

conventional low conversion refineries. The remaining 70% are composed mainly of heavy and extra-heavy crudes of gravity (lower than 14% API) which require the use of high conversion refineries in order to obtain the larger proportion of lighter products which the market demands. It is anticipated that another 30 billion barrels of conventional condensate and light and medium crudes can be added through future exploration and enhanced oil recovery projects. Venezuela's frontier areas, known for containing some of the largest sedimentary deposits in the world will require special technologies to deal with problems such as deep formations, low permeability reservoirs and complex geological formations.

Venezuela has the world's largest reserves of extra-heavy crudes and bitumens. Approximately 1.25 billion barrels are estimated to be in place along the northern bank of the Orinoco river. With current technology it is believed that approximately 270 billion barrels are recoverable.

Venezuela also has 127 trillion cubic feet of proven natural gas reserves with the strong likelihood of further additions in the future.

Venezuela which until recently was primarily an exporter of crude oil, has been transforming itself into mainly a marketer of oil products, via domestic refineries and downstream investments in consuming countries. In addition, ambitious expansion plans will see a further transformation of the Venezuelan petroleum industry into a major processor of petrochemical products and a large scale exploitation and development of its natural gas and extra-heavy oil.

Current mid-term plans by Petroleos de Venezuela (PDVSA), the national oil company, call for \$41 billion in investment over the next 5 years to increase production capacity by 25%, partly through secondary recovery programs of existing fields and partly through the development of the extra-heavy oil fields in the Orinoco. The plan also calls for new major refinery projects, petrochemical complexes and the development of a huge LNG facility for export.

Although still restricted from direct participation in exploration and production in Venezuela by legislation, foreign oil companies are now being invited to participate with PDVSA as service contractors (to develop marginal fields), joint venture partners for large scale projects in LNG and the extra-heavy oil development. In petrochemicals, where foreign ownership is permitted, a number of joint ventures have already been completed with PDVSA and several others are now in the development or planning stages.

In general, there is a growing consensus among Venezuelans that for the petroleum industry to continue to grow and prosper the country must continue to open up to foreign investment and technology. The combination of taxation reform, the general economic liberalization, low-input factors (i.e., labour and energy), good geographic