

European Union - EuropeAid/137502/DH/SER/LB

Technical Assistance to Support the Government of Lebanon's Preparation of Exploiting and Producing Offshore Oil and Gas Resources

Strategic Environmental Assessment (SEA) for Exploration and Production Activities Offshore Lebanon

SEA Report
VOLUME 3: LEGAL, INSTITUTIONAL AND
POLICY ANALYSIS

Date: February 2020





A project implemented by GFA Consulting Group GmbH / Projekt-Consult GmbH / Geological Survey of Denmark and Greenland (GEUS) / ELARD Lebanon HQ

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Republic of Lebanon

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SEA Report- Volume 3: Legal, Institutional and Policy Analysis

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#### 1. LEGAL, INSTITUTIONAL AND POLICY ANALYSIS AND COMPATIBILITY

The analysis of the main relevant legislation, standards, international treaties and agreements and national plans and strategies, their key requirements and key implications to E&P activities in addition to roles of the various stakeholders are presented in this **Volume 3 of the SEA report**. Analysis also focused on the governance of the environmental issues in the oil and gas sector.

In addition to the legal requirements presented, the competent authorities are preparing guidelines complementary to the regulations including, but not limited to, EIA Guideline, Exploration Plan Guideline and Technical Drilling Guideline.

It is to be noted that the listed regulations are the ones known, available and accessible to the consultant at time of preparation and that it might not be inclusive and that it might be updated/amended.









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#### 1.1 LEGISLATION RELEVANT TO THE PETROLEUM SECTOR

#### Table 1-1 Legislation Relevant to the Petroleum Sector

N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
Pet	roleum Legislatio	n			
1.	Law No. 132	2010	Offshore Petroleum Resources Law	The law sets the principles and procedures for the management of offshore petroleum operations.	It requires an SEA study prior to awarding any petroleum rights or allowing any petroleum activities and requires <b>EIA studies</b> for any plan for development, production, transportation, storage, utilisation, cessation of petroleum activities and decommissioning. It requires a permit for venting and flaring.  Article 60 stipulates that Lebanese laws for the protection of the environment shall apply to Petroleum Activities in any location to the extent such Petroleum Activities are conducted in Waters, and the MoE, in coordination with the Minister of EW, shall be in charge of supervising and controlling environmental matters related to Petroleum Activities and shall coordinate with other concerned authorities, take initiatives or measures deemed necessary to minimize negative impact that Petroleum Activities may have on local communities and the environment.  Article 55 related to health, safety and emergency response requires the right holder to establish and publish, before any Petroleum Activities are started, a

<sup>&</sup>lt;sup>1</sup> The included implications and relevant legislation articles are not exhaustive. Reference should always be made to the full legal text of legislation.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
					health and safety plan, including an emergency response plan  Article 55 stipulates that In the event of incidents, accidents or emergencies, the Right Holder shall, to the extent necessary suspend the Petroleum Activities for as long as the requirement to prudent Petroleum Activities warrant such suspension. The Minister of EW based on recommendation by the LPA may order Petroleum Activities to be suspended to the extent necessary, or impose particular conditions to allow continuation of the Petroleum Activities when exceptional circumstances occur. Article 74 provides that a competent authority has the right to inspect an area subject to a petroleum right and any facility used for petroleum activities to monitor and verify the consistency of information and reports relating to petroleum activities or performance of petroleum activities. Article 57 requires the establishment of a safety zone surrounding a Facility unless otherwise stipulated by a justified decision by the CoM. It includes other provisions related to safety zones.
2.	Law 549	2003	On the implementation of LNG terminals and refineries	it is related to the design, financing, developing and reconstruction of Tripoli and Al Zahrani refineries, operating them and building a final terminal for the export and import of liquefied natural gas, in addition to building facilities for the storage of natural gas and the	These establishments can be used for processing gas from the offshore petroleum sector.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
				establishment of networks for selling and distributing the gas.	
3.	Decree 43- Annex 2	2017	The Exploration and Production Agreement (EPA)	It includes the provisions of the agreement between the Republic of Lebanon and the Right Holder. It regulates the legal and contractual relationship between the State and the Right Holders.	Article 17 is related to health, safety and environmental requirements. Among other HSE requirements, it requires the right holders and operators to comply with: (i) Best International Petroleum Industry Standards relating to the protection of health, safety and the environment; (ii) applicable Lebanese laws relating to health, safety and the environment; and (iii) the reasonable requirements of the Petroleum Administration or any other competent authority relating to the protection of health, safety and the environment.  EIA studies are required in connection with: (a) a Development and Production Plan (β) the construction, placement and operation of a Transportation or storage Facility; and (γ) a plan for cessation of Petroleum Activities and decommissioning of Facilities.  Section 17.2 is related Block-Specific Environmental Requirements.  Article 28 related to Changes in Laws and Regulations stipulates that petroleum activities shall be conducted in accordance with all applicable Lebanese laws, as they may be amended or modified from time to time during the term of this EPA. Nothing in this EPA shall be interpreted so as to exempt the Right Holders or the Operator from the









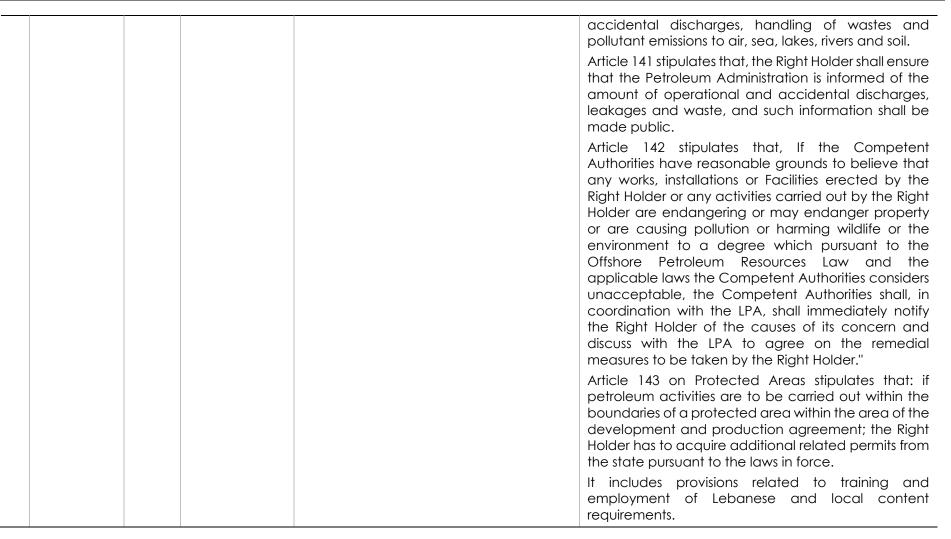
N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
					obligation to comply fully with all applicable Lebanese laws, or as modifying any applicable Lebanese laws.
4.	Decree No. 10289	2013	Petroleum Activities Regulations (PAR)	The main decree governing offshore petroleum activities. It details different phases licensing conditions and requirements, in addition to HSE requirements.	Among many other environmental provisions, It sets requirements for the SEA study. Requires environmental studies/ requirements to be submitted along with different plans. Requires a flaring or venting permit to be awarded by the Minister of EW. Article 141 on Environment requires the right holder to:  a) Use modern technologies and practices, and operation methods that guarantee protection from environmental damage and control of wastes and avoidance of unnecessary losses and damages to the natural resources; b) Comply with Lebanese environment protection laws and regulations; c) Comply with the obligations enforced by any agreement of exploration and production or by any development plan.  The Right Holder has to provide protection from: accidents and physical damage due to his activities; damage or risk of damage to workers; damage to fauna, flora, marine biodiversity and archaeology; marine pollution and pollution to springs that will be discovered during the course of petroleum activities; air pollution; damage to hydrocarbon bearing formations. The Right Holder has to assure the monitoring and implementation of mitigation



















N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
5.	Decree No. 7968	2012	Lebanese Petroleum Administration (LPA)	The establishment of the LPA and the roles of each department.	The QHSE department of the LPA handles all issues related to the quality of operators' systems and their compliance with the health, safety and environmental standards, particularly: review of plans related to quality of performance, health, safety and environment and emergency plans; monitoring the readiness of operators to handle accidents and emergencies; examining the extent of safety zones; coordination with the competent departments with regard to environmental matters; review of EIA studies in coordination with the competent departments; monitoring of facilities and ensuring their compliance with environmental standards.
Env	vironmental Leg	gislation			
6.	Law 130	30 April 2019	Protected Areas	The Law classifies the types of protected areas, sets the requirements for their establishment, includes supervision and management requirements and sets the conditions for allowing certain activities within protected areas.	Petroleum activities shall not affect protected areas and the management plans of protected areas shall be respected by petroleum activities.
7.	Law No. 127	30 April 2019	Specially protected areas protocol	The law is issued for approving joining the Protocol of Barcelona Convention concerning Specially Protected Areas and Biological Diversity in the Mediterranean.  According to the provisions of the SPA/BD Protocol, SPAMIs may be established in the marine and coastal zones subject to	According to the provisions of the SPA/BD Protocol, all the Parties to the Protocol are committed to respecting the protection and conservation measures defined in the proposal for inclusion. Such measures shall be considered and respected by petroleum activities.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
				<ul> <li>the sovereignty or jurisdiction of the Parties and in areas situated partly or wholly on the high sea. The SPAMI's List may include sites which:</li> <li>are of importance for conserving the components of biological diversity in the Mediterranean;</li> <li>contain ecosystems specific to the Mediterranean area or the habitats of endangered species;</li> <li>are of special interest at the scientific, aesthetic, cultural or educational levels.</li> <li>The SPA/BD Protocol provides the criteria for the choice of protected marine and coastal areas that could be included in the SPAMI's List (Annex I of the SPA/BD Protocol) as well as the procedure and the stages to be followed with the view of including an area in the List (read more about the procedure).</li> <li>According to the provisions of the SPA/BD Protocol, all the Parties to the Protocol are committed to respecting the protection and conservation measures defined in the proposal for inclusion.</li> </ul>	
8.	Law No. 115	2019	Paris Agreement ratification	Paris Agreement mandates countries to submit Nationally Determined Contributions (NDCs) that reduces greenhouse gas emissions and increase	GHGs from the petroleum sector shall be controlled to achieve the targeted GHGs emissions reduction from the energy sector.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
				resilience in order to fulfill the goal of the Agreement which is to keep a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.	
9.	Law No. 80	2018	Integrated Solid Waste Management	The law sets integrated solid waste management principles. It provides guidelines for the management of non-hazardous waste and hazardous waste.	The requirements of the law shall be adhered to for the management of wastes generated from the offshore petroleum activities.
10.	Law No. 78	2018	Law for the Protection of Air Quality	The law aims to protect ambient air quality by identifying, monitoring and assessing, preventing and controlling air pollution resulting from anthropogenic activities. This excludes air pollution caused by physical hazards, natural disasters, and occupational and indoor air pollution.	Requirements of the law shall be adhered to by the petroleum sector. It has specific requirements to adopt BAT for emissions reduction.
11.	Law No. 77	2018	Water Resources Law	The law aims to organize, develop, and protect water resources. It also aims to promote sustainability by strengthening water establishments.	Clause 97 that depicts penalties on unauthorized discharges or disposal of any kind of waste in water resources including sea water within territorial waters for the Lebanese government.
12.	Law No. 251	2014	Lawyers and investigation judges for environmental related cases	The law assigns fulltime lawyers and investigation judges for environmental related cases, and defines environmental crimes.	Applicable in the event of breaching of environmental laws and regulations.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
13.	Law No. 690	2005	Organization of the Ministry of Environment	<ul> <li>The MoE is responsible for all matters related to the environment sector. It holds the following tasks (among others):</li> <li>Develop strategies, policies, projects and action plans, activities and studies for environmental protecting and sustainability of natural resources</li> <li>Prepare legislation, specifications and standards for environmental protecting and sustainability of natural resources</li> <li>Participate in the development of preventive plans to respond to disasters.</li> <li>Determine the environmental conditions for licensing the establishment and investment of institutions</li> <li>Determining the environmental conditions related to land use and to the protection of the marine beaches, rivers, springs, lakes, marshes and valleys</li> <li>Conducting tests and analysis to determine the pollution rates of air, soil and water and propose and follow up the implementation of measures taken by the concerned authorities.</li> </ul>	MoE practices its mandates in the offshore petroleum sector in coordination with LPA.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
14.	Law No. 444	2002	Environmental Protection Law	It is the environmental protection framework law. Includes the general provisions for the protection of the environment.  Article 30 stipulates that it is strictly forbidden all discharges, immersions or burning in the Lebanese territorial waters of every material that may directly or indirectly: - Affect the health of human beings or natural marine resources Harm the activities and marine creatures, including shipping, fishing, flora and seaweed Negatively affect the quality of marine water - Reduce the entertainment value and tourism possibilities of the sea and the Lebanese coast. Article 31 requires a permit for discharge to sea (application decree not issued). Article 44 requires a permit for the import, handling or disposal of dangerous/hazardous chemicals (application decree not issued).  According to the law, MOE has the powers for monitoring inspection and enforcement.	MoE practices its mandates in coordination with the LPA in the offshore petroleum sector.
15.	Law 708	1998	Creation of Tyre Coast Nature Reserve	Creation of Tyre Coast Nature Reserve in Jaftlak Ras Al Ain – Tyre Real Estate Zone	Protected areas shall not be impacted from petroleum activities









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			in Jaftlak Ras Al Ain – Tyre Real Estate Zone	The Law expends the reserve to the entirety of the territorial waters facing its coastal parts.	
16.	Law 121	1992	Establishment of two nature reserves (in some of the islands in front of Tripoli Beach)	Establishment of two nature reserves (in some of the islands in front of Tripoli Beach)	Protected areas shall not be impacted from petroleum activities
17.	Law No. 64	1988	Preservation of the environment against pollution from dangerous waste and hazardous substances	The law defines dangerous waste and hazardous substances, and includes general provisions for handling hazardous waste, and sets sanctions in case of noncompliance with the provisions of the law. Article 4 stipulates that: Every producer, exporter, distributer, holder or transporter has to prove to authorities that the dangerous wastes that he produces, exports, distributes, holds or transports are of the types that can be disposed according to the provisions of this law and the regulations to be issued for its application.  Article 6 stipulates that, it is not allowed, in any condition whatsoever, to import or hold or transport nuclear wastes or wastes polluted with nuclear radiation, or waste	Dangerous and hazardous wastes from offshore petroleum activities have to be disposed in accordance with the provisions of this law.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
				that contain toxic hazardous chemicals or materials dangerous to the public safety. Article 7 stipulates that wastes shall be disposed either 1) by the person in charge of the wastes or 2) by public or private organizations specialized in wastes disposal. Types of wastes to be disposed by each party shall be determined by a decree to be issued by the Council of Ministers.	
18.	Draft Law for Integrated Coastal Zone Manageme nt of the Lebanese coastal zone	Prese nted to MOE in 2015.	Draft Law for Integrated Coastal Zone Management of the Lebanese coastal zone	<ul> <li>26 articles spread over seven sections</li> <li>Most important articles are the National Council for ICZM</li> <li>Independent unit headed by the Prime Minister</li> <li>Last six articles of the Law related to sanctions and penalties</li> </ul>	<ul> <li>The Council should:</li> <li>Develop a strategy for CZM, a Master Plan for all coastal areas and propose the gathering and amendments of laws and regulations</li> <li>Coordinate between all competent authorities and stakeholders</li> <li>Ensure the sustainable use of CZ natural resources</li> <li>Safeguard the integrity of ecosystems, landscapes and all unique natural sites in CZ and water basins</li> <li>Prevent and / or reduce the effects of natural hazards</li> <li>Post-evaluate and control of EIA and SEA</li> </ul>









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
19.	Decree- 5606	11 Sep 2019	Hazardous Waste Management Procedure	The decree provides the procedure for the integrated management of hazardous waste including requirements related to generation, sorting, storage, transport and disposal.	Hazardous wastes from the offshore petroleum sector shall be managed in accordance with the requirements of the decree.
20.	Decree 5605	11 Sep 2019	Waste Sorting at Source	It includes the requirements for sorting of municipal wastes at source	Waste from the offshore petroleum sector shall be managed and sorted according to the provisions of the decree.
21.	Decree 167	2017	Application of article 20 of law 444/2002. (Tax reduction)	Tax reduction on environmental industry activities and on spending aimed at protecting and preserving the environment in a sustainable manner.  Reduction of customs duties on the import of equipment and tools that will be used to avoid or reduce or eliminate any form of pollution or treat, recycle and reuse wastes.	Can be considered as possible incentives wherever applicable to E&P activities.
22.	Decree 3989	2016	Environmental Police	Designation of an Environmental Police Department within the Ministry of Environment to regulate environmental crimes and enforce penalties; and specification of their organization and mandates	Applicable in the event of breaching of environmental laws and regulations onshore.
23.	Decree No. 8633	2012	Environmental Impact Assessment	This decree aims at setting forth the rules that shall be considered in the EIA of public and private projects to avoid potential environmental impacts during	Annex 1: Projects that duly require an EIA study: #9 Oil and gas:  Installation of pipelines on/off the beaches Excavation and extraction of oil and gas,









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				construction, operation and decommissioning of these projects.	<ul><li>Refineries</li><li>Platforms</li><li>Tanks</li></ul>
					Article 5, Project Classification:(3) Based on an informed review during the period mentioned above, the Minister of Environment may request an initial environmental report or an EIA report on the project regardless of its classification in accordance with paragraphs 1 and 2 of this article.
					EIA reports shall be prepared according to the requirements of the decree.
24.	Decree No. 8471	2012	Environmental compliance standards for industrial establishments	The decree defines the Concept of Environmental Compliance and the procedures to get an environmental compliance certificate (ECC). The ECC certificate will allow the establishment to benefit from economic incentives set forth in Law 2002/444 and Law 2005/690.	Relevant establishments shall get the ECC certificates accordingly.  See application Decision No 189 2016 (Review procedure for environmental audit studies)  Mostly relevant to the production phase.
25.	Decree No. 8213	2012	Strategic Environmental Assessment in the public sector	This Decree aims at determining mandatory procedures to be followed for the assessment of potential environmental impacts of any policy, plan, program, study, investment or organization proposal that tackles an entire Lebanese region or an activity sector, in order to	As per Article 3, investment of natural resources and extraction of materials requires an SEA.  The SEA shall be prepared according to the requirements of the decree.  Once approved by MoE, mitigation measures included in the SEA are mandatory to petroleum sector activities.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
				ensure that these activities are compliant with conditions related to health, public safety, the protection of the environment and the sustainability of natural resources.	
26.	Decree 8044	2012	Management of Tyre's Coast's Natural Reserve	Regulates the management of Tyre's Coast's Natural Reserve	Applicable if any E&P activities would need to be conducted near or within the boundaries of the reserve.
27.	Decree No. 2604	2009	Control of materials that depletes of the Ozone layer	This decree aims to control substances that deplete the Ozone Layer which are listed in the annexes or Montreal Protocol in preparation to finally ban their use.	Import of ozone depleting substances listed in the decree is prohibited, and only limited to important uses such as military uses, aviation and medical uses, only if there are no alternative materials that have a lower impact on the environment.
28.	Decree No. 2275	2009	Organization and mandates of the MoE.	Application Decree on the Organization and mandates of the Ministry of Environment, its divisions and departments.	Departments of the MoE practice their mandated functions related to the offshore petroleum activities.
29.	Decree No. 13389	2004	Types of wastes of health institutions and how to discharge them	Classifies medical waste types and sets the requirements for disinfection, storage and disposal.	Medical waste generated from the O&G activities shall be handled according to the provisions of this decree.









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30.	Decree No. 9765	2003	Monitoring of industrial institutions	Monitoring, measures and penalties related to the industrial structures for the protection of the environment and public health.	The O&G activities are not subject to monitoring as per the provisions of this law, superseded by OPRL 132/2010
31.	MOE Decision No. 59/1	2020	Determining the procedures for implementing Section #1 (Hazardous Waste Storage Facilities) from Chapter #3 of the Hazardous Waste Management Procedure Decree #5606/2019	It stipulates the procedure for licencing new and existing hazardous waste management facilities in addition to the requirements for the closure of hazardous waste management facilities.	Hazardous wastes management facilities for the offshore petroleum sector shall be licenced in accordance with the requirements of the decision.
32.	MOE Decision No. 999/1	2019	Determining the procedures for implementing Section #2 (transporters requirements) from Chapter #2 of the	It stipulates the procedure and licencing requirements for hazardous waste transportation	Hazardous wastes from the offshore petroleum sector shall be transported in accordance with the requirements of the decision.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			Hazardous Waste Management Procedure Decree #5606/2019		
33.	MOE Decision No. 998/1	2019	Determining the procedures for implementing Section #1 (Generators of hazardous waste) from Chapter #2 of the Hazardous Waste Management Procedure Decree #5606/2019	It stipulates the declaration requirements for hazardous waste generation.	Hazardous wastes from the offshore petroleum sector shall be declared and managed in accordance with the requirements of the decision.
34.	MOE Decision No 1294/1	2017	Environmental conditions for transport of healthcare wastes	It regulates the transport of hazardous and infectious waste within Lebanese territory and determines the environmental conditions for transport from production sites to treatment sites.	Applicable for the transport of healthcare wastes generated from petroleum activities to treatment facilities.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
35.	MOE Decision No 189	2016	Review procedure for environmental audit studies	Details the review procedure and the required content of the audit studies	Applicable for audit studies for associated onshore establishments.
36.	MOE Decision No 589	2015	Defining the procedure for the review of Strategic Environmental Assessment scoping reports (SEA scoping) and Strategic Environmental Assessment reports (SEA)	Defines the procedure for the review of Strategic Environmental Assessment scoping reports (SEA scoping) and Strategic Environmental Assessment reports (SEA) and the required content of the studies.	The Updated SEA study to comply with the requirements of the decision.
37.	MoE Decision 262/1	2015	Defining the procedures for filing and review of an objection on MoE Decisions related to EIAs	Defines the procedures for filing and review of an objection on MoE Decisions related to EIAs	Applicable to EIA studies conducted for petroleum activities
38.	MoE Decision 261/1	2015	Defining the procedures for the review of Scoping	<ul> <li>Includes the mechanism and procedures to review the EIA scoping reports and environmental impact assessment reports EIAs</li> </ul>	Applicable to EIA studies conducted for petroleum activities









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			Reports (SRs) and EIA Reports		
39.	MoE Decision 260/1	2015	Defining the procedures for the review IEE Reports	- Includes the mechanism and procedures to review the initial environmental examination reports (IEE)	Applicable to IEE studies conducted for petroleum activities
40.	Decision 1044/1*	2014	General conditions to protect cetaceans	- General conditions to protect cetaceans	Shall be adhered to as applicable.
41.	Decision 396/1*	2014	Ban on catching seabirds	- Ban on catching seabirds	Shall be adhered to as applicable.
42.	MoE Decision No. 99/1	2013	Guidelines for submitting information on greenhouse gas emissions by the companies and industrial and commercial institutions in order to obtain	- This decision aims to establish an incentives system for companies and industrial institutions in Lebanon, where the industrial and commercial companies and institutions submit reports to the MoE on their emissions of greenhouse gases. The decision provides guidelines and the methodology for the preparation of GHGs emissions report. The Minister of the Environment grants the company/industrial or commercial institution a	Petroleum operators can submit their GHG emissions reports to the MoE and get the declaration.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			a declaration from the MoE (إفادة تصريح)	declaration to prove that they have submitted integrated information that meets the requirements of the provisions of this decision. Reports shall be submitted to the MoE annually, and the validity of the declaration (التصريح) is one year.	
43.	MoE Decision No. 20/1	2011	Amendment of two specifications of liquid waste generated by the chemical companies to be discharged into the sea	- Amends MoE Decision 8-1/2001. Amendment entailed two specifications of liquid waste generated by the chemical companies to be discharged into the sea	Not Applicable.
44.	MoE Decision No. 8/1	2001	National Standards for Environmental Quality (NSEQ) related to air contaminants and liquid waste emitted from classified establishments into receiving water bodies.	- The decisions sets the following standards:  1) Maximum emission limits of air contaminants (Annex 2/1 of this decision applied to power sector according to capacity in MW;  2) Maximum limits for wastewater discharge into the receiving water bodies and public sewers;  3) Maximum limits for wastewater discharge into sewer networks. It also sets minimum stack height	Applicable to onshore petroleum activities unless otherwise stipulated by MoE. Until updated standards become available that are more applicable to the offshore oil and gas sector, the SEA recommends applicable standards to be adopted by operators based on international standards.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			Amends Decision 52- 1/1996	approach for generators.  MoE Decision No. 20/1/2011 amends two specifications of liquid waste generated by chemical companies' to be discharged into the sea	
45.	Decision 125/1	1999	Prohibiting fishing of whales, seals and marine turtles	- Prohibiting fishing of whales, seals and marine turtles	Shall be adhered to.
46.	MoE Decision No. 71/1	1997	Regulation of the import of wastes and the amendment of Decision No. 22/1 of 1996	- Contains a list of wastes that are allowed to be imported and a list of wastes not allowed to be imported	Not applicable.
47.	Ministerial Decision No. 52/1, MoE	1996	National standards for environmental quality and environmental limit values for air, noise, water and soil, Amended by MoE Decision 8/1/2001.	- The following standards are still applicable: 1) guide values and maximum admissible limit values for aquatic life; 2) water quality specifications for swimming (pools, rivers, lakes, seas); 3) urban wastewater specifications; 4) national maximum allowable noise levels and the permissible noise exposure standards; 5) maximum allowable concentrations of ambient air contaminants	Shall be adhered to by petroleum activities, as applicable.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
48.	MoE Circular No. 11/1	2011	Periodic report for the treatment of hazardous and infectious medical waste	- The Ministry of the Environment requires all licensed health institutions which sterilize hazardous and infectious medical waste within their facilities to prepare the "Periodic Report for the Treatment of Hazardous and Infectious Medical Waste" according to the form attached to the decree	Applicable for the treatment of hazardous and infectious medical waste
Oth	er Relevant Le	gislation			
49.	Law no. 28	2017	The Right of Access to Information	The law grants any person and/or entity the right to access administrative information and documents which are held at any governmental and municipal authorities through a written application that should be submitted to the relevant administration by the party requesting access to information.	Applicable to the oil and gas sector.
50.	Law 37	2008	Cultural properties	<ul> <li>Defines cultural properties, identifies them into categories and sets protection procedures</li> </ul>	Procedures of the law related to protection of antiquities shall be adhered to, as applicable.
51.	Law No. 212	1993	establishment of the Ministry of Social Affairs as amended	- Sets the responsibilities and organization of the MoSA. Responsibilities of the MoSA include intervention in emergency situations that require social aid and relief.	MoSA practices its responsibilities in case of emergency situations that require social aid and relief.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
52.	Decree 2366	2009	National Land Use Master Plan	Classifies lands and organizes the territory based on the following major guidelines:  1. Structure the territory around the major urban centers;  2. Associate all regions to the national economic development;  3. Distribute the major public facilities in an effective and integrated manner;  4. Unite the territory with an efficient and developed transportation network;  5. Insure an urban development of good quality, respecting the characteristics of each region;  6. Highlight and benefit from the natural wealth of the country;  7. Exploit the water resources in a sustainable way; and  Resolve efficiently the problems of quarries, wastewater and solid wastes	Onshore facilities should be located in areas compliant with the decree.
53.	Decree No. 15512	2005	Application to decree No. 105 dated 6 of September 1983 for regulating the use and protection of/from	Decree No. 15512/2005 in application to decree No. 105/1983 for regulating the use and protection of/from ionizing radiations. Under article 1 of this decree, the minister of public health is entitled to issue the necessary permits for the use, exploitation, entry and exit of ionizing radiation, in accordance with the	Applicable for the use, exploitation, entry and exit of ionizing radiation









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			ionizing radiations.	scientific studies and assessment of the Lebanese Atomic Energy Commission.	
54.	Decree No. 9765	2003	Control measures and penalties relating to industrial establishments	All industrial institutions are subject to the provisions of this decree, regardless of their classification The Decree sets the principles of inspection of all industrial institutions, and the measures and sanctions to be applied in events of violation.	Onshore hydrocarbon processing/usage facilities are subject to the provisions of this Decree, as applicable.
55.	Decree No. 5243	2001	Classification of industrial institutions	Amends Decree No.4917/1994 on the classification of hazardous, dangerous and harmful to health institutions (based on Legislative Decree 21/L/1932)	Crude petroleum and natural gas (storage, related services and industry) are classified under Type 1, extraction is classified under type 3.
56.	Decree No. 5509	1994	Determines the general regulatory requirements for storage tanks transport tankers and distribution stations of petroleum products	Table 1 sets the general regulatory requirements for storage tanks, transportation tankers and distribution stations of liquid petroleum products. Table 2 sets the general regulatory requirements for the storage and filling of liquefied petroleum products (Butane and Propane)	Storage and transport of petroleum products shall be in line with the provisions of this decree, as applicable.
57.	Legislative Decree No. 105	1983:	Regulating the use of licensing, ionizing	This Legislative Decree stipulates licensing, regulation and authorization process for all practices including ionizing radiations;	Production, conditioning, import, sale, purchase, transport, retention, storage, possession, use and investment of radioactive material or devices









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			radiation and protection from it		generating ionizing radiation is subject to a permit from the Minister of Public Health
58.	Decree No. 8377	1961	Organization of the Ministry of Public Health	Organization of the Ministry of Public Health	
59.	COM decision 203	2017	Establishment of SDGs Committee	The COM decisions related to the establishment of the national committee responsible for leading and coordinating national efforts for SDGs implementation	The oil and gas sector to consider the SDGs and contribute to the extent possible to the related goals. The SDGs have been used for developing the SEA framework, as applicable
60.	COM Decision 41	2013	National Coordination Committee	To adopt the necessary measures and procedures to coordinate disaster response operations and national crises resulting from events, acts of war, natural disasters, or crises that threaten the security and safety of the community and environment, and require interference at a national level.	
61.	MoEW Decision No. 14	2005	Establishment of the Committee for field emergencies for energy issues and aquatic resources	The Committee is directly linked to the Minister of Energy and Water and implements his instructions and recommendations. Among its tasks, the Committee provides suggestions to combat pollution and preserve the environment in O&G installations and in the transport of liquid fuels and petrochemical products.	The role of this committee is advisory to the Minister of Energy and Water in terms of protection from pollution and preservation of the environment in petroleum facilities and the transportation of liquid fuels and petrochemical activities.











N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
62.	MoEW Decision No. 56	1997	Determines the specifications of petroleum derivatives	Sets the specifications of: Liquefied petroleum gases commercial Propane; Liquefied petroleum gases domestic Butane/Propane mixture; Automotive fuel - gasoline 92 Octane; Automotive fuel - gasoline 98 Octane; Characteristics of unleaded Gasoline 95 Ron; White Kerosene (Domestic); Aviation Turbine Fuel; Diesel Oil; Automotive Fuel Diesel Oil; Residual Fuel Oil; Asphalt cement grade 40-50; Asphalt cement grade 80-100; Liquefied petroleum gases industrial Butane/Propane mixture	
63.	Decision 166	1933	Antiquities System	It sets the procedures for protecting and preserving antiquities and reporting of new archaeological findings	Archaeological sites shall be protected and new archaeological findings shall be reported to antiquities directorates within 24 hours from discovery.
64.	Labour Code and its amendmen ts	1946	Labour Code and amendments	Regulates labour sector, and includes provisions related to employment contracts, employment of children and women; work hours and holidays, wages, dismissal, inspection, health and safety, sanctions Some articles of the law were amended by later regulations.	The decree applies to onshore hydrocarbon processing/ usage facilities.  Provisions of the law applicable to the offshore petroleum activities (those not overruled by the OPRL and the PAR) shall be adhered to.  MOL practices their mandates in coordination with the LPA.
65.	Decree 11802	2004	Organization of health protection and	Stipulates health and safety requirements and measures.	Labour accidents, incidents and fires to be reported to the MoL









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			prevention in all institutions that are subject to Labour law		
66.	Decree No. 3273	26/6/2 000	Work inspection	This work inspection system applies to all employers subject to the provisions of the Labor Code. The department of wok inspection, protection and safety of the MoL shall undertake to supervise the implementations of all laws, decrees and regulation, including ratified labor conventions, related to conditions of work and the protection of workers while engaged in their work.	The decree applies to onshore associated O&G facilities.  Provisions of the law applicable to the offshore petroleum activities (those not overruled by the OPRL and the PAR) shall be adhered to.
67.	Decree 9825	1962	Labour Inspection Convention	Each Member of the International Labour Organisation for which this Convention is in force shall maintain a system of labour inspection in industrial workplaces. Requirements of the system are stipulated in the convention.	The decree applies to onshore hydrocarbon processing/ usage facilities.  Provisions of the law applicable to the offshore petroleum activities (those not overruled by the OPRL and the PAR) shall be adhered to.
68.	Decree 8987	2012	Prohibiting the use of children under 18 at works that pose a harm to their health,	Sets the minimum age for child labour for work categories based on possible threat to their health, safety or morals.	Shall be adhered to by petroleum activities.









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			safety or morals.		
69.	Decision 103	2010	National Emergency Response Committee (NERC)	The committee comprises of 22 members representing the ministries of National Defence, Interior and Municipalities, Public Health, Public Works and Transport, Telecommunications, Environment, Energy and Water, Education and Higher Education, and Information as well as the Civil Defence and the Lebanese Red Cross. The NERC will develop (1) a general framework for combating disasters, (2) a detailed contingency plan to respond to threats from various types of disaster (i.e., earthquakes, floods, forest-fires, landslides, weapons of mass destruction, wars, and radioactive threats), and (3) an emergency management plan when a disaster occurs	
70.	Draft Laws		Establishment of a petroleum assets directorate, Sovereign wealth fund and Establishing a	Establishment of a petroleum assets directorate, Sovereign wealth fund and Establishing a national oil company	The Sovereign Wealth Fund will aim at sustainably managing revenues from the offshore petroleum sector









N o.	Legislation	Year	Title	Key Requirements	Key Implications to E&P Activities <sup>1</sup>
			national oil company		
71.	Draft Fishing law		Fishing Law	Given that the existing fishing law in Lebanon is about 90 years old, a new draft law was prepared by the MOA taking into consideration the new challenges in fisheries management as well as the new scientific references and benchmarks for the sustainable management of marine resources.	The sector to maintain limited interference with fishing areas.
72.	Whistleblow er Protection Draft Law/ Requiring final Cabinet voting.		Whistleblower Protection	The Whistleblower protection law will protect whistleblowers by securing confidentiality and guaranteeing their employment and personal safety. It will also include specific mechanisms for compensation and assistance for whistleblowers.	, ,
73.	Draft NOSCP Decree		Management of Oil Spill Response in Lebanese Water	Defines provisions for the preparedness, response and management of oil spills in the Lebanese Waters	Applicable to oil and gas sector











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#### 1.2 International Conventions, Treaties and Agreements

#### Table 1-2 Conventions Relevant to the Petroleum Sector

	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
1.	a) Vienna Convention for the protection of the ozone layer b) Montreal Protocol on substances that deplete the ozone layer;	Ratified via Law No. 253/1993	a) Vienna Convention for the protection of the ozone layer: The objectives of the Convention were for parties to promote cooperation by means of systematic observations, research and information exchange on the effects of human activities on the ozone layer and to adopt legislative or administrative measures against activities likely to have adverse effects on the ozone layer. b) Montreal Protocol (A protocol to the Vienna Convention): The treaty is structured around several groups of halogenated hydrocarbons that have been shown to play a role in ozone depletion. All of these ozone depleting substances contain either chlorine or bromine. For each group, the treaty provides a timetable on which the production of those substances must be phased out and eventually eliminated.  Ozone depleting substances shall not be used during all project phases and activities.
2.	United Nations Framework Convention on Climate Change (UNFCCC) treaty, Rio de Janeiro	Ratified via Law No. 359/1994	The objective of the United Nations Framework Convention on Climate Change (UNFCCC) treaty is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The treaty itself set no binding limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. In that sense, the treaty is considered legally non-binding. Instead, the treaty provides a framework for negotiating specific international treaties (called "protocols") that may set binding limits on greenhouse gases. In 1997, the Kyoto Protocol was concluded and established legally binding obligations for developed countries to reduce their greenhouse gas emissions (ratified by Lebanon via Law No 738/2006, See Item 1.2.24).
3.	Copenhagen amendment to the Montreal Protocol on	Ratified via Law No. 120/1999	Modifications to the list of substances to be considered.









	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles	
	Substances that deplete the Ozone Layer			
4.	The Kyoto Protocol of the United Nations Framework Convention on Climate Change	Ratified via Law No. 738/2006	In 1997, the Kyoto Protocol was concluded and established legally binding obligations for developed countries to reduce their greenhouse gas emissions. Being a Non-Annex 1 party of the United Nations Framework Convention on Climate Change, Lebanon is required to periodically prepare GHG inventories as part of its National Report/Communication to the UNFCCC and must report on the steps it is taking or envisage undertaking to implement the Convention.  O&G activities releases of GHGs shall be reduced to the minimum possible and an inventory of emitted gases shall be prepared.	
5.	Paris Agreement - Paris Climate Conference (COP21)-2015	Ratified via Law No. 115/2019	It is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation, and finance starting in the year 2020. The Agreement aims to respond to the global climate change threat by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.	
6.	Two protocols of Barcelona Convention: 1980 Land-Based Sources Protocol (LBS Protocol) and 1982 Specially Protected Areas Protocol	Ratified via Law No. 292/1994	Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (LBS Protocol): This Protocol applies: (a) To discharges originating from land-based point and diffuse sources and activities within the territories of the Contracting Parties that may affect directly or indirectly the Mediterranean Sea Area. These discharges shall include those which reach the Mediterranean Area, through coastal disposals, rivers, outfalls, canals, or other watercourses, including ground water flow, or through run-off and disposal under the seabed with access from land; (b) To inputs of polluting substances transported by the atmosphere to the Mediterranean Sea Area from land-based sources or activities within the territories of the Contracting Parties under the conditions defined in annex III to the Protocol. 2. This Protocol shall also apply to polluting discharges from fixed man-made offshore structures which are under the jurisdiction of a Party and which serve purposes other than exploration and exploitation of mineral resources of the continental shelf and	











	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
			the sea-bed and its subsoil. 1982 protocol concerning Mediterranean Specially Protected Areas: Contracting parties shall take all appropriate measures to protect marine areas which are important for the safeguard of the natural resources and natural sites of the Mediterranean Sea Area, as well as or the safeguard of their cultural heritage in the region. Measures include among others: prohibition of the dumping and discharges of wastes and other matters which may impair the protected areas; regulation of the passage of ships and any stopping or anchoring; regulation of fishing and hunting; the regulation of any activity involving the exploration or exploitation the sea-bed or its subsoil or a modification of the sea-bed profile; the regulation of any activity involving a modification of the profile the soil or the exploitation of the subsoil of the land part of a marine protected area
7.	Convention on Biological Diversity (CBD)	Ratified via Law No. 360/1994	The Convention has three main goals: 1) conservation of biological diversity; 2) sustainable use of its components; and 3) fair and equitable sharing of benefits arising from genetic resources. The Convention is legally binding; countries that join it ('Parties') are obliged to implement its provisions.
8.	The Convention on wetlands of international importance – (Ramsar)	Ratified via Law No. 23/1999	Ramsar Convention is an international treaty for the conservation and sustainable utilization of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value. There are four Ramsar Sites in Lebanon: 1) Tyre Coast Nature Reserve; 2) Ammiq wetland; 3) Raas El Chaqaa; and 4) Palm Islands Nature Reserve. O&G activities shall not affect these conserved sites.
9.	Agreement on the conservation of African- Eurasian Migratory Water Birds (AEWA)	Grant to join via Law No. 412/2002	AEWA is an intergovernmental treaty dedicated to the conservation of migratory waterbirds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian Archipelago. The core activities carried out under AEWA are described in its Action Plan, which is legally binding for all countries that have joined the Agreement. The AEWA Action Plan specifies different measures to be undertaken by Contracting Parties to warrant the conservation of migratory waterbirds within their national boundaries. These include species and habitat protection and the management of human activities as well as legal and emergency measures. In addition, special protective measures are to be implemented for those waterbird populations of particular











	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles		
			conservation concern, listed in Column A of the Action Plan. Waterbird species and habitats shall not be affected by the O&G activities.		
10.	The conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic-ACCOBAMS	Grant to join via Law No. 571/2004	ACCOBAMS is the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area is 'a cooperative tool for the conservation of marine biodiversity in the Mediterranean and Black Seas'. ACCOBAMS aims to reduce threats to cetaceans in Mediterranean and Black Sea waters and improve our knowledge of these animals, and is the first Agreement binding the countries in the two subregions, enabling them to work together on a matter of general interest. Annex A of the convention includes an indicative list of cetaceans to which the agreement  Annex 2 includes the conservation plans which includes the following measures of direct relation to O&G activities: Parties shall: - require impact assessments to be carried out in order to provide a basis for either allowing or prohibiting the continuation or the future development of activities that may affect cetaceans or their habitat in the Agreement area, including fisheries, offshore exploration and exploitation, nautical sports, tourism and cetacean- watching, as well as establishing the conditions under which such activities may be conducted; - regulate the discharge at sea of, and adopt within the framework of other appropriate legal instruments stricter standards for, pollutants believed to have adverse effects on cetaceans.		
Cartagena Ratified via Law of the safe transfer, handling and use of 'living modified organisms' resulting biotechnology' that may have adverse effects on the conservation and sustainable uses.					
12.	12. amendments   Railled vid Law   field of application to the coast; 2) the application of the precautionary principle; 3) the		The main amendments made in 1995 concerned: 1) the extension of the Convention's geographical field of application to the coast; 2) the application of the precautionary principle; 3) the application of the "polluter pays" principle; 4) the promotion of impact assessments; 5) the protection and		









	Treaty, Convention or Protocol		Objective and Brief Description of Relevant Articles
	Convention on the protection from polluting the Mediterranean Sea		preservation of biological diversity; 6) combating pollution from cross-border movements of dangerous waste; and 7) access to information and public participation.
13.	Convention on the control of Law No. Systems. (Anti-fouling paints are used to coat the bottoms of ships to prevent sealife to the control of		The Convention prohibits the use of harmful organotin in anti-fouling paints used on ships and establishes a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems. (Anti-fouling paints are used to coat the bottoms of ships to prevent sealife such as algae and molluscs attaching themselves to the hull – thereby slowing down the ship and increasing fuel consumption.)
14.	IMO Ballast Water Management Convention  Complexity Decision 31/2009		The convention represents a significant step towards protecting the marine environment from the introduction of invasive species from the uncontrolled discharge of ballast water. The Convention requires all ships to implement a Ballast Water and Sediments Management Plan. All ships will have to carry a Ballast Water Record Book and will be required to carry out ballast water management procedures to a given standard. Parties to the Convention are given the option to take additional measures which are subject to criteria set out in the Convention and to IMO guidelines. At the time the Ballast Water Management Convention was adopted, suitable technologies allowing this strict standard to be met did not exist. Meanwhile, however, companies all over the world have developed novel systems and technologies which are now undergoing a complex approval procedure at IMO or the national approval authorities.
15.	Accession to the Barcelona Convention Protocol on Integrated Coastal Zone	Accessed via Law No. 639/2014	The objectives of integrated coastal zone management are to: (a) facilitate, through the rational planning of activities, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development; (b) preserve coastal zones for the benefit of current and future generations; (c) ensure the sustainable use of natural resources, particularly with regard to water use; (d) ensure preservation of the integrity of coastal ecosystems, landscapes and geomorphology; (e) prevent and/or reduce the effects of











Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
Management in the Mediterranean (ICZM) (1995)		natural hazards and in particular of climate change, which can be induced by natural or human activities; (f) achieve coherence between public and private initiatives and between all decisions by the public authorities, at the national, regional and local levels, which affect the use of the coastal zone.
		Article 19 on Environmental Assessment states that: 1) Taking into account the fragility of coastal zones, the Parties shall ensure that the process and related studies of environmental impact assessment for public and private projects likely to have significant environmental effects on the coastal zones, and in particular on their ecosystems, take into consideration the specific sensitivity of the environment and the inter-relationships between the marine and terrestrial parts of the coastal zone; 2) In accordance with the same criteria, the Parties shall formulate, as appropriate, a strategic environmental assessment of plans and programmes affecting the coastal zone; 3) The environmental assessments should take into consideration the cumulative impacts on the coastal zones, paying due attention, inter alia, to their carrying capacities.  Article 28 is related to Transboundary Cooperation, It stipulates that: the Parties shall endeavor,
		directly or with the assistance of the Organization or the competent international organizations, bilaterally or multilaterally, to coordinate, where appropriate, their national coastal strategies, plans and programmes related to contiguous coastal zones. Relevant domestic administrative bodies shall be associated with such coordination.
		Article 29 on Transboundary Environmental Assessment stipulates that: 1) Within the framework of this Protocol, the Parties shall, before authorizing or approving plans, programmes and projects that are likely to have a significant adverse effect on the coastal zones of other Parties, cooperate by means of notification, exchange of information and consultation in assessing the environmental impacts of such plans, programmes and projects; 2) To this end, the Parties undertake to cooperate in the formulation and adoption of appropriate guidelines for the determination of procedures for notification, exchange of information and consultation at all stages of the process; 3) The Parties may, where appropriate, enter into bilateral or multilateral agreements for the effective implementation of this Article.











	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
16.	MARPOL 73/78 and its annexes: Annex1, Annex II, Annex III, Annex IV, and Annex V	Ratified via Law No. 13/1983	The MARPOL Convention also known as the « Marine Pollution Convention » is an International Convention for the Prevention of Pollution from Ships from operational or accidental causes. The Convention includes the following Annexes:  • Annex I: Regulations for the Prevention of Pollution by Oil. Covers prevention of pollution by oil from operational measures as well as from accidental discharges. It states that: - Ship must be proceeding en route, not within a "special area" and oil must not exceed 15 ppm (without dilution). Vessel must be equipped with an oil filtering system, automatic cut-off, and an oil retention system Shipboard oil pollution emergency plan (SOPEP) is required.  • Annex II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk. Includes details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk; some 250 substances were evaluated and included in the list appended to the Convention; the discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with. In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land.  • Annex III: Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form. Contains general requirements for the issuing of detailed standards on packing, marking, labelling, documentation, stowage, quantity limitations, exceptions and notifications. For the purpose of this Annex, "harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code) or which meet the criteria in the Appendix of Annex III.  • Annex IV: Prevention of Pollution by Sewage from Ships. Contains requirements to control pollution of the sea by sewage; the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment











	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
		and specifies the distances from land and the manner in which they may be disposed of; the important feature of the Annex is the complete ban imposed on the disposal into the sea of forms of plastics. It stipulates that: - Disposal of garbage from ships and fixed or floating plate prohibited. Ships must have a garbage management plan and shall be provided with a Go Record Book Discharge of food waste ground to pass through a 25-mm mesh is permitted facilities more than 12 nmi from land.	
17.	Barcelona Convention and two of its protocols: a) 1976 Dumping Protocol , b)1976 Emergency Protocol	Ratified via Leg. Decree No. 126/1977	The 1976 Barcelona Convention for Protection against Pollution in the Mediterranean Sea is a regional convention to prevent and abate pollution from ships, aircraft and land based sources in the Mediterranean Sea. This includes, but is not limited to, dumping, run-off and discharges. Signers agreed to cooperate and assist in dealing with pollution emergencies, monitoring and scientific research.  Article (7): Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil: The Contracting Parties shall take all appropriate measures to prevent, abate and combat pollution of the Mediterranean Sea area resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil.
			<ul> <li>-a)1976 Dumping Protocol: Protocol for the Prevention of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft. It was amended in 1995 and recorded as: Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea.</li> <li>-b)1976 Emergency Protocol: Protocol Concerning Cooperation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency. It was replaced by the Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea in 2002.</li> </ul>
The United Nations Convention on Ratified via Law No. 295/1994 use of the world's oceans, establishing guidelines for businesses, the management of marine natural resources. UNCLOS divided the sea into zo different legal status and app		The Law of the Sea Convention defines the rights and responsibilities of nations with respect to their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. UNCLOS divided the sea into zones, each subject to a different legal status and applicable law. UNCLOS outlines state's responsibility for protecting the marine environment from: "Pollution from	











	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
	the Law of the Sea (UNCLOS)		installations and devices used in exploration of natural resources of the seabed and subsoil, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulation of the design, construction, equipment operation and manning of such installations or devices". (Article 194 (3) (c) of UNCLOS 182 "Measures to prevent, reduce and control pollution of the marine environment").
19.	The International Convention relating to the Limitation of the Liability of Owners of Sea-Going Ships, and Protocol (Brussels, 1957)  The International Accessed via Law No. 294/1994	The owner of a sea-going ship may limit his liability in accordance with Article 3 of this Convention in respect of claims arising from any of the following occurrences, unless the occurrence giving rise to the claim resulted from the actual fault or privity of the owner: (a) loss of life of, or personal injury to, any person being carried in the ship, and loss of, or damage to, any property on board the ship; (b) loss of life of, or personal injury to, any other person, whether on land or on water, loss of or damage to any other property or infringement of any rights caused by the act, neglect or default of any person on board the ship for whose act, neglect or default the owner is responsible or any person not on board the ship for whose act, neglect or default the owner is responsible: Provided however that in regard to the act, neglect or default of this last class of person, the owner shall only be entitled to limit his liability when the act, neglect or default is one which occurs in the navigation or the management of the ship or in the loading, carriage or discharge of its cargo or in the embarkation, carriage or disembarkation of its passengers; and (c) any obligation or liability imposed by any law relating to the removal of wreck and arising from or in connection with the raising, removal or destruction of any ship which is sunk, stranded or abandoned (including anything which may be on board such ship) and any obligation or liability arising out of damage caused to harbour works, basins and navigable waterways.	
20.	The International Convention for the Prevention of Pollution of the Sea by Oil	Ratified via Law No. 68/1966	Attempts to tackle the problem of pollution of the seas by oil, defined as crude oil, fuel oil, heavy diesel oil and lubricating oil in two main ways as a consequence of the ever increasingly industrialized society:  -Definition of ships include oil platforms, oil transport and storage facilitiesDelimitation of zones where Oil cannot be dumped, except in strict cases of emergencies.









	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles	
	(OILPOL) 1954 and its 1962 amendments.		-Establishment of dumping far from land ruleSanctions in case of breachCreation of zones in ports to handle waste and dumping.	
21.	The International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969	Ratified via Law No. 28/1973	Attempts to ensure that adequate compensation would be available where oil pollution damage was caused by maritime casualties involving oil tankers.  -Establishes owner's liability for any pollution damage caused by oil which has escaped or been discharged from the ship as a result of the incident. Liability's exoneration cause (hostilities, war, third party fault, government's negligence).  -Possibility for owners to limit their liabilities with the condition of him establishing a fund for this precise purpose.  -The owner of a ship registered in a Contracting State and carrying more than 2,000 tons of oil in bulk as cargo shall be required to maintain insurance or other financial security.  -Courts Jurisdictions.	
22.	IMO International Convention relating to intervention on the High Seas in cases of Oil Pollution Casualties	Ratified via Decree No. 9226/1974	<ul> <li>-Applied to all seagoing vessels except warships or other vessels owned or operated by a State and used on Government non-commercial service.</li> <li>-States have the right to take measures "necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests" from oil pollution.</li> <li>-Establishment of certain obligations weighting on the costal State. Consulting other affected States (flag State, ship-owner, cargo owner and independent experts from the list maintained by the IMO (excluding cases of extreme urgency requiring measures to be taken immediately).</li> <li>-Usage of its best endeavours to avoid any risk to human life, appropriate measures to facilitate the repatriation of ships crews Notification all interested States, owners of ships and cargoes and the IMO of all measures taken.</li> <li>-All measures shall be proportionate to actual or threatened damage.</li> <li>-Obligation to pay compensation (weighting on the costal Sate) to the extent of the damage caused by measures which exceed those reasonably necessary to achieve the end.</li> <li>-Emissions targets have been set in 2018 by IMO and shipping in the offshore industry has to abide by these targets</li> </ul>	









	Treaty, Convention or Protocol		Objective and Brief Description of Relevant Articles	
23.	1992 Protocol which amends the International Convention on Civil Liability for oil pollution damage (CLC) (1969)  Frotocol Grant to join via 607/2004 607/2004		The Protocol of 1992 changed compensation limits and widened the scope of the Convention to cover pollution damage caused in the exclusive economic zone (EEZ) or equivalent area of a State Party. The Protocol covers pollution damage as before but environmental damage compensation is limited to costs incurred for reasonable measures to reinstate the contaminated environment. It also allows expenses incurred for preventive measures to be recovered even when no spill of oil occurs, provided there was grave and imminent threat of pollution damage. The Protocol also extended the Convention to cover spills from sea-going vessels constructed or adapted to carry oil in bulk as cargo so that it applies apply to both laden and unladen tankers, including spills of bunker oil from such ships. Under the 1992 Protocol, a shipowner cannot limit liability if it is proved that the pollution damage resulted from the shipowner's personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result.	
24.	IMO International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC)	2005	Parties to OPRC are required to establish measures for dealing with pollution incidents, either nationally or in co-operation with other countries. Ships are required to carry a shipboard oil pollution emergency plan. Operators of offshore units under the jurisdiction of Parties are also required to have oil pollution emergency plans or similar arrangements which must be co-ordinated with national systems for responding promptly and effectively to oil pollution incidents. Ships are required to report incidents of pollution to coastal authorities and the convention details the actions that are then to be taken. The Convention calls for the establishment of stockpiles of oil spill combating equipment, the holding of oil spill combating exercises and the development of detailed plans for dealing with pollution incidents. Parties to the convention are required to provide assistance to others in the event of a pollution emergency and provision is made for the reimbursement of any assistance provided.	
25.	The International Convention on Civil Liability for Bunker Oil Pollution Damage (BUNKER)	Grant to join via Law No. 141/2011	The Convention was adopted to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil, when carried as fuel in ships' bunkers. The Convention applies to damage caused on the territory, including the territorial sea, and in exclusive economic zones of States Parties. The bunkers convention provides a free-standing instrument covering pollution damage only. Another key provision is the requirement for direct action	









	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
26.	The International Convention on Civil Liability for Bunker Oil Pollution Damage (BUNKER)  The International Accessed via Decree No. 10285/2013		- this would allow a claim for compensation for pollution damage to be brought directly against an insurer.
27.	2002 Emergency Protocol of the Barcelona Convention  Convention  Combating Pollution of the Mediterranean Sea is the legal framework within which cooperation in the Mediterranean region in the fields of prevention of and response to pollution is developed seasons and the seasons of the Mediterranean Sea is the legal framework within which cooperation in the Mediterranean Sea is the legal framework within which cooperation in the Mediterranean Sea is the legal framework within which cooperation in the Mediterranean sea is the legal framework within which cooperation in the Mediterranean sea is the legal framework within which cooperation in the Mediterranean sea is the legal framework within which cooperation in the Mediterranean sea is the legal framework within which cooperation in the Mediterranean region in the fields of prevention of and response to pollution  The 2002 "Prevention and Emergency" Protocol now covers prevention of, preparedness response to marine pollution from sea-based sources. Its text was also updated with a harmonizing it with the texts of other relevant international legal instruments developed seasons.		The Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea is the legal framework within which regional cooperation in the Mediterranean region in the fields of prevention of and response to marine pollution is developing. The 2002 "Prevention and Emergency" Protocol now covers prevention of, preparedness for and response to marine pollution from sea-based sources. Its text was also updated with a view to harmonizing it with the texts of other relevant international legal instruments developed since the adoption of the 1976 Protocol.
28.	Basel Convention on the control of transboundary movements of hazardous wastes and their disposal Ratified via Law No. 387/1994		The main objective of the Basel Convention is to protect human health and the environment against the negative impacts resulting from the generation, management, movement and disposal of hazardous wastes. The Convention controls the transboundary movements of hazardous waste and considers shipments without prior consent as illegal. The provisions of the Convention centre around the following principal aims: 1) the reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal; 2) the restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and 3) a regulatory system applying to cases where transboundary movements are permissible.
29.	Joint Convention on the Safety of Spent Fuel Management	Signed on 9/30/1997	Article 3.2 states that: This Convention shall also apply to the safety of radioactive waste management when the radioactive waste results from civilian applications. However, this Convention shall not apply to waste that contains only naturally occurring radioactive materials and that does not originate from









	Treaty, Convention or Protocol		Objective and Brief Description of Relevant Articles	
	and on the Safety of Radioactive Waste Management		the nuclear fuel cycle, unless it constitutes a disused sealed source or it is declared as radioactive waste for the purposes of this Convention by the Contracting Party.	
Stockholm Convention on Persistent Organic Pollutants Pollutants  Ratified via Law No. 432/2002 Pollutants  Production and use of persistent organic pollutants (POPs). It the requirement that developed countries provide new or measures to eliminate production and use of intentionally produced POPs where feasible, and manage and dispose sound manner. Precaution is exercised throughout the references in the preamble, the objective, and the		Stockholm Convention on Persistent Organic Pollutants (POPs) aims to eliminate or restrict the production and use of persistent organic pollutants (POPs). Key elements of the Convention include the requirement that developed countries provide new and additional financial resources and measures to eliminate production and use of intentionally produced POPs, eliminate unintentionally produced POPs where feasible, and manage and dispose of POPs wastes in an environmentally sound manner. Precaution is exercised throughout the Stockholm Convention, with specific references in the preamble, the objective, and the provision on identifying new POPs. O&G Activities shall not use/ produce POPs.		
31.	Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade	Ratified via Law No. 728/2006	The convention promotes open exchange of information and calls on exporters of hazardous chemicals to use proper labeling, include directions on safe handling, and inform purchasers of any known restrictions or bans. Signatory nations can decide whether to allow or ban the importation of chemicals listed in the treaty, and exporting countries are obliged to make sure that producers within their jurisdiction comply.	
32.	UNESCO Convention on the Protection of Cultural & Natural Heritage, 1972	Adhesion via Law 19 dated 30/10/1990.	Ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage.	









	Treaty, Convention or Protocol	Status	Objective and Brief Description of Relevant Articles
33.	Convention on the Protection of the Underwater Cultural Heritage. Paris, 2 November 2001	Grant to join via Law No. 722 dated 15/05/2006.	The Convention aims to ensure and strengthen the protection of underwater cultural heritage. According to the convention, the preservation in situ of underwater cultural heritage shall be considered as the first option before allowing or engaging in any activities directed at this heritage and recovered underwater cultural heritage shall be deposited, conserved and managed in a manner that ensures its long-term preservation. Also, Underwater cultural heritage shall not be commercially exploited.
34	Sendai Framework of Action	Endorsed by the UN General Assembly, June 2015	The Sendai Framework for Disaster Risk Reduction, otherwise known as the Sendai Framework, is a 15-year, voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.
35.	Minamata convention on mercury	Adopted on 10 October 2013 and entered into force on 16 August 2017	The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. It was agreed at the fifth session of the Intergovernmental Negotiating Committee on mercury in Geneva, Switzerland and it was adopted on 10 October 2013 at the Conference of Plenipotentiaries in Japan. The Minamata Convention entered into force on 16 August 2017. The Convention draws attention to mercury that has broad uses and is released to the atmosphere, soil and water from a variety of sources. While it is naturally occurring, controlling the anthropogenic releases of mercury throughout its lifecycle has been a key factor in shaping the obligations under the Convention.











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#### 1.3 Plans, Programs and Strategies

Main national plans, programs or strategies that could have implications on E&P Activities are presented in Table 1-3, including the compatibility of E&P Activities with them.

It shall be mentioned that the table is not exhaustive. It includes most relevant plans, programs and strategies to E&P activities.

Table 1-3 Plans and Strategies Relevant to the Petroleum Sector

#	Title	Year	Key Requirements	Implications to E&P Activities
1.	Lebanon's commitment to the UN sustainable development goals, 2030	2017	In September 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs). Building on the principle of "leaving no one behind", the new Agenda emphasizes a holistic approach to achieving sustainable development for all.	E&P Activities shall consider the SDGs and contribute to the extent possible to the related goals. The SDGs are used for developing the SEA framework, as applicable, to ensure alignment of E&P Activities with the SDGs.
2.	Sustainable Consumption and Production National Action Plan/ Mol	2015	SCP-NAP is a first step in response to the 2015 adopted SDGs and in particular Goal 12: Ensure Sustainable Consumption and Production patterns.  In a multi-stakeholder and inclusive process Lebanon developed a national SCP Action Plan for the Industrial Sector to promote Sustainable Consumption and Production patterns, with a special focus on the Litani Basin and Qaraoun Lake.  It identified 3 operational objectives:  - Adopt Best Available Techniques to promote SCP in the industrial sector;  - Introduce SCP approaches related to the industrial sector in the policy and institutional frameworks;  - Educate and raise awareness of consumers on SCP in the industrial sector;	The objectives of the action plan shall be followed by the petroleum activities, where applicable, and particularly during Production Phase.









#	Title	Year	Key Requirements	Implications to E&P Activities
3.	The Integrated Vision for Lebanese Industrial Sector for 2025/ Mol		<ul> <li>The plan of the Mol sets the operational objectives:</li> <li>Expansion of domestic market</li> <li>Increase of industrial exports</li> <li>Increase of the competitiveness capacity of the national industry, internally and externally with consistency and steadiness.</li> <li>Increase of investment and financing in the industrial sector</li> <li>Encouragement of green industries</li> <li>Encouragement of new knowledge Industries</li> <li>Media for the industry</li> </ul>	E&P Activities can contribute to achieve some of the objectives of the plan of the Mol, specifically:  - Increase industrial exports  - Increase competitiveness of the national industry
4.	Policy Paper for the Electricity Sector (Electricity Reform Paper), MoEW	2010 Prepared by the MoEW in June 2010, and adopted by GoL in 2011	An Integrated Electricity Strategy was set within the Electricity Reform Paper. It addressed the following areas:  I. Infrastructure: 1. Generation, 2. Transmission, 3. Distribution  II. Supply and demand: 4. Fuel Sourcing, 5. Renewable Energy, 6. Demand Side Management / Energy Efficiency, 7. Tariffs  III. Legal Framework  The Policy Paper constitutes a global framework for the power sector in Lebanon, and constitutes 10 strategic initiatives. According to the Policy, the power sector will have more than 4,000 MW generation capacity in 2014 and 5,000 MW after 2015, in addition to reliable transmission and distribution networks. The Policy calls for resources diversification such that natural gas will constitute 2/3 of the fuel mix with multiple sources of supply; more than 12% of energy used for power generation will be renewable energies by 2020.	E&P Activities could provide gas sources which would help achieve the set fuel sourcing policy.
5.	Second National Energy	2016	Based on the contents of the Policy Paper, the LCEC developed the first National Energy Efficiency Action Plan (NEEAP) for Lebanon for the period 2011-2015. The NEEAP is a national document that summarizes the national efforts taking place and sets the road map to be followed by	The plan guides national plans for oil and gas utilization.









#	Title	Year	Key Requirements	Implications to E&P Activities
	Efficiency Action Plan		the country towards reaching its objectives in energy efficiency. The Second National Energy Efficiency Action Plan for the republic of Lebanon, NEEAP 2016-2020, continues and builds on the initiatives proposed in the first NEEAP 2011-2015. The NEEAP 2016-2020 is divided into two main section:	
			<ul> <li>The power sector measures: which tackle energy efficiency in electricity generation, transmission and distribution.</li> <li>The end-use measures: which tackle Horizontal End-Use measures, End-Use measures in the Building Sector, End-Use measures in the Industry and Agriculture, Measures in Mobility and Transport and End-use measures in The Public Sector.</li> </ul>	
6.	Land Transport Sector Strategy	2016 - 2017	<ul> <li>Greater Beirut Urban Transport Project</li> <li>Rehabilitation of the Coastal Railway between Beirut and Tripoli</li> <li>Rehabilitation of the Coastal Railway between Tripoli and the Syrian Border</li> </ul>	Potential onshore facilities and pipelines shall consider the railway corridors.
7.	The National Renewable Energy Action Plan for the Republic of Lebanon- 2016-2020/ MoEW	2016	The NREAP 2016-2020 is the main national document that will lead the way for Lebanon to develop the different RE technologies needed to reach the 12% target by the year 2020.  It offers a detailed description of the different RE technologies to be used in Lebanon to meet the 2020 objective, including the target for each technology, the financial appraisal of the technology, the needed budget, and the way forward. It discusses the policies and tools that Lebanon needs to follow and use to reach the set objectives including legal issues and legislation, awareness raising, capacity building, quality control, financing mechanisms, and grid code.	Petroleum sector development and the potential energy supply from petroleum sources shall not contradict with the renewable Energy target set in the action plan.









#	Title	Year	Key Requirements	Implications to E&P Activities
8.	Lebanon's National Strategy for Air Quality Management for 2030/ MoE	2017	The strategy is composed of 6 strategic goals and allows the GoL to identify the needed outputs and activities to meet the vision set forth in the strategy by 2030 at the level of each goal. The strategic goals together with their outputs and activities provide a framework for action at short-, medium- and long-term level and allow the concerned stakeholders to use the strategy as a basis for identification of needed interventions.  The goals identified in the strategy are:  Strengthening the Legal & Institutional Framework  Improving AQ Assessment Throughout the Territory  Solving AQ Problems Due to Stationary Sources in Degraded Airsheds  Solving AQ Problems from Mobile Sources  Mainstreaming AQ Management in Priority Sectors  Communication & Outreach on AQ	The sector to consider the strategic goals and take the required measures to meet the objectives.
9.	Lebanon's Nationally Determined Contribution under the UNFCCC / MoE	2015	<ul> <li>Lebanon's mitigation included:</li> <li><u>Unconditional Target:</u></li> <li>GHG emission reduction of 15% compared to the Business- As-Usual (BAU) (2011) scenario in 2030.</li> <li>15% of the power and heat demand in 2030 is generated by renewable energy sources.</li> <li>3% reduction in power demand through energy-efficiency measures in 2030 compared to the demand under BAU scenario.</li> <li><u>Conditional Target:</u></li> <li>A GHG emission reduction of 30% compared to the BAU scenario (2011) in 2030.</li> <li>20% of the power and heat demand in 2030 is generated by renewable energy sources.</li> </ul>	GHGs from the petroleum sector shall be controlled to achieve the targeted GHGs emissions reduction from the energy sector. Emissions offsetting might be required if emission reduction targets are to be jeopardized by emissions from E&P activities.









#	Title	Year	Key Requirements	Implications to E&P Activities
			- A 10% reduction in power demand through energy-efficiency in 2030 compared to the demand under the BAU scenario.	
			The conditional mitigation scenario covers the mitigation actions under the unconditional scenario, as well as further mitigation actions which can be implemented upon the provision of additional international support.	
			The INDC covers the sectors of: Energy, industrial processes and other product use, agriculture, land-use, land-use change and forestry, and waste.	
10.	Lebanon's Marine Protected 2012 Area Strategy/ MoE		The document proposes new MPAs in addition to the two existing sites and sets the MPAs management strategy which aims to fulfil the following objectives:  - To establish a more systematic approach to marine protected	During offshore petroleum activities,
		2012	areas planning and establishment;  - To enhance collaboration for management and monitoring of marine protected areas;  - To increase awareness, understanding and participation of the local community in the marine protected areas network; and  - To link Lebanon's network of marine protected areas to Mediterranean networks.	it is necessary to adhere to the requirements of the strategy and set measures to protect MPAs and proposed sites.
11.	Lebanon's 5 <sup>th</sup> National Report to the Convention on Biological Diversity/ MoE	2015	It provides an update on biodiversity status, trends, and threats and implications for human well-being and provides the national biodiversity strategy and action plan.	National targets and national actions relevant to the programme shall be adhered to, especially targets related to preserving threatened species, control the introduction and diffusion of IAS into the environment and sustainable management of natural ecosystems.









#	Title	Year	Key Requirements	Implications to E&P Activities
12.	Lebanon's National Biodiversity Strategy and Action Plan/ MoE	2016	It addresses Lebanon's obligations under Article 6a of the Convention on Biological Diversity (CBD) and is an update of the country's first NBSAP issued in 1998. The revised NBSAP was aligned with the new CBD strategic goals and integrated the 2020 Aichi Biodiversity Targets while taking into consideration both global and local needs and aspirations, as well as reflecting Lebanon's specific realm and the current existing professional capacities and awareness levels. One of the main objectives of the NBSAP is to mainstream biodiversity into sectorial and cross-sectorial strategies, plans and programmes.	National targets and national actions relevant to the programme shall be adhered to, especially targets related to preserving threatened species, control the introduction and diffusion of IAS into the environment and sustainable management of natural ecosystems.
13.	Palm Islands nature reserve management plan 2000-2005	2000	Management plan for Palm Islands nature reserve	Requirements of the management plan shall be adhered to
14.	Ministry of Agriculture strategy 2015- 2019/MoA	2014	<ul> <li>The strategy sets three objectives, eight main courses of action including 30 components and 104 areas of intervention.</li> <li>Fisheries related actions include:</li> <li>Improve the contribution of agriculture to the economic and social development of the country</li> <li>Support investment in the fisheries and aquaculture and improving sustainable management of the sector</li> </ul>	Petroleum activities shall not negatively affect the requirements of the strategy.
15.	National Oil Spill Contingency Plan in the Lebanese Waters/ MoEW	2017	<ul> <li>The objectives of the NOSCP match and amplify the International Maritime Organization (IMO) objectives for a NOSCP, and as such it:</li> <li>Establishes a viable operational organization with representation from all concerned agencies.</li> <li>Identifies the national high risk areas.</li> <li>Identifies priority coastal areas for protection and clean-up.</li> </ul>	Procedure and requirements of the plan shall be followed in case on oil spills of all tiers.









#	Title	Year	Key Requirements	Implications to E&P Activities
			<ul> <li>Provides a minimum level and appropriate types of pre-positioned pollution response equipment in accordance with article 6(2) of the OPRC Convention.</li> <li>Prevents the spread of further pollution from identified oil spills.</li> <li>Controls the spill source and clean-up existing pollution.</li> <li>Employs Net Environmental Benefit Analysis (NEBA) to ensure that the chosen recovery strategies do not cause further damage to the environment.</li> </ul>	
16.	Integrated Solid Waste Management Policy	2018	Sets the overall guiding principles and requirements for Solid waste management in Lebanon. Regarding Hazardous Wastes, MoE shall prepare a feasibility study and shall take the necessary steps to build there interim hazardous wastes storage sites and build needed treatment facilities.	National hazardous wastes infrastructure, if and when in place, can be used to dispose of hazardous wastes generated by petroleum activities.
17.	The integrated vision for Lebanese Industrial Sector 2025	2015- 2016	<ul> <li>Vision: Industry that contributes effectively and consistently to the achievement of sustainable development. Some of the Strategic objectives include:</li> <li>Enhance the referential reliability of the Ministry of Industry in the field of industrial statistics and information.</li> <li>Strive to lead the Lebanese society into becoming a highly productive and active industrial society.</li> <li>Achieve national economic development and raise living standards. ¬ Contribute in reducing trade deficit.</li> <li>Increase Job opportunities steadily.</li> <li>Strive to raise productive capacity of the national industry to be able to provide 50% to 70% of local consumption needs of various sectors.</li> <li>Increase the contribution of the industrial sector to gross domestic product (GDP) to 18%. ¬ Preserve and protect the environment.</li> </ul>	Main implications of the E&P sector expected is the reduction in the cost of power/energy for production, which would increase the profitability of the industrial sector in Lebanon.









#	Title	Year	Key Requirements	Implications to E&P Activities
			- Keep pace with developments, support researches and innovations.	
	Reaching All Children with Education: RACE II (2017- 2021)	strategic approach to the anstrategic approach to the shifts:  **Aligning with the SD integrate human right, to its interventions  **Ensuring that quality evulnerable children are Lebanese.  **MEHE and its partners that address both the address both the address are enrolled in explicitly expands the approach to the anstrategic approach	RACE II (2017-2021) seeks to build on RACE I, envisaging now a more strategic approach to the education sector response, on the premise of a stabilization and development agenda through these key strategic shifts:  • Aligning with the SDGs' Goal 4 on Education, RACE II will seek to integrate human right, child rights, and child protection principles, as key	Implication to education sector in general are considered. Development of a petroleum sector brings increased need for adequately educated and qualified work force and subsequently increases the demand for special profiles
18.			<ul> <li>to its interventions</li> <li>Ensuring that quality education opportunities are available for the most vulnerable children and families; whether they be non-Lebanese or Lebanese.</li> <li>MEHE and its partners will implement systemic and holistic interventions that address both the demand for, and the availability of, quality public</li> </ul>	
			• An acceleration towards ensuring that all children and youth aged 03-18 years are enrolled in quality and inclusive education opportunities. This explicitly expands the Sector's responsibility to support education opportunities for all throughout their life-cycle; from early childhood education, to improving quality of teaching services for primary, secondary, and vocational education, and a focus on equipping children and youth with effective life-skills.	provided by the education sector.
19.	Lebanon Rural Tourism Strategy	2015	The goal of the five-year strategy is to enhance economic opportunities in Lebanese rural areas through improving the competitiveness of specific value chains, including rural tourism and another set of agriculture sectors and food products. The Strategy identified main rural tourism stakeholders, dynamic trends in rural tourism and the different	Onshore petroleum facilities and supply bases shall avoid areas important for tourism and should not affect the visual amenity in such areas.









#	Title	Year	Key Requirements	Implications to E&P Activities
			segments and sub-segments. The development of the rural tourism strategy is in line with the identified need to strategize and advocate for the development of the rural tourism sector through cooperation and common action among stakeholders.	
20.	Lebanon SME Strategy: A Roadmap to 2020	2014	Initiated by the Ministry of Economy and Trade to ensure the long term planning and support for a key sector of the Lebanese economy.  The study proposes a national strategy for Lebanon's entrepreneurs and SMES with the ambitious vision of: SMEs as Key Economic Engine for Growth and Job Creation Achieving the vision is incumbent upon all stakeholders to execute the mission: Foster the Creation of Vibrant and Globally Competitive SMEs that Contribute to Employment Opportunities and High Value-Added Economy.	The petroleum sector is expected to provide opportunities for SME in fields related to the petroleum sector.
21.	Strategy to Restructure the Economy	In progress	Creation of a new economic vision for Lebanon.	Future development and hydrocarbon usage options shall consider the new economic vision for Lebanon.
22.	National Water Sector Strategy	2012	The NWSS has been developed by the Ministry of Energy and Water, with the participation of national stakeholders and international donors. The NWSS goal is 'to ensure water supply, irrigation and sanitation services throughout Lebanon on a continuous basis and at optimal service levels, with a commitment to environmental, economic and social sustainability'.	Sustainable use of water, treatment of wastewater and reuse shall be considered in the offshore petroleum activities.









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#### 1.4 ROLES OF STAKEHOLDERS IN THE SEA

General perceived roles and responsibilities of stakeholders relevant to the SEA are provided in Table 1-4. Their specific roles in the implementation of mitigation measures and monitoring of indicators are provided in Section 10 of Volume 1 of the SEA report.

Table 1-4 Roles of stakeholders in the SEA

Relevant Stakeholders	Role in SEA Process
Minister of Energy and Water (MoEW)/LPA	<ul> <li>Petroleum sector proponent.</li> <li>Reviewing and endorsing the SEA report and related subdeliverables.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> <li>Ensuring streamlining of SEA findings with Ministry's plans, strategies and future development of the petroleum sector including EIA studies.</li> <li>Data provision.</li> </ul>
Ministry of Environment (MoE)	<ul> <li>Main competent authority for environmental matters in Lebanon and focal point of international environmental conventions.</li> <li>Reviewing and approving the SEA report.</li> <li>Monitoring the implementation of SEA recommendations.</li> <li>Assessment of alignment of SEA findings/recommendations, selected alternatives and EMP with national legislation and Ministry's strategies and goals for environment protection.</li> <li>Involved in consultations with neighbouring countries regarding possible transboundary impacts.</li> <li>Data provision.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Ministry of Public Works and Transport (MoPWT)/DGLMT	<ul> <li>Main competent authority on the maritime domain in Lebanon and focal point of maritime international conventions.</li> <li>Follow up of SEA proposed recommendations, EMP and selected alternatives to mitigate the impacts on marine transport and shipping and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Data provision.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
The National Council for Scientific Research (CNRS) - National Centre for Marine Sciences (NCMS)	<ul> <li>Data provision.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>







Relevant Stakeholders	Role in SEA Process
Ministry of Agriculture	<ul> <li>Competent authority related to fisheries.</li> <li>Follow up of SEA proposed recommendations, EMP and alternatives to mitigate the impacts on fisheries and fish resources and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Provision of data related to fisheries and fish resources.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Ministry of Culture (MoC)/ Directorate General of Antiquities (DGA)	<ul> <li>Follow up of SEA proposed recommendations, EMP and alternatives to protect archaeological and cultural sites (including marine sites) and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Provision of data related to location and conservation status on archaeological sites.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Ministry of Defence/Lebanese Navy	<ul> <li>Follow up of SEA proposed recommendations, EMP and alternatives and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Provision of data related to sub-sea features and aviation and marine transport corridors.</li> <li>Role in emergency response.</li> </ul>
Ministry of Tourism	<ul> <li>Follow up of SEA proposed recommendations, EMP and alternatives to mitigate the impacts on tourism and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Provision of data on tourism</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Ministry of Labour (MoL)	<ul> <li>Follow up of SEA proposed recommendations and EMP and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Ministry of Social Affairs (MoSA)	<ul> <li>Follow up of SEA proposed recommendations, EMP and alternatives to alleviate the negative social impacts and maximize benefit from positive impacts and their accordance with local laws and ministry's strategies and plans.</li> <li>Alignment on Socio-economic indicators for the SEA framework.</li> <li>Data provision.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>







Relevant Stakeholders	Role in SEA Process
Lebanese Atomic Energy Commission – LAEC)	<ul> <li>Role in the permitting and monitoring of equipment or products containing radionuclides.</li> <li>Follow up of SEA proposed recommendations, EMP to mitigate possible radiation-related impacts and adequacy of NORM waste management alternatives and accordance with national legislation, strategies and plans.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Key relevant NGOs including international associations	<ul> <li>Awareness raising, building trust, dissemination, community engagement and ensuring transparency.</li> <li>Role in follow-up implementation of SEA recommendations</li> </ul>
Ministry of Foreign Affairs	<ul> <li>Follow up for transboundary coordination/consultation.</li> <li>Follow up for all multilateral agreements and commitments.</li> </ul>
Ministry of Industry	Inter-sectorial coordination and cooperation to ensure compliance/alignment with local legislation, plans and strategies.
Ministry of Economy and Trade	<ul> <li>Inter-sectorial coordination and cooperation to ensure compliance/alignment with local legislation, plans and strategies.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> <li>Alignment of SEA framework of objectives, targets and indicators with economic objectives and indicators in Lebanon</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Disaster Risk Reduction (DRR) (within the Council of Ministers)	Alignment of SEA proposed recommendations, EMP and selected alternatives related to emergency response measures.
CBRN National Team	Alignment of SEA proposed recommendations, EMP and selected alternatives and accordance with strategies and plans.
Electricity Of Lebanon (EDL)	<ul> <li>Inter-sectorial coordination and cooperation to ensure compliance/alignment with local legislation, plans and strategies.</li> <li>Potential user of hydrocarbons generated by E&amp;P activities.</li> </ul>
Central Administration of Statistics (CAS)	Data provision
Council for Development and	Responsible for various infrastructure projects in Lebanon including energy projects.









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Relevant Stakeholders	Role in SEA Process
Reconstruction (CDR)	
Academic institutions	<ul><li>Expert opinion.</li><li>Data provision.</li></ul>
Ministry of Education and Higher Education	<ul> <li>Alignment on the educational needs of Lebanese population to serve the oil and gas sector.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
Ministry of Public Health	<ul> <li>Follow up of SEA proposed recommendations, EMP and alternatives and their accordance with national legislation and Ministry's strategies and plans.</li> <li>Data provision on health statistics.</li> <li>Implementation of relevant mitigation measures and monitoring of relevant indicators.</li> </ul>
UN SDG support unit	Alignment of SEA framework of objectives, targets and indicators with SDGs implementation in Lebanon

#### 1.5 ENVIRONMENTAL GOVERNANCE<sup>1</sup>

Sound environmental governance and regulation of the offshore Oil & Gas sector shall give assurance to:

- Prevent and reduce as far as possible the occurrence of major accidents and limit their consequences on people, environment and assets;
- Preserve and protect the environment and communities, in particular the marine environment and coastal economies against pollution;
- Conservation of Lebanon's natural resources:

Lebanon has a unique opportunity to create a fit for purpose HSE governance system for a nascent industry in Lebanon. In order to achieve this, the HSE Governance Framework shall:

- 1. Ensure the establishment of a well-defined mandate for regulating, monitoring and enforcing the HSE matters throughout the sector's life cycle
- 2. Clearly define the roles and responsibilities, commitments and liabilities of all involved stakeholders in the sector.

<sup>&</sup>lt;sup>1</sup> This section is based on internal working document prepared by BV and ELARD for LPA under SODEL project.









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- 3. Integrate Health, Safety and Environmental aspects within the sector's management, including Major Accident to the Environment, rather than adopt an aspect approach.
- 4. Ensure that the HSE regulator is independent from economic regulator (resources management). This can be achieved through structural or functional arrangements.

The petroleum regulations clearly identify MOEW-LPA as the main regulator of the sector, where the integrated approach to HSE is, to a great extent, achieved in the mandated role of the Quality, Health, Safety and Environment (QHSE) department within LPA which supervises and oversees the implementation and compliance of HSE aspects, while also recognizing the need for coordination with other relevant entities at multiple instances. Meanwhile, the independence between HSE and economic management and regulations is not assured in the current governance arrangements.

It is of utmost importance to emphasize the need of independence of the HSE and economic management and regulations where following every major accident in the world where a credible investigation has been made, a lack of independence of the HSE regulator(s) from economic regulation was found to be at issue. In its main study preceding EU-wide legislation in 2013, the European Commission found the independence factor a cornerstone of best regulatory practice.

It is not always practicable to ensure complete separation of the HSE regulator from the officials exercising economic regulation. One reason may be that the scale of the sector does not warrant or fund a regulator of sufficient size to stand alone from the licensing authority of the country. The HSE EU Directive have recognized that the ambition is to achieve independence between HSE and economic regulations however it has recognized that for emerging oil and gas countries (similar to Lebanon), this independence can be waived for early stages (first couple wells) as investment in independent regulators might not be justified as well as pooling of capacities, competences and resources would be helpful at these early stages.

#### 1.5.1 Recommendations

Despite of its importance, the required independence of the HSE regulator(s) must not become a pursuit of altruism since the only way to remove HSE risks from economic activity is to take land/sea bed out of economic use. The regulator is an enabler of high hazard industries on behalf of the state, and the economic activity is the primary purpose of allowing high hazard industries to operate. Nevertheless, identifying and mitigating the risk is indispensable at the short and long terms.









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#### On the short term:

The principal organizational adaptation will be the creation of functional separation between the HSE decision making and the economic decision making (resource management) at the Petroleum Administration. In such circumstances, every endeavor must be made from the Minister down to ensure at all times the independence and objectivity by preventing conflicts of interest between the HSE regulation on one hand and the considerations of economic regulation and revenue collection on the other hand.

#### On the long term:

The principal organizational adaptation will be the creation of structural separation that is the complete separation of the HSE regulator from the economic regulator. This is the recognized international best practice model. Such structural separation could take place through various scenarios while taking into consideration the following key issues:

- 1. The existing mandated roles & responsibilities of the key HSE regulatory authorities in Lebanon
- 2. The existing offshore oil & gas regulatory framework (i.e. OPRL, PAR, LPA Decree, EPA)
- 3. Fulfilling all, or to the maximum extent possible, the requirements of the international best practice principles
- 4. Ensuring that the occupational health & safety and Major Accident prevention (including Major Accident to the Environment) are regulated by a single entity
- 5. Achieving sufficient independence between HSE regulation and economic regulation
- 6. Government's constraints regarding mobilization of resources

As a first scenario, an entity responsible for Occupational Health & Safety and Major Accident Prevention (including MATTE) will be established. Such entity could operate in parallel to LPA under the tutelage of the Minister of Energy and Water or under the tutelage of another ministry or be a fully independent regulatory authority. In this scenario, the follow up of all environmental matters sits with the Ministry of Environment (MOE). This will entail a close interface between the proposed health and safety regulator and the environmental regulator (MOE) namely on common topics (MATTE, management systems ...etc). Such a scenario would require active capacity building at the Ministry of Environment on the supervision of the new emerging sector. It may also require organizational arrangements at the Ministry of Environment to better follow up on the sector e.g. the provision of a specific unit.

As a second Scenario 2, an entity is established as fully independent regulatory authority that regulates all HSE aspects including day-to-day environmental matters. If need be, such entity could communicate with other ministries e.g. Ministers of Labor and Environment.

In both scenarios, all economic regulations (resource management) remains at LPA under the tutelage of MOEW.



