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A review of Oil and Gas Exploration in Sri Lanka



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Sri Lanka's government has called for international competitive bids in 2019 for exploration and development activities in Blocks M1, M2 and C1, in Mannar and Cauvery Basins including appraisal and development of natural gas discoveries in Block M2 [3]. There will be opportunities to supply equipment and services needed for oil and gas exploration projects [1]. In other words, logistics and transport firms, whether government or private, need systematic capacity building in next five to ten years. The

objective of this series of articles is to provide a general understanding about the ground situation of the oil and gas exploration in Sri Lanka.

Introduction

Petroleum exploration in Sri Lanka began approximately 40 years ago in late 1960s [2]. Refreshing the oil and gas exploration work, 2D seismic surveys were conducted in Mannar basin by TGS NOPEC, a Norwegian seismic contractor with a regional office in Perth, Australia in 2001 and 2005 [1]. The first international licensing round was held in 2007 for three exploration blocks (M1, M2 and M3) in 2007 and one exploration block was awarded to Cairn Lanka Pvt Ltd, subsidiary of Cairn India in 2008. For the first time, two natural gas discoveries were made in two wells out of the three wells drilled in Block M2 by Cairn in 2011.

Sri Lanka will become a country which produces natural gas during 2024- 2025, and it will transform the country's energy mix subjected to securing potential investors by 2020 with offtake commitment by the government. [3]. Sri Lanka's Petroleum Resources Development Secretariat (PRDS) with the assistance of regional experts has estimated that the Mannar basin alone eould have has the potential to generate over two billion barrels of oil and over nine trillion cubic feet of natural gas(9 TCF), which would be sufficient to fulfil a substantial portion of Sri Lanka's energy needs for the next 60 years [1]. PRDS was planning to call bids for the next major licensing round, for exploration and development work in the remaining blocks in Mannar and Cauvery basins after legislating the National Policy on Natural Gas (NPNG) in 2019 with an aim to drill natural gas before 2025 [3]. In addition, Petroleum exploration efforts and some downstream market developments so far have resulted in the slow emergence of a new logistics industry that caters to the local as well as global oil ang gas market.

This experience in offshore seismic and exploratory drilling operations in Sri Lanka further motivated some companies like Hayleys energy services and McLaren's to enter into the international oil and gas logistics support services through diversified upstream business operations. The recent end to end complex logistics provided by Hayleys for Oil Rigs offloading, testing, modifications, repair work and hub business are some remarkable achievements. The oil and gas drillship "Aban Abraham" arrived for a warm lay-up to the Hambantota International Port in late 2018 [4] as a result of such efforts by Hayleys Energy Services (https://www.hayleysenergy.com/).

Oil and Gas

As global population grows, our energy demand grows as well. Liquid crude oil and natural gas occur together in nature, and so are collectively called "petroleum." The word derives from the Greek words "petra" and "oleum," meaning "rock" and "oil," respectively. Another term for petroleum is hydrocarbons. it is called this because petroleum primarily consists of hydrocarbon molecules, and these molecules are the reason for petroleum's value as a fuel source [4]. Exploration is the process of trying to find accumulations of oil and natural gas trapped under the