The Petroleum Industry in Papua New Guinea - Achievements, Opportunities and Future Directions in the 21st Century

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Introduction
As often as not, the participants within our industry are too close to the underlying activities of exploration, development and production to observe, let alone measure, the progress brought about by their endeavours. Despite the progressive crash in crude prices through 1997 and 1998, the consequent global downturn in exploration activity, and the plethora of socio-economic and socio-political issues, Papua New Guinea has continued to build up its petroleum industry step by step. This paper will examine what our industry has done and achieved in Papua New Guinea during period since the Third Petroleum Convention in September 1996 up to the Fourth Petroleum Convention being held in late May 2000. In the interlaced framework of current exploration and production, policy development, gas promotion, and stakeholder participation, the industry has made significant progress in the period of almost four years that have elapsed between the Conventions. This paper will firstly examine the technical progress of exploration, development and production before turning to the development of the framework within which these activities take place.

At the time of the Third Convention, it was proudly announced that within a little over four years PNG had produced a total of 170 MMBO. This was all from the Kutubu oilfields. Now, as we approach the end of May 2000, cumulative production is estimated to amount to 286 MMBO, with the incremental production in the period coming from Kutubu, Gobe and Moran. At an average value for Kutubu crude oil of US$18 per barrel, production in the period has an estimated gross value of approximately US$2.1 billion. The petroleum industry has contributed in excess of US$5 billion to the GDP of the Papua New Guinea, since the commencement of oil production in June 1992.

Since September 1996, the industry has invested a further 570 million Kina (US$285 million at 0.50 US$/Kina) in exploration activities alone and spent a further US$400 million on development activities enhancing production at Kutubu, developing the Gobe oilfields and conducting extended well testing on the Moran field.

The development of Papua New Guinea’s gas resources has received serious consideration in recent years and the pre-eminent scheme for development, the PNG Gas to Queensland Project, is poised for development. It will involve investment of around US$2.1 billion in Papua New Guinea and US$1.55 billion in Australia.

Licensing
Petroleum activities are conducted in Papua New Guinea under a traditional licensing regime where exclusive rights are granted to companies to conduct operations within areas comprised of multiple graticular blocks that are 5 minutes longitude by 5 minutes latitude. Exploration operations are conducted under a Petroleum Prospecting Licence (PPL). The total number of Petroleum Prospecting Licences (PPLs) marginally increased during the period from 24 to 28. There has, however, been a considerable flux in the licensing with some 24 new PPLs granted and 20 surrenders of licences. This has been brought about by the departure of some familiar industry names and the consequent take-up by others of acreage thus made vacant; a number of top-files where licences were re-arranged; and the entry of some new ventures. Additionally there have been some large assets sales of both exploration and producing.