PLATTS TOP 250 GLOBAL ENERGY COMPANY RANKINGS

KEYNOTE REMARKS BY
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Platts Top 250 Asia Awards Dinner
Diversification and Unification of Capital for Energy Investment

Introduction

Good evening, ladies and gentlemen. In the past few years you have heard from economists, government ministers, and strategists, but this year I am here to give an investor's perspective. I am going to talk about two trends, on how capital sources have evolved in the Energy sector in the last 10 years, and what that means for investing in Asia going forward. It's a nice coincidence that today's event also marks the 10th anniversary of Platts dinner, so I'd like to take this opportunity to congratulate and thank Platts for what you have done and achieved to support the industry.

女士们，先生们，大家晚上好。很荣幸今天有机会在这儿与您们分享从私募基金的角度怎么看亚洲能源领域投资的发展。

Before we begin, please allow me to give a quick introduction to my firm. Warburg Pincus is the world's oldest and one of the largest private equity firm with over $35 billion in assets under management and over 120 active portfolio companies. We are celebrating our 50th anniversary next year. On the energy side, over the past 25 years, we have invested over US$10 billion across more than 50 energy companies around the world, in upstream, midstream, power, OFS, and others. Our notable investments include public names such as Newfield Exploration, Kosmos, MEG Energy, Targa, and China's largest independent CBM player, AAG, as well as numerous more private names. Our two most recent funds were an US$11.2 billion global fund in 2013 and a US$4.0 billion energy fund in 2014. We are currently in the process of raising our next US$12 billion fund, Warburg Pincus Fund XII. A combination of the global fund and energy fund gives us $8.0 billion of equity capital to invest in energy sector in the next 3-5 years.

With that as a backdrop, let us begin with sharing our observations on the evolvement of the energy investing landscape in the last few years.

Diversification of Energy Capital: Sources

The first trend we have observed is the **Diversification of Sources of Energy Capital**.

Until the mid-2000s, Energy investing has been dominated by National Oil Companies and International Oil Companies. After all, they were the only ones who had the people, capital, and risk appetite to invest in Energy. It would have been unthinkable for institutional investors like private equity or diversified conglomerates to fund the drilling of expensive binary oil and gas wells. This was especially true in Asia where NOCs dominated and IOCs participated, leaving little to no room for independent players.

However, the Energy funding landscape has evolved dramatically over the past 10 years. Although NOCs and IOCs remain the primary source of capital in Energy, we have witnessed the rapid rise of alternative sources.

First, private equity has become a significant source of E&P funding. In fact, today they are sitting on roughly US$50 billion of dry powder (that is, raised but un-invested funds) for Energy-specific investing globally. This does not include another roughly US$50 billion of dry powder from private equity-like sources, such as drilling joint ventures, distressed debt funds, and so on.

Second, hedge funds and credit funds have come onto the scene as well, setting up specialty purpose vehicles to exploit distressed situations given the drop in oil and gas prices.

Third and finally, Asian industrial conglomerates and real estate companies have come onto the scene as well. A well-known example is Reliance of India, which has invested in domestic conventional gas, domestic coal bed methane, and unconventional shale gas in the Eagle Ford and Marcellus. Chinese companies are stepping out as well. Anecdotally, we have run into them in many areas and in many processes like never before. In total, we estimate that Chinese companies have aggregated US$25-50 billion of capital for these efforts.

What all this means is that funding for Energy investments now come from a wider variety of sources, increasing the overall pool of available capital.

Unification of Energy Capital: Focus on Risk-Adjusted Returns

The second trend we have observed is the **increased focus on risk-adjusted returns** by all energy investors, which I call "**the unification of energy capital**".

Just as the pool of available capital has increased, so has the focus on returns. Private equity and hedge funds have always been laser-focused on risk-reward, staying disciplined about when and how to deploy capital. This is why little of the capital raised has been deployed in the past year – investors are still waiting for asset prices to come down to allow for adequate returns. When they have invested, the majority of capital has gone to companies and assets in the United States and Canada versus further abroad.

IOCs have similarly re-focused given their views on risk-reward and reduced exploration capex budgets. Companies including Hess, Newfield, Murphy, Talisman, and others have sold their Southeast Asia blocks or assets since they believe that their capital is better invested elsewhere. Consequently, they have turned their attention to the Gulf of Mexico and unconventional shale resources in the United States. This is especially true now that IOCs can now buy into shale positions that were heretofore too expensive.

Finally, NOCs are increasingly focused on risk-adjusted returns as well. Throughout much of the 2000s and early 2010s, Chinese NOCs like CNOOC, PetroChina, and Sinopec were focused on growth in production and reserves at all costs. However, now their tone has changed to growing production and reserves with a keen eye on unit economics, recycle ratios, and risk-adjusted returns.

Energy Investing in Asia

Naturally after hearing the doom-and-gloom, you are probably wondering what is it about risk-reward that has led the sources of capital to pivot away from Southeast Asia. Let me delve into an investor's perspective on investing in Energy in Asia, starting first with oil before talking about returns.

The oil markets have fundamentally shifted, primarily due to the advent of shale. Given its scale, shale has become the marginal or swing producer, thereby making them the price setter. Whereas other sources of oil (conventional, deepwater, etc.) have relatively steep supply stacks, shale's supply stack is relatively flat, resulting in a large block of supply around $40 to $60 breakeven, setting the new band for price. Given the relative ease of entering the shale market in North America, where there are no local content rules or production sharing agreements, this is now the benchmark against which other opportunities are measured. The question investors ask is "can I make a better risk-adjusted return by investing shale PDPs and PUDs or by exploring and developing oil elsewhere?"

The answer is that the risk-reward proposition for exploration and development in Asia has been challenging.

First, the opportunity universe has been limited. As I mentioned earlier, the process to secure blocks is both difficult and lengthy, making it challenging to build business of scale. Without the prospect of scale, the only players will be small investors, versus the large IOCs and private equity firms that move the needle on reserves and jobs.

Second, infrastructure and above-ground issues remain complicated and opaque. Although many governments have made strides in this area, it is still too large of a question mark in many investors' minds.

Third, service providers are limited. Whereas North America has a cornucopia of providers of every stripe, Asia lacks providers that combine technical sophistication, scale, and cost. Therefore this increases the breakeven point of every project, especially onshore ones.

Finally, the fiscal regime remains challenging. As many of you know, the production sharing agreements require investors to bear all the risks of exploration, which in and of itself is fine. However, the share of the upside they are allowed to keep is too low to warrant the risks.

However, note that none of the challenges to risk-reward I have mentioned have anything to do with the fundamentals of the business, exploring and drilling for oil and gas. Investors, especially private equity, are not afraid of taking risks and getting into complex situations – that is at the heart of what we do.

For example, Warburg Pincus started investing in unconventional gas in 2002 in the Barnett Shale in the United States because we saw the coming evolution in technology and completions that would allow companies to unlock tremendous value from shale.

We took huge exploration risk by drilling US$100 million-plus wells in the then unproven offshore Ghana because we believed in the geological thesis presented to us by our management team.

We also dared to make a big bet in the Gulf of Mexico shortly after the BP-Macondo disaster because we believed that the region had potential and investors were too bearish on the prospects.

Therefore, it is not the fundamental risks of the Energy business that is holding investors back but instead the various factors that constrain the reward.

Looking forward, as Southeast Asian production and reserve life indices decline, driving investment in Energy will be of paramount importance. The region is blessed in many ways because it has all the right ingredients – known working hydrocarbon basins, unexplored regions, hardworking and talented people, etc. However, the key will be to ensure the risk-reward is attractive enough to investors for them to risk the capital dollars that the governments and NOCs cannot do by themselves. For this to happen, independents and private equity need NOCs and governments' help to improve the risk-reward proposition, particularly around fiscal regime, opportunity universe, and infrastructure.

Conclusion

In conclusion, the sources of capital for Energy investment have proliferated over the past decade. However, they are increasingly unified on allocating their capital to the best risk-reward opportunities are globally. We, as private equity investors, remain cautiously optimistic on the future of Energy investing in Southeast Asia as well as in China and India. As the region opens up its blocks, and reforms its fiscal regimes to enhance risk-adjusted returns, investment dollars will pour in, allowing countries in the region to benefit from more exploration, reserves, and production.

Thank you for your time. I welcome the opportunity to speak with you on this topic afterwards. Please enjoy your dinner.

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