



Legal and Contractual Framework

Bogotá - Houston – London –Singapore - Calgary



- Sub-surface resources belong to the State
- Foreign and domestic companies may explore and obtain production from these resources under an Exploration and Production Contract with the ANH
- Contracts are granted by the ANH through various mechanisms, including bidding rounds

New Structure of the Petroleum Sector in Colombia

- Ministry of Mines and Energy. Regulator and follow-up of field operations.
- ANH - Manager of the oil & gas State subsurface resources. Defines terms and conditions of oil & gas contracts and regulates upstream activity.
- ECOPETROL – Upstream and midstream oil and gas commercial activities.
- Other Ministries/Agencies charged with other aspects such tax, HSE etc. (industry standard practices)

Change in Contract Form and Substance

- OLD - Association Contracts
 - R Factor
 - ECOPETROL steps in at commerciality declaration
 - 20% royalty

- NEW – E&P Contract
 - A tax and royalty-based (sliding scale) contract with no carry or step in of ECOPETROL

- Model E&P Contract developed to reflect:
 - Requirements of Decree 1760 of 2003 (creation of ANH)
 - Colombian legal framework and background
 - International practice and experience
 - Suggestions received during consultations with companies (via ACP) and various Government Ministries and Agencies
 - Since Model Contract was issued (August 2004), ANH has awarded 93 contracts, of which 86 are currently in effect

- Current Model Contract incorporates a number of improvements based on comments from companies

- ANH does not expect changes to the Model Contract for the Caribbean Round but remains open to constructive feedback and commentary
 - Model contract issued with Initial Terms of Reference in April
 - Final model will be included in the Definitive Terms of Reference to be issued in August

Key Contract Terms

- Investments at the risk and cost of the Contractor
- Minimum investment obligations
 - Guaranteed by Letters of Credit
- Pre-defined periods
- Mandatory partial relinquishment at the end of each Exploration Period
- Contractors responsible for the activities of their subcontractors
- Contractor performance standard of “best industry practice”

Key Contract Terms (cont.)

- Environmental permitting for each activity undertaken
 - Seismic - no license required, Environmental Management Plan
 - Exploration Drilling – environmental license required
 - Development – blanket authorization

- Adoption of petroleum industry “Best Practice”
 - Environmental protection
 - Operational safety
 - Conservation of the petroleum resources

- E&P Contract covers Exploration and Production Phases

- Contractor owns the rights to all production, net of royalties

- Exploration Periods/Relinquishment
 - 3 + 3 + up to 4 extension years
 - Relinquish 50% to move to second period, 50% of remainder to move to third period
- Minimum Exploration Program for each period
- Possibility of extension for evaluation of discovery in Exploration Phase
- Companies have 4 months from end of exploratory drilling to advise ANH of discoveries made, along with required tests/evaluation reports

Minimum Exploration Programs

- Separate pre-defined obligations for each exploration period
- First period
 - At least seismic program
 - 2D seismic
 - or 3D at conversion rates to be defined
- Second period
 - 1 A-3 exploration well
- Extensions
 - 2 periods of 2 years each possible, subject to agreed additional exploratory work program

Minimum Exploration Programs (cont.)

- Each period requires guarantee acceptable to ANH (standby letter of credit or insurance bond)
 - Approximately US\$ 5 million for first period
 - Amount set at time of renewal for second period
 - Performance of work program is guaranteed

- Drilling at Contractor's option during the first Exploration Period
- All wells have pre-defined target formation and need to be advised to MME
- Additional exploration activity may count towards obligation in next exploration period
 - Subject to ANH pre-approval of program
 - All periods will have minimum commitments

Evaluation Phase

- All evaluation plans must be submitted within 6 months of end of drilling (in all cases prior to end of Exploration Period)
- Maximum duration of evaluation is 2 years (if appraisal wells included), otherwise 1 year
- Results of evaluation must be submitted to ANH within 3 months of completion of plan with clear indication if there is a Declaration of Commerciality, or not
- Additional 2 year extension may be requested in the case of natural gas or heavy oil, to allow further evaluation of commercialization options
- Areas under an evaluation plan are excluded from area relinquishment obligations

Development Plan

- Initiated at any time during the Exploration Phase
- Development Plan must be submitted within 3 months of the Declaration of Commerciality
 - Covers all aspects of field development and production

Contents of Development Plan

- Map of proposed production area
- Estimation of reserves
- General description of development plan (wells, reservoir management plan, facilities, abandonment plan, etc.)
- Forecast of annual production
- Identification of critical factors and proposed handling
- Proposed delivery point
- Proposed basket of crude oils for production valuation purposes

- ANH only verifies contract compliance
- Approval is deemed granted if no objection/request for additional information by ANH is issued
- During its execution, the Development Plan can be modified by the Contractor, with prior notice to ANH
- Standard of approval – best industry practice, consistent with Colombian law

Production Phase

- Starts with Declaration of Commerciality
- Initiated at any time during the exploration phase
- 24 year duration
- Contract can cover several fields
- Right to export production
- Term extension in event of available production, subject to certain conditions

- Required by Law. Limited application to date in Colombia
- Principle is that neighboring contractors sharing a discovery agree to a joint development approach
 - In absence of such agreement, MME will decide
- Where field extends into open areas, ANH will extend contract area subject to certain conditions

Domestic Market Supply Requirement

- Contractor free to commercialize production in international markets
- If ordered by MME to supply domestic market, up to 50% of production must be dedicated to supply the domestic market
- Pricing will be based on international market pricing as established in MME Resolution 18-1709/2003
 - In no event will the price be less than that used for the calculation of royalty or ANH participation (windfall price or the X% bid)

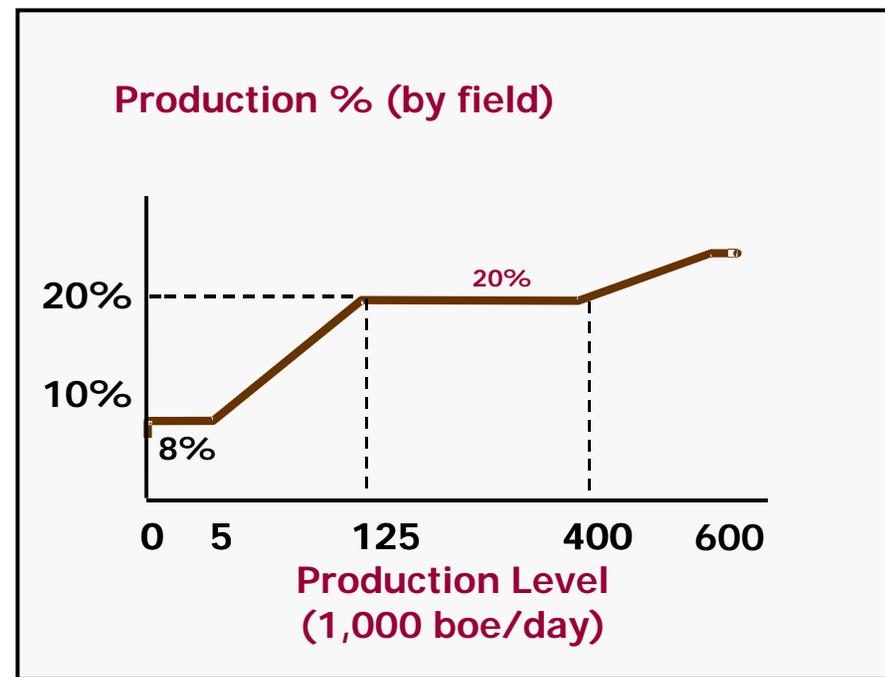
- Sliding Scale Royalty
 - Specific discounts for offshore oil and gas, onshore gas and heavy crude

- Participation of ANH
 - X% bid
 - High Price Participation

- Other Fees & Payments
 - Administration fees
 - Surface Rental Payments
 - Technology Transfer Payment

Sliding Scale Royalty

- Paid monthly
- Based on gross value of hydrocarbon production from each field (calculated by MME)
- Paid in cash/kind at election of MME
 - Current practice: oil in kind, gas in cash (but evolving with changes in sector)
- Applicable to all fields throughout term of Contract



Discount relative to light crude rates

Gas	- 20%
Heavy Crude	- 25%
Offshore gas (>1000 feet)	- 40%

High Price Participation – Oil

- Oil - applicable where gross cumulative production has exceeded 5 million barrels AND price is in excess of benchmarks

$$\text{Payment to ANH} = \left(\text{Value of Hydrocarbons At the Delivery Point} \right) \times \left(\text{CONTRACTOR'S Volume of Hydrocarbons} \right) \times \left(\frac{P - P_0}{P} \right) \times 30\%$$

Factor "A"

- where P = WTI and
- P₀ = (see table)

API Gravity	P ₀ (2007)
Below 10°	0
10-15°	\$41.45/Bbl
>15 and ≤ 22	\$30.43/Bbl
>22 and ≤ 29	\$29.34/Bbl
>29	\$28.25/Bbl
Offshore Production from > 300m	\$34.77/Bbl

High Price Participation – Gas

- Gas – applicable after 5 years from production start AND where gas is for export AND where Henry Hub benchmark exceeds base price

$$\text{Payment to ANH} = \left(\text{Value of Hydrocarbons At the Delivery Point} \right) \times \underbrace{\left(\text{CONTRACTOR'S Volume of Hydrocarbons} \right) \times \left(\frac{P - P_0}{P} \right) \times 30\%}_{\text{Factor "A"}}$$

where P = Henry Hub and P₀ = (see table)

Straight-line distance between Delivery Point and point of receipt in destination country (kms)	US\$/MMBtu (2007)
>0 and ≤ 500	\$6.52
>500 and ≤ 1000	\$7.60
>1000 or LNG plant	\$8.69

Surface Rentals

- Payment for each period during the Exploration Phase, commencing in second Exploration Period (per hectare)

Size of area	For the first 100,000 Has.		For each additional hectare after 100,000 Has.	
	≤12 months	> 12 months	≤12 months	> 12 months
Outside the polygons	0.5	0.75	0.75	1.0
Offshore areas	0.25			

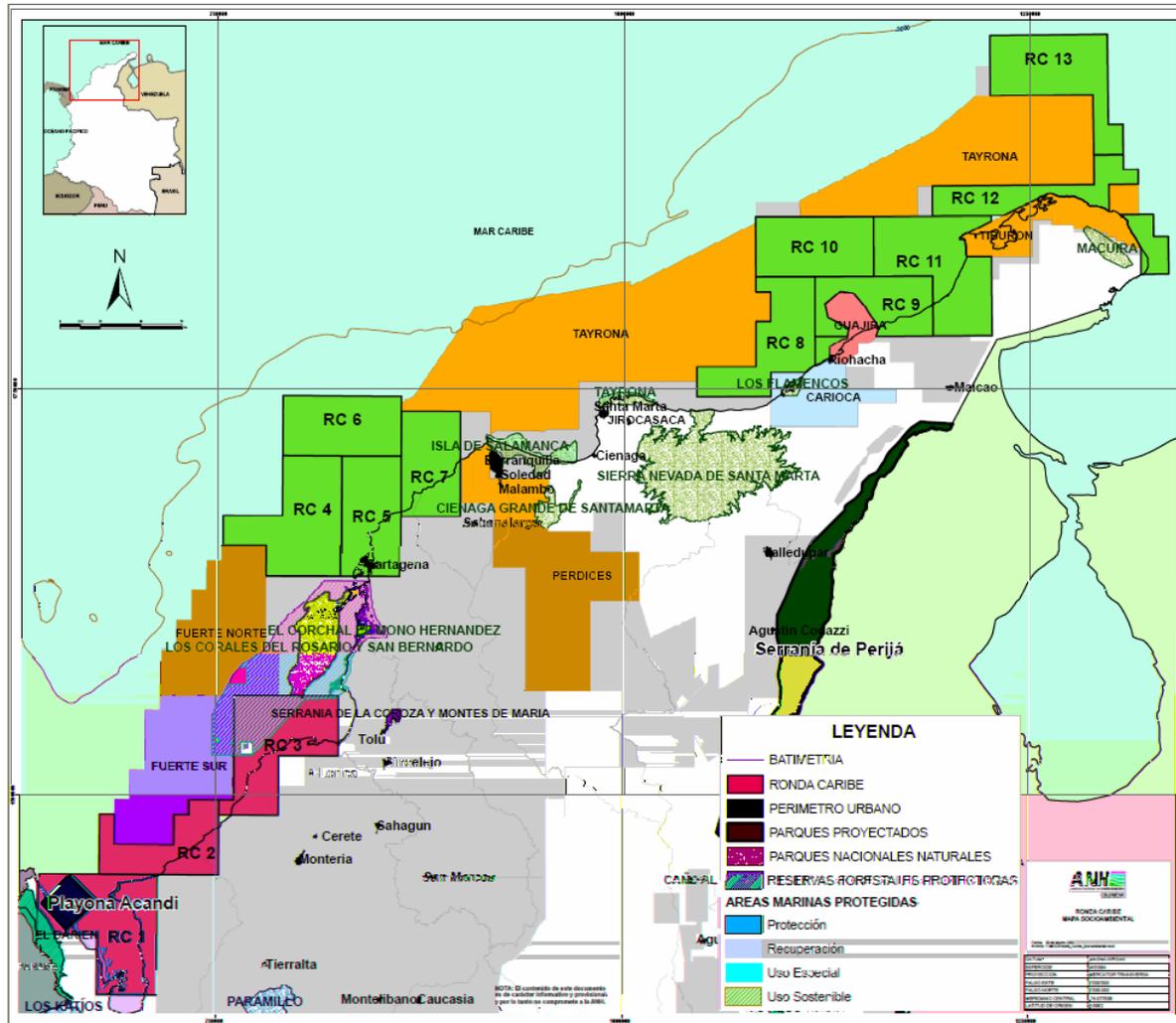
- Excluding any areas held under a Development Plan
 - Areas held under Evaluation Plan or Development Plan pay the applicable rental fee on an annual basis
- All producing areas also pay a bi-yearly amount to the ANH, in 2007:
 - \$0.1086/Bbl of Contractor's oil production
 - \$0.01086/Mcf of Contractor's gas production
- All amounts subject to U.S. inflation index (PPI Finished Goods WPUSOP 3000)

Technology Transfer Payment

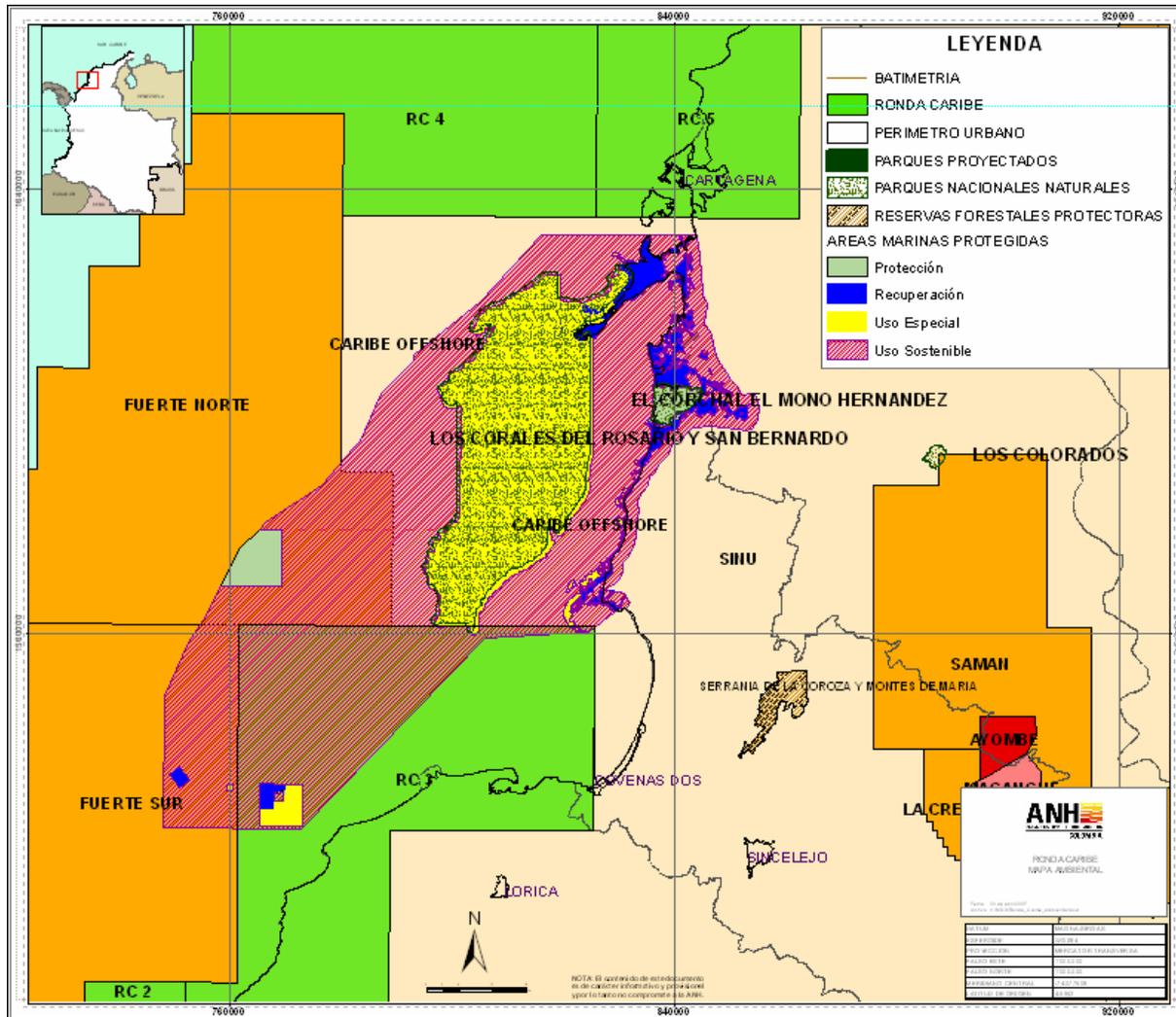
- Funds intended for investment in petroleum industry-related training, research, education, etc.
- Calculated as 25% of applicable surface rental payments
- Technology transfer payments subject to maximum annual amount of US\$ 100,000

- Where necessary, check for presence of indigenous or Afro-Colombian communities in the project's area of influence (Interior and Justice Ministry). Prior consultation, in case of presence.
- Foreign flag ships involved in exploration activity need permit from DIMAR (Colombian maritime control agency)
- Verify environmentally sensitive areas: Protected marine area and area projected for incorporation into the national parks system (see maps)
- Environmental license for exploratory drilling or marine production activities (Ministry of the Environment)

Environmentally-sensitive areas



Environmentally-sensitive areas



- Drilling and developing field - event-based reporting to MME (Decree 1895/1973)
- Annual reports
 - Reserves
 - Production Plan
 - Changes to Development Plan
- Executive report, each semester
- Monthly production reporting to ANH
 - Variations in excess of 15% from initial forecast reconciled quarterly

- ANH Board Agreement 24 of 2006 stipulates obligations
- All data acquired (seismic, logs, cores, etc.), interpreted for each phase must be provided to the ANH by end of the exploration phase and/or by year (in the production phase)
- Data is subject to confidentiality agreements
 - Seismic 5 years
 - Well logs 5 years
 - Interpreted information 20 years

- In compliance with obligations in the Development Plan, Colombian Law and Best Practices of the Petroleum Industry
- Commence capitalization of a fund 30 days after production starts, in the form of a trust, bank guarantee or other instrument acceptable to ANH
 - Required annual contribution to Abandonment Fund (A_{MA})

$$A_{MA} = (P_{AH} \div R_{IH})^2 \times C_{AB}$$

- P_{AH} = Accumulated Production; R_{IH} Proved reserves and C^{AB} = Abandonment Cost
- Existence of fund does not waive Contractor liability for full and proper abandonment

- Duties are applicable on imported equipment and expendables
 - Temporary import license
 - Some duty exemptions apply for oil and gas E&P activities

- Notice to ANH required only for mergers, spin-offs, takeovers
- Assignment subject to prior approval of ANH (and qualification of assignee, if applicable)

- Issue in dispute put to top legal representative of each party to resolve. If not resolved within 30 days, then:
 - Technical/accounting issues – 3 member expert panel, 30 days to resolve
 - Legal - Arbitration with rules of and in the Bogotá Chamber of Commerce, 3 arbitrators, Colombian law, Spanish language