7 August 2018
Energy

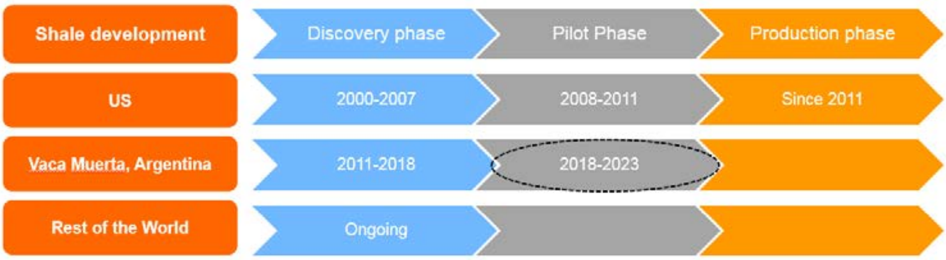
Argentina oil & gas

Unleashing its potential

The oil and gas sector in Argentina is moving in the right direction, with the liberalisation of the domestic market. A number of obstacles remain. Transitioning from a regulated to free market will always be tough, as it is a challenge finding a balance between keeping consumers content and attracting investment.

Shale development progress can be broadly categorised into three phases: 1) initial discovery phase, 2) pilot phase and 3) production phase. We believe that Argentina is now completing the initial discovery phase, with the Vaca Muerta region well established for its shale resources. The region is now entering into the pilot phase, where oil majors are planning to spend on field development, testing wells, infrastructure and technical and financial viability of projects. Government efforts to liberalise the industry are likely to keep the process moving forward, but there could be some hiccups along the way.

Fig 1 Shale development phases



Source: ING

In this report, we discuss the steps taken by the Argentinian government to help the domestic industry, and the production outlook over the next several years.

Contents

Sitting on plenty of shale reserves (2nd largest gas reserves and 4th largest oil reserves), Argentina's energy sector failed to realise its potential as a result of years of managed market policies undercutting investment in exploration and infrastructure. However, this is set to change with the Macri administration, which has made efforts to implement market-friendly policies, including price liberalisation and flexible labour laws to reinvigorate the industry. The results can already be seen in gas production, though oil output is yet to see a recovery. We believe that the country is moving in the right direction, and combining this with further developments in shale technology suggests prospects for the domestic energy sector looks positive.

Price liberalisation and other policy changes

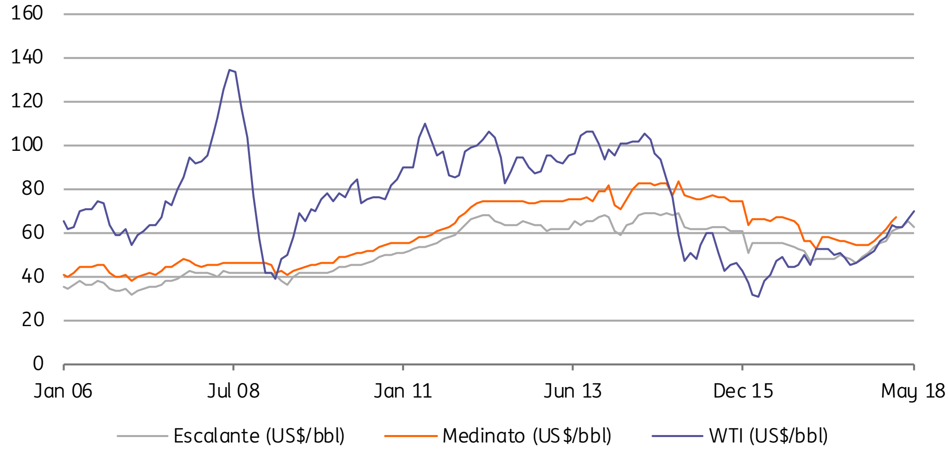
One of the key factors holding back investment in the domestic oil and gas industry has been the regulated price environment. Domestic oil prices were generally set at a large discount to international benchmarks. For example, in 2008 domestic oil prices were trading as much as a US$90/bbl discount to WTI. At the start of 2017, the Macri government started to deregulate the market. This initially started with revising prices on a quarterly basis, only to completely liberalise the market in October 2017, which saw domestic prices moving largely in sync with international benchmarks.

However it has not all gone to plan. Given the strength that we have seen in international benchmarks over the year, along with almost a 50% depreciation in the ARS against the USD so far this year, has meant that consumers have felt the pressure of higher prices. While WTI has rallied by around 16% since the start of the year, in ARS terms WTI has strengthened by an eye-watering 68%. In an attempt to rein in inflation, which hit almost 30% in June, the government decided to intervene, fixing the domestic oil price at US$67/bbl in June and US$68/bbl in July, a period where WTI traded to as high as US$74/bbl. At the same time fuel distributers in the country agreed with the government to show restraint in pump price increases. However over July, this also did not seem to go entirely to plan with YPF increasing gasoline and diesel prices by 5%, compared to the gentleman's agreement of only up to a 3% increase over the month.

The government has insisted that this intervention will not be repeated, and that prices will be free floating from August onwards. It is clear that the government is committed to moving away from the populist measures of the past. However as one would expect, such a transition is difficult, and the government will certainly come under pressure domestically if prices continue to edge higher. The key question is whether this is a risk that the current government will be willing to take, with general elections set for 2019.

For consumers, while liberalisation means the potential for higher prices, resulting investments would improve domestic supply stability in the longer term, in a country which is relying ever more on imports to meet its domestic requirements. Freeing up the domestic market has two effects for the country: it makes the investment climate more attractive for foreign direct investment, while reducing the pressure on the fiscal balance, with less outgoings in the form of subsidies.

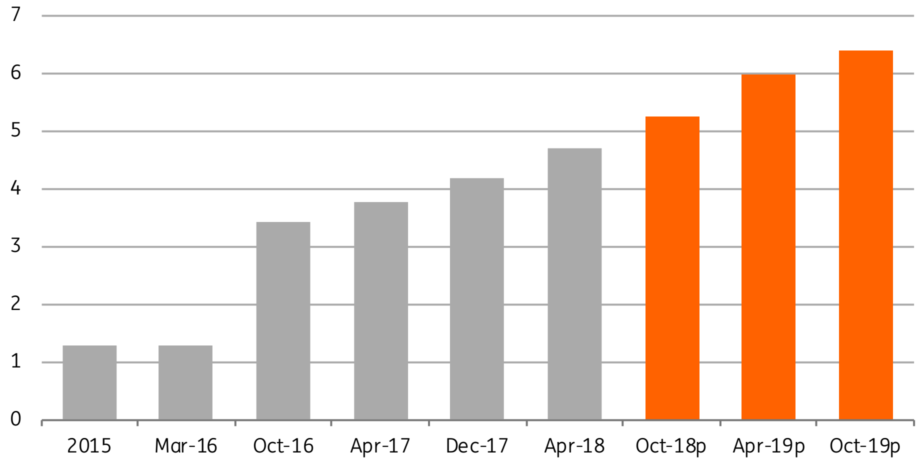
Fig 2 Argentina vs US crude oil prices (US$/bbl)



Source: Argentina Energy Ministry, Bloomberg, ING research

The price increases for natural gas have been even sharper, with consumers in the country previously paying as little as c.7-10% of prices paid in neighboring countries, including Chile and Brazil. The Macri administration first increased natural gas prices for residential consumers by as much as 300% in October 2016, followed by further increases in April and December 2017, while the latest hike implemented in April 2018 saw natural gas prices raised by another 28-40%. With all these hikes, current gas prices of US$4.7/MMBtu are now more comparable to those in neighboring countries. These increases have narrowed the gap between what producers receive and what consumers pay, and as a result reducing the burden on the government in the form of subsidies. Moving ahead it seems that there will only be further increases in consumer gas prices. Once again, under pressure to balance the books, the government will reduce the price that producers receive. In fact, the government recently announced that no further gas projects will be eligible for the current subsidy programme, and that this programme will not be extended beyond 2021.

Fig 3 Argentina average natural gas prices for consumers (US$/MMBtu)



Source: Argentine Energy Ministry, ING research

In terms of labour, an agreement was implemented in January 2017 for the oil & gas sector in Neuquen province, with the aim of making labour contracts more favourable for employers, in a bid to help attract investment in the local shale industry. Some of the measures include reducing the number of workers needed per well, introducing night hours and also scrapping benefits for traveling time between home and oil wells. There have been reports recently that the labour agreement is still yet to be fully implemented.

The country has also opened its offshore fields to private explorers, with the first auction of blocks scheduled for later in the year. The government is still defining the exact blocks that will be up for auction, but there is reportedly interest from a number of international firms, including Anadarko, CNOOC, Equinor (Statoil) and Petronas.

Investment plans

A more liberalised domestic market along with a recovery in oil prices has meant that investment sentiment has improved, although as mentioned previously there are likely to be some hiccups moving forward with a transition from a regulated market to a free market painful for consumers. Any action taken by the government, much like we have seen in recent months, is likely to knock investor confidence, and this is probably the reason that the energy minister has insisted that this intervention was a one-off. The potential for Argentina is massive, with EIA data showing that the country holds the world's 2nd largest shale gas reserves and the 4th largest shale oil reserves, with the Vaca Muerta region remaining largely underexplored. Local oil company, YPF has invested heavily in the field and has increased shale oil and gas production from 11.6Mboe/d in 2013 to 38.1Mboe/d in 2017. Yet there is still plenty of potential growth, with the company targeting a 25% increase in total oil and gas production by 2022, with the majority of it likely coming from shale. The company has investment plans of US$20-25bn over 2018-22 to achieve this target.

It is not just YPF that is investing in the domestic industry, we are also seeing other local players as well as global firms looking to invest. BP's Pan American Energy had investment plans of US$1.2bn for 2017, including US$400m in the Vaca Muerta field, Chevron plans to invest US$500m in partnership with YPF over 2018, Royal Dutch Shell plans to invest about US$300m annually in the Vaca Muerta basin through until 2020, while Exxon also plans to invest US$200m in Vaca Muerta exploration, with an additional US$10bn earmarked for project development. With Argentina's annual exploration spend totaling around US$500m per year over the past five years; these investments would be significant for the country's exploration efforts.

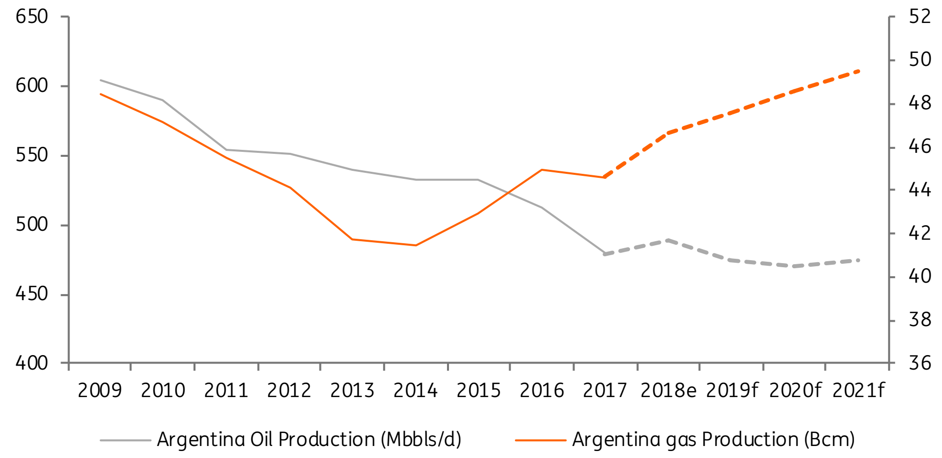
Oil & gas production outlook

Although the country has implemented market friendly policies since 2016, crude oil production in Argentina fell 6.4% YoY to 479Mbbls/d in 2017, after falling 3.9% YoY to 512Mbbls/d in 2016. However initial trends suggest that production could increase around 2% YoY to 485-490Mbbls/d in 2018. Argentina currently produces nearly all of its oil from conventional sources, with the majority of these oil fields mature and in a declining trend. Production is likely to remain largely under pressure in the short term, with the oil rig count in the country falling to a low of 40 in April 2017, down from 99 in the second half of 2015. More recently it has partially recovered, with the number of active oil rigs standing at 62 at the end of June. We expect production will fall towards 470Mbbls/d by 2020.

However the Vaca Muerta shows plenty of potential for shale oil; but the sector is still in the pilot phase. Current investments are mostly going into testing wells, field development plans, initial infrastructure and studies on commercial and technical viability; the exploitation phase is still a few years away at least. Besides, the country still lacks the technical capability to exploit shale resources and imported technology is costlier. The EIA estimates well completion costs to be around US$500-600/ft in the US, compared to YPF's cost of c.US$1,390/ft. Although saying that, costs have fallen significantly over the last few years, from US$3,050/ft in 2015 to US$1,390/ft as of the end of 2017. The outlook for shale oil development is positive, however how quickly this evolves will depend largely on the degree of government intervention moving forward, and whether prices are at levels which attract investment in production assets.

Meanwhile, the high gas prices that producers have been guaranteed has been positive for natural gas production in the country. While oil output in the country has trended lower, natural gas production has recovered from a recent low of 41.5Bcm in 2014 to 44.6Bcm in 2017, and initial trends suggest production will increase to 45-46Bcm in 2018. We expect the gas production to recover further towards 48Bcm by 2021. The key risk to this outlook is if a reduction in guaranteed gas prices for producers does start having an impact on investment decisions. In order to ensure adequate investment, consumer gas prices would likely have to increase to offset the guaranteed prices that producers receive.

Fig 4 Argentina oil & gas production



Source: Argentina Energy Ministry, ING research

Disclaimer