



FRONTIERS OF DEVELOPMENT IN THE UPSTREAM ENERGY SECTOR

WAYNE BERTRAND


FORMAT OF PRESENTATION

- Introduction and background
 - Geological frontiers
 - Tertiary education and research
 - Infrastructure Joint venturing
 - Exports of skills services and equipment
 - Equity investments by joint venturing
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INTRODUCTION AND BACKGROUND

- All the 'easy hydrocarbons' have been found
 - Declining reserves and production
 - Economy is highly dependent on hydrocarbon revenues
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GEOLOGICAL FRONTIERS

- Deepwater
 - Deeper horizons
 - Land
 - Offshore
 - Enhanced oil recovery in mature reservoirs including the use of CO₂
 - Heavy oil and Tar Sands
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TERTIARY EDUCATION AND RESEARCH

Governance of oil and gas resources

Training of 'ready to work' graduates

Applied research to

- Improved recovery
- Unconventional reservoirs



INFRASTRUCTURE JOINT VENTURING

Sharing of platforms and other infrastructure

Sharing of services




EXPORT OF SKILLS SERVICES AND EQUIPMENT

- **To new producing South-South countries**
- **Marketing of Labidco Platform Construction**



EQUITY INVESTMENTS BY JOINT VENTURING

- ❖ In new Hydrocarbon Provinces
 - CARICOM
 - Africa
 - South America
 - ❖ Initially as equity partner, eventually also as operator
 - ❖ Requires a different 'head set'
 - ❖ Leverage current JVs with international partners
 - ❖ Leverage government to government relationships
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CLOSING REMARKS

We need to accelerate the closure of the gap between current developments and our vision for the future.

