

For the 1994 budget year PDVSA's investment budget is set at U.S. \$3.9 billion: \$2.2 billion for production; \$1.13 billion for refining; \$287 million for exploration; \$184 million in petrochemicals; and \$89 million for Orimulsion; and \$14 million on coal.

Exploration

In both traditional and non-traditional production zones PDVSA wants to raise proven reserves from 63 to 65 billion by the end of the ten-year period, despite projected increases in production. This may not sound like a large increase, but it means that for each of the ten years contemplated in the business plan, PDVSA will have to add more than one billion barrels to proven reserves just to replace those which it will produce. PDVSA estimates a potential of 42 billion barrels of light and medium crude yet to be discovered in Venezuela's four principal sedimentary basins. A number of good areas have been identified for development by PDVSA some on its own and some through exploration/production sharing approaches with private partners.

New Production and Strategic Associations for Heavy Oil

Last year the Venezuelan Congress gave approval to PDVSA to move forward with joint-ventures to develop large-scale projects for the production of heavy oil in the Orinoco Belt in effect up to 35 years. Two deals are currently expected to begin development within the next two years to extract, upgrade and market Zuata crude. One association between Maraven and Conoco will require an investment of U.S. \$1.9 billion to produce 120,000 barrels p/d and pipe it 210 km to a delayed coker facility at Jose where it will be upgraded to a lighter crude of 20 degrees API. Each partner has a 49.5% stake in the consortium. The other project being planned is with Maraven(35%), the French oil company Total(40%) and a group of Japanese companies to produce 114,000 b/d and ship it through the same pipeline to Jose, where it will be upgraded to 31 degrees API. This project will require a \$3.8 billion investment.

Currently the partners are negotiating the legal and business structures of the two independent companies that will be formed. In 1994, the design, engineering and real costs will be detailed. Construction is expected to begin as early as the end of 1995. With Canada's well-known and respected leadership in heavy oil development Canadian companies should have excellent opportunities in these and a number of future heavy oil development projects being planned. Companies should be marketing their expertise and products to the consortium partner now.