THOMSON REUTERS STREETEVENTS

EDITED TRANSCRIPT

VLO - Q4 2018 Valero Energy Corp Earnings Call

EVENT DATE/TIME: JANUARY 31, 2019 / 3:00PM GMT

OVERVIEW:

Co. reported 4Q18 net income attributable to VLO stockholders of $952m or $2.24 per share.

THOMSON REUTERS

CORPORATE PARTICIPANTS

Donna M. Titzman *Valero Energy Corporation - Executive VP & CFO*

Gary K. Simmons *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Homer Bhullar *Valero Energy Corporation - VP of IR*

Jason W. Fraser *Valero Energy Corporation - Executive VP & General Counsel*

Joseph W. Gorder *Valero Energy Corporation - Chairman, CEO & President*

Martin Parrish

R. Lane Riggs *Valero Energy Corporation - Executive VP & COO*

CONFERENCE CALL PARTICIPANTS

Blake Michael Fernandez *Piper Jaffray Companies, Research Division - MD & Senior Research Analyst*

Bradley Barrett Heffern *RBC Capital Markets, LLC, Research Division - Associate*

Craig Kenneth Shere *Tuohy Brothers Investment Research, Inc. - Director of Research*

Craig Patrick Weiland *U.S. Capital Advisors LLC, Research Division - Executive Director of Refining Research*

Douglas George Blyth Leggate *BofA Merrill Lynch, Research Division - MD and Head of US Oil and Gas Equity Research*

Douglas Todd Terreson *Evercore ISI Institutional Equities, Research Division - Senior MD & Head of Energy Research*

Jason Daniel Gabelman *Cowen and Company, LLC, Research Division - VP*

Manav Gupta *Crédit Suisse AG, Research Division - Research Analyst*

Matthew Robert Lovseth Blair *Tudor, Pickering, Holt & Co. Securities, Inc., Research Division - MD of Refining and Chemicals Research*

Neil Singhvi Mehta *Goldman Sachs Group Inc., Research Division - VP and Integrated Oil & Refining Analyst*

Paul Cheng *Barclays Bank PLC, Research Division - MD & Senior Analyst*

Paul Benedict Sankey *Mizuho Securities USA LLC, Research Division - MD of Americas Research*

Philip Mulkey Gresh *JP Morgan Chase & Co, Research Division - Senior Equity Research Analyst*

Prashant Raghavendra Rao *Citigroup Inc, Research Division - Senior Associate*

Roger David Read *Wells Fargo Securities, LLC, Research Division - MD & Senior Equity Research Analyst*

PRESENTATION

Operator

Good day, ladies and gentlemen, and welcome to the Valero Energy Corporation's Fourth Quarter 2018 Earnings Conference Call. (Operator Instructions) As a reminder, this conference call is being recorded. I would now like to turn the conference over to Homer Bhullar, Vice President, Investor Relations. Sir, you may begin.

Homer Bhullar - *Valero Energy Corporation - VP of IR*

Good morning, and welcome to Valero Energy Corporation's Fourth Quarter 2018 Earnings Conference Call. With me today are Joe Gorder, our Chairman, President and Chief Executive Officer; Donna Titzman, our Executive Vice President and CFO; Lane Riggs, our Executive Vice President and COO; Jason Fraser, our Executive Vice President and General Counsel; and several other members of Valero's senior management team. If you've not received the earnings release and would like a copy, you can find one on our website at valero.com. Also attached to the earnings release are tables that provide additional financial information on our business segments. If you have any questions after reviewing these tables, please feel free to contact our Investor Relations team after the call.

I would like to direct your attention to the forward-looking statement disclaimer contained in the press release. In summary, it says that statements in the press release and on this conference call that state the company's or management's expectations or predictions of the future are forward-looking statements intended to be covered by the safe harbor provisions under federal securities laws. There are many factors that could cause actual results to differ from our expectations, including those we've described in our filings with the SEC.

Now I'll turn the call over to Joe for opening remarks.

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Thanks, Homer, and good morning, everyone. We're pleased to report that we completed another good quarter where we ran our business well and delivered solid financial results. Throughout the quarter, we maintained our unrelenting focus on operations excellence, which enabled us to operate safely and reliably in an environmentally responsible manner. We also delivered on our commitment to invest in growth projects and acquisitions that increase Valero's earnings capability, while maintaining solid returns to our stockholders.

In 2018, we matched our 2017 record for process safety performance, and we continued to outperform the industry on our personnel injury rates. The logistics investments we made over the last several years are contributing significantly to earnings. Our investments in Line 9B, the Diamond Pipeline and the Sunrise Pipeline expansion increased our system's flexibility, allowing us to take advantage of the opportunities available in the fourth quarter of 2018. In fact, we set a record for total light crude runs at 1.5 million barrels per day and a record for North American light crude processed at over 1.3 million barrels per day. We also continued to maximize product exports into higher netback markets in Latin America.

Turning to capital allocation. We continue to execute according to our disciplined framework. Our projects in execution remain on track. Construction is scheduled to finish on the Houston alkylation unit in the second quarter. And the Central Texas pipelines and terminals are expected to be completed in mid-2019. In November, the Boards of Directors of Valero and Darling Ingredients approved an expansion of the Diamond Green Diesel plant to 675 million gallons per year of renewable diesel production and the construction of a renewable naphtha finishing facility.

With respect to cash returns to stockholders. In 2018, we paid out 54% of our annual adjusted net cash provided by operating activities, exceeding our target annual payout range of 40% to 50%. Our solid financial position and a favorable outlook for our business enabled us to further demonstrate our commitment to our investors, as last week our board approved a 12.5% increase in the regular quarterly dividend to $0.90 per share or $3.60 annually.

Lastly, earlier in January, we closed the acquisition of Valero Energy Partners. This transaction was immediately accretive and has greatly simplified our structure. While Valero will no longer have a publicly-traded midstream business, VLP's assets and ongoing logistics investments at Valero will continue to enhance our feedstock and product flexibility.

Now as we look ahead, we remain committed to our capital allocation framework. There has been no change in our capital discipline strategy, which prioritizes our investment-grade ratings, sustaining investments and paying our dividends. We expect our annual CapEx for both 2019 and 2020 to be approximately $2.5 billion, in line with where it's been over the last several years. And you should expect incremental discretionary cash flow to continue to compete with other discretionary uses, including cash returns, growth investments and M&A.

In closing, with a growing economy, a year-over-year increase in vehicle miles traveled and low fuel prices, we're encouraged for 2019. We expect good demand in domestic and export markets this year. Despite seasonal weakness in the gasoline market, days of supply for distillate inventories remained below the 5-year average. Expected incremental diesel demand and discounts for sour feedstocks associated with the impending global fuel oil sulfur reduction also give us reason to remain optimistic. We believe that our system's flexibility to process a wide range of feedstocks and reliably supply quality fuels, as evidenced by our fourth quarter 2018 results, positions Valero well for whatever opportunity the market presents to us.

So with that, Homer, I'll hand the call back to you.

Homer Bhullar - *Valero Energy Corporation - VP of IR*

Thank you, Joe. For the fourth quarter, net income attributable to Valero stockholders was $952 million or $2.24 per share compared to $2.4 billion or $5.42 per share in the fourth quarter of 2017. Fourth quarter 2018 adjusted net income attributable to Valero stockholders was $900 million or $2.12 per share compared to $509 million or $1.16 per share for the fourth quarter of 2017.

For 2018, net income attributable to Valero stockholders was $3.1 billion or $7.29 per share compared to $4.1 billion or $9.16 per share in 2017. 2018 adjusted net income attributable to Valero stockholders was $3.2 billion or $7.37 per share compared to $2.2 billion or $4.96 per share in 2017.

The 2018 adjusted results exclude several items reflected in the financial tables that accompany this release, while the 2017 adjusted results exclude an income tax benefit of $1.9 billion from the Tax Cuts and Jobs Act. For reconciliations of actual to adjusted amounts, please refer to those financial tables.

Operating income for the refining segment in the fourth quarter of 2018 was $1.5 billion compared to $971 million for the fourth quarter of 2017. The increase from 2017 was mainly attributed to wider discounts for North American sweet crudes and certain sour crudes relative to Brent, partly offset by weaker gasoline margins. Refining throughput volumes averaged 3 million barrels per day, which was in line with the fourth quarter of 2017. Throughput capacity utilization was 96% in the fourth quarter of 2018.

Refining cash operating expenses of $3.92 per barrel were $0.34 per barrel higher than the fourth quarter of 2017, mostly due to higher natural gas costs in the fourth quarter of 2018. The ethanol segment generated a $27 million operating loss in the fourth quarter of 2018 compared to $37 million of operating income in the fourth quarter of 2017. The decrease from 2017 was primarily due to lower margins resulting from lower ethanol prices.

Operating income for the VLP segment in the fourth quarter of 2018 was $88 million compared to $80 million in the fourth quarter of 2017. The increase from 2017 was mainly due to contributions from the Port Arthur terminal assets and Parkway Pipeline which were acquired in November 2017.

For the fourth quarter of 2018, general and administrative expenses were $230 million and net interest expense was $114 million. General and administrative expenses for 2018 of $925 million were higher than 2017, mainly due to adjustments to our environmental liabilities.

For the fourth quarter of 2018, depreciation and amortization expense was $531 million, and income tax expense, which includes certain income tax benefits as reflected in the accompanying earnings release tables, was $205 million. Excluding these benefits, the effective tax rate was 21%.

With respect to our balance sheet at quarter-end, total debt was $9.1 billion, and cash and cash equivalents were $3 billion. Valero's debt-to-capitalization ratio net of $2 billion in cash was 24%. At the end of December, we had $4.4 billion of available liquidity, excluding cash.

We generated $1.7 billion of net cash from operating activities in the fourth quarter. Excluding the unfavorable impact from a working capital decrease of approximately $120 million, net cash generated was $1.8 billion.

With regard to investing activities, we made $771 million of growth and sustaining capital investments in the fourth quarter of 2018, of which $254 million was for turnarounds and catalysts. For 2018, we invested $2.7 billion, of which approximately $1.9 billion was for sustaining and $800 million was for growth.

Moving to financing activities. We returned $965 million to our stockholders in the fourth quarter. $627 million was for the purchase of 7.7 million shares of Valero common stock and $338 million was paid as dividends. As of December 31, we had approximately $2.2 billion of share repurchase authorization remaining.

We expect capital investments for 2019 to be approximately $2.5 billion with approximately 60% allocated to sustaining the business and approximately 40% to growth. Included in the total are turnarounds, catalysts and joint venture investments.

For modeling our first quarter operations, we expect throughput volumes to fall within the following ranges: U.S. Gulf Coast at 1.67 million to 1.72 million barrels per day; U.S. Mid-Continent at 440,000 to 460,000 barrels per day; U.S. West Coast at 265,000 to 285,000 barrels per day; and North Atlantic at 475,000 to 495,000 barrels per day.

We expect refining cash operating expenses in the first quarter to be approximately $4.05 per barrel.

Our ethanol segment is expected to produce a total of 3.8 million gallons per day in the first quarter. Operating expenses should average $0.42 per gallon, which includes $0.06 per gallon for noncash costs, such as depreciation and amortization.

For 2019, we expect G&A expenses, excluding corporate depreciation, to be approximately $840 million. The annual effective tax rate is estimated at 23%.

For the first quarter, net interest expense should be about $110 million and total depreciation and amortization expense should be approximately $550 million. Lastly, we expect RINs expense for the year to be between $400 million and $500 million.

That concludes our opening remarks. Before we open the call to questions, we again respectfully request that callers adhere to our protocol of limiting each turn in the Q&A to 2 questions. If you have more than 2 questions, please rejoin the queue as time permits. This helps us ensure other callers have time to ask their questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Blake Fernandez with Simmons Energy.

Blake Michael Fernandez - *Piper Jaffray Companies, Research Division - MD & Senior Research Analyst*

I appreciate the outlook for 2 years on CapEx. I think there were some perceptions, maybe with the projects sanctioned last year that there would be upward pressure, and we're actually seeing a $200 million decrease year-over-year and that sustained into 2020. Can you talk a little bit about where maybe some of that deflation is coming from? Whether it's the growth component or sustaining or turnarounds?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

Blake, this is Lane. I wouldn't call it deflation. I'd call it -- we had a lot of sustaining capital with respect to Tier 3 and plus the reliability projects in our Corpus Christi refinery in 2018. Your run rate is like what we said, it's normally about $1.5 billion to sustain our assets. We had a little bit more than that in this past year. And there's obviously timing involved in all that where our turnarounds get a little bit lumpy or again we end up having to do something a little bit special and on some environmental stuff, which currently we don't have anything on our sort of forward view of that.

Blake Michael Fernandez - *Piper Jaffray Companies, Research Division - MD & Senior Research Analyst*

Okay, great. The second question is on Venezuela, obviously very topical. I guess, for one, could you confirm how much you are currently importing crude there? But then, I guess, more importantly, I'm just curious, in order to replace those barrels, are you looking to resort to more light sweet domestic crudes or is your system largely maxed out on light sweet to where you're actually going to have to resort to the global market for kind of medium and heavy seller replacement barrel?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes. Blake, this is Gary. Of course, with the sanctions, we're currently not taking anything from Venezuela. But it was about 20% of our heavy sour that we run was Venezuelan barrels historically. We're certainly hopeful that we'll see prompt resolution to the crisis, not only for the benefit of the crude markets, but for the welfare of the people of Venezuela. We've seen production decline in Venezuela for years, and we've also known there was a threat of sanctions, so we've put alternatives in place to be prepared for this. Of course, the announcement was just made Monday. We've only had 48 hours to respond. Our top priority really has been to get the next 30-day supply plan covered, and I can tell you we're in a lot better position today than we were on Tuesday, but we still have some holes to fill in our supply plan. We really run Venezuelan barrels at 2 of our refineries in the Gulf, St. Charles and Port Arthur. The St. Charles refinery did begin a turnaround on their crude and coker unit. So that definitely minimizes the impact that the sanctions have on our system. To your point, current economics are certainly pushing us to maximize light sweet in the system.

Operator

Our next question comes from Doug Terreson with Evercore.

Douglas Todd Terreson - *Evercore ISI Institutional Equities, Research Division - Senior MD & Head of Energy Research*

I wanted to see if we can get some elaboration on Joe's points that he made a few minutes ago about market fundamentals and specifically while distillate demand and inventories appear to be positive in both the U.S. and the Atlantic Basin, the converse seems true for gasoline, although seasonality and net exports should be supportive. And then also, could you just spend a minute covering how fuel markets are likely to sort out this year given the uncertainty that Blake just highlighted about Canada and Venezuelan heavy feedstocks and how you might adjust?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, this is Gary, again. Of course, seems like early in the year, during this call, we always were kind of panicked on the gasoline markets. We feel very good about gasoline demand moving forward. High employment and low gasoline prices should result in good gasoline demand. The wildcard, of course, becomes refinery utilization. So with the 20-year high refinery utilization we saw last year, we are starting the year with a bit of an overhang. The overhang in gasoline has primarily been pad 1, pad 2 and pad 3. If I look at those regions individually, I could see that we built a little bit more inventory in pad 1. The market structure is such that there is an economic incentive to make summer-grade gasoline and put it in tankage in New York Harbor and there is still tankage available. So that would tell me you could see some inventory gain in pad 1. I think you'll see some significant improvements in both pad 2 and pad 3 moving forward. Pad 2, I think, a lot of the gasoline build was the result of the crude discount. The margins were just very strong. So typically in pad 2, you see refinery utilization drop off in the winter to balance the market, but with the crude discounts where they were, they ran hard. But if I look at the pad 2 market now, there looks to be more planned maintenance this year than was last year as we move forward. And then currently with the cold snap hitting pad 2, there seems to be quite a few refinery issues in that region. In fact, the Explorer Pipeline between Group 3 and Chicago is now prorated, indicating there is a big pull for products in that region. So I think you'll see gasoline inventories draw on pad 2, and I also think you'll see some good gasoline draws in pad 3 as well. In the Gulf, early in the year, we typically have fog issues, which hinder our ability to export product, and we saw that again this year. We also saw a bottleneck trying to get gasoline into Mexico, which is obviously our largest export destination. And then we saw a lot of refiner buying interest in the Gulf as well as people built some inventory in preparation for turnaround, so they could cover their supply during their outages. So I think all those things that you see lower utilization in the Gulf as a result of planned maintenance beginning and you see exports pickup. I'm confident you'll see inventories in pad 3 draw well. So I think we feel pretty good about gasoline. We feel very good about gasoline demand, and again, the wildcard is what utilization is going to be going forward.

Douglas Todd Terreson - *Evercore ISI Institutional Equities, Research Division - Senior MD & Head of Energy Research*

Okay. Any insight on fuel oil, too?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, fuel oil, I think it definitely is the issues you talked about. There's been a lot of significant hits to fuel oil on the supply side with OPEC cuts and the Iranian sanctions, now Venezuelan sanctions and production cuts in Western Canada. If you look at the forward curve on fuel oil, it's backward about $1 a month and a lot of that is tied to the IMO 2020 fuel spec change. We do see fuel moving weaker. As a result, lower demand for high sulfur fuel oil. And then there are some signs that some of the production can be coming on. The Alberta government did announce that they're going to go ahead and raise production in February at least 75,000 barrels a day. So some of those things will help as well.

Operator

Our next question comes from Paul Cheng with Barclays.

Paul Cheng - *Barclays Bank PLC, Research Division - MD & Senior Analyst*

Before I ask my question, since I told John Locke, your Gulf Coast realized margin going to be far in excess of 650, I will publicly lobby it. Joe, you should give Gary and his crude supply team a big bonus or I'm...

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Paul, you're really helpful to me here.

Paul Cheng - *Barclays Bank PLC, Research Division - MD & Senior Analyst*

But anyway, so other than that, 2 questions. First, if you're looking at the current level in the fourth quarter, I mean, I think everyone is already trying to maximize on the distillate yield. So in your system, is there any more that you can actually do there to shift from gasoline to distillate? And also you said you are running a record 1.5 million barrels per day in the light oil. Is there any more that you can -- can you quantify that? How much more, if there's any, that you can actually move from light into -- from medium and heavy into light?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, so I would tell you on the gasoline to distillate swing, there is very, very low else we can do. We're pretty much maxed out on distillate today. On the light crude, we would tell you that the numbers Joe gave you, that was about 90% of our light sweet capacity. And so there is some room there to put some additional light sweet crude into our system.

Paul Cheng - *Barclays Bank PLC, Research Division - MD & Senior Analyst*

So, Gary, you mean that if 90%, that means that at most you can push is another 100,000, 150,000 barrels per day?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Exactly. So we've been saying we've about 1.6 million barrels a day of light sweet crude capacity.

Paul Cheng - *Barclays Bank PLC, Research Division - MD & Senior Analyst*

Okay. Secondly then, do you expect the Mexico export that you're shipping there, that you expect to increase in the coming weeks given the fuel shortage there? And with that, if we look back in the last 2 months, have you seen any noticeable decline in your gasoline export to Mexico?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

No, we really haven't. Historically, we see a lot of buying interest in December for Mexico, and we see these bottlenecks then trying to get the barrels into the country. And obviously, the crackdown on fuels stuff made that even worse. We're seeing good demand from Mexico, not only waterborne barrels, but we continue to ramp up our business of actually importing the barrels into the country, and we're seeing very good demand for barrels delivered all the way into country as well.

Operator

Our next question comes from Manav Gupta with Crédit Suisse.

Manav Gupta - *Crédit Suisse AG, Research Division - Research Analyst*

And Homer, congrats on joining a great team. We would all miss John Locke and would like to wish him all the best in his new role.

Homer Bhullar - *Valero Energy Corporation - VP of IR*

Thanks, Manav.

Manav Gupta - *Crédit Suisse AG, Research Division - Research Analyst*

I just have a quick question on Diamond Green Diesel expansion. Like, if we look at the current margins, is it fair to assume that this is like a 35-plus percent return for project for you? And the second follow-up on it is, what advantage does Darling Ingredients brings to the table? Are they just a financial partner? Or they give you some kind of competitive edge on your peers who are also trying similar projects?

Martin Parrish

This is Martin. On Diamond Green, we're looking at historically. We think going forward, we're going to be at about $1.25 a gallon. If you're doing the math, you're probably in the right ballpark with that return on EBITDA margin. Now Darling is not just a financial partner. Darling processes about 10% of the world's meat byproducts. They also do a significant work on collecting used cooking oil. They've been in these markets for years. As Diamond Green, we've been in this fat market for 5 years now, 5.5 years. They've been in for a long time. They bring a lot to the table around sourcing the fat, pretreating the fat for the units. So it's a really good synergy here. We've got our refining expertise, we've got expertise in marketing the product. They've got pretreatment expertise and bringing the fat into the joint venture. So it's a really good partnership.

Operator

Our next question comes from Doug Leggate with Bank of America Merrill Lynch.

Douglas George Blyth Leggate - *BofA Merrill Lynch, Research Division - MD and Head of US Oil and Gas Equity Research*

Joe, you guys do a great job of making the sell side look really dumb every quarter. It's a great quarter, obviously. But my question is, a $30 correction in oil prices. Obviously, there's some lag effect in your capture rate. I'm just curious as to the capture rate move that we saw north of 100% on our numbers is running about 30%, 40% above what you would normally deliver. Was that just lag effect? Or is there something structural going on such as the shift to the lighter grades that we should pay more attention to going forward?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Doug, that's a good question. You guys...

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

Yes. I'll take a shot out and have Gary for a recal -- retune whatever I'm saying here. But there's really a few -- couple of reasons. One is, as we alluded to in the opening remarks, we've had these pipeline projects. We had the Line 9 and we had the Diamond Pipeline and the Sunrise. And all those put us in position in the Mid-Continent and in our Quebec refinery position us to take advantage of essentially the distressed markets in the fourth quarter. And then the other side of that is on the product side, really low RIN prices allowed us to capture essentially higher netbacks on our product prices. I'm sure there's the contribution on the other things like pet coke, all the other stuff that contribute to our capture rate, but really it's the first 2 things that really drove our capture rate in the fourth quarter.

Douglas George Blyth Leggate - *BofA Merrill Lynch, Research Division - MD and Head of US Oil and Gas Equity Research*

So should we consider that the capture rate is structurally moving higher?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

I would say, you should -- on the product side, with the lower RIN prices, yes. On the crude side, it's just a matter of how distressed those markets are. And then you have a line -- you have a view of what Hardisty looks like and a view of what Midland looks like and Cushing.

Douglas George Blyth Leggate - *BofA Merrill Lynch, Research Division - MD and Head of US Oil and Gas Equity Research*

My follow-up is really -- is kind of a follow-up to Doug Terreson's question, I guess. Normally, we would see this, the industry pivot obviously between distillate and gasoline to some extent as you move through the summer, but obviously you've got this IMO event going into 2020. So I'm wondering, is there a possibility that we see Valero specifically maintain a max distillate bias through the whole of 2019 as one part of the solution to the gasoline overhang? And I'll leave it there.

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

This is Lane, again. We absolutely believe that will be the case. I mean, we've been in max distillate mode for a while now, and we'll continue to be in that way through the, at least the way we see the rest of the year going in 2019. Obviously, it's early, but that's the way the forward market will be pointing us right now.

Operator

Our next question comes from Prashant Rao with Citigroup.

Prashant Raghavendra Rao - *Citigroup Inc, Research Division - Senior Associate*

I want to circle back to crude sourcing and drill down a little bit. Obviously, really strong performance there and as Paul said, the mixes all look -- we underestimated you this quarter. On the Maya or other Central American heavy sours, I just want to get your confirmation. I mean, a lot of those grades have priced themselves out of the market we saw in 4Q, but were you -- what was your purchasing like in 4Q? And is it -- were you not running as much and should we -- how should we expect that to look, now that we've seen some price normalization, as we go forward in 1Q?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes. So I think on the heavy side, we've definitely seen that Maya is probably not the best marker for what we're paying for heavy sour crude. So in the fourth quarter, if you look, Maya was priced at $4.50 discount to Brent. WCS or Western Canadian Select in the U.S. Gulf coast was trading at $10.60 discount to Brent. And we believe that the Canadian quote was much more representative of our actual delivered heavy sour into the system. In addition to that, then there were certainly some things with the connect -- disconnect in Western Canadian pricing. We had a significant uplift on the crude-by-rail, we did 43,000 barrels a day of heavy Canadian by rail into Port Arthur and those were very discounted barrels.

Prashant Raghavendra Rao - *Citigroup Inc, Research Division - Senior Associate*

Okay. And I guess, that sort of leads nicely to my second question. My follow up is on the Canadian barrels. Year-to-date seems like the import data and purchasing data what we've heard in the market is, you've continued to be able to get good access to those Canadian barrels. Just wondering if you can give us some color on the sourcing, especially given that we've had production cuts up in Canada, what the dynamics are like of those barrels also coming in by rail or are they more available in the market, just any color on how we should think about the variety of sourcing there?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, so in the fourth quarter, we also set a record on the volume of Canadian heavy that we ran on our system, we ran over 180,000 barrels a day of heavy Canadian. And it is sourced via pipes delivered into the Gulf and then we do about [43,000] (corrected by company after the call) barrels a day crude-by-rail. Our view is that crude-by-rail will be necessary until one of the major pipeline projects gets approved out of Western Canada.

Operator

Our next question comes from Roger Read with Wells Fargo.

Roger David Read - *Wells Fargo Securities, LLC, Research Division - MD & Senior Equity Research Analyst*

Sorry, I kicked off the mute there. I guess, maybe to dig in a little deeper thinking about the summertime here with gasoline. So you're running max distillate. Presumably most, if not all, of the industry is doing the same. So if we see, relatively speaking, weaker gasoline cracks this summer. Does that imply that, to get things in balance, effectively the industry has to employee run cuts? Or should we think about additional toggles you can do if you ended up with a summertime situation with stronger distillate cracks relative to the gasoline, especially with IMO staring us in the face by the latter part of the summer?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, Roger, difficult to answer. I certainly think the gasoline situation is a combination of yield, which certainly we expect to be in a max distillate mode. And then the other thing I referred to is just what the utilization rate and the refining capacity is and whether that 20-year high that we saw last year is sustainable.

Roger David Read - *Wells Fargo Securities, LLC, Research Division - MD & Senior Equity Research Analyst*

Yes, I mean, I would think so with these -- with more light barrels available, there's no reason to think U.S. refining throughputs have to come off, right? It's strictly a margin decision. We've heard other companies, other refiners talk about different things you can do in terms of how hard you run your FCC units versus other decisions you can make. I was just curious if there is anything like that, that occurs before IMO as you look at your overall system?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

Roger, it's Lane. I'll take a stab at that. So we do -- FCC is obviously a pivotal part of our operation, and there's certain inflection point -- economic inflection point. And it almost always makes sense to fill our alky. So we'll run up to the point to make sure our alkylation units are full. And so the marginal capacity we're always looking at, as it makes sense, is to run past that point. And to your point, interestingly enough, the stream that we put in these alkys also can go into the fuel market for the 0.5% to meet the IMO reg. So we do think structurally at least one of the things that will happen here is that FCCs probably won't run a whole lot fast filling their alkys, certainly in the context of how IMO 2020 is going to work out.

Roger David Read - *Wells Fargo Securities, LLC, Research Division - MD & Senior Equity Research Analyst*

And then, Joe, you've done a great job over the years here in terms of capital allocation. The decision to roll up VLP kind of brings the balance sheet more into like the true issue on cash and debt as opposed to the nonrecourse side. I was wondering, as you think about future capital allocation, is there anything you want to do on the balance sheet? Is there a goal to reduce debt here? Or you -- maybe to increase kind of future flexibility, if you were to pursue anything on the acquisition front?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Roger, that's a good question. I would say, generally, there isn't anything that we're expecting to change. We set the target within the capital allocation framework, that's a cap of 20% to 30% range. Donna has got kind of a minimum cash balance target of $2 billion, things like that. Those are just things that we operate with as fundamental assumptions day-in and day-out as we go forward. We get asked periodically about -- somebody raised the issue about the sustainability of the dividend. And that's a really interesting question to come up at this point in time because in October, we were all being asked what we were doing to do with all the cash that IMO 2020 was going to provide. So that being said, I think, when I look at Valero, I realize that we understand our business, and we're making decisions for the long term based on our strategic view of the market and not hype. And so we always try to position ourselves financially to be able to deal with whatever the market might be giving us. And so I'm -- if we think in terms of dividend, for example, I can just say without reservation, if we consider the sustaining CapEx and the dividend to be totally nondiscretionary and we're going to defend them as we allocate cash, we've got a really good strong balance sheet, and we certainly wouldn't have raised the dividend if we thought sustainability was any kind of issue here. And really that's it around that. From an acquisition perspective, we'll continue to review them in the context of growth projects. And when you think in terms of the roll-up of VLP, it kind of takes you to the question, well, are you going to continue to invest in logistics projects going forward. And the answer to that would be, yes, to the extent that they benefit Valero's business. And if you recall, even with VLP as a publicly traded entity, we always started with a need at Valero. And then, that will -- if we did the project to satisfy that need at VLP and paid VLP a 12% rate of return, would it still make sense for Valero to do the projects? Okay, that was kind of the calculus that we went through, and if it was yes, we proceeded. Now we just look at these projects as an aggregate project. So the Diamond Pipeline, for example, we can get a huge benefit on the crude sourcing into Memphis as a result of the Diamond Pipeline, and VLP will be getting a 12% rate of return. Now all that's rolled into one set of economics and we look at it in the context of 25% rates of return on refining projects. So the way we structured the framework, it's flexible enough to allow us to adjust a little bit from time to time, but it hasn't fundamentally changed what we're doing and what we're focused on. So that was a really long answer to a pretty simple question, Roger. So sorry about that.

Roger David Read - *Wells Fargo Securities, LLC, Research Division - MD & Senior Equity Research Analyst*

No, I appreciate that. I just can't believe you accused Wall Street of being fickle though.

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Yes, I know it's hard to imagine. Isn't it?

Roger David Read - *Wells Fargo Securities, LLC, Research Division - MD & Senior Equity Research Analyst*

Yes, absolutely.

Operator

Our next question comes from Phil Gresh with JPMorgan.

Philip Mulkey Gresh - *JP Morgan Chase & Co, Research Division - Senior Equity Research Analyst*

First question, Joe, would be, you've talked for a couple of years now about the illustrative EBITDA that you can generate from these projects that you have underway. And I think in your slides, you talked about $175 million incremental for 2018 from completed projects. So I'm wondering how you think about that ramp in 2019 and 2020 that we should be thinking about from the projects underway?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Well, we haven't been that explicit in giving EBITDA forecast for '19 and '20, right? And I don't think we're going to go there. I think what you've got rely on really, Phil, is the chart we've got in the slide deck. And if you look at our return threshold for our projects, and you say you're going to invest this much strategic capital year in and year out, what kind of EBITDA you expect it to produce? And our numbers are $1.2 billion, $1.4 billion. And that includes the benefit of the coker project, of our ownership interest in DGD, of all the pipelines and terminal projects we have going on, the alkys and so on. And we're still very, very comfortable with those numbers. And so in terms of moving the needle from an EBITDA perspective, in light of our capital allocation framework and the clear recognition that capital is a finite resource, we're going to invest it accordingly in the projects we're targeting are going to produce $1 billion to $1.5 billion of incremental EBITDA.

Philip Mulkey Gresh - *JP Morgan Chase & Co, Research Division - Senior Equity Research Analyst*

Okay, fair enough. Second question is just, coming back to your comment on the minimum cash balances. If I take your ending 2018, take out $950 million for the VLP buy-in in the first quarter, I think you're kind of around that $2 billion level. I realize working capital has also been a pretty big headwind in 2018. So trying to think about that, is there some kind of perhaps reversal that could happen with crude oil prices now going back up and just generally wondering how you think about that in the context of the capital return plans and things of that nature?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Yes, that's a good question. Donna, you want to?

Donna M. Titzman - *Valero Energy Corporation - Executive VP & CFO*

Sure. So in regards to the working capital, I mean, yes, so to the extent prices would go up, you would see a shift in the more positive direction in 2019. A lot of the negative working capital that you saw in 2018 has to do with some timing on some tax payments that were really due in '17 that were pushed to 2018. So that has sort of evened itself out. But certainly, there are some other movements in the working capital in 2018 that could reverse themselves.

Philip Mulkey Gresh - *JP Morgan Chase & Co, Research Division - Senior Equity Research Analyst*

Okay. And then just in terms of VLP, taking that down to $2 billion cash balance. So you -- I mean, you're basically saying that you're kind of at the levels you want to manage out? Or is it flexibility around that $2 billion? Or how do you think about that target?

Donna M. Titzman - *Valero Energy Corporation - Executive VP & CFO*

Well, clearly, that was a big amount of cash going out this -- in January, but we're going to continue to make money, generate cash, and so you should see that the cash balance recover. But again, we're at that $2 billion minimum. We're comfortable gearing it at that level.

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Yes, Phil, I mean, we've said this for years now. We never -- our plan was not to carry $5 billion of cash quarter to quarter to quarter to quarter. And we were just finding ourselves in that situation. And so there was an intentional plan here to try to tighten this down a little bit. Now Donna's got our target set. She is the CFO, and we're going to try to abide by the target. But there's no reason for us to sit here with $5 billion of cash on the balance sheet.

Operator

Our next question comes from Neil Mehta with Goldman Sachs.

Neil Singhvi Mehta - *Goldman Sachs Group Inc., Research Division - VP and Integrated Oil & Refining Analyst*

Joe and team, just want to start, talk a little bit here about IMO 2020. It's funny, we're 40 minutes into the call and it's gotten a lot less attention than probably 6 months ago, which is a reflection perhaps of what you've seen in the forward curve where we've seen diesel-FO, while it's still favorable, has compressed in 2020, 2021. As you look at this dynamic of IMO 2020, has anything changed in the team's mind about the potential upside from it? And just can you talk about how you see it playing itself out through the markets and the sustainability of that tailwind?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Sure, Niel. This is Gary. I don't think our view of what will transpire as a result IMO 2020 has really changed at all. We still see that you'll see a significant uptake in diesel demand. And you'll see weakness in the high sulfur fuel oil markets. The shape of the high sulfur fuel oil curve is pretty much as we assumed it would be. The starting point is a little higher with high sulfur fuel trading 94% of Brent today, but you still see steep backwardation in the high sulfur fuel oil curve. I think the one to us that we keep staring at is the ULSD forward curve really isn't showing any IMO impact at all. And we still believe there will be significant demand increases as a result of IMO and strong diesel cracks as a result of that as you approach that January 2020 date.

Neil Singhvi Mehta - *Goldman Sachs Group Inc., Research Division - VP and Integrated Oil & Refining Analyst*

I appreciate that. And then the other follow up. Oldie but a goodie is RINs. Just your thoughts on that market? Again, it seems like something we haven't paid as much attention to lately. Prices have been lower for a period of time here. Is there any risk that you see in the RINs market that could send prices higher and just your thoughts on how it plays out from here?

Jason W. Fraser - *Valero Energy Corporation - Executive VP & General Counsel*

This is Jason. Just from a policy side, we don't see any seismic shift coming. I mean, the EPA has several rulemakings. They're looking at the E15 waiver for the upcoming summer for the ethanol guys to get more ability to put more in the market tied with the market reform aspects, some rules that would hopefully improve the functioning of the RIN market within RFS reset. But what's happened is those have all gotten stalled out with the government shutdown. So we don't see any change in course more, just a delay right now, but I don't see any big catalyst to change things.

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

And then the small refinery exemption is another piece of this, right? And the EPA followed the rules last year, in fact smaller refinery exemptions really were appropriate. And that certainly took some of the pressure off the RIN market also. We expect them to continue to follow the rules to comply with the legislation as it's drafted and issue the small refinery exemptions where they are appropriate. And so Neil, I'm with Jason. I don't see a whole lot of change in this market going forward.

Operator

Our next question comes from Paul Sankey with Mizuho.

Paul Benedict Sankey - *Mizuho Securities USA LLC, Research Division - MD of Americas Research*

Joe, this is good result obviously in Q4, but it feels like a tremendous number of things have changed into Q1. Equally so does your comments about gasoline, for example, it's not a good time in January to sort of turn bearish. Can you talk a little bit about what the really big earnings impact changes have been? And obviously I'm thinking about OPEC cuts, Alberta cuts, Venezuela, gasoline markets, it's just a very different environment. How do you expect things to progress in some of those things through 2019? And how different is the environment even in January compared to this very good result in Q4?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Paul, I mean, that's a very good question. And you hit on the point. I mean, it is a very interesting market because there are so many moving parts right now. The thing that we always have to keep in mind is that January always stinks, okay? Gasoline is usually weak at this point in time. If the winter is warm, distillate's not too salty, a lot of times. And Paul, we've been at your conference in the past in January when everybody wanted to slit their wrists because things were so miserable, right? But the reality is, is that we're managing our business for the long term. And we have been in this for a very long time, and we understand the cycles in the business. And so what do you do? You make adjustments day-in and day-out in your operations to try to deal with this and to be as profitable as possible. I mean, Lane mentioned some of things we'll do around cracks. Gary is changing the way he's sourcing crude on a weekly, daily basis to try to get the best netback that we can on the plants. So things that we don't change, we don't change our commitment to the things that make Valero really good, which is operating safely, reliably, honoring environmental stewardship, managing our capital appropriately. Those are the things we can control and that we pay a lot of attention to. Day in and day out optimization based on certain market conditions, okay, we are all over that too. But we don't have a crystal ball. And so we just manage the business for the long term, and we do our best. Lane, you, or Gary, want to talk to any specifics around that?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

One thing I want to add on Venezuela, Venezuela at some point is going to have to put oil in the market even if these sanctions stay in place. And so there's going to be a balancing time through here where whoever was buying the alternatives, they'll buy Venezuelan oil and oil will come to our market. So I mean, it will all settle out. You're just sort of in the interim time period here where that's got to play out. And of course if something changes in Venezuela, then it's just back to status quo. On OPEC, OPEC clearly going to be looking at trying to set the amount of oil in the market based on whether the markets -- and what's the structure of the market. And again, as Joe alluded to, we -- every day, we wake up, and we do -- we optimize our assets around what's available out there. We have a great system, better than anyone's in the market, to get the most value and understand these markets.

Paul Benedict Sankey - *Mizuho Securities USA LLC, Research Division - MD of Americas Research*

Joe, I greatly appreciate the shouts out for our January Refining Conference, saying that you are the only major refiner not there this year, but do remember that we've got our -- don't forget we've got our Napa Valley Energy Summit on the 1st and 2nd of April, and you're most welcome to join us in case you want to apply. Apologies for the shameless plugs.

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Paul, I would expect nothing less and if you are fine, I'll go back and see if we can make it work.

Operator

Our next question comes from Brad Heffern with RBC Capital Markets.

Bradley Barrett Heffern - *RBC Capital Markets, LLC, Research Division - Associate*

Lane, I was just hoping you could sort of expand on the comments that you just made about crude sourcing. I mean, it seems like all the numbers we see on the screen for, pretty much anything, sour, waterborne, is just not the math that you'd normally expect. So is Mars at minus 2 or Oriente at minus 4, are those crudes actually pricing their way into the system? Or is there a chance that in the sort of interim period where the trade routes are sort of getting redrawn that we see a cut in RINs just because the mediums and the heavies are not competitive?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

So I'll take a shot at it, and Gary obviously can tune in. Today, where we are, the most profitable crude that we run are sweet. And then, sort of medium and heavy are sort of at parity with one another and this depends on what part of your refinery you just want to fill out, but on the market like the last barrels we try to run on the system where it's really sweet. And they all still have margin -- positive margins here in the open crude unit. So it's just really trying to try to navigate and get the right die into our assets. In terms of just the way trade routes are flowing, I think, again, as I've said, I mean OPEC is best as there aren't always going to be cuts, and we got to watch how Venezuela plays out on the sanctions side and it's just back to what happens with the RIN, same thing. So they're not permanent trade routes, but the world rebalances when these things happen.

Bradley Barrett Heffern - *RBC Capital Markets, LLC, Research Division - Associate*

Okay. Got it. And then I was just wondering if you could give any color on your union contracts. Obviously, the steelworkers union negotiation is going on right now and the contract expires tomorrow. So I know you guys didn't have any impact 4 years ago, the last time that we saw this. But just curious if -- what you expect this time around?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

Sure. Shell is really negotiating on behalf of the industry for the pattern bargaining. In terms of Valero, we have 2 refineries -- I mean, it's actually tonight at 12 midnight that these contracts expire. And we have 2 refineries that contracts will expire. That is our Memphis refinery and Port Arthur. We have a tentative agreement with our Memphis refinery right now in terms of just sort of a local agreement pending the sort of the Shell negotiations, and we're still working on our issues at Port Arthur. We don't expect the work stoppage during this whole process, but you just never know. So we're prepared for that. We have a completely trained temporary workforce to take over the assets in the event there's a walkout, but I'm not trying to say we're going to have one. But we're certainly prepared for it as you would expect them to be.

Operator

Our next question comes from Craig Shere with Tuohy Brothers.

Craig Kenneth Shere - *Tuohy Brothers Investment Research, Inc. - Director of Research*

So picking up on Neil's IMO 2020 question. I just wonder if you could speak to the expanding wastewater regulations that appear to be limiting the option of ship-based scrubbers?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

This is Lane. I think what you're asking about, there are some of these environments -- there are some sort of ports that are saying they're now allowing the discharge. Is that what you're talking about?

Craig Kenneth Shere - *Tuohy Brothers Investment Research, Inc. - Director of Research*

Exactly.

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

Yes. So again, that's just -- that just makes it a little more difficult for the ships to invest in scrubbers. I mean, again, this technology takes the sulfur out of the air and puts it into the water. And I think some of these local ports are fully aware of that. It's just sort of another headwind in terms of -- I mean, in terms of making it more difficult to try to solve this watering problem out of IMO, which is this really heavy bitumen that's been -- historically has been from these ships and they're going a few other pathways to try to get rid of it. And as Gary mentioned, that's where you really see the forward market trying to understand exactly how it's going to happen, is that particular stream.

Craig Kenneth Shere - *Tuohy Brothers Investment Research, Inc. - Director of Research*

So would you agree that that's just another data point suggesting a perhaps deeper and more prolonged benefit to the refineries?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

Exactly. That's exactly right.

Craig Kenneth Shere - *Tuohy Brothers Investment Research, Inc. - Director of Research*

And also just picking up on Roger's M&A balance sheet question. 2018 was a robust acquisition year. We have the ethanol plants, the Peruvian terminaling and the VLP roll up, obviously. Do you think that convergence was just a one-off event? Or do you see ongoing opportunities that can continue to soak up cash balance?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

No, Craig, I mean, our practice is not to really kind of foretell what we're looking at from an acquisition perspective. But I can tell you there is nothing on the radar screen at this point in time. We will continue to evaluate opportunities as they arise, but we don't have any pressing need to fix our business or to fill a gap with acquired assets. I can't call it coincidental because we made the decision to do the acquisitions last year, right? So it's far from a coincidence. But the facts are we saw some opportunities that we felt satisfied our strategic interest and that really was to extend our supply chains and to continue to grow one of our businesses, the ethanol business, buying assets that were priced very attractively in the markets. And so we took advantage of the opportunity. But I am going to tell you there -- I would not model for a repeat act in 2019.

Craig Kenneth Shere - *Tuohy Brothers Investment Research, Inc. - Director of Research*

So barring ongoing strong M&A and relatively steady $1 billion growth CapEx, robust margins like we're seeing and the opportunity for IMO 2020, it seems like, if anything is going to flex, it's going to be the share buybacks which we saw in the fourth quarter?

Joseph W. Gorder - *Valero Energy Corporation - Chairman, CEO & President*

Yes, sir.

Operator

Our next question comes from Matthew Blair with Tudor, Pickering, Holt.

Matthew Robert Lovseth Blair - *Tudor, Pickering, Holt & Co. Securities, Inc., Research Division - MD of Refining and Chemicals Research*

Homer, did you say it's 3.8 on ethanol throughput guidance for Q1? And if so does that reflect any economic run cuts or maybe a big turnaround or something else going on?

Martin Parrish

Well, this is Martin Parrish. Yes, we have cut back a little bit. We're running all our plants, so we've some -- cut back a little bit. There's just not much fun in it right now. But we take a long-term view, and we expect things to turn around. Ethanol demand in the U.S. is going to grow marginally and export demands weigh up this year, and we expect that to continue. It's more mandates worldwide and even better than that just blending the economics worldwide for ethanol where it's priced. And we just don't think that can stay that way where ethanol price is this cheap. So that's the plan.

Matthew Robert Lovseth Blair - *Tudor, Pickering, Holt & Co. Securities, Inc., Research Division - MD of Refining and Chemicals Research*

Okay, sounds good. And then, I was also hoping you could talk about octane and upcoming alky expansion. When we look at Gulf Coast octane spreads coming in around $5 a barrel. Couple of years ago, that was more like $10 to $12 a barrel. So is the alky unit -- what are the economics on today's pricing? And would you expect a widening octane spread going forward?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

This is Lane. (inaudible) Houston alky unit demonstrating in the second quarter. Our FID decision, I think, the EBITDA from around $105 million or something like that. So I will have to go back and look and see where it compares now, but we're still committed to just the idea that, A, going forward, octane is going to be more valuable. There's a couple of reasons for that. One is the autos want higher octane; and two, you still haven't seen Tier 3s. All those Tier 3 investment get in and sort of potentially pressure the octane. And then finally, just all this light crude puts a lot of naphtha out there. So all that put together essentially, we believe, that octane is going to be valuable. Where it goes -- where it is versus our funding decision we just have to check, but we still selected good projects, thanks though for our St. Charles alkylation project.

Operator

Our next question comes from Craig Weiland with U.S. Capital Advisors.

Craig Patrick Weiland - *U.S. Capital Advisors LLC, Research Division - Executive Director of Refining Research*

You have about a quarter of your Gulf Coast refining capacity Located in Eastern Louisiana. And it looks like Bayou Bridge is about to start up here and start delivering barrels in to St. James at some point, maybe this quarter. Also a slew of other proposed projects that have been introduced in recent weeks and months designed to move crude into that market over the next couple of years. So I'm curious if you could elaborate on how you think Valero's crude procurement options will develop on the back of these projects? And what type of impact they could have on your Gulf Coast feedstocks? Appreciate any color your can share.

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, I think the biggest thing for us in the Eastern Gulf is St. Charles, is obviously a heavy sour refinery, and getting better access to heavy Canadian crude would be a big advantage for us there. And so we're certainly looking at some of the projects that are out there, namely the Capline Reversal has the potential to be able to get more cost-effective heavy sour crude into St. Charles is a big benefit to our system.

Operator

Our next question comes from Jason Gabelman with Cowen.

Jason Daniel Gabelman - *Cowen and Company, LLC, Research Division - VP*

Just a couple of questions. A follow up on the comments about running the FCCs just to maximize alky production. The inputs into the FCCs, although is able to be blended into the marine fuel pool, is there, from a technical standpoint, an issue with meeting marine fuel specs if you try to blend that vacuum gas oil into the marine pool?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

This is Lane. So yes, the margin -- the feed, particularly the marginal feed which is low sulfur VGO into these FCCs will fit into the 0.5% fuel oil market.

Jason Daniel Gabelman - *Cowen and Company, LLC, Research Division - VP*

Okay, great. And there's not an issue with any of the other specs outside of meeting the sulfur spec?

R. Lane Riggs - *Valero Energy Corporation - Executive VP & COO*

We've done a lot of work in terms of blends, making sure that there is compatibility. There is not -- the spec board is not that rigorous. It really ends up being -- there is just sulfur spec, so really, what you really got to be careful of is if there's something that you do to the blend that creates compatibility. I'm pretty confident ultimately the industry will work through all that, not to say that early on, there won't be some of the issues. We work with some of these people to try and work on our own blends around that. So that's really the only issue this potentially could have.

Jason Daniel Gabelman - *Cowen and Company, LLC, Research Division - VP*

All right. Great. And just looking more near term. Obviously, 4Q benefited from some better captures then and anticipate -- and I'm trying to figure out if that could continue into the first quarter? One area, I think, where there could be some upside is on the butane blending. It looks like butane prices have blown pretty hard against what gasoline prices are. Do you expect that to support capture rates in the first quarter relative to its support in prior first quarters?

Gary K. Simmons - *Valero Energy Corporation - SVP of Supply, International Operations & Systems Optimization*

Yes, we see the spread. But it's not a real meaningful contribution to our overall earnings for the quarter.

Operator

This concludes the question-and-answer session. I'd like to turn the call back over to Homer Bhullar for closing remarks.

Homer Bhullar - *Valero Energy Corporation - VP of IR*

Thanks, Shannon. We appreciate, everyone, joining us. Please feel free to contact the IR team if you have any additional questions. Thank you.

Operator

Ladies and gentlemen, this concludes today's conference. Thanks for your participation. Have a wonderful day.