

Improving Reserves Management Processes to Increase Oil Production in Peru

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Abstract

Energy demand in Peru has increased in the last 15 years. Due to economic growth, energy demand will continue to increase, it is estimated that by 2040 energy consumption will grow by 30%. A primary source to meet energy demand is oil, but the oil industry in Peru is at a critical stage in recent years.

Oil production has declined from 94,000 barrels per day in 2000 to 69,300 in 2014. During the same period, proved reserves have increased from 323 to 683 million of barrels, this due to the execution of development projects and some discoveries in recent years. What remains is to execute the necessary investment sustainably to develop these reserves and turning them into production. The total volume of probable and possible reserves is about 748 million barrels, which require investments to reduce technical uncertainty and to turn them into proved reserves.

On the other hand, the volume of contingent resources amounts to 637 million barrels in December 2014. In the current state of oil prices, is required on the one hand, companies to improve the technical - economic models in order to reduce the risk of commerciality. On the other hand, the State should implement new tax and legal models that would help to improve projects' profitability. But the greatest potential is located in the prospective resources. The estimated volume is 5,429 million barrels of oil. Most of this volume is located in areas under contract. It's required facilitating and expediting the exploratory processes that allow the prompt assessment of these areas.

This work presents an analysis of the current state of oil reserves and resources in Peru. Authors assess the trend of reserve replacement indicators and the performance of the various players in the local oil market to propose urgent measures – technical, economic & legal – to improve the reserves management processes in order to increase the oil production and meet the demand of energy for the next 25 years.