

Energy

North American energy independence: reenergized | **22 March 2016**

CIO WM Research

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We published a UBS research focus report in June 2012 entitled *North American energy independence: reenergized*. Here, we provide an update on our outlook for the thesis underlying North American energy independence.

- We maintain our thesis for North American energy independence. Through the oil price downturn, the strongest US onshore operators have shown that they are competitive on the global stage. We believe the North American energy industry will be a key contributor to the global energy pool in the future.
- Lower oil prices and an advantaged natural gas price are beneficial to North American energy consumers, and we believe the benefits will be ongoing.
- We also see opportunities emerging in renewables and energy efficiency.



Source: UBS

A version of this report is available with specific security recommendations for US onshore investors. For a copy, please consult your UBS Financial Advisor.

Outlook

The oil price downturn has been deeper and longer than expected, and the operating environment for North American oil and gas operators remains challenging. However, we see oil market fundamentals improving by late 2016. We believe the US competitive landscape favors the stronger operators. Meanwhile, we expect energy consumers to enjoy the ongoing benefits of lower cost energy.

Our conviction in our thesis for North American energy independence is unshaken. While oil production is moderating, US onshore operators have shown that they are competitive on the global stage. The strongest operators have thus far been able to make the necessary adjustments to endure a prolonged downturn.

What's more, we believe these operators are gaining competitive strength versus weaker US operators.

We believe that now is a good time for investors in the North American energy independence theme to add to positions.

North American Energy Independence thesis on track

Despite energy commodity price volatility, our thesis is unchanged. We project ongoing progress towards North American energy independence through the end of this decade. We project three primary paths to energy independence: 1) rising US oil production; 2) increased oil supplies from Canada; and 3) conservation and diversification of our energy fuel base.

Since launching our thesis in early 2012, progress towards energy independence has been pronounced. Oil imports to the US from outside of North America have declined by over 30% (Fig. 1). Further, the US in the past two years has transitioned from being a large importer of refined product to a large exporter of refined product. The US is also an exporter of coal and natural gas.

Pause in oil production growth

When we introduced our thesis for North American energy independence in June 2012, our investment recommendations in the energy sector were underpinned by the growth opportunities afforded by the development of vast onshore resources in the US and Canada. In fact, the growth trends were extraordinary, permeating all phases of the oil and gas business – from services & equipment providers – to exploration & production - to pipelines, processing and storage – to refining.

With the decline in oil prices, US and Canadian operators have sharply reduced spending. As a result, oil production has moderated (Fig. 2). Production declines will likely continue in 2016, as oil prices have fallen to below-breakeven levels for most. This will contribute to the rebalancing of the global oil markets.

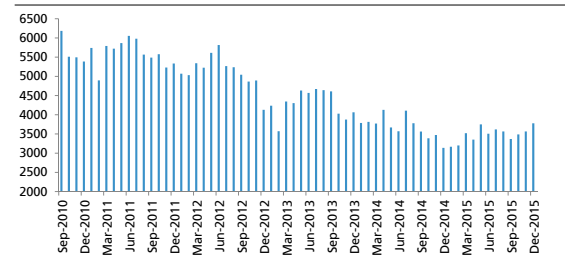
Despite the more challenging operating conditions, there are a number of North American operators that we believe can continue to thrive and grow, even in a prolonged sub-midcycle oil price environment. As oil prices begin to recover, as we expect they will in 2H 2016, we believe operating momentum will resume in the US onshore. Operators in the lowest cost basins will be the primary beneficiaries. In time, US production will grow once again, though the rate of growth will likely be more modest than seen in 2012 through 2014.

US operators competitive on the world stage

The oil price downturn has tested the competitive position of US onshore oil producers in the global arena. We believe US onshore operators have demonstrated that they are not only competitive on the world stage, but in some respects they are *advantaged*, given their unique ability to quickly adjust activity and spending levels to the fundamental environment.

Fig. 1. US oil imports from outside of North America

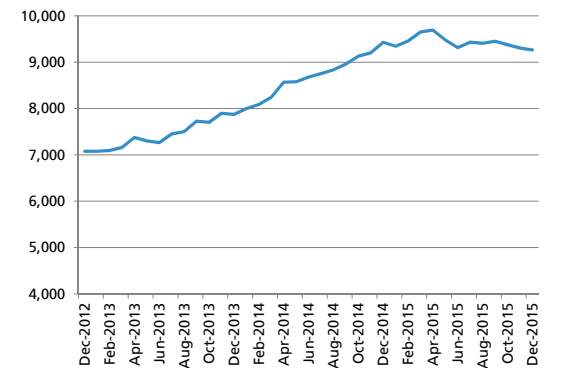
In thousands of b/d



Source: Energy Information Administration

Fig. 2. US oil production

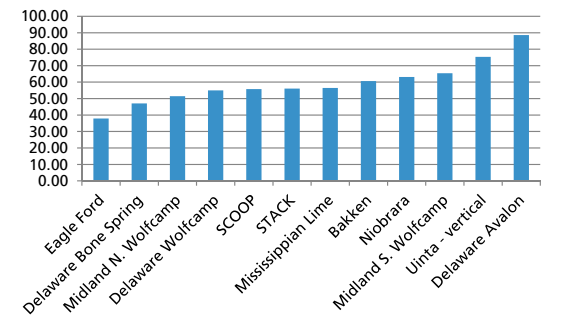
Growth has waned in response to lower oil prices
In thousands of b/d



Source: Energy Information Agency

Fig. 3. Breakeven price

Core areas of the major plays have the lowest cost production
In USD/bbl



Source: Company reports, UBS

Service cost deflation and efficiency gains have reduced breakeven levels in the onshore US. By our calculations, the majority of onshore US oil production has a breakeven drilling and development cost below USD 60/bbl (Fig. 3). We estimate that the most efficient operators in the core areas of the major onshore oil plays can be profitable at lower price levels, some as low as USD 40/bbl. This is well below the global marginal cost, which we estimate at USD 75-80/bbl.

Meanwhile, low energy costs a positive for energy consumers

Low oil prices, on balance are a positive for the US economy. As of 22 February 2016, average US gasoline and diesel prices were USD 1.95 and 2.04 per gallon their 2014 peaks, respectively, providing substantial savings for businesses and retail consumers alike.

Likewise, US natural gas prices are among the lowest in the world (Fig. 4), benefiting industrial consumers who not only have access to a low cost and reliable energy resource, but also enjoy a cost advantage over their international peers, who are reliant on more expensive imported gas.

Conservation and diversification of the energy resource base

A key tenet of our thesis for North American energy independence parallels UBS' more recent research on sustainable investing (please see report entitled *Adding value(s) to investing*, dated March 2015.) In the discussion on opportunities in energy, the report cites energy efficiency improvements, which yield both energy savings and reduced carbon dioxide emissions. In recent years, stricter regulation with a view to protecting the environment and securing the supply of energy has been a powerful driver, boosting efficiencies in buildings, autos and power generation. Energy efficiency addresses a whole range of issues, such as the sought-after reduction in the use of fossil energy sources and the lack of storage technologies for renewable energies. Companies manufacturing energy efficient equipment benefit from this trend.

While development of sustainable energy is still in the early stages, we expect this to become a growing component of our North America energy independence investment thesis.

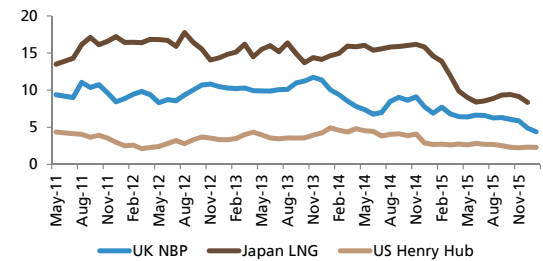
Investment conclusion

We believe that now is a good time for investors in the North American energy independence theme to add to positions. Current volatility in oil prices does not alter our thesis. US onshore operators remain competitive and we maintain our constructive outlook for the North American oil and gas industry. Our investment strategy targets the strongest operators, who we believe could emerge from the downturn in a strengthened competitive position.

We believe oil prices will begin to recover in 2016. However, even as global oil production growth moderates in response to current prices, a substantial inventory overhang could hold oil prices at below mid-cycle levels for the next two years or more. Over time however, we believe oil prices will need to rise to mid-cycle levels in order to stimulate adequate new supply to satisfy global demand.

Fig. 4. Natural gas prices in major consuming markets

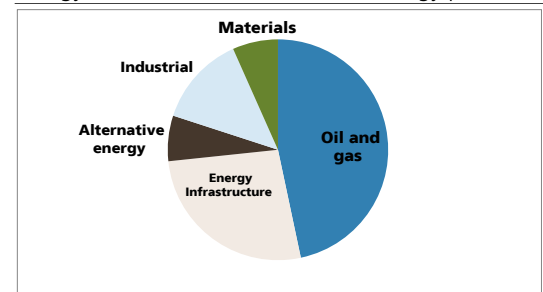
US gas consumers enjoy price advantage due to abundance of domestically-produced supply
In USD/mcf



Source: Bloomberg, UBS

Fig. 5. Sector allocation

Our recommendations include energy companies, energy consumers, and alternative energy providers



Source: UBS

As investors in this theme, we focus is on North American oil and gas producers, oil and gas services, and energy infrastructure, where we see value among the high-quality and well-positioned providers. Meanwhile, lower oil prices and an advantaged natural gas price are beneficial to North American energy consumers, and we look for some of the best examples in the industrial and materials sectors. We also look for opportunities in renewable technologies, and technologies that target efficiency, providing new approaches to satisfy energy demand.

Positioning for the coming year

The North American energy independence theme is long-term in nature, but new challenges and new opportunities arise as progress in the industry continues, and as macro conditions evolve. We monitor the trends in search of the best opportunities for investors in this theme for the coming twelve months.

Below we highlight key focus areas for investors in North American energy independence in the next year.

- **Oil & gas.** We project activity levels will bottom in North America. over the next twelve months. The industry remains challenged by the decline in commodity prices, and we target the strongest operators.
- **Energy infrastructure.** While growth in oil and gas production will slow, infrastructure providers continue to play a vital roll in storing processing and transporting crude and other energy products throughout North America.
- **Industrial energy consumers.** Consumers in the industrial and materials sectors will continue to benefit from affordable energy supplies. For natural gas consumers, we believe benefits will be ongoing, as certain chemical, fertilizer and other large consumers of natural gas continue to expand their US operations to exploit the energy cost advantages.
- **Renewable and alternative energy.** Diversification of our fuel base is a key element of our thesis for North American energy independence. We see investment opportunities beginning to emerge as the technologies mature into competitive and growing alternative energy resources.

Appendix

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