solid	Specialized container	100 pcs
Wastewater Management				
Blackwater	730 m ³ /year	Liquid	The FSRU carrier will be equipped with a sewage treatment unit sized to suit the FSRU carrier living accommodations capacity. The discharge from the sewage treatment unit and other accommodation drains will be collected by a waste barge for later disposal to shore by a DENR-accredited waste collector.	
Graywater from showers/ sinks/ galley	6,205 m ³ /year	Liquid		
Bilge Water from engine room bilges	3,650 m ³ /year	Liquid	The FSRU has various compartments or hold spaces with individual bilge suction pipes. These bilge suction pipes terminate at a sump well with strainer boxes to prevent solid debris from entering the pump. Hold bilges, which contain only water, are pumped overboard through bilge eductor. Bilge drains in engine and machinery spaces will be directed to hold bilge collecting tank or	

Waste			Waste Storage in the Storage Area	
Name	Amount	Physical Composition (Solid, Liquid, Gas)	Storage Conditions	Maximum amount (ton)
			engine room tank for processing to an oily water separator (OWS). Oil-free water will be pumped overboard through the eductor. Retained oil and grease will be collected by waste barge.	
Contaminated rainwater	50 m ³ /year	Liquid	Most rainwater is considered clean. However, the entire open deck area will be fitted with scupper drains complete with sealing plugs. All Deck Machinery spaces, fuel oil tank vents & sounding ports on the exposed deck will be provided with appropriately sized 'Save-all'. All clean rainwater will be drained overboard, while contaminated water will further be processed in the OWS (Oily Water Separator) ensuring a contamination below 15ppm before it will be delivered to barge.	
Spent Cooling Seawater	14,000 m ³ /day	Liquid	Discharged	
Air Pollution Management				
PM		Entrained Solid	Emitted	
Total Suspended Particles (TSP)		Entrained Solid	Emitted	
CO		Gas	Emitted	
SO _x		Gas	Emitted	
NO _x		Gas	Emitted	
CO ₂	Estimated Annualfrom	Gas	Emitted	

Waste			Waste Storage in the Storage Area	
Name	Amount	Physical Composition (Solid, Liquid, Gas)	Storage Conditions	Maximum amount (ton)
	Flared: 67 TPA			
CH ₄	Annual Leakage Estimate: 367 mt	Gas	Emitted	
VOCs (ethane, propane and other light aliphatics)		Gas	Emitted	
Noise	Not Applicable	Not Applicable	Noise management devices	Not Applicable

The non-contaminated seawater from ballast, engine cooling and regas heating will be discharged at the points shown Figure 22.

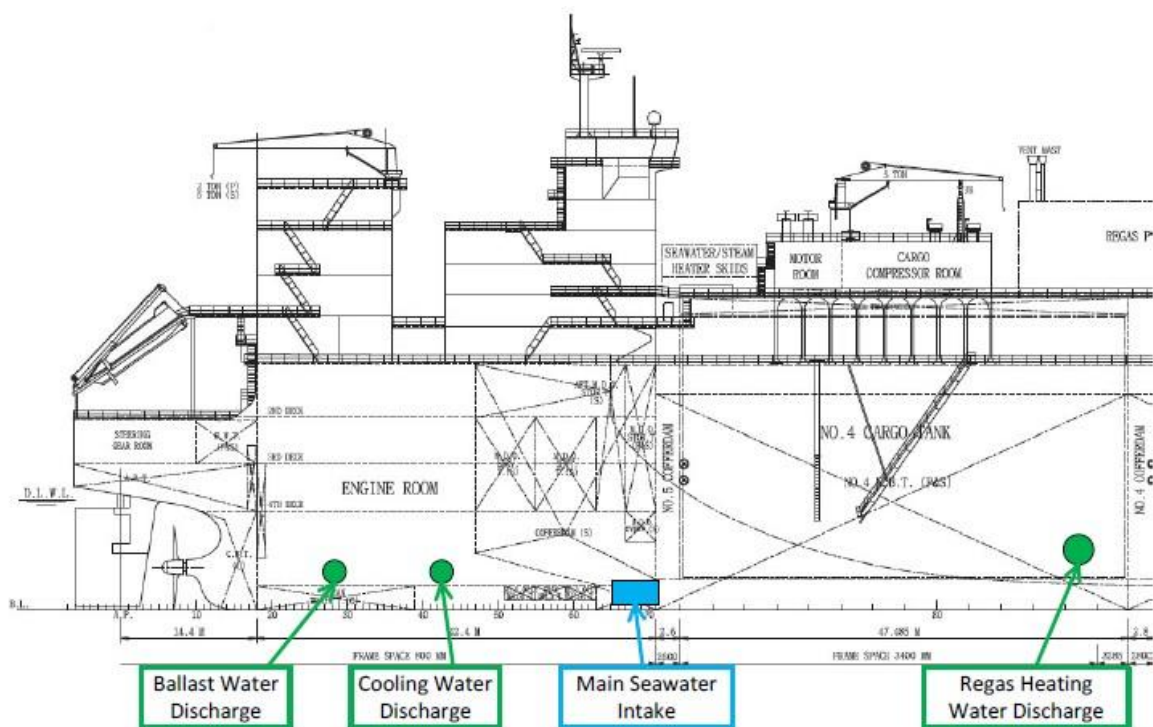


Figure 22 Wastewater discharge points

The main sources of potential noise are the main generator engines located in the engine room and ventilation fans for the engine room. Pressure reduction valves in the high-pressure parts of the process could also be a source of noise. The FSRU will be built to satisfy the requirements of the IMO Resolutions A

343 (IX) and A468 (XII). The maximum noise levels specified from the shipyard are presented below Table 14.

Table 14 Noise Levels within FSRU

Noise sources	Levels in dB(A)
Machinery spaces	110
Cargo and engine control room	75
Wheelhouse including chart space	65
Private cabin	55
Mess and recreation rooms and offices	65
Ship railing on deck	70

2.5.3.2 Onshore

Table 15 Waste Generation and Waste Management (Onshore components)

Waste			Waste Storage in the Storage Area	
Name	Amount	Physical Composition (Solid, Liquid, Gas)	Storage Conditions	Maximum amount (ton)
Solid Waste and Hazardous Waste Management				
The solid and hazardous waste for the onshore facilities will be generated during the construction phase. Solid and hazardous wastes will mostly be composed of packaging materials, used batteries, food wastes from workers, and cuttings from vegetation clearing and ground preparation. The existing materials recycling, storage, and disposal areas within the PSPC full import terminal facility will be used. Hazwastes will be collected in specialized containers and hauled by DENR-accredited hazwastes haulers. Recyclables, food wastes, cuttings and greenery wastes will be stored in bags for collection of the LGU waste collector. During the operations phase, minimal solid and hazardous waste is anticipated to be generated from the onshore components since all the activities will occur within the FSRU. Waste generation during the operations phase for solid and hazardous waste will potentially be generated during maintenance activities only.				
Recyclable Plastics	25 TPA	Solid	Compacted in big bags	1.5
Recyclable Metals	20 TPA	Solid	Big bags	1.5
Food Waste	5 TPA	Solid	Disposed in big bags for collection of city waste collector	0.2
Recyclable used Batteries	0.5 TPA	Solid	Specialized container	0.1
Cuttings and greenery wastes	25 TPA	Solid	Big bags	1.5
Wastewater Management				
During the construction phase, wastewater stream to be generated onshore will include only domestic				

Waste			Waste Storage in the Storage Area	
Name	Amount	Physical Composition (Solid, Liquid, Gas)	Storage Conditions	Maximum amount (ton)
wastewater, oil and grease from equipment and vehicles, surface run-off, and water used for one-time hydrotesting. Workers on site will make use of existing PSPC ablutions facilities hence, the maintenance and treatment for domestic wastewater will remain under PSPC. Oil and grease that will be collected in drip pans and OWS will be stored in drums and hauled by DENR-accredited hazwaste collector weekly. Clean surface run-off and water from the hydrotesting will be released through the drainage line and to the existing PSPC outfall.				
Air Pollution Management				
CO ₂	Estimated at 3 Nm ³ since flaring will only occur during maintenance every 5 years for 1 hour duration only	Gas	Emitted	
Noise	Not Applicable	Not Applicable	Noise management devices	Not Applicable

2.6 Description of Liquefied Natural Gas (LNG)

LNG is a type of a natural gas that has been cooled to a liquid state at about -162 degree Celsius (°C) (-260 degrees Fahrenheit [°F]), to facilitate transport and storage. On this state, LNG is a clear, colorless, non-corrosive and non-toxic liquid substance. Typical impurities and contaminants as CO₂ and H₂S have been removed or significantly reduced to low concentrations (ppmv level). The stream composition of natural gas for the project is presented below (Table 16).

Table 16 Stream Composition for the Shell LNG Project

Composition (Mol%)			
Stream number	1	2	3
Stream description	HP Gas from FSRU	HP Gas on flexible pipeline	HP gas on rigid pipeline
Methane	84.70	84.70	84.70
Ethane	12.40	12.40	12.40
Propane	2.46	2.46	2.46
i-Butane	0.17	0.17	0.17
n-Butane	0.16	0.16	0.16

Composition (Mol%)			
Stream number	1	2	3
Stream description	HP Gas from FSRU	HP Gas on flexible pipeline	HP gas on rigid pipeline
i-Pentane	0.01	0.01	0.01
Nitrogen	0.10	0.10	0.10

In the process of liquefaction, the volume of natural gas in its liquid state is about 1/600th smaller than its volume in its gaseous state in a natural gas pipeline allowing it to be stored more effectively in a limited space and can be more readily transported. At regas terminals, the LNG is turned back into gaseous state (regasified) after unloading from ships and then distributed across the network to potential consumers for power generation or industrial purpose.

The typical supply chain for LNG consists of the following:

- Extraction of natural gas
- Transport of gas to liquefaction plant
- Liquefaction of natural gas to LNG
- Transport of LNG via carriers
- Loading LNG into the import terminal
- Regasification of LNG to natural gas
- Distribution of natural gas to potential consumers

This document does not cover pre-import terminal processes, and the distribution of the natural gas to potential consumers; instead, it only covers the FSRU and its related pipeline and onshore service facilities. The potential source of the LNG is not yet finalized as the project is still in the project feasibility and engineering design phase. The preferred model of Shell is to supply from a portfolio and not to connect any

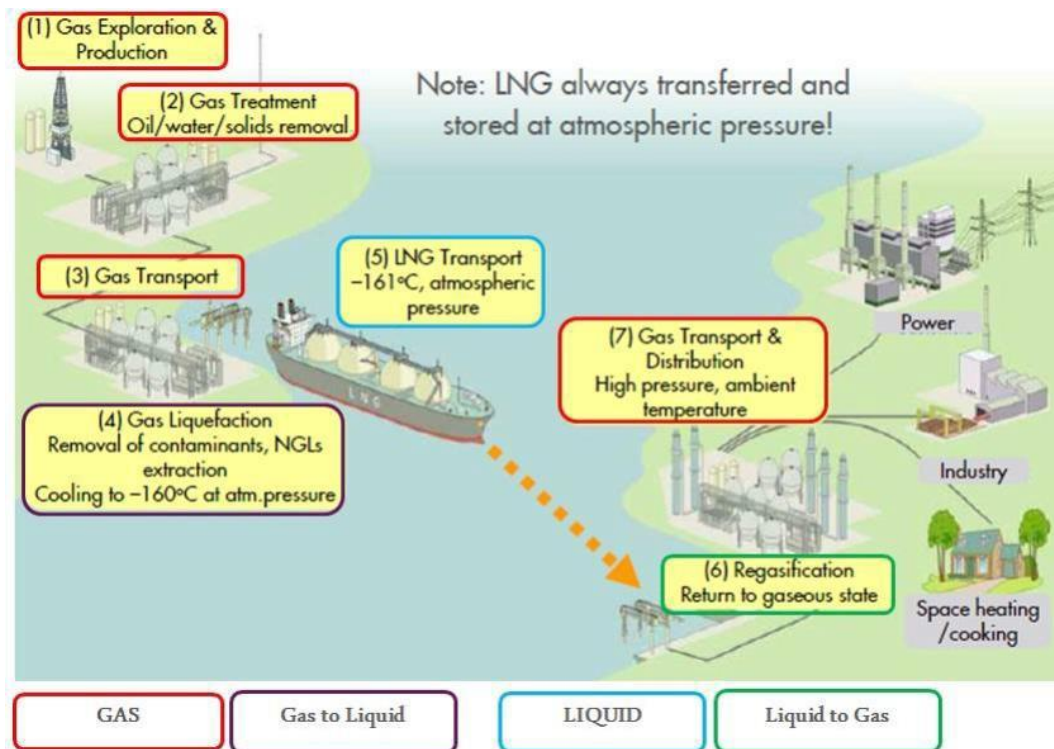


Figure 23 General LNG supply chain and transport

customer to a source. The proponent uses a wide variety of outlets to provide LNG to consumers, including all Shell's equity investments, including Nigeria, Sakhalin, Prelude, and future Gorgon venture, as well as third-party sources.

The general supply chain of the LNG is illustrated in Figure 23.

LNG is stored and transported at near atmospheric pressure in heavily insulated and refrigerated tanks. The BOG (about 0.15% by volume per day) is generally used to fuel the liquefaction facility, the LNG transport ships and the receiving terminals. LNG as a cryogenic liquid is not flammable in liquid form, however BOG could result in a vapor cloud under certain conditions. Uncontrolled releases of LNG could lead to jet or pool fires if an ignition source is present, or to a methane vapor cloud that is potentially flammable (flash fire) under unconfined or confined conditions if an ignition source is present. LNG spilled directly onto a warm surface (such as water) could result in a sudden phase change known as a Rapid Phase Transition (RPT). The hazard potential of RPT can be severe but is generally localized within the spill area. LNG vessel design and operations that comply with international standards and codes have resulted in a good safety record and no major LNG tanker spill has occurred to date.

2.7 Process Technology

The general flow of an LNG terminal is presented Figure 25. The LNG onboard the FSRU will undergo regasification at Jetty 4 to be able to send out HP gas to onshore through a pipeline system. Storing the LNG in the tanks available in the FSRU require operating at slightly above atmospheric pressure.

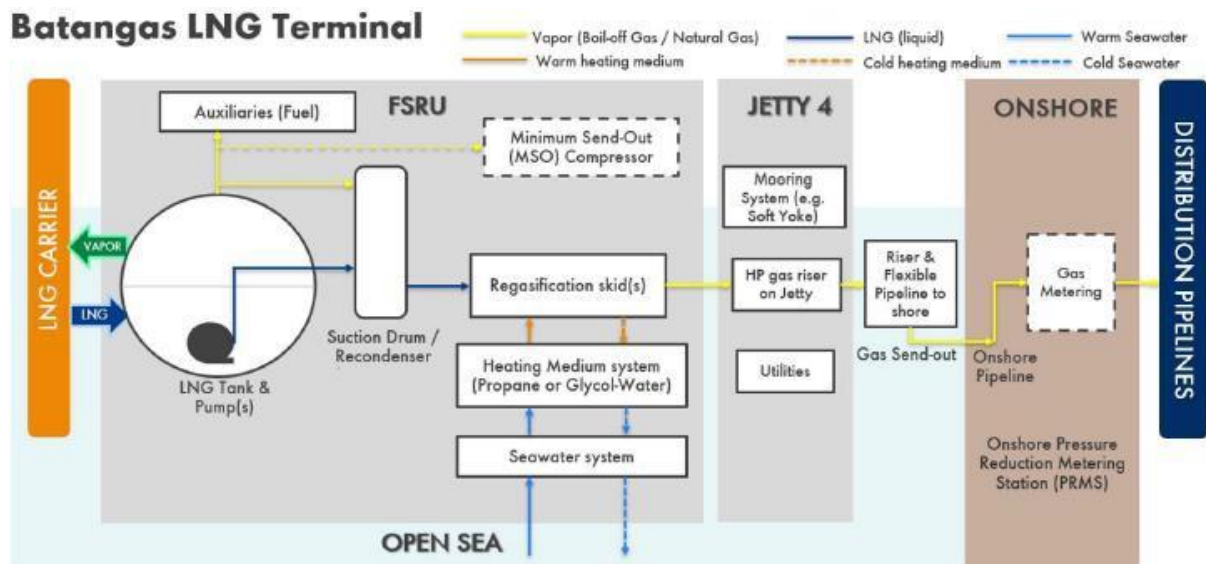


Figure 25 Overview of process flow of a conventional LNG import terminal

The FSRU vessel will have a self-sufficient system that will receive and store LNG from LNG carriers which perform ship-to-ship operation following the best industry practices. The LNG will be stored in cryogenic cargo tanks on the FSRU and the LNG will undergo vaporization to send out the gas at approximately 100 bar gauge (barg) and discharge temperature up to 7°C below ambient seawater temperature. All the necessary facilities which include LNG tanks, recondensers, HP pumps, compressor, regasification skids, heating medium and seawater system for the process are included in the FSRU; hence, there is no processing onshore.

The gas from the FSRU will be transferred to the shore using offshore pipelines. The offshore pipeline will consist of a dynamic riser and a buried section to shore with a new crossing. As the offshore pipeline (diameter: 12 to 16 inch) reaches the shore crossing, it will transition a rigid steel-type pipeline. From the shore crossing to the tie-in point, the gas will be transported in through the buried rigid steel pipeline. The routings consider maximizing the existing pipeline corridors to ensure effective execution. Onshore, the new PRMS will measure the gas quantity in the pipeline (Figure 26).

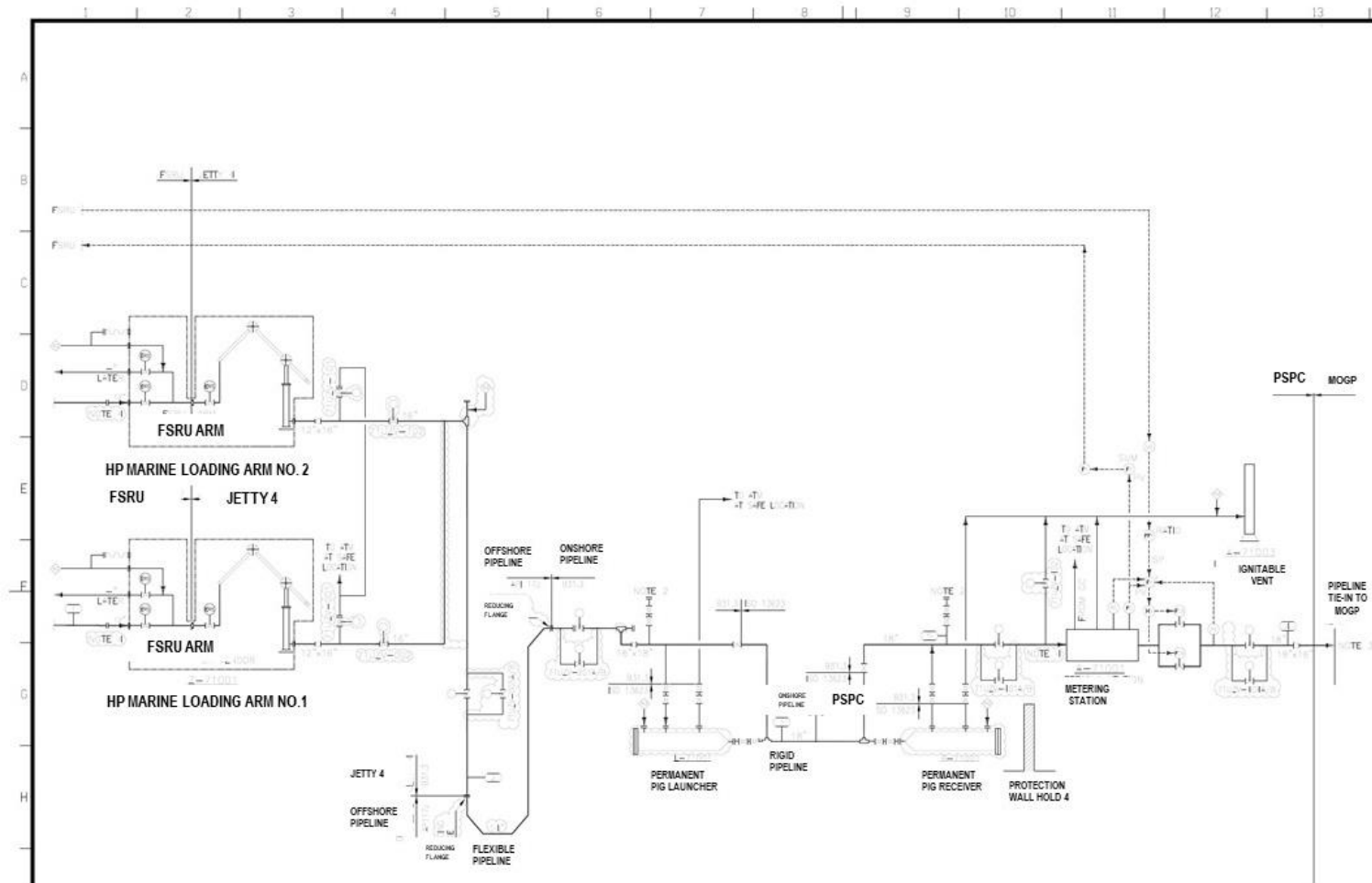


Figure 26 Process Flow Scheme of HP Gas from FSRU to MOGP

2.7.1 Heat and Gas Balance

The heat and gas balance across the process scheme at 23.2 °C shiprail temperature and 70 barg tie-in pressure is presented in Table 17. Vapor mass fraction of 1 signifies only gas will be conveyed from the FSRU into the pipelines and onshore facilities.

Table 17 Heat and Gas Balance Across the Process Scheme

Specifications	Units	HP Gas from FSRU	HP Gas on flexible pipeline	HP Gas on rigid pipeline	HP Gas to MOGP
Vapor Mass Fraction (Ratio of the gaseous components to other components of other phases)		1			
Pressure	barg	76.7	75.8	74.0	70.1
Temperature	°C	23.2	22.9	22.6	22.0
Mass flow	kg/hr	279,975	279,975	279,975	279,975
Mass enthalpy	kJ/hr	-4740	-4740	-4739	-4737
Standard gas flow volume	mmscfd	350	350	350	350
Mass density	kg/m ³	59.3	58.6	57.1	53.9
Molecular weight	kg/kmol	16.06			
Viscosity	cP	0.013			
Compressibility		0.854	0.855	0.857	0.862
Thermal conductivity	W/m-K	0.041	0.041	0.041	0.040
Gross heating value (GHV) at 15 °C, 101.325 kpa abs	Btu/scf	1011			

2.7.2 Regasification and BOG Handling System

The regasification and BOG handling system are presented in Figure 27. From the cargo tanks, the LNG will be pumped to the suction drum/recondenser. From the suction drum, the LNG is pressurized to send out pressure using the booster pumps. The HP LNG is then led through heat exchangers before it is sent to a flexible riser export system at the desired pressure and temperature. The LNG is heated by BOG to pre-cool the BOG in the first heat exchanger. Allowing the BOG to cooldown increases its efficiency of recondensing. In the second and third heat exchanger, the LNG is heated with propane and seawater in the open loop operation. To eliminate the risks of freezing seawater, a propane loop will be set in place. The high-pressure gas pipeline is protected from overpressure by a High Integrity Pressure Protection System (HIPPS).

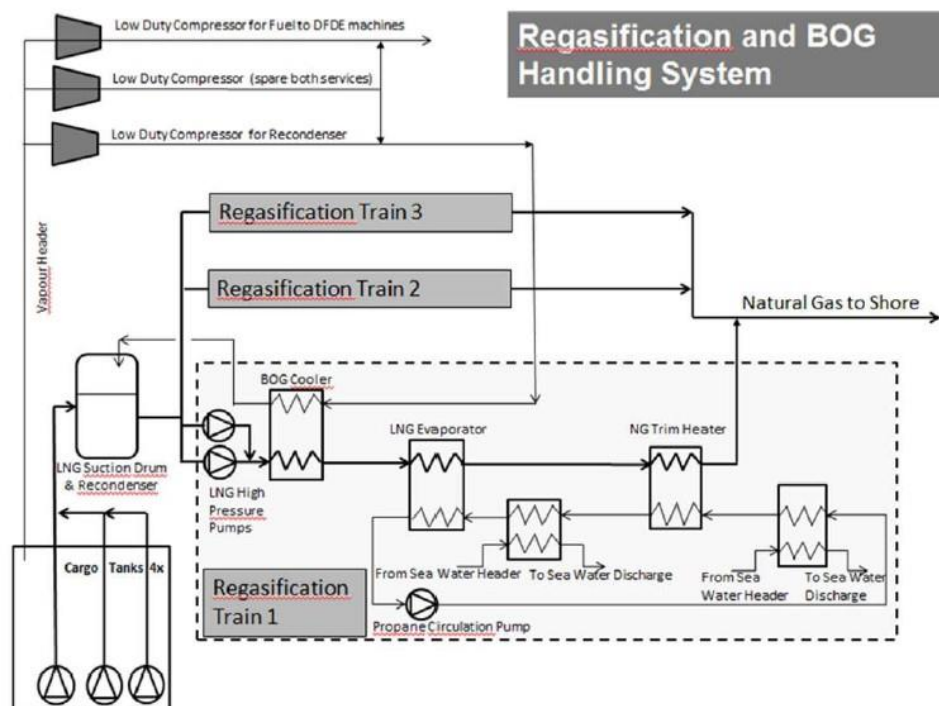


Figure 27 Regasification and BOG Handling System. Note: The actual design of the project's shell and tube vaporizer will be finalized after completion of engineering design

The regasification plant is installed between the cargo compressor room and LP cargo manifolds on starboard side. The equipment in the regasification system is designed for marine installations and for cryogenic working conditions. The regasification module consists of three (3) trains, each having a vaporization capacity of about 250 MMSCFD. The vaporization and send-out system is based on three trains in use at maximum capacity of 750 MMSCFD. The units are heated by seawater, and there is an intermediate propane circuit in between seawater and LNG to avoid freezing. The LNG supply is assured through LNG carriers coming alongside the FSRU and transferring LNG in a side by side ship to ship operation. The LNG is pumped from the LNG carrier's

cargo tanks via the cargo manifolds and then through the cryogenic flexible hoses to the FSRU. On the FSRU side, the flexible hoses are connected to the cargo manifolds, from where the received LNG is piped to the cargo tanks for storage and use in the regasification process. All three trains are connected to one common suction drum, fed by the LNG pumps in the cargo tanks. From the suction drum the LNG is pressurized to the send out pressure using the booster pumps (2x per train). The high-pressure LNG is then led through heat exchangers before it is sent to a flexible riser export system FWD at the desired temperature and pressure. In the first heat exchanger, the LNG is heated by BOG to precool the BOG to the recondenser. This heat exchanger's main task is to cool the BOG to increase the efficiency of the recondensing. A side effect is that it gives a small contribution to the regasification. In the second and third heat exchanger, the LNG is heated with propane which again is heated by seawater in open loop operation. The intermediate propane loop is included to protect from the risk of freezing of the seawater. The gas is lead through a gas metering station before the high-pressure gas is exported from the FSRU. The loading system and gas pipeline are protected from overpressure by HIPPS on the FSRU.

Utilities which include instrument air, electricity and nitrogen are all available onboard the FSRU. For this project, nitrogen will only be utilized to comply with local standards as needed and will not be used to dilute the gas concentration. The installed hydrocarbon vents will be utilized to address possible emergency conditions, plant start-up/ shutdown and depressurization of equipment. The excess hydrocarbon vapors (BOG) will be used as fuel in gas-burning engines for the power generation. BOG can also be controlled by an onboard reliquification plant, by increasing cargo tank pressures, or an onboard gas combustion unit (GCU). Venting is a last resort and will not a normal operating procedure.

The FSRU can send out natural gas for export at pressures between 46 barg to 98 barg. The regasification plant is flow controlled, with a control valve after the booster pumps. The export pressure from the regasification plant will under operation align with the grid pressure. The maximum temperature difference between sea water intake and discharge will be 7°C during regasification operation up to 750 MMSCFD.

2.8 Project Size

The project will have an onshore footprint and have offshore facilities which include the FSRU and the existing Jetty 4, which is the proposed berthing facility. The onshore footprint is approximately 14 ha, covering all the facilities on land which include the Shell Tabangao Import Facility and TRI. The FSRU will require an exclusion zone of 300 m radius and a pass-through zone between 300-m to 500-m radius. The project will utilize an FSRU storage volume of approximately 175,000 m³ and project design peak send out of approximately 3.8 MTPA. There will be no onshore storage.

2.9 Development Plan, Description of the Project Phases and Corresponding Timelines

2.9.1 Description of Project Phases

Table 18 presents the different phases that will be applied in the project.

Table 18 Project Phases, Estimated Duration and Equipment Requirement

Project Activity	Estimated Duration	Equipment Requirement
Engineering Studies	4 to 5 Months	Vehicles and hand-held instruments
Modifications of Jetty 4: <ul style="list-style-type: none"> Removal of existing topsides Structural Reinforcements Installation of New Topsides 	6 to 8 Months	Heavy construction equipment: <ul style="list-style-type: none"> Cranes Movers Lifters Concrete/Steel work equipment and access boat
Riser Offshore pipeline installation including dredging activities Landfall	6 to 8 Months	Installation vessels and excavation equipment Concrete/Steel work equipment
Brownfield (import facility - onshore work including tie-in)	9 to 12 Months	Pipe-laying on sleepers, construction of over/underpasses and pipe demolition equipment
Commissioning	1 to 3 Months	Utilities provision (air, nitrogen etc.) Crew transport (vessel) Valve testing equipment

2.9.1.1 Pre-Construction

Presented in Error! Reference source not found. are the project phases in accordance with the requirements of the project development by Shell. Project phases cover the pre-construction preparation which is essential in identifying the project's feasibility and are included in the pre-FEED activities. Available secondary information includes hydrographic surveys, bathymetry, and hydrodynamic studies. There are also available geotechnical reports which the team will utilize to support the project baseline condition characterization. This phase includes, but are not limited to, the collection of primary environmental baseline surveys which cover soil investigation, geophysical survey, ecological studies, water quality, air and noise quality, climate change adaptations and stakeholder engagement activities. Permitting work for the proposed project will also be completed during the pre- construction phase including the ECC application. Most of the activities during the pre-construction period entail primary and secondary data collection.

2.9.1.2 Construction

Project construction will begin once the necessary permits and ECC have been obtained from the designated regulatory bodies. During this period, the detailed engineering design will be utilized to implement the final design in laying out all the project facilities required by the LNG import terminal. This stage will involve all the

necessary dredging activities for the project. The FSRU will arrive as a complete unit and will be stationed to the existing Jetty 4. Onshore construction activities will be limited to onshore pipeline, PRMS, and emergency shutdown valves.

Power and water requirements for the construction activities will be supplied by available sources within the vicinity of the project. Power and water during construction in the TRI area will be supplied by the contractor through generator sets and water tankers sourced outside the premises. At the import terminal area, existing facilities will be tapped for power and water needs for the project. Most of these requirements are during the construction phase.

During the construction phase, a waste management plan, and pollution control and incident response plan will be set in place to address all the wastes that will be generated. Construction activities will require an increase in manpower requirements for the project and may result to an increase in the production of domestic wastes. Masonry wastes, scrap metal, used oil and solvents and minimal earthworks are possible waste materials which will be produced during construction.

Dredged material may be used for backfilling depending on suitability. Prior to dredging, sediment characterization will be conducted to determine if there are contaminants present. If there are no contaminants detected, the dredged material will be used as in-situ fill material and will be deposited near the trench. If contaminants are detected, the spoils will be disposed according to the requirements of DAO 1992-29 (Procedural Manual on Hazardous Waste Management) and DAO 2013-22.

The pollution control and waste management plan of the designated contractors who will work on-site shall follow the regulatory standards of the Philippines and will be subject for Shell's approval.

Toxic, hazardous, and pre-treated wastes will be disposed of properly, in accordance with Republic Act (RA) 9003 (Ecological Solid Waste Management Act) and RA 6969 (Toxic Substances and Hazardous and Nuclear Wastes Control Act). Recyclables that will be collected during the construction phase that are identified as hazardous wastes (used batteries, cans, oils etc.) shall be collected in standard barrel sized containers and handled by its appropriate recyclers. Special handling and treatment of any used oil, oil contaminated materials and other hazardous wastes will be collected and transported by a DENR-accredited hazardous waste hauler and treater. None of these wastes are stored on the ground surface, thus eliminating improper hazardous waste disposal which may contaminate the soil and water bodies within vicinity of the project.

On-site collection of solid wastes and domestic wastes will be done regularly during the construction phase where solid wastes are expected to be produced due to the use of materials to support the completion of project facilities. On-site, wastes will be segregated, and a functional MRF will be in place. All the non-recyclable wastes and residuals will be collected by a DENR-registered/accredited waste hauler. Materials which cannot be recycled will be treated as waste and disposed of accordingly. Since the designated waste collector and transporter are registered and accredited by DENR, the handling of solid wastes up to disposal will strictly follow the rules and regulations stated in RA 9003.

Equipment that will be utilized during the construction activities shall be certified and approved by Shell. The approval process will include a full inspection of the state of maintenance, leak, and spill risk limitation of the equipment. The main pollution control measures include liquid tight paving at the designated equipment refueling station and the use of leak trays designated for lubricant and diesel fuel spills for generator sets and temporary diesel pumps to avoid ground and water contamination.

Construction material storage shall be at dedicated and company approved areas to be provided by the contractors. The storage of construction material will be located in the temporary laydown areas set up in the construction phase of the project. Areas where the temporary facilities will be located will no longer be used by SEPH and will be turned over to another entity for use and management. As such, the responsibility of SEPH to monitor and manage the temporary facilities areas is limited only during the construction phase.

The storage areas should have the following pollution control measures:

- Controlled clearly marked material storage area
- Material storage and handling management including full control over the Material Safety Data Sheets (MSDS)
- Dry storage of chemical construction materials
- Liquid-tight bunded storage space flooring for liquid construction materials in drums, canisters, bottles, etc.
- Safety devices, emergency and spill response equipment and materials at the various contractor site construction locations
- Fire extinguishers and blankets
- Temporary safety showers and eye showers
- Special absorbent materials to clean leakages such as granulate and cloths
- Pumps for spill removal
- Oil screen and deployment boats for near shore oil spill containment and removal

2.9.1.3 Operation

After completion of the construction activities, the FSRU will arrive on-site and will be positioned as the project transitions to the operations phase. The natural gas will be unloaded through flexible hoses or HP gas loading arms located at the existing Jetty 4 and coursed through the pipeline to the onshore facilities. The project life is estimated be twenty-five (25) years. The project life is aligned with the length of commercial contracts for potential power plant consumers which require a long-term LNG supply of up to 25 years. Submarine and onshore pipeline integrity are estimated to last for 25 years. The FSRU lease period typically lasts for 10 years but will renewed/extended accordingly in alignment with the required supply. The FSRU and onshore facilities will operate 24 hours per day, 7 days per week.

2.9.1.4 Abandonment

The project infrastructure will be decommissioned at the end of project life. Decommissioning of the subsea and onshore pipeline will be in accordance with the prevailing legislation and industry standards. The FSRU will leave Batangas bay at the end of the project life and move to a new facility.

2.9.2 Proposed Project Schedule

A high-level project schedule for the terminal is presented in Table 19. It should be noted that these are estimated timeline and are subject to change based on further studies.

Table 19 Project Schedule

Activities	Schedule
Approval of ECC	Q3 2022
Basis of Design and FEED Completion	Q4 2021
Detailed Design / Pre-Construction	Q1 2023 to Q4 2023
Construction	Q1 2024 to Q2 2025
Ready for Start Up	Q3 2025

2.10 Manpower

2.10.1 Estimated Manpower Requirements

The estimated manpower requirement during the construction phase is approximately 150 people as presented in Table 20. Parallel activities will be done during the peak of construction activities. The FSRU and onshore facilities, during operations, may require a total number of 50 people to continuously manage and monitor the process. The numbers presented below are indicative and may change as the project design matures and the project progresses.

Site preparation and permitting activities will require a manpower of approximately 50 people with corresponding specialization and duties. This is not included in the manpower peak calculation below for the project. The specific details on the requirements for manpower for all project phases are not yet finalized; but it is assumed that during the construction phase, a labor force will work simultaneously onshore and offshore. Project commissioning activities manpower requirements is estimated to be supported by approximately 50 personnel which include labor workers and site engineers.

The FSRU is an existing asset that will require some project-specific modifications. The FSRU will sail under its own power to the site after its modifications are completed. Manpower requirements for the FSRU modifications are not included in the figures presented here Table 20.

Table 20 Manpower Requirements for Construction and Operation

Project Activity	Manpower Requirement
Engineering Studies	On-site; 5 to 10 people for site surveys and work planning

Project Activity	Manpower Requirement
Modifications of Jetty 4: <ul style="list-style-type: none"> Removal of existing topsides Structural Reinforcements Installation of New Topsides 	Jetty works; 10 to 50 people Support/Installation Vessels: 20 people
Riser Offshore pipeline installation including dredging activities Landfall	Installation Vessels: 30 people Onshore/Landfall: 10 to 30 people
Brownfield (import facility - onshore work including tie-in)	10 to 20 People
Commissioning	Engineers to communicate LNG process from FSRU topipeline: 10 to 50 people

2.11 Project Investment Cost

The CAPEX of the LNG import terminal is estimated to be approximately PhP 3.5 billion. However, this amount is subject to change as the project matures and more details are determined. The cost does not include the FSRU lease cost.

Annex

Project Site Aerial Photos



Jetty 4



Onshore Pipeline and Project Facilities

Summary of Information, Education, and Communications (IEC) Meetings:

A series of IEC meetings were conducted from July 18 to August 4, 2022 with identified Project stakeholders within Batangas City consisting of the following:

- Batangas City Mayor
- Batangas City Vice Mayor and Councilors
- Batangas Congressman
- Various City Government Department Heads
- Representatives of DENR PENRO, CENRO, and PEMU
- Representatives of the Philippine Coast Guard, Police, and Bureau of Fire Protection
- Representatives of the City Disaster Risk Reduction and Management Council
- Barangay Chairpersons and Councilors
- Non-Government and Peoples Organizations (senior citizens, women, and youth)
- Representatives of business, education, and religious sectors
- Fisherfolks from TALIM barangays and Brgy. Wawa
- Participants from the general public

The proponent SEPH discussed the Project Description including location, components, the need for the safety and exclusion zone, anticipated project schedule, and relevant information. The proceedings from the Open Forum are compiled in the succeeding sheets according to the dates of meetings and are also categorized in tabs according to question category as follows:

- Project Description
- Permits and Clearances process (including EIA)
- Impacts to Water and Air
- Safety and Security
- Flood Risk
- Social Impacts and Livelihood

Based on the summary of questions, the top issues raised across all sectoral groups are the impacts of the safety and exclusion zone to the livelihood of fisherfolks within the TALIM barangays (consisting of Tabangao Aplaya, Ambulong, Libjo, San Isidro, and Malitam), livelihood and social development opportunities from the project, and the safety and security risks associated with the project. The City LGU representatives, fisherfolk organizations, and barangay echoed concerns and questions regarding the impact of the project's offshore components on the restriction of access of fisherfolks to fishing areas and passage of fisherfolks within the bay. The same sectors also raised questions regarding livelihood opportunities during the construction and operations of the project particularly on priorities with respect to job openings and social programs. Security and safety questions were also repeated across the meetings with respect to the basis of the exclusion and safety zone, worst case scenario should an incident occur, or potential impacts of leakage of products. Other questions raised pertain to the EIA process and associated permits and clearances required from the local government, flood risk for Brgy. Libjo, and the environmental impacts of the project to water and air quality.

With respect to questions on the enforcement of the exclusion and safety zone, SEPH responded that this will be subject to further discussions with the affected stakeholders and the City LGU. In terms of livelihood opportunities and social development programs, SEPH and Jacobs facilitated a free and informed discussion with attendees to gather their suggestions and recommendations that can be integrated in the social development plan. While the project is in its early stage, SEPH highlighted that the best practices and experience from existing social programs of Pilipinas Shell Foundation and Malampaya Foundation can be applied to the proposed project with the inclusion of recommendations raised by stakeholders. Questions on flood risk, environmental impacts, and other topics were answered to the satisfaction of the attendees. Overall, the IECs were conducted successfully.

Table 1 Shell LNG Import Terminal Project IEC Matrix July 18, August 1-4, 2022

LGUs/Sectors Covered by IEC	Actual IEC Schedule / Dates	Name and affiliation of stakeholder	Question/Concern Category in the EIA	Issues Raised / Suggestions Provided	Proponent/Jacobs	Response
Brgy. Tabangao Aplaya	18-Jul-22	Nick Eje, Kagawad	EIA Process	Nabanggit na may permit na ito. Meron na itong ECC dati pa.	Jacobs - Katherine Gavile, EIA Preparer	Kung matatandaan noong 2013, 2014 nagkaroon na ng proposed LNG project ang Shell na maraming project components, magtatayo ng bagong jetty. Iyon ay mayroon ng permit. Dahil mayroong pagbabago sa project components, kailangan ng project kumukha ng bago dahil hindi na appropriate ang ECC dati. Hindi rin naimplementa ang proyekto noong 2013.
			EIA Process	Ang ECC ay isa sa mga requirements	Jacobs - Katherine Gavile, EIA Preparer	Bahagi ito ng requirements ngunit mas importante ipaalam sa inyo ang kasalukuyang proyekto para malinaw sa lahat.
				Bakit ang Tabangao Aplaya ay secondary lamang? Samantalang ang Malitam at Ambulong ay primary. Maraming mangingisdang halos ang dagat ang ikinabubuhay.	Jacobs - Katherine Gavile, EIA Preparer	Sa primary and secondary impact barangays, sinusunod lamang ang sinasabi ng DENR na mayroong lokasyon ang facilities sa kalupaan o nasasakupan ng administrative boundaries ay primary impact barangay. Halimbawa ang pipeline, karamihan ng facilities for onshore pipeline ay sakop ng bahagi ng Malitam, may maliit na bahagi na nasasakop sa barangay Libjo, ang kabuuan ay nasa barangay Ambulong. Kaya bahagi kayo ng konsultation, bagamat iyon ang depenasyon ng DENR, kinikilala namin na mayroong mga mangingisda galing sa inyong barangay na nangingisda sa portion na ito kaya ikinukunsulta.

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		Manny, Konsehal	Social Development	Meron pong resolution na pinapayagan na makapasok sa loob ng refinery. Ang Jetty 4, alam ko ipagbabawal yan, restricted area yan. Paano ang gagawin sa mangingingisda?	SEPH - Beverly Berberabe, CLO	Ang resolusyon ay amin namang sinusunod. Dahil may resolusyon, kayo ay napapayagan. Ang naging tugon noon Ugnayan, ang huling bahagi ng resolusyon na tayo po, kami pong nagpo-propose ng project na ito at concerned na stakeholder ang tawag namin, ay mag-usap para magkaroon ng agreement regarding sa paano natin maa-allow ang fishing at pagdaan na hindi masasacrifice ang safety ng bawat isa. Itong mga lumabas sa project na ito dahil sa pag-aaral, yung layo na kinakailangan ay para po sa safety ng mga lalapit dito at safety ng FSRU. Ito naman po ay hindi pa ito ang huli na pag-uusap hinggil sa talakayan na yan. Dahil may resolusyon hindi namin pwedeng ipagwalangbahala at hindi rin pwedeng hindi ipagpaalam sa inyo ang mga ipapatupad namin. Dahil kayo ay kailangan ding pumayag sa aming proposal at proposal niyo ay kailangan maaral at maka-arrive tayo sa harmonious na usapan.
			Social Development / Benefits - local employment	Primary ang Libjo dahil dadaan ang pipeline underground. Nasa kanila sa impact. Marami sa Tabangao Aplaya na ang kabuhayan ay sa dagat. Ibig sabihin, mas malaki ang maapektuhan. Gusto ko lang ipaabot na management na kaming Tabangao	SEPH - Beverly Berberabe, CLO	Primary and secondary ay term na sinusunod based sa definition. Hindi nagiging sekondarya ang Tabangao Aplaya. Kung pinaguusapan ang host community, baka ganoon po ang damdamin. Ang pagkakaroon ng ganoon ay sinusunod po namin lalo't iyon ang nakasulat. Alam niyo naman po na kapag nagpapatupad ng programa ang Shell, pinagaaralan kung ano ang aangkop sa bawat barangay. May ginagawa ang foundation para sa Tabangao Aplaya. Dahil sa proyekto ng LNG, sa parte ng Social Performance ay doon pa mas lalo pang tututukan dahil alam ang

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				Aplaya na maisip nila na hindi dumaan ang pipeline underground pero ang hanapbuhay ay naandoon. Ang range ng safety na 300 to 500 meters ay hindi na kami makakalapit. Hindi na po mapapayagang lumapit dahil sa safety. Sa pagkakaunawa ko sa primary at secondary, baka pagdating ng proyekto ay least priority.		impact ng mangyayari kung sakalang maapprove ang safety seclusion. Mas mabibigyang diin ang investment programs. Matugunan ang mawawala sa hanapbuhay.
					Jacobs - Katherine Gavile, EIA Preparer	Sa proseso ng Environmental Impact Assessment, ang kahit anong proyekto ay may epekto. Ang pagenforce ng safety ay may epekto sa mga mangingisda. Isang bahagi ng EIA na tinawatag ang pagkakaroon ng Social Development Plan. Base sa reaksiyon ninyo, maaring gumawa ang SDP ng Shell Energy ng Social Development Plan na angkop sa inyo. Kasama sa Social Development Plan bukod sa Health, Safety and Environment ang assistance sa livelihood, assistance sa infrastructure at iba pang programa base sa pangangailangan ng komonidad. Hindi natin mafinalize sa ngayon dahil patuloy pa ang ating konsultasyon. At kahit na dumating sa punto ng Public Consultations, magkakaroon pa rin kayo ng patuloy na usapan with Shell Energy Philippines hanggang maisaayos ang arrangements sa safety zone.

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		Reynaldo Doce, Punong Barangay	Benefits - local employment	<p>Ang pagpupulong na ito ay paglalahad ng project, kami ay makikinig, aalamin kung ano ang proyekto. Ano ang benepisyo? Anong kategorya ang first and second? Ibig sabihin, fortunate and less fortunate. Ang mangyayari dito, last meeting namin regarding sa employment. Kung nakatayo ang isang kumpanya ay nakatayo sa isang barangay nasa kanilang poder ang kumpanya, 75% of the job opportunities ay kanila. By reality, sino ang higit na naapektuhan? Sino ang higit na nakikinabang? Isang kabarangay namin na mag-aaply ng trabaho sa planta bilang contractor, hihingi ng permit sa Ambulong para makapag-apply. Bibigyan ko ng certification galing Barangay Tabangao Aplaya</p>	SEPH - Beverly Berberabe, CLO	<p>Tungkol sa kung anong mapapala ng barangay Tabangao Aplaya. Gusto ko munang sagutin kung ano ang mapapala ng buong bansa kung kayo may mahihikayat naming suportahan ang LNG project. Ito ay energy project. Hindi lamang ang taga barangay ang makikinabang sa buong proyekto. Ito ay IEC pa lamang naman. Ito po ay mas maliwanagan ang bawat isa sa nilalayon ng proyekto. Particular sa Tabangao Aplaya, ang amin pong grupo ay bumabalangkas ng mga programa na makakatugon sa kung anoman ang impact ng LNG project. Para sa mangingisda, ang foundation ay nagsimula na magbigyan sa livelihood. Inaantay ko rin po na mag-open ang tindahan. Sa maliit na steps ay maipayabong natin. Hindi namin basta mailatag dahil kailangan po ng assessment ng kakayahan at kagustuhan ng Tabangao Aplaya. Sa trabaho, dahil po ito sa ordinance kaya may clearance na nangyayari. Hindi lamang ito hinaing ng Tabangao Aplaya. Ito po ay proseso na isinasaad ng ordinance. Maganda itong ipareview dahil kami sa Shell ay sumusunod sa sinasabi ng batas. Ano pa ang magiging pakinabang na makukuha? Ang Shell Foundation ay may priority programs. Lagi naming sinasabi na ang mga programs ay sumabay ang pangangailangan sa pinapatupad na programa. May mga hiling na mag-usap baka mayroon kayong programang naiisip para magawa ito. Last Uganayan, mayroong nakausap ang grupo ng magsasaka. Sana ay mabuo at</p>

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				<p>pero sila ay required na humingi pa rin ng certification from Tabangao Ambulong. Kaya kami nagkakaganito simula 1964 ang Tabangao Aplaya ay ganito na ang dinadaranas. Andyan ang intensyon ng Shell Foundation para tumulong, ngunit nararamdaman ba? Ang intensyon ko noon ay maliwanagan ang Tabangao Aplaya. Ano po ang mapapala namin sa pagpunta dito? Ano ang aming tinatanaw? Sana hindi namin danasin yung from 1964 up to now, ganoon na naman.</p>		<p>maging lehitimong grupo para matulungan ng Foundation. Sa ngayon ay hindi mailatag lahat ng maaaring pakinabang sa mismong LNG project. Sana sa mga susunod na usapin ay may mas konkreto.</p>

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		Nick Eje, Kagawad	Social Development	<p>Mahingan ng tulong o pagpapaphatid sa pwedeng mahingian ng tulong. Sa pag-unlad, hindi maiiwasan na may naapakan. Maapakan natin ay ating aakyat, ating ititindig. Mabigyan ng sapat na tulong ang eskwelahan. Kung hindi man maramdaman ng mga nasa edad na, itong mga kabataan ay maayos through scholarship at eskwelahan mismo matutulungan. Kung masusuportahan ng kumpanya ay napakalaking ganda nito.</p>	PSPC - Jonathan Junillo	<p>Tama ang sinabi niyo. Maganda matulungan ang mga paaralan. May mga proyekto ang foundation na scholarship hindi lang sa schools kundi vocational schools for skills. Kung may proyekto kayo na gusto niyong iprioritize namin, pwede niyo pong iparating sa amin at sa foundation. Magtulungan po tayo. Iparating niyo po sa amin ang pangangailangan ninyo at pipiliting solusyunan. Sa scholarships, mayroong mga pinaplano para sa mga estudyante. Iseshare po namin sa inyo pati sa ibang mga barangay sa SHIFT. Coordinate niyo ang inyong plano at sabihin niyo po sa amin.</p>
			EIA Process	<p>Ang Tabangao Aplaya ay kasama ba sa house to house information campaign? Sa nakita ko kanina ay mangangalap pa kayo ng ibang impormasyon para sa pag-aapply ng permit na ECC.</p>	Jacobs - Katherine Gavile, EIA Preparer	<p>May mga studies na nasa Tabangao Aplaya ang location. Hindi po iyon house to house. Kumukuha kami ng sample size for consultation. Ganoon din naman sa ibang barangay. Yung information campaign natin ay di rito natatapos. Meron pang susunod na consultation. Kung tingin natin ay kailangan sa marami pang pagpupulong or isama sa isang session ng Ugnayan, pwede naman po iyon.</p>

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				Sasabihin po ng aming constituent hindi po nila alam ang tutoong nangyayari sa pagpupulong. Itinatanong nila sa amin kung ano ang LNG. Mas magandang ipaalam sa kanila na may nilalatag na programa, project. Kailangan ipaalam sa mga pamphlet man lang ano ang LNG, sino ang makikinabang, anong epekto sa dagat. Lalo na ang mangingisda. Kailangan ipaalam sa inyo ang puso ng Tabangao Aplaya. Mahirap magpaliwanag dahil alam nila ang epekto ng proyektong itatayo.		No response required.
			Project Description	Ang pipeline ay nasa loob ng Malampaya. Pero ito ay nasa shoreline sa Jetty 1.	Jacobs - Katherine Gavile, EIA Preparer	Nasa loob ng dating refinery. Galing Jetty 4, offshore pipeline ito ay nakabaon.
			Livelihood / Environmental Risk Assessment	Ang tatlong jetty, siguro ay hindi naman kasama sa ipinagbabawal pangisdaan.	SEPH - Beverly Berberabe, CLO	Jetty 1, 2, 3 ang arrangement ay as is. Ipinagbibigay alam kapag may darating. Ang aming mahigpit na paalala ay mag-ingat at susunod sa advice. Ang process ay nasa loob ng barko kaya merong exclusion zone.

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		Alexander Vergara, Kagawad	Project Description	Ilang araw ang pagdaong ng FSRU?		Base sa resolusyon na napagusapan kaya patuloy pong napapagayan.
					Jacobs - Katherine Gavile, EIA Preparer	Jetties 1,2 and 3 ay kasama sa ECC ng dating refinery na ngayon ay import facility na nasa jurisdiction ng PSPC. Itong Jetty 4 ay dating kasama sa facilities ng refinery. Sa current na ECC application, tinatanggal na component ng refinery at inilipat sa Shell LNG. Ang Jetty 1, 2, 3 ay kasama sa dating ECC ng Import Facility ng PSPC. Ang jetty 4 ay gagamiting daungan ng FSRU pasok siya na component ng SHell LNG.
					Jacobs - Katherine Gavile, EIA Preparer	FSRU ay semi-permanent facility. Kapag dumating po siya, maintenance, repair, o may natural hazard na kailangan iwasan, andyan lang siya.
					SEPH - Jonabel Abad-Faustino, Engineering Manager	Semi-permanent dahil kapag may bagyo o emergency pwede umalis. May mga batayan kailan pwedeng umalis.
			Project Description	May mga kumpanya kayong susuplayan, kung matutuloy ang LNG, sino ang dapat naming lapitan sino may ari ng project? Ang hirap sa kumpanya, kapag susulat ng request letters, ipapasa pa namin sa Shell.	Jacobs - Katherine Gavile, EIA Preparer	Ang proponent ay Shell Energy Philippines Inc. SEPH. Ang upisina po ito sa Taguig. kung kayo ay may hinaing ng CorpRel na naandito sa Tabangao. Ang presidente ay si Mr. Bernd Krukenberg. Sa kasalukuyan, si Joven Hernandez pwedeng sulatan. Si Sir Joven Hernandez ang point of contact sa Shell LNG.

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		Leonel Mendoza, Sangguniang Kabataan	Social Development	Sana magkaroon ang company niyo po with schools and youth. Magpapasukan na naman po ang school, ang SK in partnership the barangay ay tumutulong sa brigada skwela. Lalo na ngayon malapit na ang pasukuhan. Hinihiniling po namin na magkaroon po ng help ang company kasama ang Shell Foundation sana po sa Brigada Skwela magkaron po tayo ng help like pamimigay ng mga papers pampaprint ng modules. Nagseseek kami ng help na matulungan ang school.	Jacobs - Katherine Gavile, EIA Preparer	Pwedeng isangguni sa PSFI o sa CorpRel. Paglilinaw lamang ng timing ng ating social projects. Baka umasa po kayo na matutugunan ng SEPH ang inyong pangangailangan ngayon. Sa kasalukuyan, nasa permitting phase pa tayo, hindi pa makakapagpatupad ng proyekto o social development programs hangga't hindi pa nagsisimula ng implementation ang project. Pwedeng i-note po concerns ninyo para makasama sa future plans.
		Nick Eje, Kagawad	Social Development / Benefits - local employment	Maramdaman ng mga mangingisda ang trabaho. Dahil priority ang host barangay, wala ang Tabangao Aplaya.	SEPH - Beverly Berberabe, CLO	noted.
		Silverio Bilaro, Fisherfolk representative	EIA Process	Sa susunod na consultation, ang mga mangingisda ay maimbitahan	Jacobs - Katherine Gavile, EIA Preparer	Kagaya ng nabanggit kanina, meron pa po tayong Public Scoping at at Public Consultation. Pero kung kailangan ng targeted meeting para sa

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				dahil hindi ko kayang ipaliwanag sa kanila.		mga mangingisda, pwede naman po iyon gawin. Hindi pa naman natatapos ang presentation natin. Meron pa tayong susunod na meetings.
Batangas City LGU	18-Jul-22	RD Dimacuha, Secretary, Office of the Mayor	Project Description	Malampaya has been operational in the past. It will replace the existing transfer of natural gas from Malampaya by the pipes using the vessels, ganon ba ang mangyayari?	SEPH - Jonabel Abad-Faustino, Engineering Manager	Ang supply ng natural gas iba iba po. It could be a powerplant.
			Project Description	Is this different from the consortium of Malampaya? Will you be using the same facility of Malampaya or the existing refinery of shell?	Jacobs - Katherine Gavile, EIA Preparer	Ang LNG project na ito ay iba. Magtatayo siya ng pipeline. May mga shared facilities with PSPC Import Facility.
			EIA Process	It was proposed already five years ago. What happened?	Jacobs - Katherine Gavile, EIA Preparer	It was first proposed in 2013-2014. It was given ECC. Market appetite from LNG project and capital for this project, hindi naimplement. During that study as well, because of perceived environmental and social impacts, Shell needs time to operate the project in a more environmentally sound manner. Five year validity of the ECC. Marami na ring nagbago sa proyekto, kailangan ng panibagong approval para sa project na ito.
			Project Description	assuming that this project will be operational, this is an LNG terminal in addition to what we have in	Jacobs - Katherine Gavile, EIA Preparer	Yes

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		Gilda Goroy, City Planning Coordinator		Malampaya and first gas terminal, tama? If ever magkakaroon tayo ng tatlong energy providers to provide additional power.		
			Project Description	Relation to previously approved SHIFT project	Jacobs - Katherine Gavile, EIA Preparer	SHIFT project ay patungkol sa conversion ng dating Pilipinas Shell Refinery into an Import Facility. Ang refinery po dating may processing na nagcoconvert ng raw product. Ngayon po siya ay import facility na lang. Proponent of SHIFT is different from LNG Terminal Facility. SHIFT po ay Pilipinas Shell Petroleum Corporation. LNG naman po ay kay Shell Energy PH.
		Alyssa Cruz, Vice Mayor	Project Description	Saan isusupply ang LNG na makukuha ng proyektong ito?	SEPH - Beverly Berberabe, CLO	Commercial aspect ay wala pang for disclosure. Project layout ay magcoconnect from OGT.
			Social Development	ano ang plano sa mangingisda sa area?	SEPH - Beverly Berberabe, CLO	Patuloy na nakikipagugnayan at nakikipagusap sa mga mangingisda. Hindi lang ito ngayon. Ang safety exclusion zone ay taliwas sa resolution na sumusuporta sa mga mangingisda para makapangisda. Ang priority ni Shell ay safety. Dahil may resolusyon na sila ay pinapayagan, hindi sila maban. Itong proyektong ito ay for safety ng mga tao ay need ng safety exclusion zone. Magkaroon ng alternatibong livelihood. Tinuruan ng Shell foundation na magrepair ng mga bangka, nagprovide din ng solar panels.

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		Sergie Atienza, CMO	Project Description	Kapag nawalan ng trabaho, hindi napayagan makapangisda, lahat ay mapupunta sa sanggunian. Maging specific si Shell kung ano ang maibibigay sa mga mangingisda. Kung hindi man pangangisda, hindi lang sa tubig sa livelihood. San Miguel nagtayo ng LNG at magtatayo ng powerplant para doon isupply, may plano ba ang shell na magtayo ng powerplant kung saan isusupply ang LNG?	SEPH - Beverly Berberabe, CLO	Walang knowledge dito. Ito ay papatak sa commercial side. So far, wala pang alam na balak or plans ng shell sa itatayo na powerplant.
			Livelihood/ Environmental Risk Assessment	Direkta pagdating sa mangingisda. 300 exclusion and 500 safety zone ay napakalawak. Ang panghuhuli ng isda ay seasonal. Kung ang shell refinery ay nagiingat sa planta, lalo silang nagiingat dahil katabi lang ng planta ang kanilang bahay.	PSPC - Jonathan Junillo	We will take it into account.

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		Boy Dimacuha, SB Member	Water Quality	Paglabas ng tubig sa ilog ng Calumpang. Yung labasang iyon ay makakatulong kung papalawakin ng Shell ang pag-aari kasama ang ilog para makatulong sa pagbaha.	PSPC - Jonathan Junillo	Makakapartnership ang LGU sa pag-aaral para masolusyunan. Kung may makikita na based on study na makakatulong mas maganda.
			Social Development	Makatulong sa livelihood ng mga mangingisda	Jacobs - Katherine Gavile, EIA Preparer	Marami pang consultations na gagawin para pag-usapan.
			Project Description	Itong LNG project ay 100% na owned ng Pilipinas Shell?	Jacobs - Katherine Gavile, EIA Preparer	Shell Energy Philippines ang nagmamay-ari ng project. 100% owned by SEPC.
			Biodiversity	Biodiversity hotspot which is the Verde Island Passage. It separates Batangas from Mindoro. FSRU from point of origin to Point of Destination Tabangao. Magkakaroon ng disturbance sa ilalim. Madidisturb Lilipat ang mga isda. Ifocus ang atensyon sa Verde Island Passage.	Jacobs - Katherine Gavile, EIA Preparer	Noted po sir. Isasama po natin sa pag-aaral. To clarify, ang FSRU ay semi-permanent. Minsan lang siya dadaan. Naandun lang po sa Jetty 4.

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		Noel Silang, Public employment service officer	Benefits - local employment, permits and clearances	Kung magkakaroon ng construction, there will be employment. Never pa kami nakatanggap ng employment report. List of employees hired. Sana makipagcoordinate at gagawan ng report sa DOLE. Mabigyan ng pansin ang employment report ng company.	SEPH - Beverly Berberabe, CLO	Recently, we had our contractors' forum, ugnayan - fenceline community. Although this is a SHIFT issue, because of that concern, tinutukan. Through the contractors's forum, focused on the the ordinance 75% of the employees. Pumapatak sa "if qualified" hindi matatanggal na may specialists na may pumupunta. We will escalate it. Documents to follow
		Ditas Aguado, Office of the Mayor	Permits and Clearances	Subcontractors, contractors and service providers pakuhanin ng mayor's permit.	SEPH - Beverly Berberabe, CLO	Noted
		SF01 Efren Laniog Jr., BFP	Project Description	No need for lorry trucks?	Jacobs - Katherine Gavile, EIA Preparer	LNG ay dadalhin ng FSRU. Kapag naregasify, ito po ay convey to OGT sa pipeline na po. Ang offshore pipeline at onshore pipeline, ito po ang dadaanan ng produkto. Paggaling po ng FSRU, wala nang transfer ng lorry o truck. Diretso na ng pipeline. Wala po. Walang storage onshore kaya walang paglalagyan ng tangke.
		Rodrigo Dela Roca, Disaster Risk	Environmental Risk Assessment	Protection ng mga kababayan lalo na sa issues ng	Jacobs - Katherine Gavile, EIA Preparer	pag-aaralan po natin ang waterways at coastal protection.

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		Reduction Officer	Environmental Risk Assessment	safety. Sa tunay, sa Batangas City inaabutan ang mga lorries. Ang responder ay local government. 99.9% okay tayo. Paano ang 0.01% na nagmintis? Pagdating sa development, pasuyo po kami sa development ng site, pagdating sa tributaries instead of sarhan ay maimprove.	SEPH - Jonabel Abad-Faustino, Engineering Manager	Sa more than 45 years po ng LNG shipping, wala pa pong namamatay, wala pong fire na nakapagdisable ng carrier. Siguro naman po ay pamilyar po kayo sa quality ng Shell pagdating sa leakage. Isang magandang example po ang Sta. rita pipeline, sa tinaggal-tagal po ay wala pong record na nagkaroon ng leakage Design po, it takes a lot of time and effort para maiprepare. Simula po design, construction, hanggang operations maraming nilalagay na mitigations. Maayos ang pagkakadesenyo ng LNG project.
		Jacobs - Katherine Gavile, EIA Preparer			Kung matatandaan ang project components, merong mga pig launchers, metering stations integrated na sa pipeline na ginagamit sa maintenance para masiguro na ang kabuuan ng pipeline ay maayos na umaandar. Emergency shutdown valves, heat detection units o instruments na matatagpuan sa FSRU at sa pipelines, kung magkaroon ng pagtagas ng produkto, kaagad na hihinto ang proseso. Potential issues on disasters, FSRU ay pwedeng umalis pansamantala at maghanap ng safe na lugar.	
					No response required.	
		RD Dimacuha, Secretary, Office of the Mayor		Mataas ang HSSE ng Pilipinas Shell. You will have an idea for the locational clearance. Previously, may isang lorry na nagcause ng traffic and accident. Sa Bauan, Batangas nagkaroon ng oil		

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				leak. These are experiences from other companies and places.		
			Permits and Clearances	Ang mahalaga sa Mayor's Office, that the documents we require are submitted to us.		No response required.
Brgy. Malitam	01-Aug-22	Mamerto Marasigan, Barangay Captain	Safety, Risk Assessment	Paano kami makakaasa na talagang ligtas ang proyekto?	Jacobs - Katherine Gavile, EIA Preparer	<p>Tungkol po sa kaligtasan, unahin po muna natin ang produkto ng FSRU. Itong produkto ay natural gas at natanggal na ang mga contaminants, kaya wala itong mga components na nakakalason o nakakasama kagaya ng CO2 at H2S.</p> <p>Sa pipelines po natin sa FSRU naman, meron tayong tinatawag na mga leak detection system at mga leak gauges at pig receivers na nagsasabi kapag mayroong leak ang isang pipeline. Kapag mayroong leak ang mga emergency shutdown valves ay mag a-isolate ng mga bahaging may tagas nang hindi naantala ang daloy ng produkto. Parehong may leak detection system ang FSRU at mga pipelines.</p> <p>Paano naman kung lumabas o tumagas ang gas? Kapag ito ay tumagas sa lupa ang gas ay mag e-evaporate lamang sa atmosphere. Ganito rin kung ito ay lumabas sa katubigan. Kailangan lamang ay walang source ng ignition para ito ay mag apoy kaya kailangan nito ng</p>

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						<p>safety zone. May sinusunod na safety standards ang FSRU at pipeline ngunit kailangan ng safety zone sakaling magkaroon ng insidente. Ang distansya na ipinakita kanina sa kakailanganing safety zone ay base sa pagaaral tulad ng QRA (quantitative risk assessment) na siyang nagsasabi kung sakaling magkaroon ng insidente, hanggang saan aabot ang epekto ng insidenteng ito. Mayroon nang paunang pagaaral na ginawa nung 2012 to 2013 kung kaya nagkaroon tayo ng tinatawag na risk contours na nagsasabi na ang safe distance ay 500m radius.</p>
			People, Social Development Plan	Hindi nakakapasok yung mga taga barangay kahit mag apply. Hindi kinukuha sa inaapplyan na trabaho.	SEPH - Joven Hernandez Business Development Lead	In the construction, we need construction workers but the project is simple. Hindi malaking scope ang construction di kagaya ng powerplant na kailangan ng maraming tao sa construction. Just to manage expectations at dahil mas simple ang project. Hopefully itong LNG ang mitsa para magtayo ang iba ng powerplant.

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		Robert M. Panaligan, Barangay kagawad	Safety, Risk Assessment	<p>Tungkol sa security, ano po ang plano tungkol sa security?</p> <p>Kasi meron tayong radius na 300-500m buffer. Sabi ang LNG ay colorless at odorless, so anong security ang inilagay natin doon? Kung sa lupa meron pader, para sa seguridad, sa tubig, ano ang security?</p>	SEPH - Beverly Berberabe, CLO	Dahil ang planta ay nasa mismong FSRU at mag operate 24/7 may security risk kay dapat maglagay ng security tulad ng patrolling. Dahil ang proyekto ay nasa planning stage pa lamang, ang SEPH ay patuloy na nakikipag-ugnayan sa LGU kung anong programa ang maaaring ipatupad patungkol sa seguridad. Pinaguusapan pa lamang kung halimbawa magtatag ng task force at ng tulong mula sa LGU para sa pagtatalaga ng exclusion zone.
Brgy. San Isidro	01-Aug-22	Andres Malibiran, Barangay Captain	EIA process, People	Ano talaga ang ibig sabihin ng external stakeholders? Meron ba itong pinagkaiba sa internal stakeholders?	Jacobs - Katherine Gavile, EIA Preparer	<p>Bilang paglilinaw, ang external stakeholders ang mga communities, agencies, LGUs, at iba pang mga organizations na hindi affiliated sa mga proponent pero maaring maapektuhan ng proyekto.</p> <p>Kapag sinabi naman na internal stakeholders, ito po ang mga empleyado ng kompanya o proponent na shell. Kasama na rin ang mga stockholders o investors nito.</p> <p>Additional po diyan, sa definition naman ni DENR meron din tayong tinatawag na primary o direct at secondary o indirect impact communities or stakeholders. Sa definition ni DENR, yung primary o direct ito po ang mga communities o stakeholders na kung saan ang mga project facilities doon daraan. Iyong secondary o indirect, ito naman po yung mga karatig barangay o</p>

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						komunidad ng mga primary stakeholders na daraanan ng facilities.
		Andres Malibiran, Barangay Captain	EIA process, People	Saan ang San Isidro nabibilang? Sa direct o primary stakeholder? Baka meron kami hinaing pero wala pala kaming karapatan.	Jacobs - Katherine Gavile, EIA Preparer	<p>Base sa tinukoy kanina, ang mga primary or direct ay ang mga dinadaan ng components ng project na barangay kabilang ang Malitam, Libjo at Ambulong.</p> <p>Ang San Isidro ay kabilang sa secondary o indirect impact communities. Pero hindi ito nangangahulugan na hindi valid o hindi na sasagutin ang mga issues and concern ninyo o hindi kayo pwedeng magsabi ng inyong mga hinaing. Maaaring secondary impact barangay kayo pero over the course of the construction, the operations of the project, meron ding maging epekto and proyekto sa inyo.</p>

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		Andres Malibiran, Barangay Captain	EIA process, People	Sa ECC conditions meron ba pinagkaiba sa primary at secondary ang mga benepisyo?	Jacobs - Katherine Gavile, EIA Preparer	<p>Sa ECC conditions, wala doon pagkakaiba o distinction na ito lang mga benepisyo na ito ay para sa primary, ito lang para sa secondary. Kapag natapos ang pagaaral, at in-evaluate na ni DENR at pereho na may epekto sa primary at secondary barangays, sila ang magsasabi sa mga proponent na dapat ang Social Development Plan ay naaangkop ayon sa impact sa environment ng primary o secondary.</p> <p>Sa ECC po nakalagay doon na ipatupad ng proponent and kanyang social development plan ayon doon sa resulta noong konsultasyon sa stakeholders tsaka ayon doon sa review ni committee.</p>
					SEPH - Beverly Berberabe, CLO	<p>Based on the location ng project nakakategorize ang mga lugar pero hindi ibig sabihin na mas kaunti o pangalawa sa benepisyo ang lugar</p> <p>Once the ECC is there, makikita po natin kung ito ba ay naaayon. Ganoon ka specific ang kailangan sa social development plan.</p>
			EIA process	Ano po ang ang mga parameters na pinag-aaralan sa EIA. Maari ba namin malaman kung hanggang saan ta ano ang mga scope nito?	Jacobs - Katherine Gavile, EIA Preparer	Sa proseso ng EIA ay may mga standard parameters na naka-set ayon sa guidelines. Ito ay binubuo ng pag-aaral sa soil, water, air, noise at people.

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			People, Social Development Plan	Iminumungkahi na i-activate ang TALIM clearance kung saan ang isang proyekto ay kukuha ng Barangay Clearance mula sa bawat Barangay na parte ng TALIM barangays.		no response required
			People, Social Development Plan	Ano ang job opportunity sa operations phase?	SEPH - Joven Hernandez Business Development Lead	Ang proyekto ay simple at maliit lamang. Hindi na ito mangangailangan ng konstruksyon ng planta at pawang pipelaying lang ang gagawin. Ang FSRU na barkong darating ay parang planta na kung saan lahat ng proseso ay dito na ginagawa. Hindi gaano kadami ang mga trabahante na kakailanganin. Subalit kung matuloy ang LNG, at dahil ito ay fuel para sa mga power plant, maaaring mahikayat ang mga planta ng kuryente na dito magtayo at itong mga proyektong ito ay mas malaki at mangangailangan din ng mga empleyado.
			People, Social Development Plan	Yung 300-500 zone, bawal makapasok ang mga mangingisda?	SEPH - Joven Hernandez Business Development Lead	Pwede dumaan ang mga mangingisda pero bawal huminto sa safety zone. Bawal rin mamingwit sa safety zone. Hindi ito tulad halimbawa sa Jetty 1 na may schedule ang delivery ng produkto at maaaring makapangisda kung walang barko.
			Project Description	Sana sa project na ito, kung maging smooth ang takbo, mag start na ba ito ng 2022?	SEPH - Joven Hernandez Business Development Lead	Ang construction ng LNG pipelines ay estimated magsisimula ng 2024.

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		Primo Anonuevo Jr, Barangay Counselor	People, Social Development Plan	Kami ay umaasa na kung ano ang assistance sa kabilang barangay ay kaparehas ang makukuha ng San Isidro	SEPH - Joven Hernandez Business Development Lead	Gagawing isa ang pagtingin o holistic ang approach para sa mga barangay ng TALIM.
			People, Social Development Plan	Tumitingin kami na kapag nag-ooperate na ay makakakuha pa rin kami ng benepisyo sa proyekto	SEPH - Joven Hernandez Business Development Lead	Ang FSRU ay kumpletong facility na, 40pax lang ang specialist na nasa barko. Subalit dahil ito ay magsusupply ng natural gas, mahihikayat ang mga power plant na magtayo malapit dito at maaring magkaroon ng mas maraming oportunidad sa trabaho sa mga plantang ito.
			People, Social Development Plan	Pare-parehas lang po ba ang benepisyo na matatanggap ng Talim Islands? At, magtatayo po ba ng bagong Foundation para sa LNG?	SEPH - Beverly Berberabe, CLO	Wala pa pong bagong Foundation para sa proyektong ito, PSFI pa lang po ang existing at ang kapartner ng Shell sa kanilang mga programa.
Brgy. Tabangao Ambulong	02-Aug-22	Manolo Macatangay, Barangay Captain	People, Social Development Plan	<p>Sa pipelaying lamang kailangan ng trabahador habang konstruksyon?</p> <p>Pagdating sa operation, may assurance ba na ang magtrabaho na matagalan ay meron na makukuha na taga-Ambulong?</p>	SEPH - Joven Hernandez Business Development Lead	Sa pipelaying po kakailanganin ng workers habang construction phase. Ang FSRU ay kumpleto nang darating at may mga personnel na ito para ito ay ioperate.

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		Erwin Vasquez, ARWASA li President	People, Social Development Plan	Ang darating na type ng proyekto (LNG/FSRU) ay bago at wala tayong local employees na may kaalaman dito. Hindi ba pwede na baka makapagtrain na para sa susunod na henerasyon?	SEPH - Joven Hernandez Business Development Lead	Dahil nasa planning stage pa lamang ang project hindi pa sigurado kung gaano karami ang oportunidad para sa employment sa FSRU bagamat ito ay halos kumpleto na pagdating dito. Pero titingnan pa rin natin ang opportunity for local employment.
		Romulo Abriza, Barangay Councilor	People, Social Development Plan	Sabi ay may 300 meters exclusion zone, yan po ang lugar na dinadaan at ginagamit ng mga tao. Ang lugar na iyan ay ginagamit ng mangingisa para sa pagsisihi.	SEPH - Beverly Berberabe, CLO	We will work with the constituents on this, kagaya ng ginawa noon ni Shell. We will understand the situation and come up with a program to address it. We are partnering with Pilipinas Shell Foundation to address this.
		Teodoro Andal, Barangay Councilor	People, Social Development Plan	Kung sakali na matutuloy ang proyekto, ang aming kahilingan magkakatulungan ang Shell at ang Ambulong.	SEPH - Beverly Berberabe, CLO	Ang Shell Foundation ay nandito at meron tayong existing na programa na nakakatulong para sa Barangay. Hopefully ay magpatuloy ang programa ng Shell Foundation at tuloy-tuloy ang ugnayan natin para dito.
		Manolo Macatangay, Barangay Captain	Permits and clearances	Ang Barangay Clearance na binigay sa Shell noon, may bisa pa ba? O back to zero?	SEPH - Joven Hernandez, Beverly Berberabe, CLO Jacobs - Katherine Gavile, EIA Preparer	Ang Barangay Clearance ay kailangan para sa Notice to Proceed (NTP) ng LNG Project at sinumite ng Shell sa DOE. Itong engagement natin sa ngayon ay para sa ECC. For the Purpose of the ECC, pwede naman na humingi ng bagong clearance o notice of no objection kung kakailanganin.

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Brgy. Libjo	03-Aug-22	Jorge Catilo, Barangay Captain	Safety, Risk Assessment	In case of emergencies, meron bang nakaabang na tugboat na hahatak sa barko palayo sa pier para sa kaligtasan? Ito ba ay may mga safety na nakaabang?	SEPH - Jonabel Abad-Faustino, Engineering Manager	<p>Ang atin pong FSRU ay self-propelled kaya hindi ito nangangailangan ng tugboat. Pero sa aming logistics plan meron pa rin po kaming nakaabang na tugboat para sa emergency cases.</p> <p>Para naman sa karagdagang safety, maaari din po nating gamitin yung mga existing marine services natin sa mga existing jetty natin ngayon.</p>
		Joel Chavez, Barangay Administrator	Flood Hazard	<p>Sa ating mga pipeline may bahagi na naka angat kung saan gagamitin ang existing piperack meron din naka 2 meter deep na hukay sa aming experience sa barangay Libjo Sa Sitio Old San Vicente bumabaha po sa aming barangay diyan sa area ng river bank at diyan sa area (malapit sa SGEI). Pag hindi po kami nabigyan ng assistance para sa open canal lalo pong tataas ang tubig.</p> <p>Sana sakaling magkaroon ng ECC, sa inyong program (SDP) ay 4 metro na dadaanan ng tubig. Sinasabi po</p>	SEPH - Joven Hernandez Business Development Lead	<p>Kami po ay nasa early part of engineering kaya ung mga concern nyo (sa pagbaha) ay mailiconsider namin sa detailed engineering. Sa ngayon po meron po kaming on-going consultations para sa Flood Mitigation Plan sa Batangas City in cooperation with the LGU at kasama rin ang iba pang kumpanya na mag tatayo ng proyekto dun sa area.</p> <p>Kinoconsider po sag aming Social Performance Team ang concern ng barangay sa pagbaha. Ang hinihingi lang din po namin ay yung oras na mapag-aralan ito dahil gusto po namin na kung ito ay mailalagay sa project ito ay magiging solusyon. Tulad po ng nabanggit kanina, ito po ay in coordination with other projects and companies na magtatayo doon at ng LGU.</p>

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				ninyo na wala sa plano ang pag bibigay daanan ng tubig dahil hindi ito lupa ng proyekto. Sa tingin ko kailangan bumili ng lupa na dadanan ng kanal.		
		Jorge Catilo, Barangay Captain	Permits and clearances	Ang Proyekto po bang ito ay under PEZA? Sapagkat kung ito ay under PEZA walang tax na direktang dumadating, walang proyekto sa site ang mga taga barangay.	SEPH - Joven Hernandez Business Development Lead	Hindi po under PEZA ang Project, kasi hindi naman po kami mag eexport ng produkto.
			People, Social Development Plan	Yung mga streetlight sa area ng SGEI noong hindi na operational ang SGEI nawala na din. Maari ba itong maibalik dahil ito ay safety concern	SEPH - Beverly Berberabe, CLO	Yung dadanan ng mga ilaw nafinalize na po namin sa documentation hopefully maayos ng FEED. Approved na po ang pagbibigay ng ilaw.

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				kasi madilim ang dadaanan.		
			People, Social Development Plan	May emergency cases sa loob ng San Vicente, nagpapaalam pa po kami sa security guard para makapasok at makalabas yung sasakayan tulad ng ambulansya at bumbero. Ang hinihingi namin ngayon sana ay direktang makapasok ang mga sasakyan ng barangay tulad ng ambulasya o bumbero.	SEPH - Beverly Berberabe, CLO	Ito ay ikokonsidera namin sa aming Social Development Plan
			Air Quality	Minsan ay nag aamoy LPG, pagdating ng taga DENR wala na ang amoy.	SEPH - Joven Hernandez Business Development Lead	Ang natural gas po ay walang kulay at amoy.

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		Romulo Caniedo, Barangay Kagawad	EIA Process	Ang Jacobs, ano po talaga ang inyong role dito? At, sino po talaga ang may-ari ng proyekto? Gusto lang po naming linawin kung kanino namin dapat ilapit ang aming concerns.	Jacobs - Katherine Gavile, EIA preparer, SEPH - Beverly Berberabe, CLO	Ang Jacobs ay 3rd-party consultant at ang scope ng Jacobs sa proyekto ay tungkol sa ECC. Para sa ibang concerns po pwede po sa amin at sa Social Performance. Sa SHIFT at iba pang assets ng Shell sa Batangas si Ms Jemen po ang community coordinator at kay Nilo Baronio Community and Permits Coordinator for LNG
Tabangao Aplaya Fisherfolk	03-Aug-22	Paterno Balid, LAMBAT member	Project Description	Saan dadaan ang barko (FSRU)?	SEPH - Joven Hernandez	Ang FSRU ay permanenteng nakadaong 24 hours a day at 7 days a week.
			People, Social Development Plan	Meron bang madadaan ang mga bangka lalo na sa pagitan ng Jetty 2 at Jetty 4?	SEPH - Jonabel Abad-Faustino, Engineering Manager	Maari naman dumaan sa safety zone na nasa 300 to 500 meters mula sa Jetty 4. Ngunit hindi maaring magtagal sa lugar na ito.
		Romeo Eje, Brgy Aplaya Senior Citizen President	People, Social Development Plan	Ang problema po namin ay iyang jetty 4 na yan ay pangisdaan namin ng mga malalaking isda. Baka sakaling sa ibang paraan tulad ng konstruksiyon at trabaho ay matulungan kami ng Shell kapalit ng nawalang pangisdaan.	Jacobs - Katherine Gavile, EIA Preparer	Isasama sa pagpapalano sa social development plan ang pagtugon sa mababawasang kabuhayan ng mangingisda.

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			Safety, Risk Assessment	lagyan ng palatandaan o mga marking para malaman ng mga mangingisda yung zone. Para hindi lumapit ang mga mangingisda sa FSRU	SEPH - Beverly Berberabe, CLO	<p>Gusto lang naming linawin na ang 300m exclusion zone iyon po ay no pass zone. Iyon po ang area of safety ng barko. Yung 300-500m safety zone, meron pass zone po iyon, pero ito ay no fishing zone. Salamat sa suggestion na paglalagay ng buoy.</p> <p>Ang concern din ng city, dahil ito ay permanente sa dagat (FSRU), iniisip ng pamahalaan ang kapakanan ng mga mangingisda. Dito papasok ang social development plan. D+F48ito paguusapan yung saan ang area kung saan mangingisda.</p> <p>meron na nasimulan ang PSFI para sa lambat, meron na mga nasimulang programa at magiging tuloy tuloy ang mga programa.</p>
			People, Social Development Plan	Magko conduct po kami ng pa-meeting sa kapwa naming mangingisda para mabahagi at makapagpa abot ng mga napag usapan	SEPH - Beverly Berberabe, CLO	Thank you po sir. Napaka laking bagay po iyon. Maganda po talaga napapag usapan. Kapag sa meeting ninyo kung meron mga lumabas na bago o iba pa na comments, paki sabi sa amin.
		Silverio Bilaro, LAMBAT President	Safety, Risk Assessment	Ang suggestion ko po ay ung area na restricted ay lagyan ng buoy para alam namin kung hangang saan kami maaring mangisda.	SEPH - Beverly Berberabe, CLO	Magkakaran po ng demarkation. Kami po ay nakikipagusap din sa mga regulators tulad ng kung kailangan ng magpapatrol.

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		Arnel Lacpuno, LAMBAT member	People, Social Development Plan	<p>Sa jetty 1 and jetty 4 diyan po dumadaan ang mga bangka namin, pu-puwede bang maghulog ng lambat sa laot?</p> <p>Follow up: So puwedeng dumaan pero bawal maghulog ng lambat?</p>	SEPH - Jonabel Abad-Faustino, Engineering Manager	Pwede pong dumaan ngunit hindi pwedeng maghulog ng lambat. Hindi po puwede magtagal sa safe zone. Kasi hindi lang po ang panganib na explosion, may mga emergency situation na for example kailangan umalis ng barko na madalian, baka may mahagip.
Brgy. Wawa Fisherfolk	04-Aug-22	Orlando P. Dapula, Fisherman	Safety, Risk Assessment	Sa safety zone na may lawak na 200m, may madadagdagan pa ba? Paano kung malapit na kami sa bilog na iyon?	Jacobs - Katherine Gavile, EIA Preparer	Magkakaroon ng demarcation na magmamarka sa exclusion zone para alam ninyo kung nakakalapit na sa 200m safety zone.
		Restituto Roce, Barangay Chairman	Safety, Risk Assessment	<p>Dapat maging aware ang mga taga-Barangay kung hangang saan ang hangganan na pwedeng makapangisda.</p> <p>Wala naman problema para sa amin, ang mahalaga ay mapangalagaan ang mga taga Barangay at ang mga mangingisda ay aware at laging ligtas.</p> <p>Sana hindi ngayon lang ang magiging</p>	Jacobs - Katherine Gavile, EIA Preparer	Hindi ito ang huling meeting natin bilang bahagi ng proseso. May mga susunod na meeting kasama ang Shell at mga taga Barangay.

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				meeting natin. Sana liwanagan ang sinasabi at pinapaliwanag para malaman kung pano ito iwasan at para tayo ay maging ligtas.		
		Valentin Berana, Barangay Clerk	Safety, Risk Assessment	Ano ang pinakaworst na pwede mangyari kung napatagal kami sa gitna ng lugar na hindi pwede (exclusion and safety zone)?	Jacobs - Katherine Gavile, EIA Preparer, SEPH - Jonabel Abad-Faustino, Engineering Manager	<p>Alam natin na ang performance ng Shell sa Malampaya at Refinery, napakahigpit ng requirements for Safety. Kumpara sa crude carriers, hindi siya taga-deliver ng produkto, siya mismo ang planta kung saan ang processing at pagpapainit ng liquefied gas pabalik sa gas na phase ay mangyayari. Ang natural gas ay ignitable. May safety at emergency equipment sa FSRU para maiwasan ang aksidente. Safe naman ang operations ng LNG. Wala kayong mararamdan o maamoy na emissions, pero iniiwasan na may magtagal diyan para hindi matamaan ng FSRU kung kinakailangan nitong gumalaw lalo kung may emergency.</p> <p>May ginagawang pagaaral ng extreme emergency case kung saan kung meron kaming 10 linagay na pang-</p>

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						iwas aksidente, kung sabay sabay di gumana lahat, hanggang saan ang magiging epekto. Sa buong history ng LNG at FSRU ay walang history ng leak, pagsabog, o malaking diskasya. Pero hindi ibig sabihin ay hindi pwede mangyari kaya plinaplano ang design na may safety.
			People, Social Development Plan	Ano ang magiging epekto ng proyekto sa ekonomiya at kabuhayan naming mga mangingisda?	Jacobs - Katherine Gavile, EIA Preparer	Kasama iyan sa kasalukuyang pinagaaralan at kaya rin tayo nagpulong dahil gusto naming maintindihan kung saan ang dinadaan at saan kayo nangingisda. Sa ngayon, hindi masasabi ng tuwiran na ganito kadami ang magiging epekto sa inyong kabuhayan. Pag-aaralan pa ito para makagawa ng Social Development Plan.

LGUs/Sectors Covered by IEC	Actual IEC Schedule / Dates	Name and affiliation of stakeholder	Question/Concern Category in the EIA	Issues Raised / Suggestions Provided	Proponent/Jacobs	Response
		Glendo D. Atienza, Barangay Treasurer	Safety, Risk Assessment	Ang 200m (safety zone), meron bang palatandaan o warning devices para malaman ng mga mangingisda na nakalagpas na sila?	Jacobs - Katherine Gavile, EIA Preparer	<p>Maari tayong magkaroon ng markers gaya ng buoy para magkademarkation ang exclusion at ang 200m safety zone. Kung saan pwede dumaan pero hindi pwede maglagi.</p> <p>Ang project na ito ay maglalagay ng safety measures. Nagkaroon na ng konsultasyon sa LGU at department heads ng mga ahensiya kasi ang paglalagay ng safety zones ay kelangan pagusapan. Kasama sila para sa pinaka epektibong pagawa para ma-preserve at matupad ang safety and security.</p>
		Judy Clamor, Fisherman	Project Description, People, SDP	<p>Ang storage (FSRU) kung dumating, gaano katagal nandoon?</p> <p>Sa tapat ng mismong lugar ng FSRU kami naghahanap buhay. Sa kanan ng barko. Magiging kawalan ng hanap buhay samin.</p>	Jacobs - Katherine Gavile, SEPH - Jonabel Abad-Faustino, Engineering Manager	<p>Semi-permanent ang FSRU. Ibig sabihin 24/7 nakakabit ito sa Jetty 4. Hindi kagaya ng crude carriers na pagdeliver ng produkto ay umaalis ito. Kung walang emergency o maintenance activities na kinakailanganin na ito ay umalis, nakadaong na permanente ang FSRU. Ang LNG carrier na galing ibang bansa ang magdadala ng produkto at siya ang darating at aalis.</p> <p>Ang safety zone ay pwedeng daanan pero hindi pwede manatili dahil ang FSRU ay nakakabit na sa Jetty 4 habang operations. Sa labas ng safety zone, ito ay free to use. Naiintindihan namin na kakain talaga ito ng area pero hindi buong area kung saan pwede mangisda. Kinikilala namin ang epekto sa kabuhayan ng mga mangingisda. Ang SDP ay magagawa para kung maapektuhan ang kabuhayan, makapagbigay ng programa kun ano ang pwedeng gawin ng proyekto para sa komunidad na ito.</p>

LGUs/Sectors Covered by IEC	Actual IEC Schedule / Dates	Name and affiliation of stakeholder	Question/Concern Category in the EIA	Issues Raised / Suggestions Provided	Proponent/Jacobs	Response
		Jun Flutado, Mangingisda	People, Social Development Plan	Kung matutuloy ang proyekto, hindi na kami makakapag hanapbuhay diyan. Sa gilid lang kami nangingisda, sa harap ng Calumpang pababa.	SEPH - Beverly Berberabe, CLO	Ang 300-500 meters ay ang current study, ang 200m safety zone na additional sa existing exclusion zone ay may ongoing studies. Maaring maging less than 500 meters at magkaron ng allowance doon. Kung sakaling ito ang binigay na limit na ito sinabi ni DENR na itong 500m ang safety zone, ito ay walang activity kung hindi pass through lamang. Titignan natin ang oportunidad sa ibang area.
		Restituto Roce, Barangay Chairman	People, Social Development Plan	Kami, basta hindi kami maapektuhan ng malaki, ang mahalaga ay matuloy ang project para sa buong Pilipinas. Tulad ng inyong nabanggit may mga pag-aaral pa na ginagawa. Sana ang Barangay ay laging sabihan kung maapektuhan o hindi. Ang pangingisda ang pangunahing kabuhayan ng mga residente ng Wawa. Meron pa siguro mga lugar na kung saan pwedeng ang mga mangingisda.		No response required.

LGUs/Sectors Covered by IEC	Actual IEC Schedule / Dates	Name and affiliation of stakeholder	Question/Concern Category in the EIA	Issues Raised / Suggestions Provided	Proponent/Jacobs	Response
		Vicente Madla, Mangingisda	Project description, waste management	Sa produksyon, ang domestic at wastewater, saan ito itatapon?	Jacobs - Katherine Gavile, SEPH - Jonabel Abad-Faustino, Engineering Manager	<p>Ang waste ng FSRU ay tatauhan ng mga 40 operators lamang. Ang pipeline ay nakakabit, di na gagalawin. Waste para sa FSRU ay domestic waste. Ang emissions ng proyekto ay usually CO2 pero kaunting kaunti lamang. Ang dumi sa barko, kung hazardous, ay ipapack at may waste hauler na DENR accredited na magtatanggal sa barko para dispose sa ibang lugar. Usually ang FSRU ay may sewage treatment at oil water separator para ang mga grasa ay matanggal at susunduin ng waste hauler ito. Clean water ang ididischage.</p> <p>Si DENR ay mahigpit sa Waste Management. May mga pagaaral sa proseso na kailangang sundin upang masiguro na walang epekto sa environment.</p>
		Valentin Berana, Barangay Clerk	Safety, Risk Assessment	Ano ang kahandaan sa sakuna?	SEPH - Jonabel Abad-Faustino, Engineering Manager	Magkakaroon ng emergency response plan ang proyekto. May emergency shutdown ang FSRU at ang pipeline. Maraming barriers ang inilalagay sa design. Ang flare ay gagamitin para kung may upset o sobrang gas ito ay susunugin na lamang. In terms of emergency response, kasama ito sa planning.
		Restituto Roce, Barangay Chairman	People, Social Development Plan	Trabaho sa Barangay, kung may skilled naman, kung meron oportunidad para sa amin dito.	SEPH - Joven Hernandez Business Development Lead	Pag natuloy ang project, darating ang mga powerplant kaya makakamaraming oportunidad para sa trabaho.

Barangay Tabangao-Aplaya

Shakey's Events Place, Brgy Pallocan West Batangas City

18 July 2022

9:00 to 11:00 AM



Photo 1: View of the participants and facilitators during the IEC activity.



Photo 2: Jonabel Abad-Faustino (Engineering Manager, SEPH) presenting the Project Details to the participants.



Photo 3: Alexander Vergara, Kagawad asking questions during the open forum.



Photo 4: Leonel Mendoza, Sangguniang Kabataan raising his queries regarding the project.



Photo 5: Nick Eje, Barangay Kagawad asking questions and giving insights.



Photo 6: Silverio Bilaro, Fisherfolk representative raising his concerns regarding the project.

Batangas City LGU
City Hall
18 July 202
22:00 to 4:00 AM



Photo 7: Katherine Gavile (EIA Preparer, Jacobs) presenting during the IEC Activity.



Photo 8: Jonabel Abad-Faustino (Engineering Manager, SEPH) presenting the Project Details to the participants.



18/07/2022

Photo 9: RD Dimacuha sharing his insights and asking queries during the open forum.



18/07/2022

Photo 10: Gilda Goroy, City Planning Coordinator raising questions during the open forum.



18/07/2022

Photo 11: Beverly Berberabe (Community Liaison Officer, SEPH) answering the questions during the open forum



18/07/2022

Photo 11: Noel Silang, Public employment service officer seeking clarifications during the open forum.



18/07/2022

Photo 12: Participants listening to the IEC Presentation

Barangay Malitam
Taclobo Conference Room
01 August 2022
9:00 to 11:00 AM



Photo 13: Participants and Facilitator (Katherine Gavile, Jacobs) during the IEC Presentation.



Photo 14: Katherine Gavile (Jacobs) presenting the EIS Process to the Participants.



Photo 15: Joven Hernandez (SEPH) presenting the Project Details to the Participants.



Photo 16: Participants asking a question during the Open Forum.



Photo 17: Beverly Berberabe (SEPH) answering a question during the Open Forum.

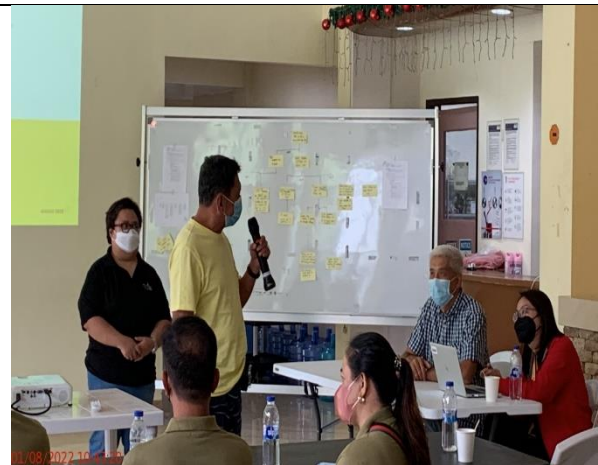


Photo 18: Barangay chairman sharing his insights and queries regarding the project.

Barangay San Isidro
Taclobo Conference Room
01 August 2022
2:00 to 4:00 PM



Photo 19: Participants at the Registration Table for the IEC Activity.



Photo 20: Katherine Gavile (Jacobs) beginning the presentation for the IEC Activity.



Photo 21: Beverly Berberabe (SEPH) introducing the Shell representatives in attendance during the IEC Activities.



Photo 22: Joven Hernandez (Business Lead, SEPH) presenting the Project Details to the participants.



Photo 23: Barangay Captain raising his concerns regarding the pros and cons of the project.



Photo 24: Katherine Gavile (Jacobs) answering the concerns of the barangay kagawad.

Barangay Tabangao Ambulong
Taclobo Conference Room
02 August 2022
9:00 to 11:00 AM



Photo 25: Katherine Gavile (Jacobs) starting the IEC activity and stating the opening remarks.



Photo 26: Joven Hernandez (SEPH) introducing the Shell representatives in attendance.



Photo 27: Barangay Kagawad raising questions during the open forum.



Photo 28: Representative of the Senior Citizens group asking the Safety measures of the FSRU.



02/08/2022 10:28 AM

Photo 29: Barangay Kagawad seeking clarifications regarding the project scope.



02/08/2022 10:37 AM

Photo 30: Barangay Captain asking questions during the open forum.

Barangay Libjo
Taclobo Conference Room
03 August 2022
9:00 to 11:00 PM



03/08/2022 09:28 AM

Photo 31: Katherine Gavile (Jacobs) facilitating the IEC activity.



03/08/2022 09:41 AM

Photo 32: Katherine Gavile (Jacobs) presenting the EIS Process to the Participants.



Photo 33: Jonabel Abad-Faustino (Engineering Manager, SEPH) presenting the Project Details to the participants.



Photo 34: Brgy Councilor sharing his views on the impacts the project and how it would affect their barangay



Photo 35: Barangay Kagawad raising questions during the open forum.



Photo 36: Post activity socials with the barangay captain and other stakeholders.

Barangay Tabangao Aplaya Fisherfolk
Taclobo Conference Room
03 August 2022
1:00 to 3:00 PM



03/08/2022 01:56 PM

Photo 37: Beverly Berberabe (Shell) presenting the Project Details to the participants.



03/08/2022 02:09 PM

Photo 38: Katherine Gavile (Jacobs) presenting during the IEC Activity.



03/08/2022 02:17 PM

Photo 39: Joven Hernandez (SEPH) discussing the scope of the project



03/08/2022 02:12 PM

Photo 40: Fisherfolks attentively listening to the project presentation



Photo 41: President of the fisherfolks association (LAMBAT) clarifying the allowable activities inside the 300-500m Safety & 0-300m Exclusive Zone.

Barangay Wawa Fisherfolk
Barangay Wawa Covered Court
04 August 2022
1:00 to 3:00 PM



Photo 42: Katherine Gavile (Jacobs) presenting during the IEC Activity.



Photo 43: Jonabel Abad-Faustino (Engineering Manager, SEPH) presenting the Project Details to the participants.



Photo 44: Katherine Gavile (Jacobs) giving clarifications to the queries of the fisherfolk.



Photo 45: Fisherfolk raising questions during the open forum.



Photo 46: Barangay Captain giving his insights to the project and closing remarks.



SHELL LNG IMPORT TERMINAL PROJECT
Information, Education, Communications (IEC) Meeting

Taclobo Clubhouse, Batangas City

Scanned with CamScanner



SHELL LNG IMPORT TERMINAL PROJECT
Information, Education, Communications (IEC) Meeting

Taclobo Clubhouse, Batangas City

Scanned with CamScanner



Jacobs

Brgy. San Isidro, August 1, 2022, 2:00 p.m.

Taclobo Clubhouse, Batangas City

[illegible]



Jacobs

SHELL LNG IMPORT TERMINAL PROJECT
Information, Education, Communications (IEC) Meeting

Batangas City LGU, July 18, 2022, 1:30 p.m
Sampaguita Farm, Brgy. Sampaga, Batangas City

[illegible]



Shell
ENERGY

12 July 2022

HON. REYNALDO B. DOCE
Barangay Chairman
Barangay Tabangao-Aplaya

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear **Hon. Doce**,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the members of the Barangay Council and the following sectoral representatives enumerated below to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Shakey's Pizza, National Road, Brgy. Pallocan West, Batangas City (Near SM Batangas) from 9AM to 11AM.

- Chairman, Sangguniang Kabataan (SK)
- President, TARWASA Group
- President, Senior Citizens Group
- School Principal
- Head/President, TODA Group
- Head/President, KALIPI Group
- President, LAMBAT Group

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Shell Energy Philippines, Inc.
41st Floor, The Finance Centre, 26th Street corner 8th Avenue, Bonifacio Global City, 1635 Taguig City, Philippines
+63 (2) 7502 7994 ShellEnergyPhilippines@shell.com

Received by:

S. Vilela
BERNADETTE C VILELA
BRGY. CLERK

July 13, 2022



14 July 2022

HON. BEVERLEY DIMACUHA

Mayor

Office of the Mayor, Batangas City

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Hon. Dimacuha,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

RECEIVED
Office of the City Mayor

Signature : VILM DE CASRO
Printed Name : Dimacuha
Date : 7-15-22



14 July 2022

HON. MARVEY MARINO
Congressman
Office of the Congressman

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Hon. Marino,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

RECEIVED BY

DATE: 7/15/2022

0943-1394686



14 July 2022

MR. ROD DELA ROCA

City DRRM Officer

City Disaster Risk Reduction and Management Office

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Mr. Dela Roca,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

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Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

RECEIVED

BY 
DATE 7/15/2022



Shell
ENERGY

14 July 2022

MR. NOEL SILANG
PESO Officer
Public Employment Service Office

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Mr. Silang,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Received by:
Fina
07/15/2022



14 July 2022

SINSP BENJIE CACA
City Fire Marshall
Bureau of Fire Protection

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear SINSP Caca,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Shell Energy Philippines, Inc.
41st Floor, The Executive Center, 28th Street corner 9th Avenue, Bonifacio Global City, 1635 Taguig City, Philippines
+63 (0) 7902 7904 • ShellEnergyPhilippines@shell.com

Received by 0745H
Vernice Barbonio



14 July 2022

MS. DITAS A. RIVERA

Department Head

Business Permits and Licensing Office

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Ms. Rivera,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

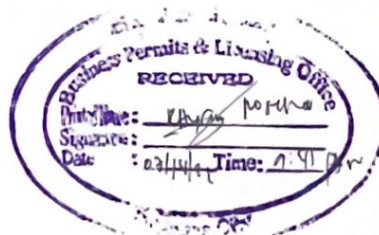
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Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.





14 July 2022

ENGR. FRANCIS BEREDO
Department Chief
Transportation Development Regulatory Office

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Engr. Beredo,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguila Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

RECEIVED BY
DATE 07-15-22



14 July 2022

MR. OLIVER C. GONZALES

City ENRO Officer

City Environmental and Natural Resources Office

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear **Mr. Gonzales**,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

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Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Shell Energy Philippines, Inc.
4th Floor, The Futura Center, 246 Street corner 9th Avenue, Bonifacio Global City, 1635 Taguig City, Philippines
(+63) (2) 7502 1904 • ShellEnergyPhilippines@shell.com





14 July 2022

ATTY. OLIVA D. TELEGATOS
City Secretary
Sangguniang Panglungsod

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Atty. Telegatos,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Received by:
Jeramio Dundo
7/15/22
9:00 am



HON. ALYSSA RENEE A. CRUZ-ATIENZA
Vice Mayor
Office of the Vice Mayor, Batangas City

Received by:
Jeramie Dunn
7/15/22
9:00 am



14 July 2022

GILDA L. GODOY, ENP
Office of the City Planning & Development Coordinator
City Planning and Development Office

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Ms. Godoy,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.





14 July 2022

ATTY. VICTOR REGINALD DIMACUHA
Secretary to the Mayor
Office of the Mayor, Batangas City

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Atty. Dimacuha,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).


With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,


Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

RECEIVED
Office of the City Mayor

Signature : _____
Printed Name : _____
Date : 7.15.22



**Shell
ENERGY**

14 July 2022

PLTCOL SALVADOR SOLANA
Batangas City Police Chief
Philippine National Police

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear PLTCOL Solana,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you or your designated representative to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 18 July 2022 at Sampaguita Farm, Brgy. Sampaga, Batangas City from 1:30PM to 3:30PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 15 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Received by:
07-15-2022



25 July 2022

HON. MAMERTO R. MARASIGAN

Barangay Chairman
Barangay Malitam

SUBJECT: Invitation to Attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear **Hon. Marasigan**,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the members of the Barangay Council and the following sectoral representatives enumerated below to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 01 August 2022 at Taclobo Clubhouse, Shell Residential Compound, Batangas City from 9AM to 11AM.

- Chairman, Sangguniang Kabataan (SK)
- President, TODA Group
- President, Senior Citizens Group
- Head/President, KALUPI Group
- School Principal

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 28 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Received by:



**Shell
ENERGY**

25 July 2022

HON. ANDRES MALIBIRAN

Barangay Chairman
Barangay San Isidro

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear **Hon. Malibiran**,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the members of the Barangay Council and the following sectoral representatives enumerated below to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 01 August 2022 at Taclobo Clubhouse, Shell Residential Compound, Batangas City from 2PM to 4PM.

- Chairman, Sangguniang Kabataan (SK)
- President, TODA Group
- President, Senior Citizens Group
- Head/President, KALUPI Group
- School Principal
- San Isidro Parish Church

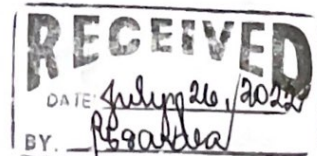
At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 28 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.





25 July 2022

HON. MANOLO V. MACATANGAY

Barangay Chairman
Barangay Ambulong

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear **Hon. Macatangay**,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the members of the Barangay Council and the following sectoral representatives enumerated below to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 02 August 2022 at Taclobo Clubhouse, Shell Residential Compound, Batangas City from 9AM to 11AM.

- Chairman, Sangguniang Kabataan (SK)
- President, TODA Group
- President, Senior Citizens Group
- Head/President, KALIPI Group
- Head/President, Gawad Kalinga (GK) Group
- President, ARWASA Group
- President, SIBBAP
- School Principal

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 28 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Shell Energy Philippines, Inc.
41st Floor, The Finance Centre, 26th Street corner 9th Avenue, Bonifacio Global City, 1635 Taguig City, Philippines
+63 (2) 7502 7994 ShellEnergyPhilippines@shell.com

RECEIVED BY:

MESCHILLA G. FERRER
07-26-2022



27 July 2022

HON. JORGE C. CATILO
Barangay Chairman
Barangay Libjo

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Hon. Catilo,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the members of the Barangay Council and the following sectoral representatives enumerated below to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 03 August 2022 at Tadoba Clubhouse, Shell Residential Compound, Batangas City from 9AM to 11AM.

- Chairman, Sangguniang Kabataan (SK)
- President, TODA Group
- President, Senior Citizens Group
- Head/President, KALUPI Group
- School Principal
- President, LIMCO

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on or before 28 July 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Received by:
Lipatan
7-28-2022
11:38am



02 August 2022

MR. LANDILO MAGBOO
President
Wawa Fishermen Association

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Mr. Magboo,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the members of the **Wawa Fishermen Association** to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 03 August 2022 at Taclobo Clubhouse, Shell Residential Compound, Batangas City from 1PM to 3PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on 02 August 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative Shell
Energy Philippines, Inc.

Received by: 08-02-22
Landilo Magboo
L. Magboo



02 August 2022

HON. RESTITUTO ROCE
Barangay Chairman
Barangay Wawa

SUBJECT: Invitation to attend the Information, Education, and Communication (IEC) Campaign of the proposed Shell LNG Import Terminal of Shell Energy Philippines, Inc.

Dear Hon. Roce,

Shell Energy Philippines, Inc. (SEPH) is going to conduct an Information, Education, and Communication (IEC) Campaign of its proposed Shell LNG Import Terminal Project.

This campaign will be organized by both SEPH and its consultant, Jacobs Projects Philippines, Inc. (Jacobs). This is part of the requirement of the Philippine Environmental Impact Statement System (PEISS) in relation to SEPH's application for an Environmental Compliance Certificate (ECC).

With this, we would like to invite you, together with the president and members of the **Wawa Fishermen Association** to participate on the conduct of this Information, Education, and Communication (IEC) Campaign for the Proposed Shell LNG Import Terminal Project which is scheduled on 03 August 2022 at Taclobo Clubhouse, Shell Residential Compound, Batangas City from 1PM to 3PM.

At the IEC Campaign, project facts and updates will be presented. You will also have an opportunity to freely express your concerns and ask questions about the project.

Appreciate if you can communicate your confirmation on 02 August 2022 by sending a confirmation message to Ms. Katherine Gavile (+63 917 841 5995) or Mr. Nilo Barbonio (+63 917 827 7229).

Thank you and we look forward to your participation.

Sincerely,

Pedro Joven Hernandez
Authorized Representative
Shell Energy Philippines, Inc.

Shell Energy Philippines, Inc.
41st Floor, The Finance Centre, 26th Street corner 9th Avenue, Bonifacio Global City, 1635 Taguig City, Philippines
+63 (2) 7502 7994 ShellEnergyPhilippines@shell.com

RECEIVED!
08-02-2022 RETNAKT ARANAS
KAGAWAN