

**PROJECT SUMMARY
FOR LIZA PHASE 1 DEVELOPMENT,
STABROEK LICENSE AREA, OFFSHORE GUYANA**

Esso Exploration and Production Guyana Ltd.

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BACKGROUND

Esso Exploration and Production Guyana Limited (EEPGL) has a Petroleum Agreement with the Government of Guyana dating back to 1999, which covers approximately 26,806 km² (10,350 square miles) in the Stabroek block. In 2014, Hess (30%) and Nexen (25%) acquired a commercial interest to the block. In May 2015, EEPGL announced a significant discovery of high-quality oil-bearing sands with the Liza-1 well (approximately 190 km [120 miles] offshore Guyana). In July 2016, EEPGL announced that drilling results from the Liza-2 well, the second exploration well in the Stabroek block offshore Guyana, confirmed a world-class discovery with a recoverable resource of between 800 million and 1.4 billion oil-equivalent barrels.

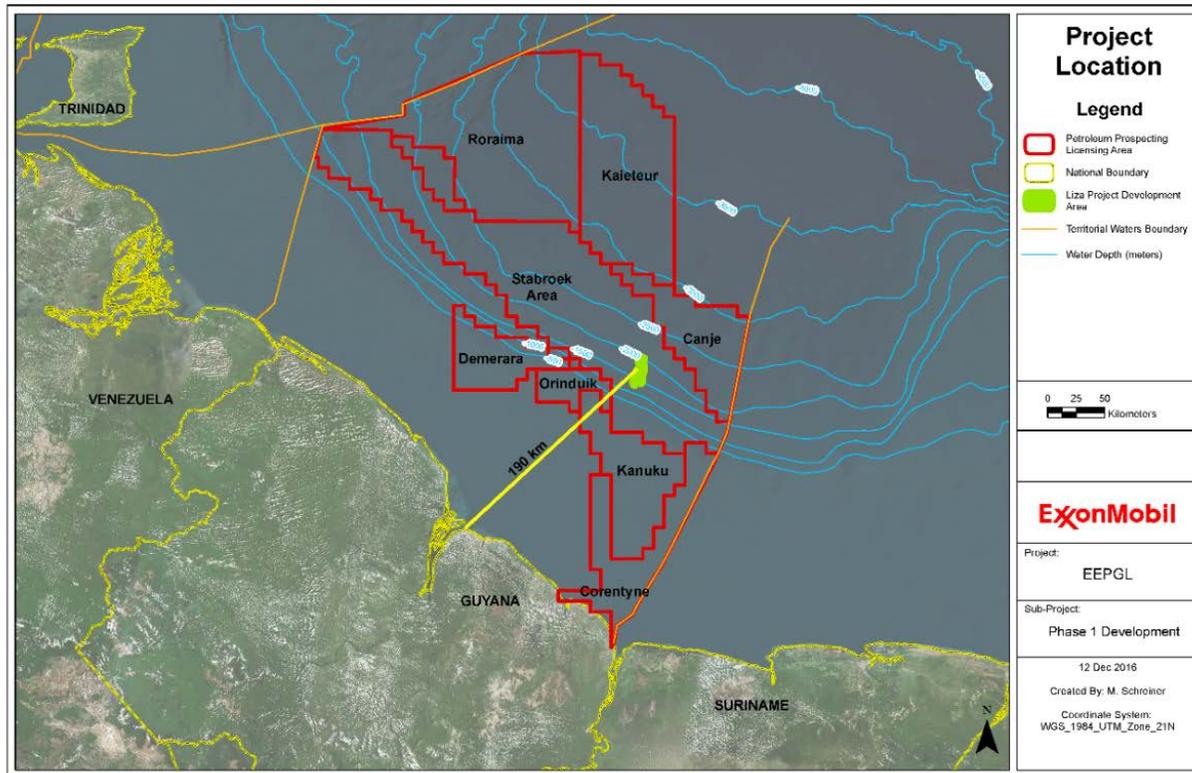
For historical context, petroleum exploration offshore Guyana began in the late 1950's and prior to the current activity by EEPGL and others, historical activity had peaked in the late 1960s. Exploration activity offshore Guyana decreased substantially from the mid-1970s through the early 2000s. In 2000, a drilling rig was forced to abandon the site by the Surinamese government, which claimed that the site was in Surinamese waters. In September 2007, the dispute between Guyana and Suriname was settled by the United Nations International Tribunal of the Law of the Sea (ITLOS). Despite the increased operational certainty, no further drilling took place offshore Guyana until 2012. Most recently, EEPGL has undertaken over two years of exploration and assessment activities in the Stabroek Block. The first exploration well, Liza-1, was successfully drilled during the first half of 2015 and a second well (Liza-2) was drilled in early 2016. A multi-well exploration drilling program will continue to be executed in the Stabroek Block. EEPGL has also conducted several geotechnical, seismic, and environmental surveys since 2014 and further surveys are planned for 2017.

SITE, DESIGN, AND SIZE OF PROJECT

EEPGL is considering a phased development of the Stabroek Block Liza discovery. This project would serve as the initiating oil and gas development project in Guyana. EEPGL is conducting an Environmental Impact Assessment (EIA) for the initial production operations phase (Phase 1). Separate environmental authorization would be pursued for subsequent phases.

Figure A.1 shows the location of the Liza Phase 1 development, approximately 190 km (120 miles) northeast of Georgetown, Guyana in the Stabroek Block. The Stabroek Block is located on the continental slope between Guyana's continental shelf and the deep marine plain of the tropical North Atlantic Ocean east of the Lesser Antilles.

Figure A.1 Location of the Liza Field within the Stabroek Block

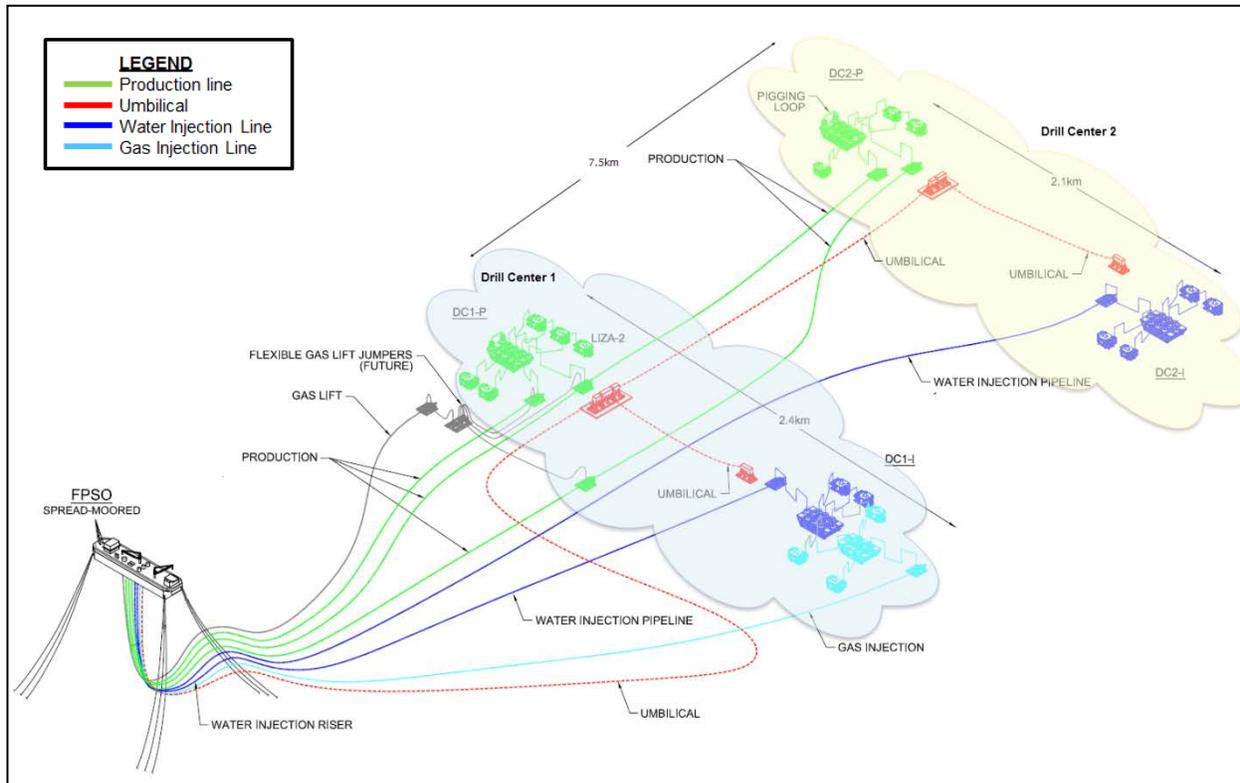


The major components of the Liza Phase 1 Project include:

- Floating Production, Storage, and Offloading (FPSO) Vessel
- Mooring system for FPSO
- Drill Ships
- Wells
- Subsea, Umbilicals, Risers, and Flowlines (SURF)
- Export Tankers
- Onshore support including Shorebases
- Marine support vessels and helicopters

The development plan for Liza will use an FPSO and SURF production system. This is a proven approach for deepwater oil developments and would leverage both operator and industry proven technologies and experiences from other regions (e.g. West Africa). Figure A.2 illustrates the preliminary conceptual layout of the production system. EEPGL is currently evaluating design criteria and options for the development.

Figure A.2 FPSO and SURF System Layout

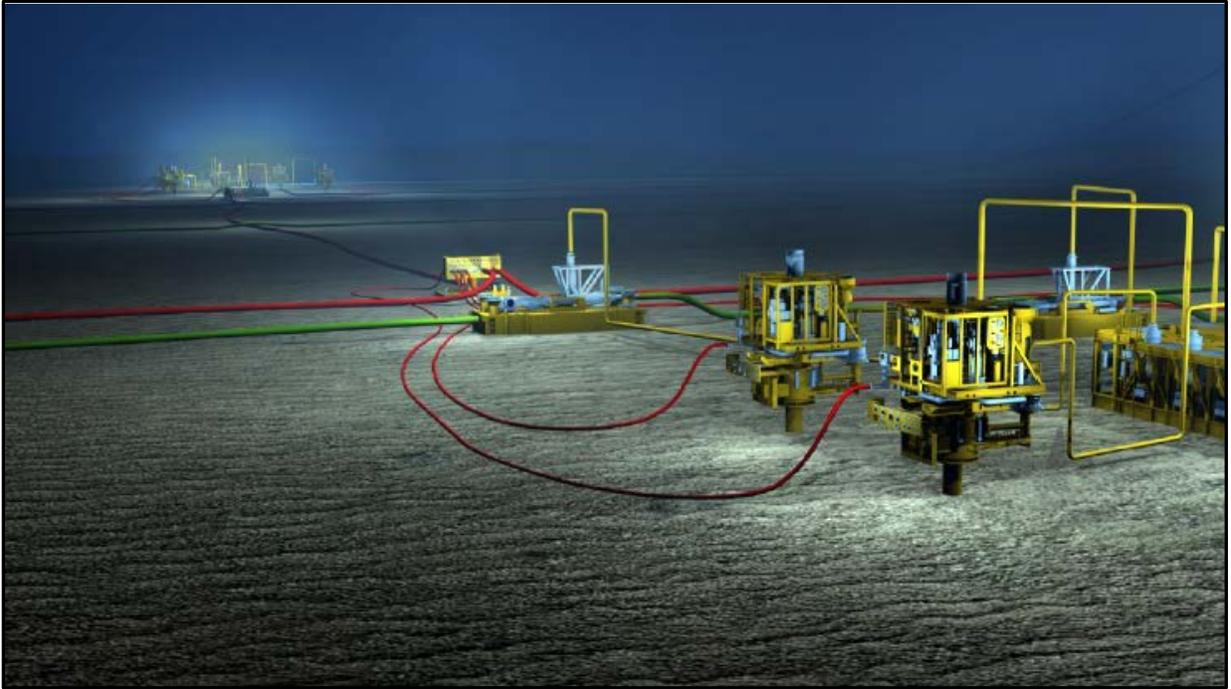


NOTE: Locations in figure subject to change

The SURF facilities for the Liza project are composed of subsea production and injection wells clustered around subsea manifolds. Approximately 17 wells will be drilled at two subsea drill centers, and hydrocarbons from the reservoir will be transported through subsea flowlines to the FPSO at the surface. The risers and umbilicals will connect the equipment on the sea floor to the FPSO. The subsea system will be monitored and controlled using a control system connected to the FPSO through a control umbilical which also supplies chemicals to the subsea facilities. The hydraulic fluid for operating the subsea control system will be water-based. Figure A.3 represents an example of subsea facilities on the sea floor.

Most of the major SURF equipment will be shipped preassembled and pre-tested directly to the offshore Project site from their points of origin. Other minor equipment, supplies, and materials may be temporarily staged at the existing shorebases and associated laydown yards and warehouses until transferred offshore for installation or use.

Figure A.3 Example Subsea Facilities (SURF)



The FPSO will be a converted double hull tanker or VLCC (Very Large Crude Carrier), approximately 340m long by 58m wide by 33m deep (1115 ft long by 190 ft wide by 110 ft deep), and will be moored on location. See Figure A.4 for a conceptual representation of an FPSO. The FPSO will be moored approximately 190 km (120 miles) offshore. Oil produced from the reservoir will be stored in the FPSO tanks prior to export. All oil produced from the FPSO would be exported to market via conventional tankers owned/operated by others.

Figure A.4 Example of FPSO



The FPSO will have a production capacity of around 100,000 barrels of oil per day, with the ability to safely operate at sustained peaks of approximately 120,000 barrels of oil per day. The FPSO will have a minimum oil storage capacity of 1.6 million barrels of oil within its hull. It's mooring system will be designed to keep the FPSO on station continuously for at least 20 years. At peak production during Phase 1, the FPSO will offload up to 1 million barrels of oil to a conventional tanker approximately every 5-10 days. The conventional tanker will be held in position with the assistance of tug(s) to maintain a safe separation distance of approximately 120m (400 ft) from the FPSO. Figure A.5 shows an example of an FPSO tandem offloading configuration.

Figure A.5 Example of FPSO Tandem Offloading Configuration



Operating processes during production operations will include flowing the reservoir hydrocarbons from the wells to the FPSO, where further processing, storage, and management occurs prior to offloading the oil to the conventional tankers. General maintenance of the production equipment will also be required. Some industry standard chemicals will be required as part of the processing of the oil. The production facilities will also require the use of industry standard additives to prevent corrosion, scale, and hydrate formation. The exact chemical requirements and quantities will be determined as part of the ongoing facility design work, and will be addressed in the EIA.

Based on the water depths in the Liza development area, dynamically-positioned drill ships as shown in Figure A.6 would be used to drill the wells. The process of drilling the wells for the Liza Phase 1 development will be very similar to the process followed during the Liza-1, Liza-2, and Liza-3 campaigns. After drilling to total depth, the wells will be completed and the subsea production equipment will be installed.

During the drilling process, drill ships will require various materials, instruments, and devices to connect the drill bit to the drill ship. Various size casings will be set as the well is drilled deeper. The drilling process will also require drilling fluid to remove cuttings and control formation pressures, and cement to support the casing and to isolate reservoir formations. Completion equipment, and completion fluids will be also be required. The raw materials above are in addition to the basic supplies required to operate the production equipment and support vessels such as fuel, food for the crews, fresh water, and industrial consumables.

Figure A.6 Example of Drill Ship



Hazardous and non-hazardous wastes as well as sanitary discharges will be produced throughout the project. Contractors will have Garbage/Waste Management Plans that address the types and quantities of waste to be generated as a result of their vessel operations. EEPGL will have a Waste Management Plan that is part of the Environmental and Socioeconomic Management and Monitoring Plan. The objective of the waste management plans will be to verify that all wastes are managed in accordance with internationally accepted standards and applicable Guyana laws and regulations. Discharges of bilge and other wastewaters from all vessels utilized for the project will be managed in accordance with MARPOL.

The project will utilize onshore infrastructure which includes shorebases, pipe yards, fabrication facilities, fuel supply facilities, and waste management facilities in Guyana. The shorebases and associated supporting warehouses and laydown yards will be used to support the drilling, installation, and production operations of the project. Additional logistical support may be provided by others outside of Guyana, which will be determined by the project contractors. Helicopters required for crew changes are planned to be operated out of the Ogle Airport as is currently being done for exploration drilling.

The Project is in the initial stages of planning and design, and detailed estimates of workforce requirements have not yet been developed. Preliminary workforce estimates are provided below. These estimates will be refined following selection and contracting for the drill ships, FPSO, SURF installation, support vessels, and shorebase support facilities.

The following manpower levels are projected for the offshore components during each stage of the project; some stages may occur concurrently:

Well Drilling	Approximately 600 Persons at peak utilizing up to two Drill Ships. Dependent upon final Drill Ships and support vessels selected.
FPSO and SURF Mobilization/ Installation/ Hookup	Approximately 600 Persons at peak. Dependent upon final construction/installation and support vessels selected.
Production Operations, including FPSO and conventional tanker	Approximately 100-140 Persons at peak, with an additional 25-30 Persons onboard the tanker. Dependent upon conventional tanker schedule.
Demobilization	Approximately 60 Persons at peak.

In addition to the offshore components, there will be a comparatively small number of personnel providing shorebase and logistical support onshore. The onshore staff will be expected to ramp up gradually through the mobilization and installation stage until reaching a maximum level during the drilling campaign and installation activities, and then diminishing during production operations. The onshore staff is expected to increase again briefly during demobilization.

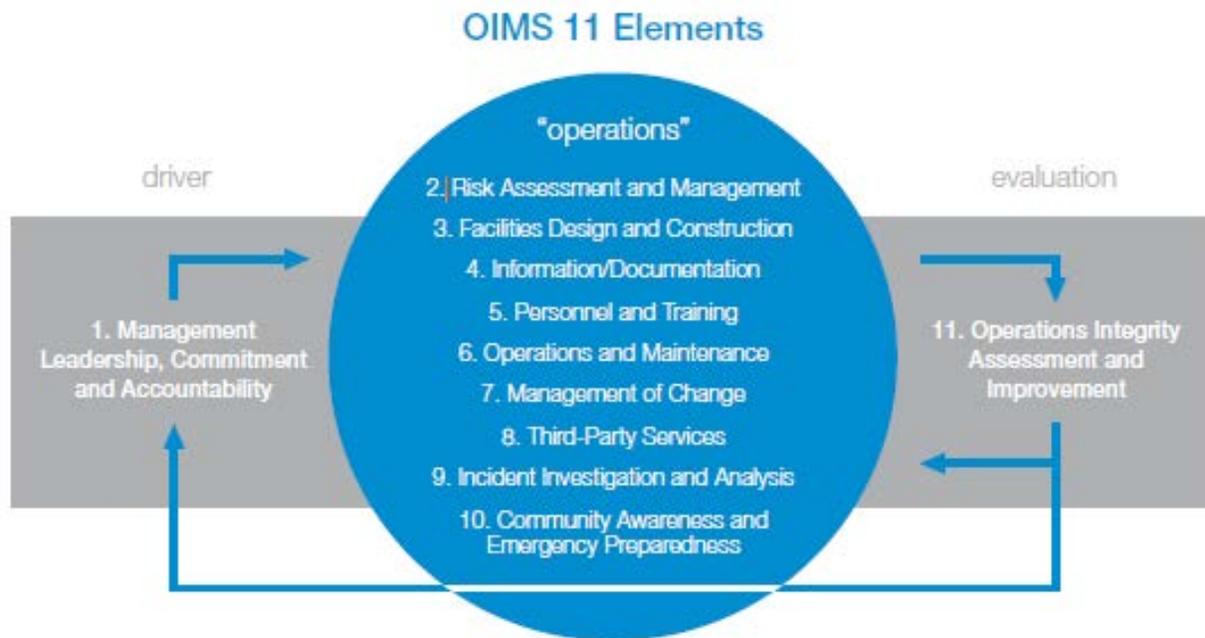
Prior to the end of the term of the Petroleum Agreement, an abandonment program will be submitted for the approval of the government. At this time, the expectation is that the SURF components would be detached from the FPSO and abandoned-in-place on the sea floor, consistent with standard industry practice. Risers and umbilicals would be flushed before being abandoned and wells would also be plugged and abandoned. For each well, cement and mechanical barriers would be used to secure the well casing and isolate the wellbore from the formation. A cement plug would also be set near the mudline surface to cap each well. The FPSO is expected to be towed away.

EEPGL is committed to conducting business in a manner that is compatible with the environmental and economic needs of the communities in which it operates, and that protects the safety, security, and health of its employees, those involved with its operations, its customers, and the public. These commitments are documented in its Safety, Security, Health, Environmental, and Product Safety policies.

These policies are put into practice through a disciplined management framework called the Operations Integrity Management System (OIMS). Company's OIMS Framework establishes common expectations used by its affiliates worldwide for addressing risks inherent in its business. The term Operations Integrity (OI) is used to address all aspects of its business that can impact personnel and process safety, security, health, and environmental performance.

Application of the OIMS Framework is required across all of company's affiliates, with particular emphasis on design, construction, and operations. Management is responsible for ensuring that management systems satisfying the Framework are in place. Management system implementation will be consistent with the risks associated with the business activities being planned and performed. A graphical model of OIMS is shown in Figure A.7.

Figure A.7 Operations Integrity Management System (OIMS)



POSSIBLE EFFECTS ON ENVIRONMENT

EEPGL has identified possible effects from the project which are related to physical, biological, socioeconomic, community health, and human environment values. Possible effects could potentially be related to:

- Air quality and climate
- Light
- Underwater sound
- Marine water quality
- Marine/natural resources including but not limited to marine mammals, sea turtles, wildlife, fish, and their habitats
- Protected areas and other sensitive habitats
- Human and ecological health
- Archeological and cultural heritage resources
- Community health and wellbeing
- Marine use
- Transportation and infrastructure services

The possible effects could be directly and/or indirectly generated by the project during development, production operations, and/or decommissioning, and such effects could be adverse or positive in nature. Additional information on potential effects are included in Attachment A.

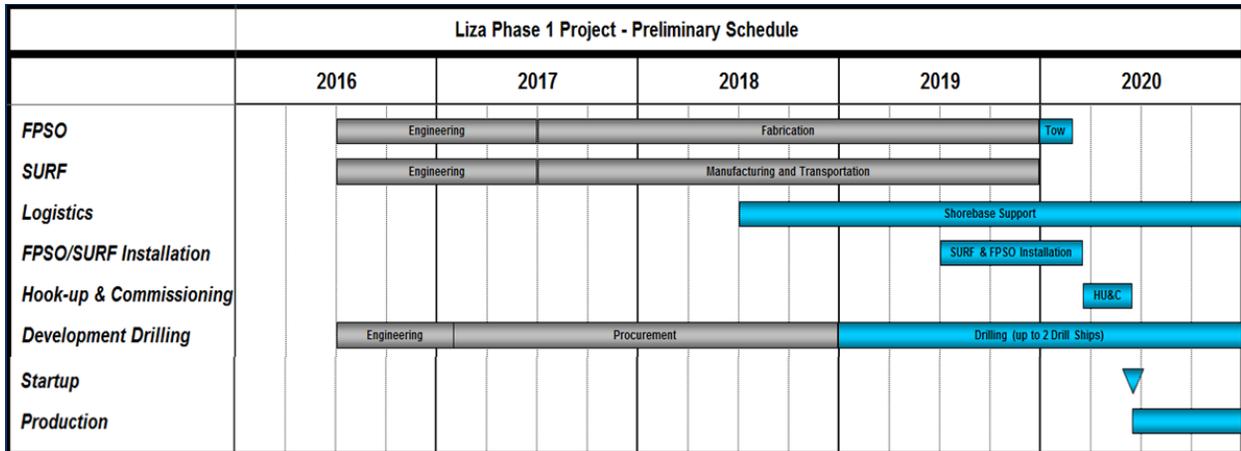
EEPGL will scope, study, and assess possible effects in its EIA per the Laws of Guyana Environmental Protection Act 1996. Through the EIA, EEPGL will study and assess the significance of possible adverse effects generated by the project, and will identify mitigation measures and monitoring programs to address any identified adverse impacts of significance.

DURATION OF PROJECT

The project lifecycle for Phase 1 will include engineering, construction, installation, commissioning, start-up, operations and maintenance, and decommissioning. The engineering phase will include design, Front-End Engineering and Design (FEED), and detailed engineering. The construction phase will include procurement, fabrication and construction, drilling, installation, and hook-up. Operations and maintenance will follow commissioning and start-up, and will be the longest phase of the project with a duration of at least 20 years.

Figure A.8 provides a preliminary sequence of major scheduling milestones for the construction, installation, and commissioning of the SURF and FPSO; however, it is still being refined and is subject to change.

Figure A.8 Preliminary Project Schedule



NON-TECHNICAL EXPLANATION OF PROPOSED PROJECT

EEPG is proposing to develop an oil production facility in the offshore waters of Guyana. The Liza development will be located in the eastern area of the Stabroek Block which is approximately 190 km (120 miles) from Georgetown. See Figure A.1.

The Liza development will be developed in phases. This project summary describes Phase 1 of the proposed project. Oil production from Phase 1 is expected to last at least 20 years.

EEPG will drill approximately 17 wells offshore to support extraction of the oil from below the sea floor. Each well will be drilled using a floating drill ship (see Figure A.6). Each well will be drilled to a depth which is over 5,000 meters (m) below the sea floor.

EEPG will install some of the oil production facilities on the sea floor at approximately 1700-1800 m (5500-5900 ft) water depth. These subsea facilities include various types of pipes and hardware. The subsea facilities allow the oil from the wells to be gathered and moved to the surface of the ocean for further processing. See Figure A.3.

EEPLG will install other oil production facilities on a vessel which floats on the surface of the ocean. The vessel is a very large vessel called a Floating Production, Storage, and Offloading (FPSO). See Figure A.4. The FPSO will be moored on location in approximately 1,500 m (4900 ft) of water depth and will be stationary throughout the life of the facility. Oil production facilities on the FPSO will further process the oil extracted from below the sea floor. The FPSO will have the capacity to produce approximately 100,000-120,000 barrels of oil per day. Processed oil will be stored in tanks in the FPSO hull which have the capacity to hold 1.6 million barrels of oil. Approximately every 5-10 days, the oil will be pumped from the FPSO to a conventional oil tanker which is owned/operated by others. The tanker will then bring then oil to buyers. Figure A.5 shows an example of an FPSO and a tanker while oil is being offloaded.

EEPGL will utilize onshore support facilities to support drilling the wells, installing the offshore production facilities, and operating the offshore production facilities. This may include shorebases, storage facilities, and waste management facilities. Helicopters and supply boats will also be needed to support the project.

At peak, EEPGL will utilize approximately 1,200 personnel offshore during the stage where the wells are being drilled and the offshore oil production facilities are being installed. This number will decrease to less than 200 personnel during the production operations phase. A smaller number of personnel will be utilized at the onshore support facilities.

At the end of the approximately 20 year life of project, EEPGL would develop a plan to decommission the offshore production facilities. The plan would be approved by the government.

EEPGL has identified possible effects from the project which are related to physical (e.g. air quality, water quality), biological (e.g. marine mammals, protected areas), socioeconomic (e.g. employment and livelihoods, economic conditions), community health and wellbeing (e.g. social infrastructure and services, vehicle traffic), and human environment (e.g. cultural heritage, indigenous peoples) values. Possible effects are further described in Attachment A.

Attachment A – Possible Effects of Phase 1 Liza Project

Resource or Receptor	Possible Effect	Primary Sources of Possible Effects	How Possible Effects Could Impact Human Life and Environment
Physical Resources			
Air Quality and Climate	Air emissions resulting from the Project have the potential to change ambient air quality in the Project Area of Interest (AOI) on a localized basis. Potential impact of greenhouse gas emissions from the Project on climate change.	<ul style="list-style-type: none"> • Power generation • Other combustion sources • Non-routine, temporary flaring • Fugitive emissions and venting • Waste incineration 	<p>Increased concentrations of pollutants in ambient air could contribute to health concerns to exposed humans and wildlife.</p> <p>Increased concentrations of greenhouse gases could contribute to climate related impacts such as global warming, rising sea level, more frequent/severe weather events, etc.</p>
Sound	Subsea sound could cause impacts to sensitive marine fauna (e.g., whales, turtles, and fish) in the PDA.	<ul style="list-style-type: none"> • Drilling of development wells • Vertical seismic profiling • Offshore pile driving operations • Installation of FPSO and SURF components • FPSO operations 	Exposure to humans and wildlife to increased sound could cause damage/behavioral concerns.
Marine Geology and Sediments	The Project will disturb marine geology and sediments on a localized basis in the PDA and could impact sediment quality from non-aqueous base fluid (NABF) on drill cuttings discharges.	<ul style="list-style-type: none"> • Drilling of development wells • Installation of FPSO and SURF components 	Changes to seafloor morphology from drill cuttings accumulation or from impacts on sediment quality from drill cuttings, which could damage wildlife habitat and cause wildlife death/injury, or cause direct damage to wildlife.
Marine Water Quality	The Project could have localized impacts to marine water quality in the PDA from discharge of drill cuttings and from routine operational and hydrotesting discharges. The Project could potentially impact marine water quality in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Drilling of development wells (cuttings and fluid discharge) • Cooling water discharges • Installation of FPSO and SURF components • Wastewater discharges • Produced water discharges • Hydrotesting discharges • Ballast water discharges • Non-routine, unplanned event (e.g., spill or release) 	Increased total suspended solids, chemical concentrations, or temperature in water column, which could damage wildlife habitat and cause wildlife death/injury, or cause direct damage to wildlife.

Resource or Receptor	Possible Effect	Primary Sources of Possible Effects	How Possible Effects Could Impact Human Life and Environment
Biological Resources			
Beaches, Mangroves, and Wetland Habitats	The Project is not expected to impact beaches, mangroves, or wetlands in the Project AOI during routine, planned operations and activities. The Project could potentially impact beaches, mangroves, and wetland habitats in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Non-routine, unplanned event (e.g., spill or release) 	Decreased value of beaches, mangroves, and wetlands as wildlife habitat, declines in fisheries productivity, and/or other ecosystem services (e.g.; flood control).
Coastal Wildlife and Shore Birds	The Project is not expected to impact coastal wildlife or shore birds during routine, planned operations and activities in the Project AOI. The Project could potentially impact coastal wildlife and shore birds in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Non-routine, unplanned event (e.g., spill or release) 	Decreased survivability of shore birds and coastal wildlife, and/or chronic sublethal effects such as decreased vigor or reproductive impacts from direct exposure or ingestion of contaminated prey items.
Protected Areas	The Project is not expected to impact Protected Areas during routine, planned operations and activities in the Project AOI. The Project could potentially impact Protected Areas in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Non-routine, unplanned event (e.g., spill or release) 	Negative effects on general wildlife habitat quality, sea turtle nesting activities, tourism, and foraging/gathering activities of local communities.
Special Status Species	The Project could potentially impact some special status species (e.g., endangered or listed species) in a localized manner in the PDA as a result of underwater sound, light, seawater withdrawal, and changes in marine water quality. The Project could potentially impact special status species in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Underwater sound generated by marine component operations and activities • Lighting on offshore facilities (e.g., FPSO, drill ships) • Seawater intake by FPSO • Wastewater discharges • Drilling of development wells (cuttings and fluid discharge) • Cooling water discharges • Produced water discharges • Hydrotesting discharges • Ballast water discharges • Vessel movements • Non-routine, unplanned event (e.g., spill or release) 	Declines in local abundance of some species within the direct AOI caused by decreased water quality and entrainment of early life stages of special status fish species, auditory impacts on noise-sensitive species, visual disturbance from artificial lighting, and injury/death from vessel collisions. Non-routine/unplanned events could cause acute and/chronic mortality or sublethal toxic effects throughout the indirect AOI depending on the magnitude of the event.

Resource or Receptor	Possible Effect	Primary Sources of Possible Effects	How Possible Effects Could Impact Human Life and Environment
Seabirds	The Project could potentially impact seabirds in a localized manner in the PDA as a result of light (i.e., disorientation). The Project could potentially impact seabirds in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Lighting on offshore facilities (e.g., FPSO, drill ships) • Non-routine, temporary flaring • Waste incineration • Non-routine, unplanned event (e.g., spill or release) 	Direct mortality and injury of seabirds related to attraction to flares and direct mortality and injury related to vessel (ship or air) strikes. Potential minor benefits from the Project to seabirds from use of the FPSO, drill ship, and installation vessels for rest or shelter during adverse weather conditions and, if such vessels acts as consistent attractants for seabird prey, providing a reliable food resource for seabirds. Non-routine/unplanned events could cause acute and/chronic mortality or sublethal toxic effects throughout the indirect AOI depending on the magnitude of the event.
Marine Mammals	The Project could potentially impact some marine mammals in a localized manner as a result of underwater sound and ship strikes. The Project could potentially impact marine mammals in the Project AoI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Underwater sound generated by marine component operations and activities • Ship strikes • Changes in forage availability • Lighting on offshore facilities (e.g., FPSO, drill ships) • Seawater intake by FPSO • Wastewater discharges • Drilling of development wells (cuttings and fluid discharge) • Cooling water discharges • Produced water discharges • Hydrotesting discharges • Ballast water discharges • Vessel movements • Non-routine, unplanned event (e.g., spill or release) 	Potential injury to mammals' ears from Project-related noise, and auditory disturbance of marine mammals. Injury/mortality of marine turtles from collisions with Project-related vessel traffic. Minor potential impacts from decreased water quality on all taxa related to decreased water quality in the direct AOI. Entrainment of early life stages of fish, and potential trophic effects associated with concentration of prey species around artificial lights. Non-routine/unplanned events could cause acute and/chronic mortality or sublethal toxic effects throughout the indirect AOI depending on the magnitude of the event.
Marine Turtles	The Project could potentially impact some marine turtles in a localized manner in the Project AOI as a result of underwater sound, ship strikes, and light. The Project could potentially impact marine turtles in the Project AOI as a result of non-routine, unplanned events.		
Marine Fish	The Project could potentially impact some marine fish as a result of underwater sound, light, seawater withdrawal, and changes in marine water quality in the PDA. The Project could potentially impact marine fish in the Project AOI as a result of non-routine, unplanned events.		
Benthic Habitat	The Project could potentially disturb some benthic habitat and organisms in a localized manner in the PDA.	<ul style="list-style-type: none"> • Drilling of development wells (cuttings discharge and deposition) • Installation of FPSO (mooring structures) and SURF components 	Disturbance of benthic habitat in the PDA and smothering of benthos within footprint of cuttings deposition zones.

Resource or Receptor	Possible Effect	Primary Sources of Possible Effects	How Possible Effects Could Impact Human Life and Environment
Social, Cultural, and Economic Resources			
Cultural Heritage	The Project has the potential to adversely impact cultural heritage through localized disturbance of archaeological or historical sites related to Project development. These resources have conservation, cultural, and other values to stakeholders. The Project could potentially impact cultural heritage in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Drilling of development wells • Installation of FPSO and SURF components • Non-routine, unplanned event (e.g., spill or release) 	Disturbance of the seabed could affect submerged archaeological resources (e.g., shipwrecks).
Community Health and Wellbeing	Most Project activities will be located offshore in the PDA and would have no direct impacts on communities in Guyana. Introduction of limited levels of foreign labor could potentially have health and socioeconomic impacts. The Project could potentially impact community health and wellbeing in the Project AOI due to onshore traffic, social interaction, or as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Increased traffic as a result of Project activities at the Guyana shorebased locations • Social interaction between Project workers and residents • Pressure on wages from introduction of foreign workers and increased competition for skilled labor • Noise and light near shore by Project marine and aviation operations • Non-routine, unplanned event (e.g., spill or release) 	Increased vehicular traffic, increased demand for limited emergency and health services in Guyana, and a slight increased risk of communicable disease transmission could result from Project activities and influence community health and wellbeing.
Employment and Livelihoods	The Project is expected to build capacity in the local labor force, increase demand for skilled labor, and increase demand for service industries (beneficial impact). There is also the potential for limited adverse impacts to fishing activities as a result of marine safety exclusion zones or marine traffic, and non-routine, unplanned events.	<ul style="list-style-type: none"> • Local employment for: <ul style="list-style-type: none"> ○ Drill ships ○ Installation vessels ○ FPSO operations ○ Marine support and supply vessels ○ Aviation operations ○ Other related service industries • Marine safety exclusion zones • Project-related marine traffic • Drilling; FPSO/SURF installation, hookup and commissioning; and FPSO and support vessel operations (aspects relating to occupational health and safety for Project workforce) • Non-routine, unplanned event (e.g., spill or release) 	Direct and indirect employment for the Project would enhance livelihoods and family incomes, but could result in some competition with other businesses for skilled workers. Marine safety exclusion zones for the FPSO, drill ship, and major installation vessels, and Project-related vessel traffic could interfere with fishing activities in certain areas.
Marine Use and Transportation	The Project may result in increased marine shipping and general marine-related traffic, which could potentially contribute to marine vessel congestion in port areas.	<ul style="list-style-type: none"> • Marine vessel operations 	Increased vessel traffic could result in localized congestion near shorebases and marine safety exclusion zones around the FPSO, drill ship, and major installation vessels would restrict access by unauthorized vessels.
Social Infrastructure and Services	The Project will use public infrastructure and services and thus could potentially compete with other existing businesses and consumers across a range of services (e.g., roads, medical and emergency response, accommodation, and utilities). The Project may result in increased vehicular traffic in Georgetown, which could potentially contribute to vehicular congestion in certain areas.	<ul style="list-style-type: none"> • Project demand requirements for selected infrastructure and services which could overburden existing capacity and supply • Shorebase operations • Ground transportation operations 	Increased demand for public infrastructure, services, and housing by the Project workforce could influence the availability of these services; and increased Project-related traffic could result in localized traffic congestion.

Resource or Receptor	Possible Effect	Primary Sources of Possible Effects	How Possible Effects Could Impact Human Life and Environment
Land Use	No new Project-dedicated land disturbance is planned. There is the potential that third-party onshore facilities may elect to expand or impact adjacent land as a result of supporting Project-related needs; however, these impacts are outside the scope of this EIA.	<ul style="list-style-type: none"> • Shorebase operations • Pipeyards • Warehouses • Bulk fuel storage and transfers • Onshore recycling of materials, waste treatment, and disposal facilities 	Potential development or expansion of shorebases by third-parties could affect nearby properties. Some Project solid wastes will be treated/disposed at permitted third-party facilities onshore.
Ecosystem Services	The Project will not have measurable impacts on ecosystem services during its planned, routine activities. The Project could potentially impact ecosystem services in the coastal areas of Guyana as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Non-routine, unplanned event (e.g. spill or release) 	In the unlikely event that some oil from a large Marine Oil Spill reaches the Guyana shoreline, many provisioning services, particularly for indigenous communities that rely on fishing, hunting, and harvesting activities for subsistence and livelihoods, could be affected. In addition, coastal flood protection services offered by mangrove forests could be affected. Cultural services could also be affected for some communities that make use of the seashore in traditional and/or religious ceremonies.
Indigenous People and Traditional Use of Resources and Land	The Project is not expected to directly cause any changes to population and demographics in indigenous communities. The Project could potentially impact indigenous peoples in the Project AOI as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Non-routine, unplanned event (e.g. spill or release) 	In the unlikely event that some oil from a large Marine Oil Spill would reach the Guyana shoreline, some natural resources used by indigenous people for sustenance or their livelihoods could be affected.
Economy/Economic Conditions	The Project is generally anticipated to have a positive impact on the economy of Guyana as a result of government revenue sharing from the Project, as well as employment and local procurement opportunities. Potential adverse impacts may include potential shorter term increases in the cost of living as a result of increased demand for specific goods and services. Potential adverse impacts to income from agriculture and fisheries could also occur as a result of non-routine, unplanned events.	<ul style="list-style-type: none"> • Government revenue sharing from Project • Local Project purchases of select materials, goods, and services • Limited local Project employment (direct and indirect) • Increased spending on select materials, goods, and services (indirect multiplier impacts for local/regional population) 	The Project would improve the economy and economic conditions in Guyana via a slight increase in employment, purchasing of some materials and supplies, and revenue sharing with the government.