

# Aiming to meet needs at home & sustain market share abroad



INTERVIEW WITH NORDINE CHEROUATI  
CHAIRMAN AND CEO, SONATRACH



## What is Sonatrach's current policy on gas and oil production, and on investment in future capacity - upstream, midstream, downstream?

The primary production of hydrocarbons of Sonatrach and its partners reached about 214m tonnes of oil equivalent (toe) in 2010, of which 55.3m tonnes of crude oil and 145.8 billion cubic metres (bcm) of natural gas. Sonatrach plans to increase its production capacities given the significant potential of the Algerian subsoil yet to be developed. It should thus continue to meet the domestic market needs and maintain its position in international markets.

In order to do so, Sonatrach has launched an ambitious development plan in the medium term, involving a total investment of more than US\$40 billion (bn) in the upstream. These investments should enable us to exceed a total production volume of over 1bn toe over the period 2011 to 2015.

Among the main elements of this plan, are development, starting in the last two years, of Gassi Touil by Sonatrach on its own, and of El Merk in association with Anadarko. To be launched in 2011 and 2012 are development of new deposits, including those of Hassi Tarfa and Hassi Dzabat, Touat Gas, as well as fields located to the south of In Salah and In Amenas satellite fields.

Sonatrach and its partners have also listed several projects to increase the production plateau of some fields, such as the oil rings of Alrar and Rhourde Nous and In Amenas Gas deposit, and to optimise the recovery of products through projects such as water alternating gas injection in Ourhoud.

In addition, the new gas pole in the South West region continues to be developed, where at least six new projects of significant size are under development with production set from 2015. These projects, operated by Sonatrach alone or in association with its partners BG, Statoil, Total, Repsol and GDF Suez, will help guarantee the supply of Algeria's markets. Sonatrach is also interested in developing unconventional resources in partnership, with the two first "shale gas" pilot projects completed in 2011.

For the hydrocarbons pipelines transportation segment, the investment planned in the medium term is around US\$6bn and mainly focuses on the development of transmission capacities to meet the commitments and on ensuring the security and reliability of facilities and infrastructures.

In the oil and gas downstream, the current portfolio of projects underway and new for the period 2011-2015 amounted to about US\$8bn, most of which relate to the continuation and completion of the construction of the two new LNG trains at Skikda and Arzew, and to the programme of rehabilitation, modernisation and adaptation of the northern oil refineries that will contribute to raise the refining design capacity of 20m tonnes currently to around 24m tonnes in 2014, representing an increase of 18 per cent.

## What should or will be the role of foreign partner companies, and their share in hydrocarbon production? Will this grow? Equally, what international presence does Sonatrach seek for itself in, for instance, regasification terminals?

Partnership is an integral part of Sonatrach's strategy and is confirmed through the various hydrocarbons laws enacted by the Algerian State. The synergy between the national and international companies has enabled access to advanced technologies developed by the international majors, and sharing of financial and technical risks inherent in hydrocarbons exploration and production.

Results recorded so far are very positive, given the many partnership contracts entered into since 1986. Today, no less than 41 contracts signed by Sonatrach and its partners, 13 of which in the Exploration phase and 28 in the Development & Exploitation phase. These commit Sonatrach and its partners to an investment level exceeding US\$6bn for 2011.

In 2010 production from fields operated by Sonatrach and its partners reached 59.1m toe, representing almost 28 per cent of total hydrocarbons primary production. I would like to underline that crude oil produced in partnership during 2010 represented more than half the total crude oil production, a fifth of which returns to partners. As for natural gas production in partnership, it is more than one-sixth of the total natural gas production.

These shares will grow in the medium and long term depending on partner's activity and discovery potential.

Sonatrach continues its policy and ambition to become a global player particularly in the upstream and downstream. One may mention, for instance, the presence of Sonatrach in Peru (Camisea blocks 88 & 56) where it holds a 10 per cent share in the upstream and in Tunisia, with a 21 per cent interest in pipeline transportation through a mixed activity holding company called "Numhyd".



In the Sahel neighbour countries (Niger, Mauritania and Mali) Sonatrach operates alone and in partnership on exploration acreages located in one of the largest sedimentary basins of Africa – Taoudeni. Sonatrach is also present on the wholly-owned Kafra acreage, two exploration perimeters in Mauritania and two others in Mali.

In the downstream, the reservation of regasification terminal capacities in expanding markets may prove a productive strategy to maintain and even increase market shares in target countries.

**Algeria has three pipelines for gas to Europe and is building a fourth, but is also building two more LNG trains because it was aiming to have raise the share of LNG to 50 per cent of all exports, in order to have more flexibility in choice of markets especially to export to the Atlantic basin and the US. Is Algeria still aiming at this 50/50 split between LNG and pipeline gas, or has saturation of the North American market because of shale gas there reduced Algeria's interest in LNG? What about LNG exports to Asia?**

Algeria has played an important role in the supply and the security of European energy markets for the past 40 years. Sonatrach has responded to the natural gas demand mainly from its natural market that is Europe, and has initiated the construction of three transcontinental pipelines, strengthening the ties between Algeria and its Mediterranean neighbours. These are essentially:

- The Enrico Mattei Pipeline (GEM), linking Algeria to Italy via Tunisia, came on stream in 1983 with an initial capacity of 8 bcm/year. This level has now reached the 32.5 bcm, thus following the changes in demand on the European market;
- The Pedro Duran Farell Pipeline (GPDF), commissioned in November 1996, is increasing volume every year to reach today a capacity of 11.6 bcm. The gas pipeline is now supplying the Iberian Peninsula via Morocco;
- And most recently, the Medgaz pipeline, with a capacity of 8 bcm/year, linking Algeria directly to Spain.

Drawing on its positive experience and strong relationships with its Mediterranean neighbours, Sonatrach today continues to work for the consolidation and development of its energy partnership especially through new pipeline projects such as:

- The Galsi project which will link Algeria directly to Italy will have a capacity of 8 bcm/year from 2014;
- The Trans-Sahara Gas Pipeline (TSGP) project that will link Nigeria to Algeria via Niger and will allow gas to be brought

to Europe. The capacity of the pipeline will be between 20 and 30 bcm and its commissioning is expected from 2018. In addition to the LNG capacities developed in Algeria over the years, reaching today a level of 26.7 bcm, two mega projects are under construction: the first one "GL2K", in Skikda, with a capacity of 4.5m tonnes /year, expected to begin production in late 2011, the second one in Arzew, "GL3Z", with a production capacity of 4.7m tonnes/year should start production in early 2013.

As you can see, beyond the 50/50 rule, the NG/LNG portfolio balance is motivated by various considerations including those of flexibility, security and opportunities to be seized. As for Asia, Sonatrach is firmly interested in this most dynamic market.

**What is Sonatrach's view of the decoupling of gas prices from oil, and of a move away from long-term contracts?**

Let me remind you that since the petroleum crisis of the 1970s, natural gas has imposed itself as a first choice energy source. The breakthrough of natural gas has been spectacular thanks to the traditional contractual model which was developed by buyers and sellers. This has enabled consumer countries to provide for their gas supplies safely and almost continuously at very competitive prices on balance compared to other sources of energy. It also helped financing important investments to carry gas on thousands of kilometres and make it available to consumers. This model has been able to provide for a balance of the parties' long-term interests.

The structure of these contracts provides for the sharing of risks between buyers and sellers: in broad outline, the former accept a volume-risk as they commit to pay for quantities that they will not need if demand is lower; the latter accept a price-risk as they commit to supply the contracted quantities even if the price falls.

Actually, take-or-pay clauses provide for important flexibility items. Hence, the buyer may carry forward, over several years, the quantities he does not wish to lift. Moreover, he is often given the opportunity to lift only 80 per cent of the contracted quantities. The buyer then bears only part of the volume-risk.

This "harmonious" and "balanced" relationship between producer and consumer countries, between buyers and sellers of natural gas, has led to the development of this industry. →



→ Furthermore, indexing gas prices to petroleum products within long term contracts has been justified through the fact that these products could replace gas in its various uses – heavy fuel in industrial processes, domestic fuel for heating in households. Such a mechanism offers a protection to both buyers and sellers against different market risks. Although affected by the economic crisis, this situation has not changed basically. The relation between the prices of both energies should regain the proportions historically observed. Even if long-term contracts are momentarily more expensive than market prices, they should remain over the longer term, as the market trends should be reversed in a relatively short horizon around 2013.

According to the scenario drawn up by the International Energy Agency, gas natural consumption on a global scale should rise by 50 per cent by 2035. In the first position, we find emerging countries with soaring energy needs: China's demand in natural gas should be equal to that of the entire European Union in 2035, whereas that of India should increase fourfold.

This spectacular boom lies in the fact that natural gas combines a series of unparalleled benefits. It has also been spared by the natural disasters that cast opprobrium on petroleum and nuclear – the Deepwater Horizon explosion and Fukushima nuclear disaster.

### **What is the policy in the domestic downstream, especially as regards subsidising the domestic cost of gas feedstock?**

As far as we know, there is no subsidy applied to the natural gas price on the domestic market. The selling price used is regulated and supported by a legal framework. The gas selling price intended for the national market is calculated on the basis of the long-term gas economic cost for the domestic market and a premium to cover the needs to mobilize the required resources to meet the very long run demand.

The gas selling price for the domestic market includes production costs, costs of domestic infrastructure, operating costs of any export infrastructure used to meet the domestic market needs, and a reasonable margin.

### **Is Sonatrach interested in developing renewable sources of energy, such as in the Desertec solar initiative?**

Sonatrach has created in 2002 the company New Energy Algeria (NEAL) in partnership. The company constructed in the gas field of Hassi R'Mel, with a Spanish partner, a power plant based on solar thermal CSP energy and natural gas, with a capacity of 150 MW including 25 MW from solar. The plant was commissioned on July 14, 2011. As regards the Desertec project, Sonatrach is not associated. ■

