ClearBridge Investments

Podcast: Understanding Today's Oil Markets

February 13, 2019

With Senior Energy Analyst Dimitry Dayen, CFA (DD) and Head of Business Development Vinay Nadkarni (VN)

VN: Hello and welcome to the latest ClearBridge Podcast. This is Vinay Nadkarni, out of Global Business Development at ClearBridge Investments. And I'm pinch hitting for our normal host Jeff Schulze, our Investment Strategist, who's out on paternity leave. So, we're taping this on February 13, 2019. He usually starts with a personal anecdote, I'll start with mine, which is today is my parents' 50th wedding anniversary, so my parents are no doubt not listening to this podcast, but in case they are, a shout out to them, and love them very much.

So, for those who have listened to our podcast before, ClearBridge is a global equity manager with $125 billion in assets under management, committed to delivering long term results through authentic active management. ClearBridge tailors our strategies to meet three primary client objectives in our areas of proven expertise: high active share, income solutions and low volatility. We integrate ESG considerations into our fundamental research process across all strategies.

So, speaking of research, I'm excited to be here today with Dimitry Dayen, a senior analyst covering the energy sector for ClearBridge. Dimitry has been covering oil and natural gas stocks at ClearBridge for four and a half years. As he tells our clients, he joined the firm in July of 2014 on literally the day that energy peaked and has 13 years of energy focused investment experience. Dimitry, thanks so much for joining us today.

DD: Thanks for having me.

VN: Yes. So, the topic of our February podcast is understanding today's oil markets. I'd love to get your feedback about the topics we cover and how we can make our podcast better. You can contact us with questions, comments and suggestions by emailing us at podcast@clearbridge.com. So Dimitry, I'll start with an opening question, which is maybe when we were here a year ago, if we were here a year ago, we would be talking about the separation of oil prices versus energy stocks.

And then as you've written internally, you had oil kind of peak at 75 bucks right around the end of the third quarter, and really dive bomb in the 4th quarter, touching I think a low of about $42. So maybe give the listeners maybe your perspective on that fourth-quarter oil price collapse, and kind of what happened, and roll back the game tapes there.

DD: Sure, happy to discuss this. So, the environment in oil prices have been phenomenally interesting over the past 12 months. Crudes started out 2018, in the 50s, went down into the low 40s, and actually rallied very strongly into the $75 range in WTI coming into the 4th quarter, after which, as you mentioned, it had a strong collapse, and crude went down into the $42 range right around Christmas. So, what happened there?

The rally in crude was caused by several factors. One, you had very strong macro demand environment throughout 2018. We got synchronized growth across United States, Europe. We had strong comments coming out of Asia. That spurred demands that was actually quite robust last year, above trend, and peaked probably in the middle of the year. At the same time, you had strong US growth, but sort of on pace with what you would have expected for the past several quarters, so it wasn't unusual in any way.

But you had a background of moderating supply coming out of OPEC countries, coming out of Venezuela specifically, and you had significant optimism in the market as it pertains to Iran that as the Iran deal, or JCPOA as it is known, is taken off the table by President Trump, that the exports out of Iran, and Iranian production, will go down quite a bit. Expectations were for over two million barrels of declines, as the rhetoric going into that event was that no waivers will be granted to importing countries. And the administration was very, very forceful about that.

In anticipation of this, in order to prevent a major spike in crude, which would be caused potentially by two million barrels of Iranian oil coming off the market, two plus million in barrels all coming off the market, our allies, specifically Saudi Arabia, and other allies in OPEC, ramped up their production in order to replace the barrels that would be lost from Iranian sanctions in the market to reduce, to cushion that shock, to reduce it.

Comes November 6th, which was the deadline for the expiration of JCPOA, the Iran Deal as it's better known, and President Trump grants waivers. And grants waivers almost across the board. Not quite across the board, but a lot of them. The vast majority of countries received waivers. Several receiving very large waivers. And now you have a problem in the market where you're doubled up in production.

You have Saudi barrels, you have other OPEC member barrels coming back into the market. And as you remember in the summer they've added barrels back in, in anticipation of this. And you have Iranian barrels that are also in the market. So, you're doubled up, and total supply growth is now exceeding demand growth. I mean you're starting to build inventories. And so crude essentially had to do a 180. It had to go the exact opposite way where it was going in order to get supply to moderate effectively.

Now on top of this, as this is unfolding, US production actually stepped up. So, it wasn't maybe the sole reason for the decline of crude in the fourth quarter, but it was one of the factors. Production did go up, take a step higher, in August and September. And at the same time, as we know, the S&P500 was hit really hard.

So you had, because you had fears about demand, you had fears about trade tensions, nobody, you know, kind of that global synchronized growth narrative was getting weaker, was fading a little bit, and folks were starting to get worried about what will crude demand growth actually be like, at the same time as you have the influx of oil into the market, a lot of it being caused by lack of direction on Iranian exports. And so, combine all those things together, you'll form a perfect storm. Supply exceeds demand, and crude has to back off until such time that you can rebalance the market.

VN: So, one of the things that you've written consistently internally to our portfolio managers over the last few years is really, especially in a cyclical industry, this is a math equation, right? It's supply side, as you just walked through, supply and demand trying to match each other. And I think what's been very hard for people who have been covering the sector for a long period of time is that supply dynamics are changing a lot.

You talked about how shale has really, I think, transformed the kind of global supply landscape. So maybe let's focus more on the supply side and what you see as kind of the key drivers and kind of key factors influencing that supply side outside geopolitical issues, you know, kind of in the near term.

DD: Sure. So, when we talk about price, and you mentioned this a second ago, is in the commodity market, the price is the mechanism to get supply and demand to match. You will send a signal to the market, and the producers will respond accordingly, depending on where they are on the global cost curve. We're seeing that play out as we speak right now as well. So, in general, supply growth is moderating.

OPEC took its first action in kind of December of last year, recognizing that they've doubled up, and recognizing that their expectations for Iranian growth are incorrect. They start removing barrels out of the market. So that's something that already … a decision has been taken and supplies following through. And we saw it over the past several weeks and weekly DOE numbers and today being another example, imports into the US are collapsing. They've gone down quite a bit relative to historical norms.

So, OPEC Plus, which includes Russia, is taking action. They said they would. In fact, there were headlines even this week, Saudi Arabia is discussing taking their production down to as low as potentially 9.8 million barrels a day, so that's coming off of 11 million barrels a day in November, so they're following through and more in their commitments, potentially, that's what it sounds like.

At the same time, and I don't want to talk about geopolitics, but Venezuelan production is very important, and it is going down. It's been on a declining trajectory for a long time, but really since 2016, 2017. You kind of had some stability in that country, and you had production in the low two's, million barrels per day, we're now down to 1.2 million barrels a day, and sanctions are also potentially going to take effect there, which is negative.

Iranian production has come down as a result of sanctions. It hasn't gone down nearly as much as you would have expected from the rhetoric going into November. But it has come off. The waivers they were granted are six-month waivers, so it will be going to the middle/end of spring. We'll see what action, further action, the administration is going to take on those waivers, and the resulting outcome of those barrels.

But swinging back to the more economic side of it all, the US production. US of course is the swing producer, as we've discussed for a long time. And that has been the macro change that shale has brought onto the industry. US went from being kind of a marginal producer to being a swing producer, and that has reshuffled the global cost curve effectively. And US producers are the most economically sensitive producers. This is a group of E&Ps that effectively spends 100 percent of their cash flows, in many cases over 100 percent of their cash flows.

When I started in this industry, we used to call them checkbook drillers, because they effectively just spend whatever it is that they get in the bank. So, to signal from the market to the North American E&Ps, is declining price of oil means your cash flows have now declined a lot, and while the industry was committing to living within cash flows, a higher commodity price is now finding itself in the heavy out-spent position. So, the response is to moderate spending. They are price takers, they have no control over the price of their commodity, so you can only control your own cash outlays. And we're seeing that.

So, cash flows have declined. The rate count has started to come off, we're down about three percent over the past few weeks. Earnings season is underway as we speak, so we'll see what folks are reporting and how they're treating 2019, but so far from the independent E&Ps we've seen them reacting down, high single, low double digit, CapEx cuts year on year. So that's sort of playing out as you would have expected it to in this environment.

And you know, as we discussed, the industry is on a treadmill. So, the interesting and unique feature of shale is that it's a very high decline rate asset. And decline rate meaning you drill a well and shale, it comes on really, really strong, and then 12 months later it's down by 60 to 70 percent of its original production. And when you stack a lot of these years on top of each other, you expectedly have an industry that has an average decline rate of call it 35 to 40 percent, depending on who you are, or where you are in your life cycle. But very, very high. That means exactly what it sounds like.

If these companies stop spending money 12 months from now, they'll have 35 percent less oil production. So, a very significant decline rate, and just to compare that to the rest of the world, the total average decline rate for the globe is about six percent. So, it's a very, very material issue.

VN: So, it's like 6X with the rest of the world.

DD: Absolutely.

VN: So that's a big, big differential.

DD: And that is a unique feature of the shale resource, because it's so tight and the pressure is so high. So, when you slow down activity, as we're seeing, if activity is flat, call it year on year, your production growth will go down. Now you'll still grow, but you'll grow a lot less than you did in 2018 if you don't increase activity in 2019. And that's sort of the dynamic of shale.

So, you have to increase activity every single year by double digits if you're going to continue to grow at the pace you've been growing. And rough math is such that if, say you don't grow, say it's flat activity in '19 over '18, production growth will probably be cut somewhere in half relative to what we saw in 2018. And so far, as we said, earnings season is unfolding, we'll see where we land, and we'll see where commodity prices land over the next several weeks. But budgets seem like their coming down. High single, low double digits.

VN: So as you were talking I was struck, I remember it was about a month ago, you came back from the energy conference in Miami, and reading your notes I think what struck me so much was just a general tone, almost generalist, that attended really hate the sector, and even specialists like yourself who have lived this energy, it's like oh, my gosh, you know, like apathy or just sentiment is so so bad.

So, I guess the question for you Dimitry is, having seen that, and just recognizing sometimes things improve the most when you go from bad to less bad, so what changes kind of sentiment and kind of revive interest in commodities broadly in your mind?

DD: Yes, the sentiment is quite bearish out there. And to be honest, who can blame them? The sector has not done well. We've seen extreme cyclicality. Not even from year to year, but within the year itself. So, it's becoming difficult from the timing perspective for folks not actively trading the stocks very aggressively. But the question is, what changes the sentiment, right? And the way I frame it internally, and framing to the companies themselves, to the energy companies when I speak to them, is how do you as companies plan to compete for capital dollars within stock portfolios?

Within portfolios like the ones we have at ClearBridge, and just broadly around the world in the generalist portfolios that allocate a lot of capital? Why shouldn't you be starved of capital? Why do you deserve to be in there?

And I think the answer is relatively simple, although quite complex, is that you will compete for capital when your returns in capital employed are in excess of your cost in capital, and your free cash flow and growth profile is compelling to a generalist portfolio manager. They will allocate capital to you then.

And the world has changed. Because the question would be like why wouldn't energy companies be doing this? Like this is just so simple. Like why wouldn't that be the case anyway? Why wouldn't they be there already? And the world has changed. Over that past 30 years, before the shale revolution, before the advent of shale, the world was actually kind of straightforward for energy.

The energy prices went up and down, still driven by supply and demand, but overall the concern was peak oil. Now when does oil run out? Where do we get oil? And the companies were incentivized, and delivered value, but through exploration, you have to go and find oil. It's hard to get. You didn't know where it was going to come from. So, it didn't matter if you were outspending.

Your value was created because you bought acreage for very little money, or no money in some cases, and you found oil on it. And once you struck oil, it's really really valuable now and you better get out there and drill it really quick, bring that NAV forward, produce your resources, sell it, and go find the next resource, because this resource is only going to last you five to seven years because there's not a lot of inventory, and outspend really wasn't the issue. It's you delivered value through the drill bit, through the exploration.

That has changed. With the advent of shale, we have repeatable inventory. Repeatable to an extent. There is still geological risk, but generally speaking more repeatable. It's not quite a manufacturing process, I don't want to use that word, but it has similar characteristics of repeatability. And companies now don't have three or five or seven years of inventory. You know, in some cases we have 30 years of inventory, or 40 years of inventory, or 50 years of inventory. You don't deliver value through exploration anymore. The buildup of that inventory has already been reflected in the values of these stocks.

For those that have good resource. It's really not an E&P, it's P. It's production. And so the market is asking not so much where you're going to get more oil, in fact don't do that, don't spend money finding more resource, because you already have a lot, it's show me how you can monetize this resource over a long period of time, with a cost structure that makes sense and that creates value for shareholders. It's almost like the analogy is like an industrial company. You don't care how many widgets and industrial company makes necessarily.

I care that they have good profit margins and that they have good returns on capital and they have good cash flows, that they are making those widgets economically. So that's the way this industry needs to shift.

It's a mind shift that needs to occur as well. And when commodity prices go up, and they'll be cyclical. They go up, they go down.

When they go up, you don't chase and spend all your money making more widgets, making more barrels. That you pace yourself at a level which makes sense relative to the size of your resource so that you have the right level of inventory, you have the right scale, you have the right corporate structure, the right balance sheet, so you that you can monetize this resource and try and catch your shareholders in a very, very logical way.

And when all prices rise, and you have more cash, and you can return more cash to shareholders. And when they fall you have less cash and you'll be returning less cash for shareholders. And we're seeing some companies that have done this successfully, but it needs to be a mind shift that needs to occur on the minds of these organizations that to their credit has grown production successfully and gotten value for kind of 30 years going into the shale revolution.

But the world's just different now. You went from resource scarcity to resource abundance, and the business model has to keep up. And on the service side things aren't necessarily very different. It's billed, historically, I add capacity when activity is good, and then I stack capacity when activity is bad. And then generally speaking use all my cash flow to add to capacity.

The mind shift that needs to be similar to where it used to go on an E&P side, as in look, I'll add capacity if it's backed by contract, because of confidence in this base load of activity. And if you want me to increase beyond the base load, because you have some temporary shift flex up, I need some guarantees that the returns to my shareholders makes sense. And we're starting to see probably a little bit more on the service side already. Even this earning season we've seen companies cut CapEx, meaningfully and be rewarded for it.

VN: Yes, there's a couple of things, we were talking about this earlier in the week. The frame of reference is so different. As recently as 2007, peak oil was what every strategist was writing about. That transition from resource scarcity to resource abundancy is a big one for people to reframe. And we have an advantage that because of our long-term horizon we get a lot of management teams come in here.

It may have even been a couple of years ago I think the Anadarko CEO, when you hosted him, he said "It's the first time in my career that people have rewarded cash flow and capital allocation as opposed to purely production growth," right? And what you just said sounds so intuitive, and yet it's been really a reframing of how people allocate capital within the space.

So, let's transition to maybe ClearBridge, as you said, we're kind of concentrated active managers. So, one of your roles is really to figure out how to separate winners and losers. And historically the two biggest areas within energy that we've had exposure to as a firm is exploration and production companies, in using acronyms E&Ps, and then the oil services space. In your mind, what do you think from here will separate winners and losers in each of those kinds of categories, and would it be different between an E&P company and an oil services company?

DD: So generally, I would come back to the comment that we just made. That in order to separate yourself and become attractive as an investment you have to be treated the same way another investment in any other industry would be treated. Like is this compelling as a stand-alone opportunity at a reasonable mid-cycle oil price that I'm going to get the right return on capital employed, right free cash flow, and some growth. You need some growth.

Companies generally speaking need to have some growth. It doesn't have to be 30 percent, but it needs to be five or six percent or ten percent or whatever the right number is, depending on your resource structure. But you need to just have those very normal factors like normal companies have. You need to offer that to the market. And we've seen good examples of that already in the market.

Within the super majors, the E&Ps, names like Suncor, names like Chevron. They don't have big growth rates, but they have a mid-single-digit free cash flow yield. And they have return on capital employed that they're earning their cost of capital. And those stocks have outperformed, and they don't try to discount multiple despite the fact that they don't have a lot of growth. So, you see examples of companies doing a good job, focusing on margin expansion, focusing on free cash flow yields, focusing on being efficient, rather than just focusing on, how do I maximize my growth.

VN: And you've brought this up with Suncor, because they're not necessarily even the lowest cost producer, but to that point of inventory and just long-lived assets, they've certainly lived within their means and have understood the dynamics that they're operating in, it feels like, relative to their peer group.

DD: Yes, I mean they've benefited from investments they've made in a different commodity priced environment. And so, they do have a lot of capital that they're now harvesting and that's been driving that story. But the idea being of your focusing on returning, on maximizing your cash yields and your margins rather than figuring out how do I expand my E&P portfolio. And within services we're also seeing kind of similar things in certain sub-sectors, specifically within this mid group.

And we've talked about the companies that can organically expand their total adjustable market, and they could do it free cash flow accretively through organic means, either by entering a new product line, a new area within the oil field services, or by innovating kind of new tools and kind of having new equipment to sell to the industry that the operators need. And so, companies that operate within niches are a little bit more insulated from sort of the ups and downs within the commodity price environment, but also have a little bit of pricing power and a little bit of market share power that they can then translate to good margins.

But at the same time, we're seeing those companies that arguably should be the most aggressive deploying capital because they have something unique, are being very conservative deploying capital despite the fact that they can earn really good returns by saying look, we understand that we have to protect the balance sheet, we have to protect free cash flow yield, we have to protect return capital employed. And those things have to balance. There's no one thing that we go to. And we've seen multiple expansion in those names and they've also acted pretty well.

VN: So, I know a lot of times when we talk about what might reactivate sentiment around a sector is M&A activity. And as you've said, you've now had people kind of run their balance sheets or kind of their production profiles pretty conservatively, certainly on the CapEx side. Do you have any kind of crystal ball? What do you think might activate anything from the M&A front that might create actually sentiment change in the industry?

DD: So, it's interesting that you bring that up. Because M&A's gone through several cycles within oil field services. And within the E&Ps over the past, let's just take the four-year period, since the downturn began. In the beginning we saw the services, M&A, sort of spring up. You know, FMC, Technip, they got together formed a company.

Baker Hughes and Halliburton tried. And it ended up being Baker GE. So that was kind of a very interesting dynamic there. You had Schlumberger Cameron, you have a number of offshore drillers. They're still emerging. And that industry has become a little bit more consolidated actually as a result. But then that sort of played itself out. You still have a few sort of small mid cap similar pressure pumping companies that probably should consolidate, but there's not a clear path on how that would actually occur.

But then you had E&Ps do asset deals. And you had sort of the Permageddon when you had a 12-month period where a lot of the Permian names started buying privately held acreage. So, acreage held by the Blackstones and the BlackRocks, and the energy specialized private equity boutiques and individuals. Everybody wanted to get bigger. The Permian theme was playing out.

VN: What time period was that Dimitry?

DD: This was 2016, 2017. So, you had especially kind of around the summer, going into the fall of that year. So, you had a lot of equity coming to the market. You had essentially companies deciding like we're going to get bigger. We're understand the promise of the Permian. We understand how prolific these walls are. You had $63,000 an acre prices being paid, things that we haven't seen forever and ever. A lot of companies trade at $30,000 an acre. And that played itself out. So, then the companies got bigger through public and private type of strategy.

And so, the next question is, are we going to see public on public? Are we going to see sort of larger scale deals? And so, my crystal ball is always a little bit foggy, but the next logical step is probably going to be we'll see one or two large scale deals probably in the Permian basin, but could be multi-basin, of majors coming probably into the Permian and doing larger transactions. And do I know this for sure? Of course not.

But when you step back you think about why hasn't this happened yet? So that would be the pushback point. Well, public company prices used to be lower. Why didn't the majors do something then? And I think they probably couldn't. This is one of the first times in years where you could logically make a case for why it should occur now. This is the first time in four years where the multiples for the majors are on par, or higher in some cases, than the large cap E&Ps.

So, if you were going to do something, if you were going to issue equity for something, you could actually do it accretively now. Before you'd be taking on a very large dividend obligation, if you're going to dilute yourself down by buying somebody with stock. And now you don't have that, so you can actually do an accretive deal.

VN: How about with the payout ratios, with those companies with the integrateds, that you feel like they have room to kind of do some … they'd be able to do this?

DD: It's interesting you say that. A few things have happened to make that easier. One is the cash flow yield for the majors have improved. And secondly, well, two things, valuations have come down for the public E&Ps, making that burden less.

And thirdly, the cash flow outspend for the high-quality independents has gone down or been eliminated. So, if you had to buy somebody and then continually take on debt, issue equity to invest in that asset, you don't have that problem anymore. And in some cases, they're free cash flowing so you can use that cash flow to pay the dividend on the assets, on the shares that you already … So, there's ways to structure … it's easier to structure that transaction now.

And the other point I would make is I don't think the majors were prepared to do deals in the Permian four years ago. If you look at their presentations, if you listen to the companies, what was their strategy? It was, "We're going abroad. We're going LNG, we're going to Australia, we're going deep water. That is our strategy, that's our core competency, that's what we're going to achieve."

If you look at their presentations today, you listen to companies and see what their strategy is, Permian is right up there. It's a top three asset, it's a top four asset. They have per yard ties that's part of their portfolio, and they have reshuffled their work flows in order to bring their technological knowhow and their organizational might into this asset where they probably couldn't have integrated a major E&P four years ago.

It would have been a failure. And you saw that with Exxon buying XTO. They bought XTO for a lot of money, and then effectively let them run themselves. So, it was almost an arm's length type of relationship. Because they couldn't, there wasn't that ability to go in and extract synergies out of XTO and merge it into the grand organization. That is no longer the case.

These companies are doing a good job drilling acreage they have. They're bringing their technological knowhow to bear, and they were actually major drivers of kind of upward surprise in US production in August and September of this year, which was at the beginning of this podcast. Because they have quote unquote "cracked the code" and have brought the organization in step with the needs of a highly repeatable asset. But we're in a different place today strategically and from a work flow perspective than I think we would have been in the past.

VN: So, I'm going to close with two rapid fire questions. You brought up something earlier. Is there a big disconnect right now between public market valuations and private market valuations for the same assets right now?

DD: There's time to come together.

VN: And last thing is, one of the things, you had kind of been steering PMs away from offshore exposure a few years ago. But the idea was that land exposure wouldn't be that different between the US and international.

Is it really shale dynamics of why you've seen kind of US land activity be so much ahead of international activity over the last couple of years? The recovery's just been much more muted and slower outside the US.

DD: Yes, and 2019 is probably the first year since the downturn when we're going to see international activity rising. International CapEx rising. We're starting to see those numbers come through for the first time.

But yes, effectively, just logically if you think about it, if the US is a swing producer and decline rates are very high, and activity has to rise every year to keep production growing, which if it's a swing producer by definition its activity needs to grow every year, that's where the kind of disproportionate growth is going to be. And if you look at kind of the background of all envelope numbers and we can argue about specifics, if you're going to keep growing call it 1 to 1.2, 1.3 million barrels a day, year on year kind of continuously, which is roughly demand growth, globally, activity in the US probably needs to rise around 12 to 15 percent every single year.

So over time, there'll be cycles, but over time activity should go up. And then the question is, can the services guys and E&Ps do it in the highly profitable return on capital employed free cash flowing compelling free cash flow manner.

VN: So, you just said, so if International has been declining, but you think it's going to increase in 2019, what do you think? What creates that swing to an inflection point to positive in 2019 for the international kind of drilling?

DD: It's a longer cycle business. You're finally seeing some brand stability. Because it gives a little bit of comfort to the majors, but also the national oil companies, international oil companies that have repaired their balance sheets over the past four years. But also, it's a longer cycle business. So, they have to look out further into the future.

It's not like shale where you drill a well and six months later you have production. It's long planning cycle, you have to start developing projects. It's going to take a while to sort of get production going. So, they're looking now into 2020 plus, and there's not a whole lot of new projects that are going to be coming online. The bulk of projects that have been identified and sanctioned coming into the downturn are now rolling off. And so, if you want to protect against your decline rate, and if you want to God forbid grow production a little bit, you need to start getting after that a little bit now.

And at the same time, you have kind of national oil companies that have massively underinvested into their resource and it's a national issue for them. Because you know, a lot of petro economies, selling oil is the primary revenue source. So as those countries are starting to see sort of an accelerating decline rate, they're going after and trying to mitigate.

VN: Well why don't we end it there. I mean it's such an interesting topic, we could probably go for longer. But we'll keep you for a future podcast. I know this was your kind of original experience. I'm sure we're going to have you on here again soon. So, for the listeners, we hope you'll continue to join us throughout 2019. You'll go back next time to hearing Jeff Schulze's melodic voice instead of mine. And we welcome any questions, comments or suggestions, which to remind people you can email to us at podcast@ClearBridge.com.

Please note the following past performance is no guarantee of future results. The opinions and views expressed in today's podcast are of the individual speakers, mainly Dimitry's, as of February 13, 2019, and may differ from other managers or the firm as a whole and are not intended to be a forecast of future events, a guarantee of future results, or investment advice. Any statistics referenced have been obtained from sources believed to be reliable, but the accuracy and completeness of this information cannot be guaranteed.

Neither ClearBridge Investments nor its information providers are responsible for any damages or losses arising from any use of this information. So, with that, thanks, and have a great day.

About the Speakers

Dimitry Dayen, CFA
Director, Senior Research Analyst for Energy

- 13 years of investment industry experience
- Joined ClearBridge in 2014
- Member of the CFA Institute
- Member of the CFA Society New York
- BA in Economics from New York University's Leonard N. Stern School of Business

Vinay Nadkarni
Managing Director, Head of Global Business Development

- 24 years of investment industry experience
- Joined predecessor organization in 1996
- MBA from the Wharton School of the University of Pennsylvania
- BS in Actuarial Science from Pennsylvania State University

ClearBridge Investments
620 Eighth Avenue, New York, NY 10018 | 800 691 6960 | **ClearBridge.com**