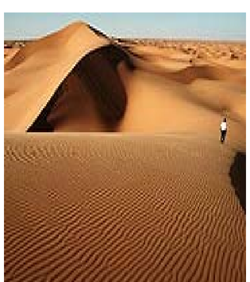
Africa Oil & Gas Forum

Maryland, November 2006

Coping With Challenges

An Algerian Perspective



Dr. Chakib Khelil

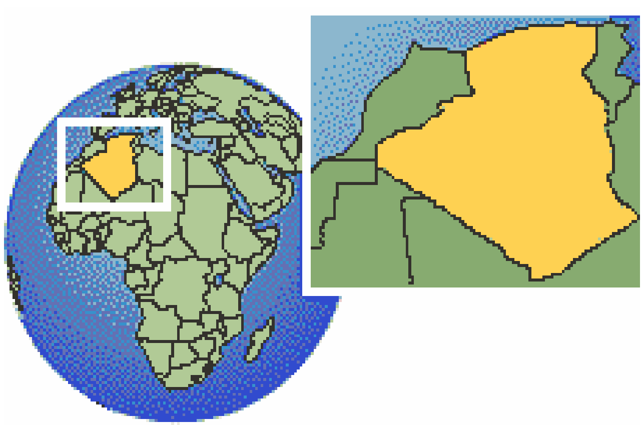
Minister of Energy and Mines

Algeria

Outline

- Algeria.
- The New Context of the Hydrocarbon.
- Services Suppliers in Algeria.
- Training.

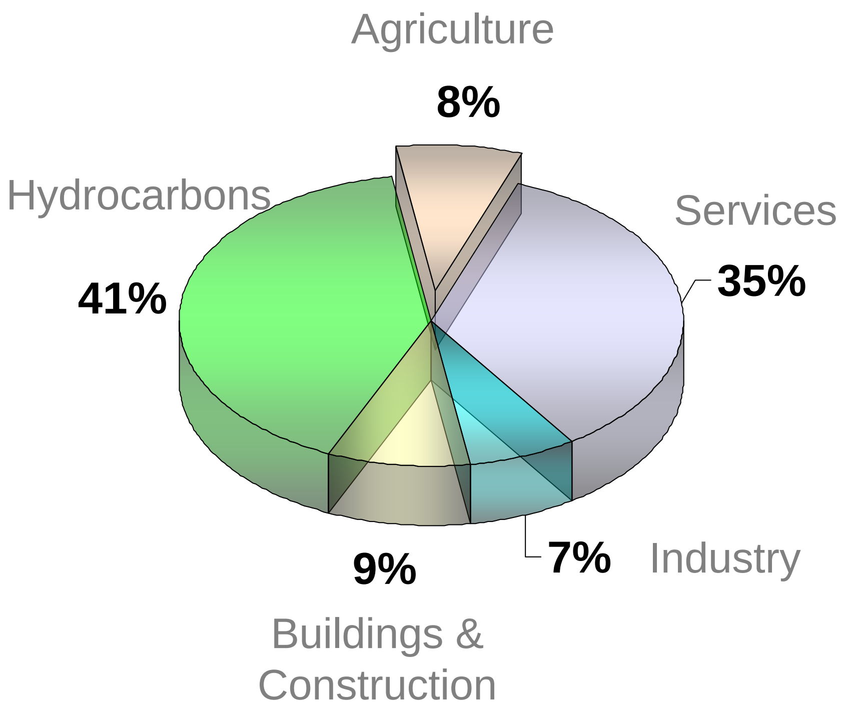
Algeria



- ✓ Second African country, with an area of 2.4 Million Sq.Km;
- ✓ Strategic geographic location, at the crossroads of African, Arab and Mediterranean worlds;
- ✓ 32.6 Million inhabitants, mostly young and educated;
- ✓ GDP per Capita doubled over the last six years, rising from 1 621 dollars in1999 to 3 150 dollars in 2005;
- ✓ External public debt declined to 14,0 % of GDP in 2005;
- ✓ Algeria adopted international legal instruments of investments protection.
- ✓ Algeria is well advanced in its negotiation of its accession to WTO membership.

Hydrocarbons Industry in the Algerian Economy

Hydrocarbon Industry plays a major role in the Algerian Economy



- The hydrocarbon industry accounts for around 40% of GDP;
- Proceeds from hydrocarbon exports cover 95 % of hard currency revenues;
- More than half of the state budget is funded by oil and gas tax revenues;
- Hydrocarbon Industry employs some 150 000.

***GDP* :** US$ 102,0 Billions*

* **Year**: 2005

The New Context of the Hydrocarbons Sector : Major changes

At the international level

Context

- **Fast growth of global demand in Petroleum;**
- **Continued tense Geopolitical situation in the main producing areas;**
- **Physical constraints in the Petroleum service industry;**
- **Inadequacy of the global refining capacity;**
- **Weather impact and natural disasters.**

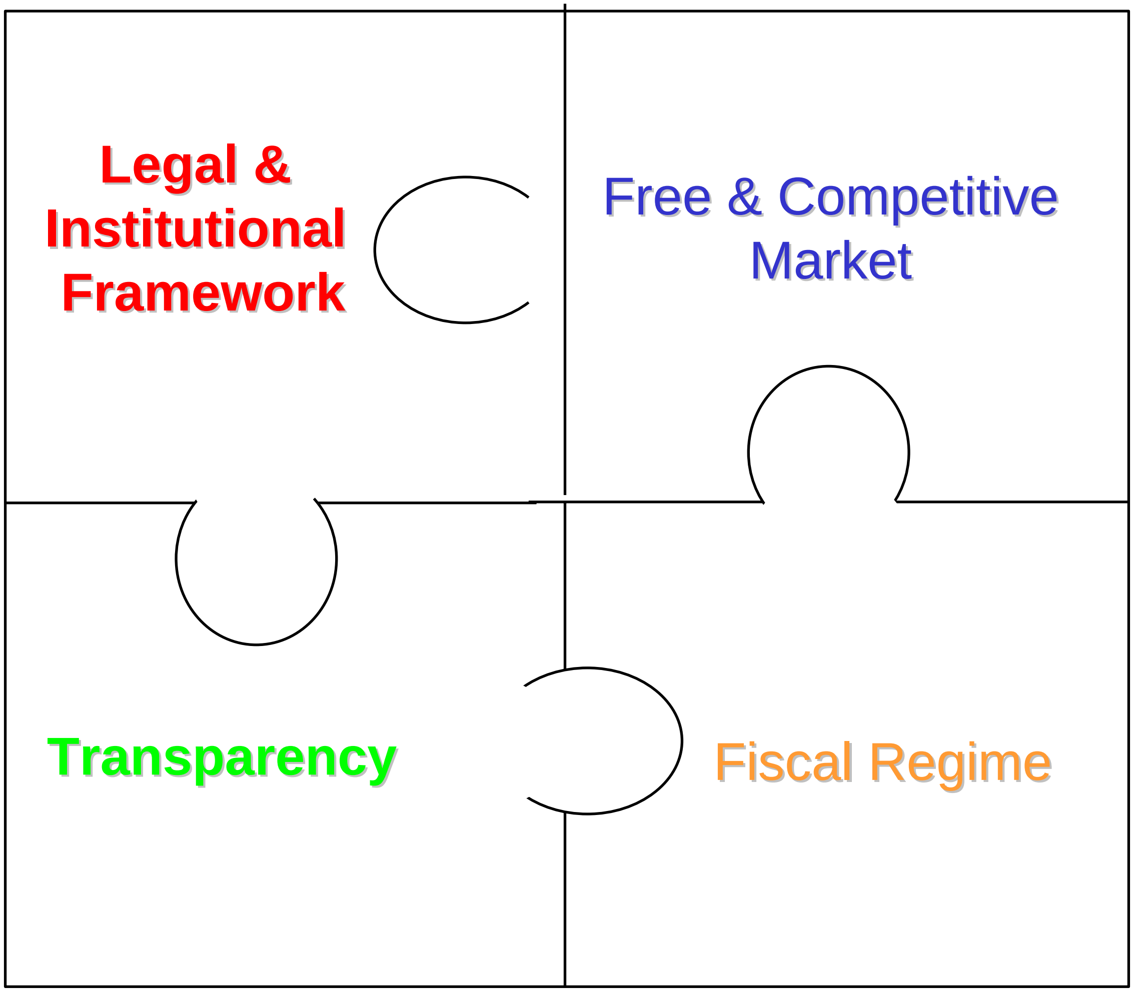
Players

- Consuming Countries
- Producing Countries
- Companies (NOC & IOC)
- Human Factor

The New Context of the Hydrocarbons Sector : Major changes

At the national level : New Hydrocarbons Law

- **Separates State and Commercial roles**
- **Covers full chain Hydrocarbon activities**



New Hydrocarbons Law : Legal & Fiscal Regime Changes*

A GRADUAL PROCESS

Before 1986

- Existing reserves & Gas excluded
- JV agreements
- Sonatrach exclusive operator
- Local arbitration

1986 : Law 86-14

- Existing Reserves & Gas excluded
- 3 types of contracts: PSC, RSC, JV
- More flexible fiscal terms
- Joint operating
- Local arbitration

1991 Amendments

- Extension to Gas
- Access to existing Reserves
- International arbitration

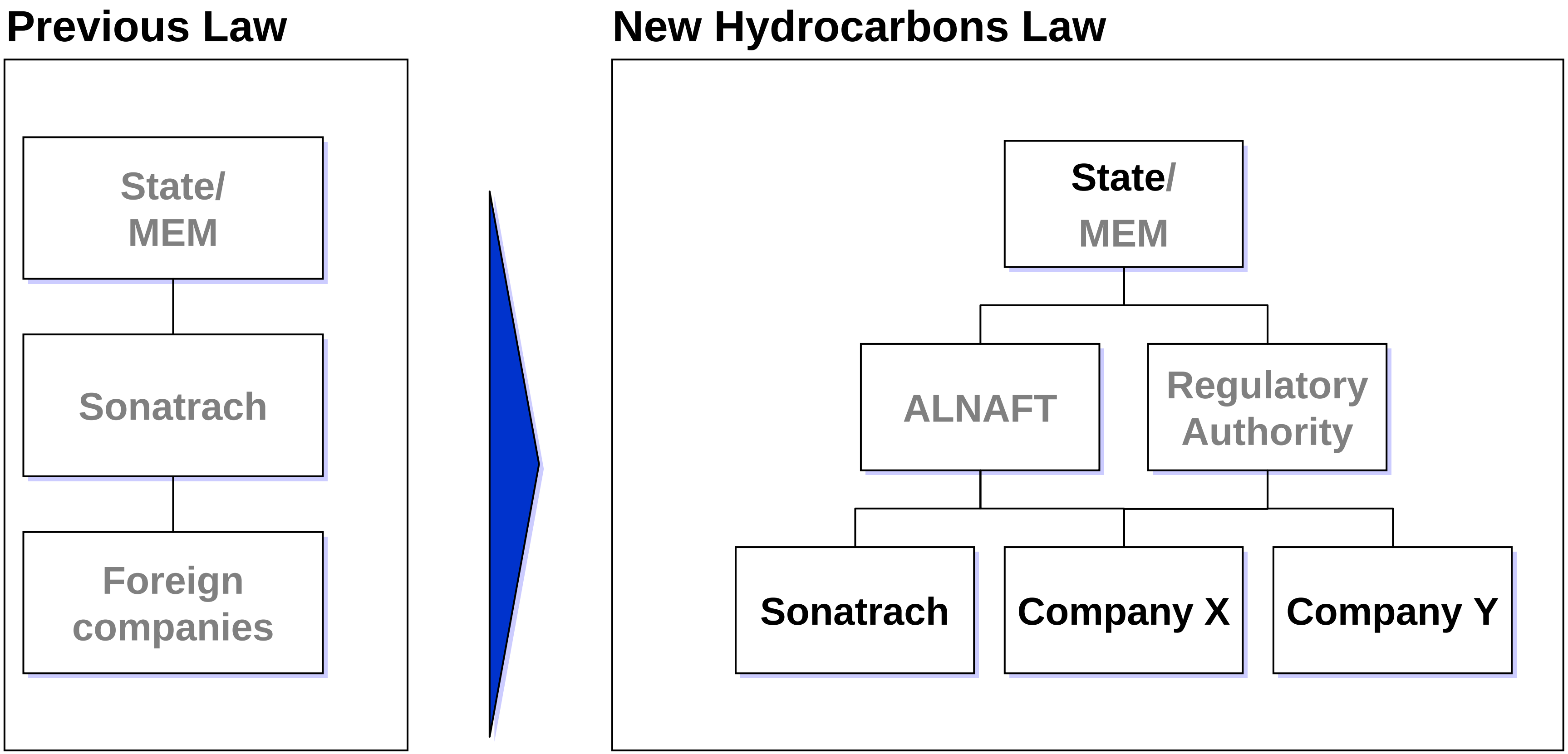
2005 : Law 05-07 & its Amendments

- Providing a clear simple and competitive fiscal regime and contractual conditions
- Separating the operations of the state from Sonatrach
- Establishing two independent regulatory Agencies (ALNAFT & ARH)
- Establishing competition in a free market
- Establishing transparency in contract awards

- **The windfall profit tax**

* Main changes only

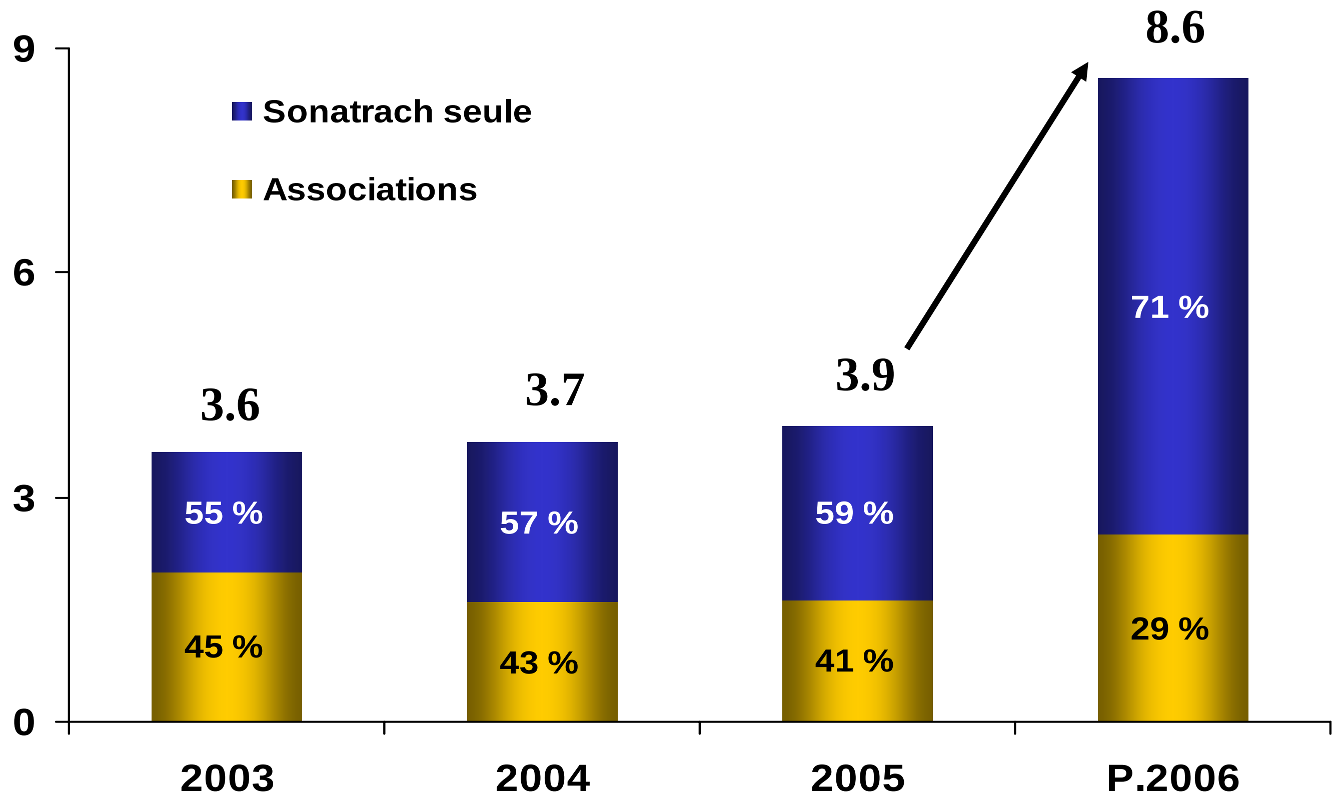
New Hydrocarbons Law : Institutional Framework



- Fiscal Regime for E&P internationally competitive, sensitive to field size, magnitude of the investment and overall profitability;
- The Government will receive all fiscal revenues in cash;
- Downstream activities are taxed at the generally applicable corporate income rate in force;
- Encourage diversification and reinvestment.

Services activities : key factor for the investment performance

Evolution of investments (US$ Billions)



✓ Investment's growth will drive increase in services activities;

✓ Performance of investments relies on that of the services suppliers.

Service activities : Market opening leading to better performance

Restructuring of services aims to open gradually the various segments of the activity

Current Situation :

Type of services	Completely opened	Partially opened	Monopoly
Upstream services (Drilling, Oilfield services, seismic acquisition and treatment)	X		
Transport and distribution of hydrocarbon		X	
Engineering services	X		
Construction services	X		
Maritime Transport	X		

Source: Sonatrach

Services activities : Main Service suppliers in Algeria

	National Suppliers (subsidiaries of Sonatrach group)	International Service Companies
Drilling	ENAFOR, ENTP	BAKER HUGUES, HALLIBURTON …
Geophysics	ENAGEO	GEOSERVICES,
Oilfield services	ENSP	SCHLUMBERGER, HALLIBURTON, …
Engineering and construction	BRC, ENGCB ENAC ENGTP	WEATHERFORD, …

The opening up of the service activities should reinforce the presence of the international service companies in Algeria and thus stimulate competition on the market.

Service activities : Partnership, a way to increase performance

National services operators are seeking partnership to increase their performances

Why Partnership ?

- ✓Cost control and risks sharing ;
- ✓ Acquisition of skills and new technologies;
- ✓ Adoption of up-to-date Technologies;
- ✓ Consolidation of market shares;
- ✓ Expansion of subsidiaries' international activities to sustain SONATRACH operations abroad;
- ✓Export of services.

Petroleum Expertise : Training is the main response of Sonatrach

Challenges

- ✓ Keep up with the pace of technological advance in the Hydrocarbon Sector;
- ✓ Update the technical and managerial skills to meet the strategic challenges;
- ✓ To face growing competition through innovation and costs control;
- ✓ Improve competence within HSE industry sector;

Training endeavor of Sonatrach

1- Intensification of training endeavors:

- ✓ Increase of training budget (+ 26.7%, 2004/05);
- ✓ Increase of training average duration (+16.7%, 2004/05).

2- Creation of the Algerian Petroleum Institute (IAP-Corporate University)

Petroleum Expertise : IAP & Corporate University Group

IAP - CU

The Backbone for Training within the Energy Sector

This group includes Sonatrach, Sonelgaz, ENTP, ENSP, ENAGEO, ENAFOR, NAFTEC and NAFTAL, with the objective of creating an institution capable of meeting the industry needs.

IAP-CU grants training for Algerian executives as well as for foreign students and Africans in particular.

IAP - CU PARTNERS

Partnership : a way to enhance training quality

Petroleum Groups:

✓ Shareholders of IAP: Statoil (10%) and Sonatrach (90%) ;

✓ IAP capital remains open to foreign partners.

Training Organizations:

✓French **IFP** has expressed an interest for partnership;

✓Several training curricula exist in collaboration with IFP and R.G University of Aberdeen